Study of the EU-Turkey Bilateral Preferential Trade Framework, Including the Customs Union, and an Assessment of Its Possible Enhancement

Final Report
26 October 2016

Prepared by BKP Development Research & Consulting
in consortium with Panteia and AESA
[*October 2016*]

EUROPEAN COMMISSION

Directorate-General for Trade
Directorate E — Neighbouring countries, USA and Canada
Unit E.2 — Russia, CIS, Ukraine, Western Balkan, EFTA, EEA, Turkey and Central Asia

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The report reflects developments until early August 2016. However, the events in Turkey of 15 July 2016 and their potential implications are not reflected in the analysis.

Directorate-General for Trade

2016

LEGAL NOTICE

Luxembourg: Publications Office of the European Union, 2016

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

PRINTED ON TOTALLY CHLORINE-FREE BLEACHED PAPER (TCF)

PRINTED ON RECYCLED PAPER

PRINTED ON PROCESS CHLORINE-FREE RECYCLED PAPER (PCF)

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Acronyms

ACP	Africa, Caribbean, Pacific countries
AEO	Authorized Economic Operator
AFTR	Agricultural and Fishery Trade Regime
AGP	Agreement on Government Procurement
AVE	Ad Valorem Equivalent
BOT	Build-Operate-Transfer
BPTF	Bilateral Preferential Trade Framework
CAP	Common Agricultural Policy
CEPII	Centre d'études prospectives et d'informations internationales
CET	Common External Tariff
CETA	Comprehensive Economic and Trade Agreement
CFR	Charter of Fundamental Rights
CGE	Computable General Equilibrium
CPE	Computable Partial Equilibrium
CSA	Coal and Steel Agreement
CU	Customs Union
DCFTA	Deep and Comprehensive Free Trade Agreement
DG	Directorate-General
ECF	Enhanced Commercial Framework
EFTA	European Free Trade Association
EIF	Entry into Force
EPI	Environmental Performance Index
EPS	Entry Price System
EU	European Union
EUR	Euro
FAO	Food and Agriculture Organization
FAS	Foreign Affiliate Sales
FDI	Foreign Direct Investment
FDI-RI	FDI Restrictiveness Index (Study Team)
FDIR	FDI Restrictiveness Index (OECD)
FTA	Free Trade Agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GLI	Grubel-Lloyd Index
GSP	Generalised Scheme of Preferences
GTAP	Global Trade Analysis Project
GVC	Global Value Chains
HIIT	Horizontal Intra-industry Trade
ICTA	Information and Communication Technologies Authority
IIT	Intra-industry Trade
ILO	International Labour Organization
IMF	International Monetary Fund
IP	Intellectual Property
ISDS	Investor-State Dispute Settlement
LDC	Least Developed Countries
MEA	Multilateral Environmental Agreement
MENA	Middle East and North Africa
MFN	Most-Favoured Nation
NAFTA	North American Free Trade Agreement
NTB	Non-Tariff Barrier
ODC	Other Developing Countries
OECD	Organisation for Economic Co-operation and Development
PECS	Pan-European Cumulation System
PEM	Pan-Euro-Mediterranean
R&D	Research and Development
ROOs	Rules of Origin
ROR	Rate of Return
SAM	Social Accounting Matrix
SAP	Stabilisation and Association Process
SCC	Social Cost of Carbon
SME	Small And Medium-Sized Enterprise
SPS	Sanitary And Phytosanitary
STRI	Services Trade Restrictiveness Index
TBT	Technical Barriers To Trade
TCD	Trade Competitiveness Diagnostics
TDI	Trade Defence Instrument
TFA	Trade Facilitation Agreement
TFI	Trade Facilitation Indicators
TiSA	Trade in Services Agreement
TOR	Terms of Reference
TPP	Trans-Pacific Partnership
TPR	Trade Policy Review
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TRQ	Tariff-Rate Quota
TRY	Turkish Lira
TTIP	Transatlantic Trade and Investment Partnership
VAT	Value Added Tax
VIIT	Vertical Intra-industry Trade
WDI	World Development Indicators
WITS	World Integrated Trade Solutions
WTO	World Trade Organisation

EXECUTIVE SUMMARY

The existing EU-Turkey bilateral preferential trade framework ("BPTF") is now 20 years old and has become outdated in view of the more ambitious free trade agreements (FTAs) that the EU has concluded or is negotiating with other key economic partners. This study assesses how well the BPTF has functioned and analyses options for potential enhancements, including an enhanced commercial framework (ECF) that builds on the existing customs union (CU) and a deep and comprehensive free trade agreement (DCFTA) that replaces the CU. The analysis is comprehensive, addressing the economic, social, environmental, regulatory, institutional, and human rights impacts on Turkey and the EU of the BPTF and of the potential replacements. Spillovers on third parties are taken into account, particularly on least developed countries (LDCs) and other developing countries (ODCs). The analysis does not take into account the events of July 15 and its aftermath as the study was largely completed at that juncture.

Historical Perspective

The BPTF emerged in the context of Turkey's bid for closer relations with Europe, pursuant to processes launched by the 1963 Association Agreement between Turkey and the European Communities ("Ankara Agreement"). It comprises the CU, which entered into force on 31 December 1995, and companion agreements on coal and steel (CSA, which entered into force in 1996), as well as a preferential regime for trade in agricultural goods and fishery products (AFTR, which entered into force in 1998).

Bilateral trade between the EU and Turkey grew very strongly during the BPTF period. For the EU, Turkey gained in importance as a trading partner and, in particular, as a destination for EU exports: the share of EU exports going to Turkey rose from about 3% at the beginning of the BPTF period to about 5% in recent years. The share of EU imports from Turkey rose from about 2% to 3% over the period. For Turkey, trade with the EU surged, but the commitment to an open trading regime mandated by the BPTF resulted in trade with third parties surging even more. Turkey's imports from the EU15 increased by about 230% over the period (from about EUR 17 billion to EUR 56 billion), but increased by 450% from the rest of the world (from about EUR 33 billion to EU 182 billion).[1] The EU's share of Turkey's exports was not similarly affected by the changes of the mid-1990s, which primarily affected Turkey's external tariffs. Between 1996 and 2014, Turkey's exports to the EU increased by about 400% (from about EUR 8.5 billion to EUR 42 billion), while Turkey's exports to the world grew by almost 570% (from about EUR 18 billion to EUR 118 billion). Thus, the EU's share in Turkey's two-way trade was, in relative terms, at its high point at about the time of the entry into force of the BPTF and tended to decline thereafter. One of the factors contributing to this was that bilateral trade had been mostly liberalised due to the 1970 Additional Protocol to the Ankara Agreement[2]. In addition, much of this gap emerged during and following the Great Recession and, thus, reflects primarily macroeconomic disturbances rather than being related to the BPTF.

The positive effect of the BPTF is most clearly seen by comparing the performance of goods subject to the BPTF (CU, CSA, and AFTR) and those not subject to the BPTF. Bilateral trade in goods that were covered by the BPTF grew far more strongly than goods not covered by the BPTF.

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1 Note: pre-1999 EUR equivalent exchange rates are taken from conversion rates for GDP from national currency to USD in the IMF, World Economic Outlook, April 2016.

2 Additional Protocol and Financial Protocol signed on 23 November 1970, annexed to the Agreement establishing the Association between the European Economic Community and Turkey and on measures to be taken for their entry into force - Final Act – Declarations.

Bilateral investment flows also grew steeply during the BPTF period, in parallel with the global trend, which witnessed a steep rise in the foreign direct investment (FDI) stock globally.

The BPTF appears to have had only a modest impact in transforming the Turkish economy. The product composition of Turkey's exports to the EU remained stable over the BPTF period, with two notable exceptions: textiles and clothing lost ground, while motor vehicles increased their share. The period did witness the emergence of more deeply integrated production networks between Turkish and European firms, but Turkey's progress in terms of export of sophisticated technological products was modest and, for the most part, limited to a brief window between the reforms initiated to address its 2001 balance-of-payments crisis and the global financial and economic crisis of 2008-09. Cross-border services exports overall remained below average throughout the BPTF period, despite the fact that the services sector share of gross domestic product (GDP) in Turkey increased substantially. The subdued performance of services exports may reflect the comparative advantage afforded by the CU to goods trade; however, some services sectors' exports did grow strongly (e.g., tourism, construction, and insurance), in line with the global norm during this period; the under-performance resulted from a failure of professional business services to make significant export gains. This points to domestic structural factors that inhibited the development of a vibrant professional business services sector, rather than comparative advantage effects from the CU.

From an EU perspective, the BPTF provided strong preferential access to the Turkish market, a factor that particularly stood out during the global slow-growth period following the global crisis of 2008-09. From a Turkish perspective, the BPTF is generally credited with increasing Turkey's openness to the world, putting it on a trade-oriented growth path, which was greatly facilitated by the adoption of the EU common external tariff (the Community Customs Tariff, CCT) the progressive adoption of the EU regulatory *acquis* and the development of integrated production patterns. The BPTF *per se* had only modest direct impacts on Turkey's social, environmental, human rights, and institutional performance, since the major strides in these areas were due to the alignment of Turkey's governance framework with that of the EU as part of Turkey's preparation for EU accession, a process that is mutually reinforcing, at least in part, with alignment obligations under the CU, in particular pursuant to Chapter I (Free Movement of Goods and Commercial Policy) and to some extent Chapter IV (Approximation of Laws).

Assessing the Impact of the BPTF

The entry into force of the CU coincided with a high point in bilateral trade intensity. Bilateral EU-Turkey goods trade was liberalized prior to the entry into force and mutual preferences were as high as they would ever be thereafter (with the exception of agricultural and food products). Immediately prior to the entry into force, Turkey reduced its tariffs against third parties significantly to align with the CCT; moreover, both parties subsequently liberalized vis-à-vis third parties, further eroding the preferences that had elevated bilateral trade in the period preceding the BPTF. Liberalization vis-à-vis third parties included implementation of the 1995 World Trade Organization (WTO) Agreement and the suite of FTAs that both the EU and Turkey entered into subsequently. The EU's expansion in the 2000s also worked to erode the value of Turkey's preferences with the EU15, with which it had concluded the CU agreement, while deepening the preferences with the accession countries that had been in place under the Europe Agreements that had laid the basis for the wave of accessions.

This pattern of trade raises a challenge for identifying the impact of the CU using trend analysis, which would identify a positive impact of the CU through an increase in bilateral trade intensity following its entry into force. Analytically, the impact of the BPTF can be addressed in three ways: (a) through analysis of trends; (b) through a statistical analysis using a gravity model that identifies the greater intensity of trade under the CU relative to third parties, controlling for a range of factors that impact on bilateral trade intensity (distance, size of markets, and various types of trade costs that vary across countries); and (c) through a counterfactual simulation using a computable general equilibrium (CGE) model that removes the BPTF. Additional evidence is supplied by the increase in openness of the EU-Turkey CU as a region vis-à-vis the rest of the world due to the requirement imposed on Turkey to liberalize vis-à-vis the EU's FTA partners.

First, given the many and varied factors impacting on the EU-Turkey commercial relationship during the BPTF period, perhaps the best benchmark for the impact of the BPTF is to consider the performance in trade of BPTF-covered goods versus goods that were not covered by the arrangements. Figures show that, for both the EU and Turkey, imports of BPTF-covered goods outperformed imports of non-covered goods.

Gravity modelling suggests that the BPTF promoted two-way goods trade, at least in the early years. After 2001, when Turkey opened up globally following its balance-of-payments crisis, the EU did not have a disproportionately large share of the Turkish market (although Turkey continued to command a stronger share of EU imports than otherwise would have been expected). Services trade was not materially affected by the BPTF. Bilateral investment appears to have been strengthened, but the conclusion is not very robust due to the weakness of the data. Given that there is no consensus across alternative gravity modelling studies, the findings in the present study should be considered suggestive, but not conclusive.

The counterfactual CGE analysis shows that the BPTF has worked to sustain bilateral trade intensity at a higher level than it otherwise would have been: in 2016, the EU's exports to Turkey are assessed as being about 9% higher than they would have been without the BPTF being in place and Turkey's exports to the EU are about 7% higher than without the BPTF, notwithstanding the preference erosion that the bilateral relationship experienced.

Driven by the trade gains, the BPTF has impacted positively on both the EU and Turkey, both in terms of increasing real output and in terms of expanding economic welfare. The gains are substantially greater for Turkey in both percentage and value terms, reflecting the much greater impact of the BPTF on it compared to the impact of the BPTF on the EU.

Table 0.1: Main effects of BPTF on EU and Turkey compared to counterfactual

	EU	Turkey
Real GDP (%)	0.008	0.722
Household Income (EUR billions at 2016 prices)	1.6	7.5
Bilateral Exports (EUR billions at 2016 prices)	8.7	6.0
Real Growth in Total Exports (%)	0.029	1.28
Real Growth in Total Imports (%)	0.029	2.60

The main source of impact of the BPTF comes from the reduction of trade costs under the CU from the lapsing of the requirements associated with compliance with rules of origin (ROOs). We adopt a conservative estimate of this cost of 2%, which is at the lower end of the range established by a range of empirical studies and also adopted by the World Bank in its 2014 review of the CU. The key role of this assumption means that the scale of the impacts is sensitive to the specific figure chosen. However, under any reasonable assumption within the empirically established range, the CU cost reduction dominates the effects of the BPTF. Further, the CU reduced uncertainty about future market access; given that uncertainty acts as a non-tariff barrier (NTB) to goods trade, this further reduced the barriers to bilateral trade. Similarly, measures in the BPTF for greater approximation of laws may have had a further cost-reducing effect for trading firms serving both the EU and Turkish markets. These latter effects are not explicitly factored into the calculations, but do support a strong CU cost-reducing effect.

The macroeconomic impacts of the BPTF on the EU are muted. We adopt the conservative modelling convention that the labour supply is fixed at what was historically observed. Labour market impacts, therefore, reflect the reallocation of jobs across sectors in response to the structural change induced by the BPTF, but there is no net job creation. By the same token, the economic gains for labour are realized exclusively in the form of higher wages. In reality, some of the labour market impact will have come in the form of net job creation rather than entirely through wage increases, with the higher wages serving to increase labour force participation by persons with flexible attachment to the labour force.

Consistent with the primary role of reduced costs under the CU, the main sectors benefiting from the BPTF are the industrial goods sectors in both the EU and Turkey. In the EU, the chemicals, rubber, and plastics group and coal and steel also benefit particularly from the BPTF, although the latter are not part of the CU. In the agricultural area, oilseeds benefit from the BPTF. In Turkey, benefits accrue across a wide range of sectors, with most services sectors making significant gains driven by income effects of the BPTF. Industrial goods, textiles, clothing and footwear, processed food, and fruits and vegetables benefit particularly. Within the industrial goods sector, the reduction of trade costs through the lapsing of ROOs requirements disproportionately benefited sectors dominated by small and medium-sized enterprises (SMEs), since the fixed-cost component of ROOs falls more heavily on SMEs, as well as sectors that feature deeper integration of value chains across the EU-Turkey border, such as automotive production, since the CU negated the build-up of ROOs-related costs within the value chain as inputs cross the border multiple times (e.g., first as raw materials, then as finished intermediate inputs, then as part of the final assembled product).

Consumers benefit considerably from the BPTF with the main sources of benefits coming from increased incomes and/or jobs, depending on how the economic gains translate into either wages or higher employment. Clearly, a stronger labour supply response implies broader sharing of the benefits as more households share in the gains. Consumer prices, however, are higher in both the EU and in Turkey because of the BPTF. This is the other side of the coin of higher wages. Consumer gains in terms of quality from the BPTF accrue mainly to Turkish consumers, although the effects of the BPTF impetus for approximation of laws and the enticement of improved market access cannot be cleanly disentangled from the similar impetus provided by the accession process. Consumers in both economies benefit from greater variety, with the greater benefits accruing to Turkish consumers due to the substantially greater impetus for opening not only to the EU, but also to EU FTA partners from the BPTF. We do not identify any unintended consequence from the BPTF (e.g., higher resort to the use of trade defence instruments, TDI).

The evidence for a positive impact of the BPTF on economic welfare is buttressed by a back-of-the-envelope calculation drawing on a "sufficient statistics" approach that generates an estimate of the welfare gains from trade based on changes in the share of imports in an economy and the trade elasticity. Any such calculation will show that Turkey's openness increased due to the CU, as the share of imports in Turkey from EU FTA partners (to which Turkey provided preferential access in line with the CU requirements) expanded from 3.2% to 3.6% of total imports – at a time when China's emergence as a global trading power resulted in the existing market shares far exceeded the reduction in imports from the EU due to preference erosion. Excluding imports from China from this calculation, the share of Turkey's imports accounted for by EU FTA partners rose by more than 1%. This implies at least a small welfare gain from the BPTF.

On balance, the alternative ways of evaluating the BPTF support a conclusion that it had a positive impact on both parties' economies. Bilateral trade between the parties is substantially larger than it would have been otherwise and trade costs are lower. While both parties benefited, the welfare gains, by our analysis, flowed disproportionately to Turkey. The much greater impact of the BPTF on Turkey stems from several factors: (a) the overall openness of the Turkish economy increased disproportionately since Turkey's liberalization with respect to EU FTA partners is attributable to the BPTF, whereas the EU's own liberalization vis-à-vis those partners is not; (b) trade with the EU is a much greater share of Turkey's economy than vice versa, which means that the reduction of trade costs due to the BPTF affected a much larger share of Turkey's trade, which in turn leveraged relatively larger gains in production efficiency and opportunities for value-chain integration, with consequentially greater gains in GDP and welfare; and (c) the impetus to alignment from the CU measures on approximation of laws strengthened the pro-market orientation of the Turkish economy (although this is not factored explicitly into the quantitative gains we report), while such an effect is not counted towards EU gains.

At the same time, the overall sense of the analysis is that there were significant headwinds facing bilateral trade during the latter part of the BPTF period, with, in a sense, a growing distance between Turkey and EU due to both non-economic factors and the centripetal forces of globalization. The BPTF worked as a powerful counterforce and kept the relationship much larger and deeper than it otherwise would have been, especially during the middle part of the BPTF period, when there was a strong momentum for bilateral trade integration; in the post-crisis period, this momentum in the relationship ebbed.

The analysis also suggests that Turkey's progress up the technology ladder during the BPTF period was concentrated on medium-technology production, while higher-technology production failed to take off. Turkey was already a middle-income economy by the time the BPTF came into force. The subsequent transformation of the Turkish economy towards the profile of a high-income economy was thus relatively limited and essentially stalled midway during the period, as shown by the trend analysis. The counterfactual CGE analysis confirms that the BPTF favoured industrial production, including in the traditional textiles and clothing and footwear areas, but does not have the granularity to expose whether the BPTF favoured or disfavoured higher-technology goods production. Whether the failure to break through into higher-technology production could be attributed to the comparative advantage effects of the BPTF, which favoured EU high-technology exports, or whether it reflected structural factors in the Turkish economy (e.g., weakness in the innovation system, weak SME performance, and the under-development of its professional business services) is not laid bare by the counterfactual. The analysis does, nonetheless, suggest that Turkey's global competitiveness and growth prospects were improved as a result of the lowered cost of trade in industrial products with the EU, as well as through greater alignment of rules, which worked to improve Turkey's ability to make stronger undertakings in its recent FTAs with third parties.

Based on these economic impacts, the present study evaluates the impacts of the BPTF on social, environmental, regulatory, institutional, and human rights outcomes. The focus in these latter regards is on Turkey, where the BPTF required changes. The study finds that the impacts of the BPTF were generally small; a key issue is disentangling the effects of the BPTF from the contemporaneous process of aligning Turkey's regulatory framework with the EU *acquis* as part of the accession process.

Spillovers on third parties of the BPTF were also relatively modest. Based on the counterfactual CGE analysis, the trade diversion effects of the CU generated losses for third parties that cumulatively were about half the size of the total gains made by the EU and Turkey. The BPTF thus contributed positively to global economic welfare. For LDCs and ODCs; the trade diversion effects were relatively muted.

While the BPTF generated significant benefits for both the EU and Turkey, it could have been still more beneficial:

- First, the commercial policy that Turkey adopted during the BPTF period because of the CU requirements was not tailored to its needs and, thus, was sub-optimal from its perspective. While unilateral liberalization vis-à-vis the EU's FTA partners (in those cases where the EU has an agreement with a third country but Turkey has not) is analysed as a positive factor for Turkey's overall development and its economic welfare, obtaining reciprocal concessions and recognition of goods originating in Turkey for diagonal cumulation in the EU's FTAs would have been still better. This was incorporated in the EU's FTAs with the EFTA, Euro-med and Western Balkans for example, but is not a general EU practice. From a political economy perspective, although Turkey is informed by the Commission in the context of the EU's FTA negotiations with third countries, formal mechanisms to take Turkey's sensitivities into account in the EU's commercial policy formulation would also have smoothed commercial relations.

- Second, the exclusion of services from the BPTF meant that the bilateral relationship was governed by the WTO GATS commitments. In services sectors where Turkey made significant commitments under the GATS, it performed well during the BPTF period; in largely closed sectors, such as business and professional services, Turkey's export performance lagged. The deep liberalization of goods sectors under the BPTF and the exclusion of services sectors does not appear to have been a factor in this underperformance, as the ex post analysis shows. However, the BPTF's failure to build on GATS commitments and open up Turkey's closed services sectors was an opportunity foregone.
- Third, Turkey's retention of higher and more extensive protection of primary agriculture under the BPTF resulted in commensurately reduced structural adjustment towards a more efficient economy and, thus, smaller gains that otherwise would have been possible.
- Fourth, a range of frictions that militated against the full realization of the potential benefits of the CU emerged or were laid bare by the expansion of bilateral trade during the BPTF period, including new NTBs erected by Turkey that frustrated EU goods sector export interests and the lack of a services component to the BPTF to facilitate the functioning of the cross-border value chains and production networks that emerged under the BPTF.
- Finally, the BPTF's institutional framework was revealed to be inadequate to satisfactorily address the frictions that emerged under the deep integration fostered by the CU, including as regards dispute settlement and ensuring coordination in the development of commercial regulations.

Accordingly, confirming previous analyses of the BPTF, this study's evaluation of the BPTF on an ex post basis suggests that the commercial policy governing the EU-Turkey relationship should be modernized and upgraded, with particular emphasis on the following: removing the imbalances in terms of sectoral coverage (services and primary agriculture) and of the negotiation of commercial treaties with third parties; addressing a range of NTBs to goods trade that emerged or became important as integration deepened under the CU; and improving the institutional framework for managing bilateral commercial relations.

Options for Upgrading the Bilateral Commercial Relationship

In light of the review of the BPTF's performance, this study considers options for moving forward on the EU-Turkey commercial relationship. Two alternative scenarios are evaluated:

(a) The ECF, conceived as a CU with the scope unchanged (industrial products only[3]), the CSA, plus an FTA covering the following: trade in agriculture and fishery products (thus, subsuming the AFTR), services and establishment, NTBs, and public procurement.

[3] With the possibility to renegotiate the "agricultural component" duties on processed agricultural products.

(b) A DCFTA to replace the CU and establish an FTA that covers all goods trade, including industrial, agricultural, and fishery products, plus services, NTBs, establishment, and public procurement. While the scope of the DCFTA is the same as the ECF, it involves a less ambitious scenario in terms of depth of liberalization in the goods and services sectors. This scenario takes into consideration ROOs effects from replacing the CU with an FTA framework for industrial goods trade.

The major impacts of the scenarios are set out in the panel below. The results of the modelling suggest that that there remain solid economic gains from upgrading the bilateral commercial relationship.

- The ECF generates economic gains for both parties. For the EU, the gains are relatively smaller but still substantial. For example, welfare is expected to increase by EUR 5.4 billion – small in relation to the overall economy but nevertheless sizeable in absolute terms; EU exports to Turkey would particularly benefit (EUR 27.1 billion higher than without the ECF). For Turkey, the real GDP gain is sizeable at 1.46% above baseline, with commensurately large gains in economic welfare (EUR 12.5 billion) despite only a relatively small gain in direct exports to the EU (EUR 5.0 billion) – an outcome which reflects the dominant effect of cost-reducing measures in the ECF, which drive Turkey's global competitiveness. Some sensitive sectors are, however, impacted relatively strongly for Turkey: sheep meat, beef, and dairy, experience notable declines in real output.

- The DCFTA has a limited impact on the EU; indeed, the impact is so close to neutral that some indicators are marginally positive and others are marginally negative. For practical purposes, the DCFTA can be considered to have a neutral impact on the EU. For Turkey, the DCFTA risks causing net negative impacts depending on the extent of the increase in trading costs in switching from a CU to an FTA for industrial goods trade: while the less ambitious tariff liberalization erodes the export gains to the EU on that score only marginally compared to the ECF, the increase in trade costs for exports to the EU for industrial products drives a much larger decline in exports, which the services and FDI liberalization do not fully offset. Nonetheless, the cost reduction generated by the DCFTA results in a modest real GDP gain. Accordingly, obtaining international commercial policy autonomy by abandoning the CU would come at a welfare price for Turkey, but not in terms of real GDP. The sensitive sectors for Turkey continue to be marginally negatively affected under a DCFTA, not because of a surge in imports from the EU, but because of the negative income effect from the DCFTA overall; the impact is, however, about half as great as under the ECF. The main negative impact is on the industrial goods sector, which faces higher trading costs with its major market.

Table 0.2: Main impacts of scenarios for enhancing the BPTF

	Bilateral Exports (EUR millions)	Welfare (EUR millions)	GDP (%)
EU			
ECF	27,062	5,388	0.007
DCFTA	7,978	1,150	-0.005
Turkey			
ECF	4,960	12,522	1.44
DCFTA	-4,342	-144	0.26

Compared to the World Bank (2014) study, which simulated duty-free, quota-free liberalization of agricultural trade between the EU and Turkey (and thus a comparable scenario to the ECF tariff liberalization shock, but with a different model and using the 2007 base year GTAP 8.1 database), the present study finds a larger gain for Turkey's GDP from tariff liberalization only (i.e., not considering the effects of reduced NTBs and barriers to services trade and FDI): 0.11% GDP compared to the World Bank's 0.05%, but a welfare (i.e., household income) loss of EUR 741 million – resulting from a decline in Turkey's terms of trade affecting households' purchasing power) compared to an EUR 74.5 million gain in the World Bank study (converted from USD at 2007 prices to EUR at 2016 prices).[4]

Based on the economic impacts, the social, environmental, regulatory, institutional, and human rights outcomes are likely to also vary across scenarios, but will generally be felt palpably only in Turkey and generally more powerfully under the ECF than under the DCFTA. Thus, the environmental impacts are stronger under the ECF than under the DCFTA, since the economic impact is substantially stronger.

Spillovers on third parties of the alternative scenarios vary. Under the ECF, the strong bilateral trade gains between the EU and Turkey drive additional trade diversion impacts on third parties; LDCs and ODCs experience a minor reduction in GDP of about 0.01% each. Under the DCFTA, however, third parties, including LDCs and ODCs, are hardly affected.

The initial conditions established by the data and the conservative modelling protocols adopted in the study generate results that embody a number of features that are discordant with several stylized facts of economic behaviour. In particular, the model-generated splits between price and quantity impacts, between wages and productivity, between trade creation and trade diversion, and between the EU's sectoral gains in its area of comparative advantage (services) versus industrial goods generally fall outside of historically validated bounds. Addressing these issues in the sensitivity analysis conducted for the study demonstrates that the basic conclusions reported above hold, but do suggest caution in interpreting the results. Generally speaking, the ECF and DCFTA, if implemented in the current economic environment, would result in greater real gains than reported. Gains in wages would be better balanced by productivity gains – indeed, it is to be expected that productivity gains would outpace wage gains rather than vice versa. There would be more trade creation and less trade diversion than reported. And the sectoral outcomes would not be as skewed in favour of industrial sectors and against services sectors as the study shows.

4 The original figure in World Bank (2014) is a USD 72 million gain in 2007 US dollars. This reflects accumulated USD inflation of 14% between 2007 and 2016 and an EUR/USD exchange rate of 1:1.1 for 2016.

1 INTRODUCTION

The European Commission's Directorate-General (DG) for Trade has awarded a contract for a "Study of the EU-Turkey bilateral preferential trade framework, including the Customs Union, and an assessment of its possible enhancement" under the multiple framework contract TRADE/2014/01/01 to a consortium composed of BKP Development Research & Consulting GmbH (BKP Development, Leader), AESA, and Panteia. The contract was signed on 26 October 2015. This Report is the final deliverable.

As general background to the study, the existing EU-Turkey bilateral preferential trade framework (BPTF) is now 20 years old and has become outdated in view of the deep and comprehensive free trade agreements (DCFTAs) that the EU has since concluded or is negotiating with other economic partners, including the EU-Korea Free Trade Agreement (FTA), the EU-Canada Comprehensive Economic and Trade Agreement (CETA), and the Trans-Atlantic Trade and Investment Partnership (TTIP) with the United States. Recognizing this reality, technical discussions were conducted by a senior officials' joint working group aimed at developing an understanding of each side's expectations and ambitions for a new commercial framework. The working group recommended that the existing customs union (CU) be modernised, that trade in agricultural and fishery products be further liberalised, and that the framework be additionally enhanced to cover, *inter alia*, services and public procurement (European Commission, 2015a). On 12 May 2015, the EU Commissioner for Trade and the Minister of Economy of Turkey agreed to enhance bilateral trade relations through a new commercial framework (European Commission, 2015a). The next step in this process is an impact assessment of the modernisation of the BPTF to be conducted by the European Commission in developing a recommendation concerning possible negotiations for submission to the Council of the EU. This study was commissioned to support that impact assessment.

This Draft Report is broadly structured in three parts. The first part provides the ex post analysis of the BPTF as it has functioned. The second part provides the ex ante analysis of potential enhancements to the relationship through two broad options: an enhanced commercial framework (ECF) that builds on the existing CU and a DCFTA that replaces the CU. Parts I and II mirror each other in terms of subject matter covered, including analyses of economic, social, environmental, regulatory, institutional, and human rights impacts, as well as spillovers on third parties, in particular on least developed countries (LDCs) and other developing countries (ODCs). The analysis in Part I of how the BPTF has functioned informs the analysis in Part II of the potential ways the relationship can be enhanced through the ECF or DCFTA approaches. Part III sets out the conclusions. It should be noted that the analysis does not take into account the events of July 15 2016 and their aftermath, including the human rights situation, as the study was largely completed at that juncture.

The remainder of this introductory chapter sets up the analysis with a summary description of the BPTF, a comparison of the BPTF to other bilateral commercial arrangements entered into by the EU and by Turkey, and a review of the literature on the performance of the BPTF and the potential benefits of its enhancement.

1.1 Summary Description of the EU-Turkey BPTF

The BPTF emerged in the context of Turkey's bid for closer relations with Europe. Turkey applied for association with the European Economic Community in July 1959. This launched a process that led to the signature of the Association Agreement ("Ankara Agreement") on 12 September 1963.[5] The Ankara Agreement established a three-stage process for developing closer economic cooperation:

5 Agreement establishing an Association between the European Economic Community and Turkey (signed on 12 September 1963; entry into force on 1 December 1964).

- A preparatory stage, governed by the Provisional Protocol[6] and Financial Protocol[7], which (a) envisaged preliminary market opening by the Community through the establishment of new tariff quotas for key Turkish exports (unmanufactured tobacco, grapes, figs, and nuts); (b) financial assistance from the Community to Turkey; and (c) the establishment of an Additional Protocol[8] that would trigger and govern the next, transitional, stage.
- A transitional stage, governed by the Additional Protocol, which would progressively establish a CU and align the parties' economic and social policies.
- A final stage that would be "based on the customs union and shall entail closer economic coordination between the parties."

The BPTF is the outcome of the transitional stage. It is comprised of the provisions entailed in the set of agreements covering trade in goods between the EU and Turkey since the Ankara Agreement, namely:

- The CU as established through the *EU-Turkey Association Council Decision 1/95*, which remains in force ("the Customs Union" or CU);
- The *Agreement between the European Coal and Steel Community and the Republic of Turkey on trade in products covered by the Treaty establishing the European Coal and Steel Community*, since subsumed by the European Union ("the Coal and Steel Agreement" or CSA);
- The *Decision of the EU-Turkey Association Council No 1/98* (amended by Council Decision No 2/2006) relating to agricultural (also covering fishery) products ("the Agriculture and Fisheries Trade Regime" or AFTR);
- The *Decision of the EU-Turkey Association Council No 1/2007* amending the trade concessions for processed agricultural products covered by Decision No 1/95 and by Decision No 1/97 on the arrangements applicable to certain processed agricultural products and repealing Decision No 1/97.

The terms of the CU were spelled out in the Additional Protocol. This Protocol committed the EU to eliminate all tariffs on covered goods immediately: Article 9 stated that "On the entry into force of this Protocol, the Community shall abolish customs duties and charges having equivalent effect on imports from Turkey." For Turkey, the Additional Protocol committed it to eliminate duties on covered goods from the EU, to eliminate quantitative restrictions on EU-originating products, and to adopt the common external tariff (CET). Articles 10 and 11 of the Additional Protocol required that tariffs on all industrial products and the industrial components of processed agricultural products be completely removed. Tariff removal was organized on the basis of two schedules: one, which applied to a list of products specified in Annex 3 of the Additional Protocol, allowed for a 22-year phase-out; all other covered products were to have tariffs removed in a series of steps over 12 years (the list for these products was not explicitly set out in the Additional Protocol).

The CSA, which entered into force on 25 July 1996 between Turkey and the then-still-existing European Coal and Steel Community (ECSC),[9] liberalised trade between Turkey and the Community in steel products, a sector that had been explicitly excluded under the Ankara Agreement (Article 26), and addressed subsequently through the Agreement between the ECSC and the Republic of Turkey on products within the province of the ECSC, which came into force in 1973, with a commitment to establish a schedule for tariff elimination. The CSA eliminated duties on most steel products immediately, while providing for a phase-out period for Turkish duties on certain sensitive products. As part of the Agreement, Turkey committed to take on board Community disciplines concerning state aids and competition in the steel sector,

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6 Protocol No 1 ("Provisional Protocol") to the Association Agreement.

7 Protocol No 2 ("Financial Protocol") to the Association Agreement.

8 Additional Protocol and Financial Protocol signed on 23 November 1970, annexed to the Agreement establishing the Association between the European Economic Community and Turkey and on measures to be taken for their entry into force - Final Act – Declarations.

9 CSA-covered products are now covered by the EC Treaty but remain outside of the scope of the CU.

with allowance for an adjustment period. The agreement also established an ECSC/Turkey Joint Committee with a view to resolving any issues that might arise. The CSA remains a standalone agreement; its rules of origin (ROOs) were amended to align with the Pan-Euro-Mediterranean system, effective 1 March 2009.[10]

The AFTR derives from Chapter IV of the Additional Protocol, which addressed trade in agricultural products. Article 33 of the Additional Protocol provided for a 22-year period for Turkey to "adjust its agricultural policy with a view to adopting, at the end of that period, those measures of the common agricultural policy which must be applied in Turkey if free movement of agricultural products between it and the Community is to be achieved." Article 34 then provided for free movement of agricultural products if the stipulated conditions had been met. Article 35, meanwhile, pending the fulfilment of the conditions for free movement to be triggered, provided for the Community and Turkey to grant each other preferential treatment in agricultural goods and fishery products, with the scope of such preferential treatment and the implementing arrangements to be decided by the Council of Association. Annex 6 of the Additional Protocol set out a transitional preferential regime for agricultural products originating in Turkey; this included elimination of tariffs on some products,[11] and reduction of tariffs and/or establishment of quotas for others.[12] Decision 1/95 pertaining to the CU reaffirmed the common objective of the Parties to achieve free movement of agricultural products and noted that an additional period was required to put in place the necessary conditions (Article 24). The same decision called for a progressive improvement of the relevant preferential arrangements (Article 26). Decision No 1/98 of the Association Council, as last amended by Decision No 2/2006 of the EC-Turkey Association Council (which amended Protocols 1 and 2 to take account of the 2004 enlargement of the EU), established the scope and terms for such preferential trade in covered agricultural and fishery products. As the conditions for Article 34 to be invoked have not been fulfilled, the AFTR remains in this provisional state. Protocol 1 to Decision No 1/98 of the Association Council sets out the preferential regime applicable to the importation into the EU of agricultural products originating in Turkey; Protocol 2 sets out Turkey's preferences; Protocol 3 sets out the applicable ROOs. The AFTR is asymmetric in favour of Turkey by providing Turkey with an exemption across the board of *ad valorem* duties for the products not covered by Protocol 2.

The main interaction between the BPTF and other EU and Turkey trade agreements is through cross-cumulation for purposes of qualifying products under the ROOs of the CSA and the AFTR. The CU does not apply ROOs, which the World Bank (2014) assesses as reducing trade costs by between 2% and 6% ad valorem for bilateral industrial goods trade. However, a movement certificate (the A.TR movement certificate) is required for shipments moving between the EU and Turkey. Further, the CU requires that inputs from third parties be subject to the CET and provides for application of tariffs if that is not the case (consistent with the "no-drawback" rule in FTAs).

In some cases where the EU has an FTA in place with a third country and Turkey does not, Turkey has imposed protection measures based on origin controls on goods trans-shipped through the EU from those parties (e.g., on automobiles from Mexico). Turkey has also applied additional customs duties on some textiles products originating from some third parties that are not EU FTA partners, as well as on a number of other products. The additional duties vary for countries benefiting from the GSP scheme, LDCs and others, based on customs declarations (World Bank, 2014: 25).

[10] The CSA ROOs are laid down in Protocol No 1 of the Agreement, as amended by Decision No 1/2009 of the ECSC-Turkey Joint Committee.
[11] All tariffs on fishery products originating in Turkey have been eliminated.
[12] Additional Protocol, Annex No 6 on the treatment to be accorded to agricultural products.

1.2 Comparison of the EU-Turkey BPTF to Other Agreements of the Parties

This section provides a perspective on the BPTF by comparing it to selected FTAs that have been entered into by the EU and Turkey.

In terms of coverage of industrial goods trade, from the EU's perspective, the BPTF is comparable to other EU agreements, which liberalize industrial goods trade entirely or almost entirely. Turkey agreed to eliminate all industrial goods tariffs in its agreement with Korea but retained protections for textiles and apparel in its FTA with Malaysia. Accordingly, the BPTF ranks with the strongest of Turkey's FTAs.

In terms of coverage of agricultural and fishery products, the EU's market access concessions under the AFTR are relatively generous for agricultural products and extremely generous for fishery products. The market access accorded to Turkey is much more generous than to developing countries under the GSP; for example, the EU provides Turkey tariff-free access for fishery products, which improves upon the GSP. The AFTR is quite restrictive on Turkey's side. This is consistent with restrictive market access terms that Turkey afforded Malaysia and Korea under its FTAs with those countries. The value of concessions varies of course according to the export capacity of the counterparties.

ROOs differ across EU agreements, reflecting special circumstances.[13] However, for agreements that qualify for pan-Euro-Med cumulation, which includes the BPTF, they are almost identical.[14] The cumulation regime of ROOs has evolved over time from the Pan-European Cumulation System (PECS) introduced in 1997 to the Pan-Euro-Med (PEM) system introduced in 2005 and formalized in its current structure in 2012.[15] The BPTF ROOs regime thus has evolved over time. Turkey has had varying success in negotiating cumulation provisions in the ROOs with third party FTAs: diagonal cumulation between Turkey, the EU, and Chile was included in the Turkey-Chile accord, but not in the Turkey-Korea FTA. Turkey's FTA with Malaysia envisages cross-cumulation with the EU if a future EU FTA with Malaysia were to include the same terms.

In customs administration, Turkey's progress in alignment has allowed it to take on advanced commitments in the World Trade Organization (WTO) Trade Facilitation Agreement (TFA) and recent FTAs. As the World Bank (2014) notes, "The CU has …

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[13] This point is emphasized on the European Commission's Trade Market Access Database website: "Be aware that the rules of origin applied to each partner country are not identical in all cases. Each preferential regime has a specific set of rules of origin attached" (European Commission, 2016j).

[14] The Commission's Handbook on the PEM system (European Commission, n.d.a), states: "the origin requirements in all the Origin Protocols to the [qualifying agreements], are almost identical." Note that the term "pan-Euro-Mediterranean cumulation system" has no legal significance and is used here in line with common practice.

[15] The Pan-European Cumulation System (PECS) was introduced in 1997 and was extended to industrial products originating in Turkey in 1999. This provided for diagonal cumulation across the bilateral and plurilateral FTAs involving the EU, the four European Free Trade Association (EFTA) countries, and the ten Central and Eastern European Countries and Baltic States. As product coverage varied and ROOs were inconsistent, the PECS represented a major liberalizing event as it introduced one common set of ROOs for all the FTAs, allowing value to be cumulated regardless of which participating party was the country of origin of the inputs without prejudicing the duty-free status of end products (see, e.g., Stewart-Brown, 2001). Pursuant to the Barcelona Process, which mandated the replacement of the EU's 1970s–era cooperation agreements with new reciprocal Euro-Mediterranean association agreements, and a decision of the EU Council on 11 October 2005, the protocols on ROOs of the various agreements were modified to introduce Pan-Euro-Med (PEM) ROOs, which provided for diagonal cumulation within the set of parties, which included the PECS parties and the Mediterranean partners, whose Euro-Mediterranean association agreements had entered into force. The PEM system was formalized through Council Decision No 2013/94/EU of 26 March 2012 on the conclusion of the Regional Convention on PEM preferential ROOs, which brings together in a single legal instrument all the ROOs for approximately 60 bilateral FTAs between the EU and the Contracting Parties to this Convention, namely:

- The EFTA States: Iceland, Norway, Switzerland, and Liechtenstein;
- Signatories to the Barcelona Declaration: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the Palestinian Authority, Syria, Tunisia, and Turkey;
- The Faroe Islands; and
- Participants in the Stabilisation and Association Process (SAP): Bosnia-Herzegovina, FYR Macedonia, Albania, Montenegro, Serbia, and Kosovo.

provided a significant impetus for trade facilitation and customs reform in Turkey including through modernization of the Turkish Customs Administration (TCA). These improvements are of great economic significance for Turkey and lie at the heart of Turkey's strong export performance over the past decade." The CU's impetus for alignment with the EU's *acquis* has also resulted in improved quality infrastructure and reforms of technical regulations in Turkey, which has accelerated modernization of Turkey's industry, to the benefit of Turkish consumers and exporters.

In the rules areas, the commitment to approximation of laws under the CU agreement worked in tandem with the more general alignment process in many areas covered by FTAs such as intellectual property (IP) and competition policy (including rules on state enterprises). In these areas, the internalization of the European *acquis* has had a stronger impact on Turkey's internal regulatory reform and alignment with modern practice compared to the effect of the EU's FTAs with other partners. Notably, this has prepared Turkey to take on progressively stronger commitments with other partners. For example, the FTA with Singapore, signed on 15 November 2015, is Turkey's first comprehensive agreement in a single undertaking and includes commitments in areas such as IP rights, e-commerce, competition, and transparency.

Nonetheless, the BPTF is out of date in a number of important respects as it lacks coverage of services, FDI, and public procurement; and does not include anti-fraud provisions, which have been included in EU trade agreements since 2001.[16]

In services and FDI, the EU's recent deep and comprehensive FTAs introduce disciplines that go beyond WTO commitments, including coverage of establishment in both services and non-services sectors, liberalization of capital flows and payments, and improved bindings under the WTO General Agreement on Trade in Services (GATS), which reduce uncertainty for services traders. While traditional Turkish FTAs covered only trade in goods (including FTAs as recent as the one with Malaysia, which came into force on 1 August 2015), the FTA with Korea, which came into force in 2013 and was originally limited to goods only, has since been expanded to cover services and investment. Similarly, the Turkey-Singapore FTA covers services and investment.

On public procurement, the BPTF lags well behind the EU's most ambitious procurement agreement, namely the CETA. Turkey's agreement with Singapore also covers procurement.

To summarize, the BPTF provides deeper effective facilitation of industrial goods trade than the parties' other FTAs, principally because of the greater alignment of rules in a wide range of areas bearing on goods trade, from customs administration to IP and competition policy. This has not only improved bilateral market access for both parties, but has worked to improve Turkey's ability to make stronger undertakings in its recent FTAs with third parties and improve its global competitiveness, strengthening its growth prospects. At the same time, the BPTF has been bypassed on a number of fronts, most importantly on services, FDI and public procurement, three key areas of interest for the EU in its recent FTAs; and it would benefit from updating of rules in other areas where there are remaining significant gaps in alignment with the EU *acquis*, including in particular anti-fraud provisions.

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[16] As a matter of principle, the EU no longer grants tariff preferences without an anti-fraud clause in its FTAs. This policy, which flows from a number of judgements of the European Court of Justice, was formalised by a number of EU policy documents, including:

- The 1997 Commission Communication on the management of preferential tariff arrangements (Commission of European Communities, 1997),
- Parliament Resolution of 22 October 1998 on the Commission communication on the management of preferential tariff arrangements,
- Council recommendations to the Commission of 16 February 1998 - conclusions on ECA reports to include an "anti-fraud clause" in trade agreements with third countries, and
- Commission for European Communities (2005) on the ROOs in preferential trade arrangements.

The clause allows suspension of tariff preferences against a country in three cases:

- a regular lack of co-operation with regard to verifications of origin of goods imported to the EU,
- a regular lack of co-operation with regard to combating breaches of customs legislation (MAA), and
- detection of a large scale breach of customs legislation.

1.3 Review of the Literature on the functioning of the BPTF

The functioning of the BPTF has been assessed from a wide range of perspectives, including official surveillance reports, commissioned studies, academic research covering aspects of the relationship, business sector submissions, and commentaries by informed persons.

For the most part, the literature focusses on the impacts of the BPTF on Turkey. In overall summary terms, the BPTF is seen as having played a significant role in anchoring Turkey's economic reforms towards a modern, private-sector-oriented, outward-looking economy, functioning on the basis of economic framework policies aligned with OECD norms. At the same time, OECD norms were not fully attained in the CU's first decade when progress was greatest in the context of strong political will and conducive economic conditions; since then, the pace of realizing full alignment has slowed markedly in the face of often severe headwinds from external factors, such as the 2008-09 global economic and financial crisis and its aftermath, the roiled waters in Turkey's neighbouring Middle East and North Africa (MENA) region that has seen weak growth amid conflict, and the internal challenges that Turkey has faced in giving full effect to its undertakings in respect of the *acquis*. Meanwhile, the shift of trade liberalization activity into the bilateral/regional preferential mode has amplified the importance of the asymmetric feature of the BPTF that requires Turkey to provide EU FTA partners with liberalized market access on the terms negotiated by the EU. These various factors have led to dissatisfaction with the overall state of affairs and calls for reform.

Assessments of the economic impact of the BPTF have reached mixed conclusions. An ex ante CGE model study by Harrison et al. (1996) anticipated that Turkey would benefit substantially from the CU – between 1.0 and 1.5% of GDP – with the main benefits to be derived from the mandated liberalization vis-à-vis third parties, including reciprocal FTAs with EU FTA partners. Francois et al. (2005) and Demirci and Aydin (2011), also using CGE modelling analysis, corroborated these ex ante results, finding significant gains for Turkey (real GDP gains of 1.3% and 4.87% respectively). These studies, however, relied on the GTAP V5 dataset with a base year of 1997 and thus represent very early perspectives. The World Bank (2014; CU Review), based on a gravity model study drawing on panel data over the period 1990-2010, concluded that the BPTF had no significant effect on bilateral trade between the EU and Turkey, although it also found that the CU has been an important factor in deepening Turkey's global integration. These studies leave open the question of whether the BPTF generated significant economic gains based on current economic conditions.

Assessments of the qualitative impact of the BPTF on Turkey's economy suggest a generally positive impact but also identify the emergence of some problematic features. The World Bank (2014; Trading Up) paints a relatively positive picture of positive spillover effects from the BPTF on Turkey's economic progress in terms of diversification of export markets, moving up the technological ladder into more sophisticated product lines, relying on more capital-intensive production and less on cheap labour, improving the quality of its products, and integrating into global value chains (GVCs). At the same time, the study noted that: progress had largely stalled since 2007; Turkey's export intensity has lagged other emerging markets; Turkey's performance in attracting FDI, services sector growth, and small business dynamism had all lagged; and Turkey's future prospects were at risk because of specialization in slower-growing export segments and the significant "distance" in industrial terms of its export palette from higher-growth sectors.

Other structural/qualitative economic effects emerging from the BPTF identified in the literature include:

- The discipline on Turkish industry from the increase in multilateral import penetration in Turkey (Erzan et al., 2002);

- The BPTF-induced transformation of Turkey into a "trading state" (Kirisci, 2015), which was in part due to the credible locking-in of a liberal foreign trade regime backed up by modern, high-standard microeconomic framework policies, which have moved the Turkish economy from a government-controlled regime to a market-based one, under which Turkish producers of industrial goods have performed "remarkably well" (Togan, 2012);
- The increased value chain integration with the EU, as evidenced by analysis of intra-industry trade (Yucel, 2014); and
- The role of trade cost reductions in boosting Turkish exports in many sectors, such as vegetables and fruit, plastic and rubber, staple fibres, and articles of apparel and clothing (Nowak-Lehmann et al., 2007).

Official surveillance reports suggest good progress has been made on areas covered by the CU, but with remaining areas for improvement. On the positive side of the ledger:

- EU surveillance concludes that Turkey has achieved "a good level of preparation in the areas of free movement of goods, intellectual property law, enterprise and industrial policy, customs union and external relations" (European Commission, 2015e: 4).
- Turkey's own recital of progress in developing capacity highlights the scope of the areas of progress in alignment with the acquis: providing for authorized economic operators (AEOs); x-ray screening of trains and airport baggage; anti-smuggling capacity (including additional maritime patrol boats, drug-sniffing dogs, and customs personnel); implementation of customs risk-management practices; capacity building for risk-analysis units; the resulting reduction in physical inspection rates and time for clearing import and export documentation; development of risk management for electronic trade; and progress in implementing the tariff systems (TARIC, Quota, and Surveillance) needed for future interconnectivity and interoperability with the EU information technology systems (Republic of Turkey, Ministry for EU Affairs, 2013).
- WTO surveillance highlights the role of the CU in various dimensions: as a cap on potential increases on MFN tariffs, which would be possible under Turkish Law when MFN tariffs "are deemed insufficient to provide 'adequate' protection to domestic industries" (WTO, TPR Body, 2012a: 29); the liberalization entailed by the alignment of Turkey's unilateral preference regime with that of the EU in terms of providing GSP, GSP+, and Everything-But-Arms (EBA) arrangements to certain developing and least developed countries" (WTO, TPR Body, 2016a); and the impetus from the CU for the alignment of trade-related laws with WTO requirements, including legislation on ROOs, trade defence, export credits, and TBT and SPS measures (WTO, TPR Body, 2016a).

At the same time, various trade frictions facing EU exports to Turkey are identified including, *inter alia*: additional testing and conformity assessment requirements applied at the border; technical barriers to trade in areas such as textiles, second-hand goods and alcoholic beverages; and the requirement to present proof of origin for some goods in free circulation. Other identified frictions include: de facto export restrictions for metals, paper, and leather exports from Turkey; certain state aid schemes that are in breach Turkey's obligations under the CU; limited progress on public procurement; and inadequate intellectual property rights enforcement at customs (European Commission, 2014; 2015e). EU surveillance also identifies the need for significant progress in alignment in terms of the judiciary and fundamental rights, social policy, and employment (European Commission, 2014).

Other areas of unresolved frictions include:

- Measures that interfere with the free circulation of certain products, including pharmaceuticals, chemicals, second-hand goods, sugar confectionary, scrap metal, and retreaded tires (World Bank, 2014); and footwear, textiles and apparel, alcoholic spirits, beef, and metal hand tools (Foreign Trade Association, 2015).

- Classification by Turkey of certain processed food products (including feta cheese, certain beverages, spirits, and vinegar) as primary agricultural products and thus subject to tariffs (World Bank, 2014).
- Road transport permits, particularly for transit, faced by transport operators and visa restrictions (World Bank, 2014); and
- Weaknesses in the bilateral institutional processes responsible for ensuring that changes to the EU *acquis* in areas covered by the CU are transposed into Turkish law in a timely manner (World Bank, 2014).

Business support for the BPTF is strong, with numerous calls from business organizations for updating and enhancing the commercial framework. At the same time, it is noteworthy that there is lack of awareness of the opportunities in EU-Turkey trade on the part of EU business (Eurochambers and TOBB, 2013); and expressed frustration with the asymmetry in the relationship on the part of Turkish business (British Embassy Ankara and TÜSİAD, 2015).

In terms of non-economic impacts, there has been considerable progress on the social and human rights aspects of the EU-Turkey relationship. As pointed out by Kirisci (2005), this progress is put in sharp relief by the difference between the 1998 EU report on Turkey, which found Turkey's progress toward pre-accession on the basis of the Copenhagen political criteria to be wanting, to the 3 October 2005 European Council decision to open membership negotiations with Turkey (Kirisci, 2005).

As regards the potential gains from enhancements to the bilateral relationship, the World Bank's (2014) forward-looking CGE analysis suggests an updated arrangement could add up to about EUR 3.1 billion[17], or 0.46%, to Turkey's GDP under the most advantageous scenario, which includes extension of the CU to cover trade in primary agriculture and liberalization of services. However, a comprehensive analysis of the potential for improvement of the bilateral commercial relationship, based on updated circumstances, remains to be addressed by the literature.

[17] Converted from the original figure of USD 2.986 billion, expressed at 2007 prices, in the World Bank study to EUR at 2016 prices.

PART 1: EX POST ANALYSIS OF THE EU-TURKEY BPTF

This Part reviews the BPTF as it has functioned.

Chapter 2 starts with a descriptive analysis of trade and investment relations between the EU and Turkey over the longer term and during the BPTF period. The focus is on trends in bilateral trade and investment flows and the evolution of bilateral market access conditions, including tariff barriers and NTBs in both those sectors covered and not covered by the BPTF.

Chapter 3 provides a gravity model analysis of the impact of the BPTF, building on the World Bank (2014) analysis, seeking to identify econometrically the BPTF's impact on trade in goods and services and on investment.

Chapter 4 analyses the BPTF's impact through CGE simulations of the counterfactual situation in which the BPTF was not implemented.

The BPTF's impacts in other dimensions are analysed in the ensuing chapters: social impacts (Chapter 5), environmental impacts (Chapter 6), regulatory and institutional impacts (Chapter 7), human rights impacts (Chapter 8), and spillover effects on third parties, with a focus on LDCs and ODCs (Chapter 9).

Chapter 10 draws conclusions from these various analyses and formulates recommendations based on these conclusions for the enhancement of the BPTF.

2 IMPACT OF THE BPTF ON TRADE AND INVESTMENT – DESCRIPTIVE ANALYSIS

The BPTF era witnessed a great expansion of EU-Turkey bilateral trade and investment. Bilateral trade quadrupled; investment from the EU now accounts for the large majority of FDI in Turkey. Moreover, as the extensive literature on the bilateral relationship documents, the alignment of Turkey's regulatory framework with the EU's facilitated the integration of Turkish producers into EU value chains, upgraded the quality infrastructure in Turkey, and elevated Turkey's competitiveness in global markets (e.g., World Bank, 2014).

However, identifying the BPTF's impact is complicated by the liberalization vis-à-vis third parties by both the EU and Turkey during this period, which eroded bilateral preferences considerably. This liberalization included implementation of the Uruguay Round commitments, including tariff cuts and commitments under the the General Agreement on Trade in Services (GATS), and the FTAs entered into by both parties. Moreover, in Turkey's case, the FTAs were in many instances driven by its CU obligations to liberalize vis-à-vis the EU's FTA partners, a fact which assigns to the BPTF the preference erosion that these often-unilateral tariff reductions by Turkey generated for EU exporters.

Further, the BPTF era featured a number of major disturbances that impacted on the bilateral relationship, including Turkey's balance of payments crisis in 2001 and the associated IMF-driven economic reforms, the 2008-09 global financial crisis and its aftermath, and the general deterioration of the economic environment in West Asia during the BPTF era.

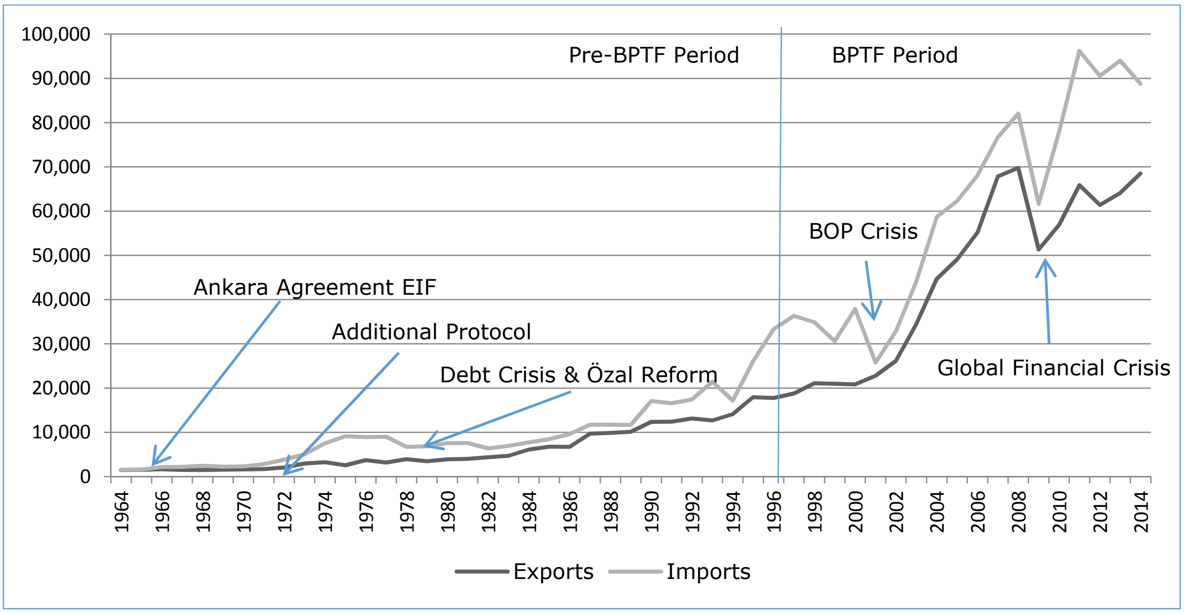
This section reviews the historical record and seeks to isolate the effect of the BPTF, taking into account the evolving context.

2.1 EU-Turkey Trade and Investment under the BPTF

2.1.1 Trade in Goods

Bilateral trade between the EU grew very rapidly during the BPTF era, especially after 2001 (Figure 2.1).

Figure 2.1: Turkey's Bilateral Trade with the EU since the Ankara Agreement, 1964-2014, USD Millions at 2014 Prices

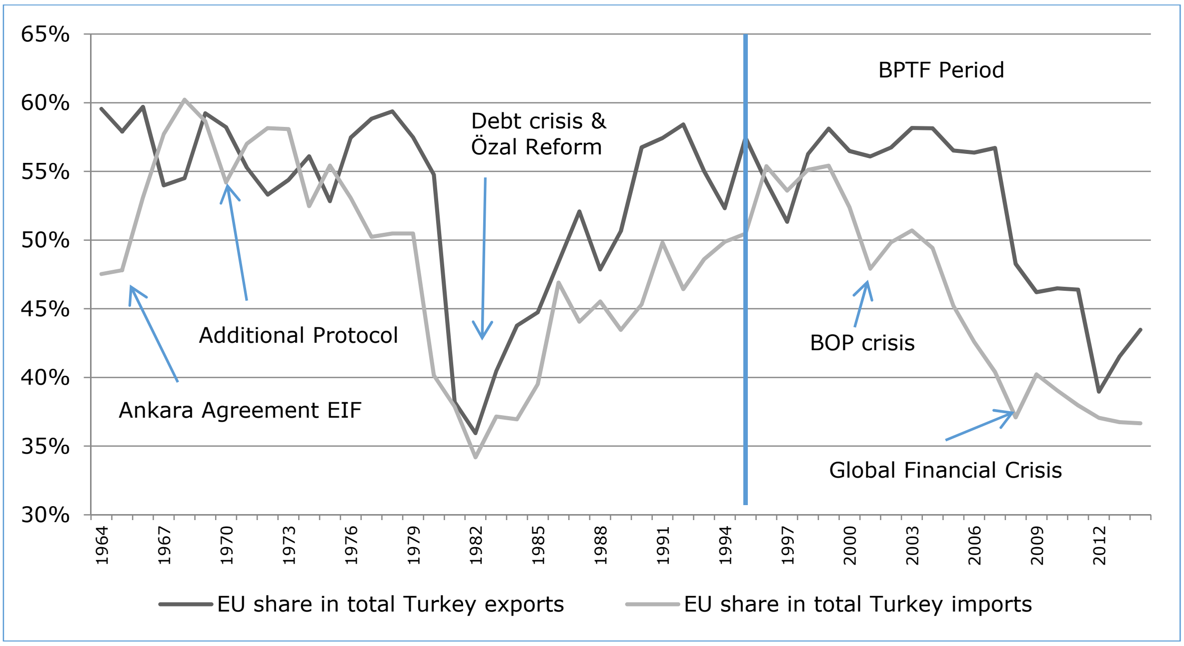


Source: IMF, Direction of Trade Statistics (n.d.) Nominal trade data deflated using the US GDP deflator from the Federal Reserve Bank of St. Louis.

The impact of Turkey's balance of payments/banking crisis in 2001 is visible in terms of the contraction of its imports at that time. The subsequent stabilization of the Turkish economy with an outward orientation supported a steep rise in EU-Turkey two-way trade through the mid-2000s. The global financial crisis of 2008-09 is also clearly visible with a significant contraction of two-way trade. The slow growth in the EU in the post-crisis period also clearly leaves its mark in Turkey's trade data with the slow pace of bilateral export growth beginning in 2009.

The EU's share in Turkey's total trade has tended to decline in the era of globalization, albeit with some major shifts reflecting the major episodes of Turkish economic policy reforms (Figure 2.2). Turkey's late-1970s debt crisis witnessed a plunge not only in the level of trade, but also in the EU share of trade. The post-crisis reforms led by Turgut Özal resulted in a steep recovery in the EU's share of Turkey's two-way trade even as Turkey opened up to the world; this is also the era of the progressive alignment of Turkey's economic framework under the Ankara Agreement and the Additional Protocol. The EU's share of Turkey's two-way trade reached its recent high point at about the time of the entry into force of the BPTF.

Figure 2.2: EU Share of Turkey's Imports and Exports

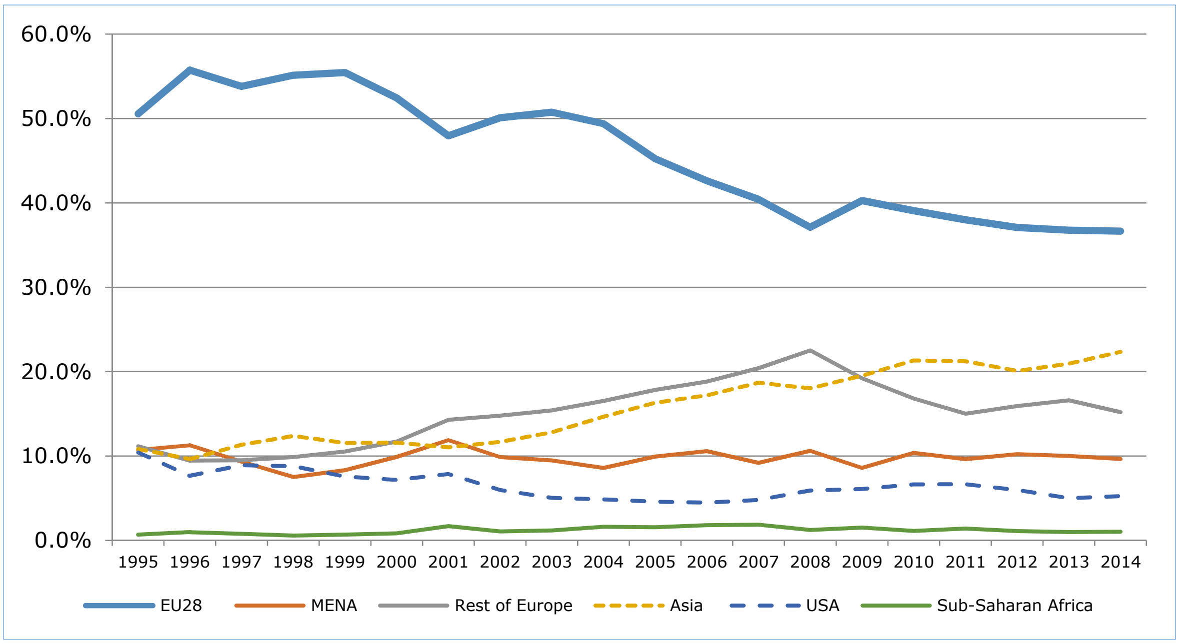


Source: IMF, Direction of Trade Statistics (n.d.)

The entry into force of the BPTF coincided with the implementation of the Uruguay Round of multilateral trade negotiations and the alignment of Turkey's tariff policy with the EU's as a precursor to the CU's launch. The BPTF era was, accordingly, one of significant expansion of global trade for Turkey. While the EU shared in this growth, the erosion of EU preferential access to the Turkish market by Turkey's unilateral liberalization to the rest of the world pursuant to the Additional Protocol reforms, which was intensified by the general lowering of tariffs under the WTO Agreement, is clearly visible in the steep decline of the EU's share of Turkey's imports during the 2000s. Turkey's imports from the EU15 increased by 242% over the period (from USD 22 billion to USD 74 billion), but increased by 470% from the rest of the world (from USD 43 billion to USD 242 billion). The EU's share of Turkey's exports was not similarly affected by the mid-1990s changes, which primarily affected Turkey's external tariffs. Between 1996 and 2014, Turkey's exports to the EU increased by 413% (from USD 11 billion to USD 56 billion), while Turkey's exports to the world grew by almost 582% (from USD 23 billion to USD 157 billion). Most of this gap emerged during and following the Great Recession and, thus, reflects primarily macroeconomic disturbances rather than being related to the BPTF.

The geographical diversification of Turkey's imports during the BPTF only really started in earnest after 2000 (Figure 2.3). It initially reflected a rising sourcing of imports from the rest of Europe, as well as from Asia. After 2008, imports from the rest of Europe started to lose ground, while Asia continued to march ahead. The United States saw its share of Turkey's imports cut in half over the period.

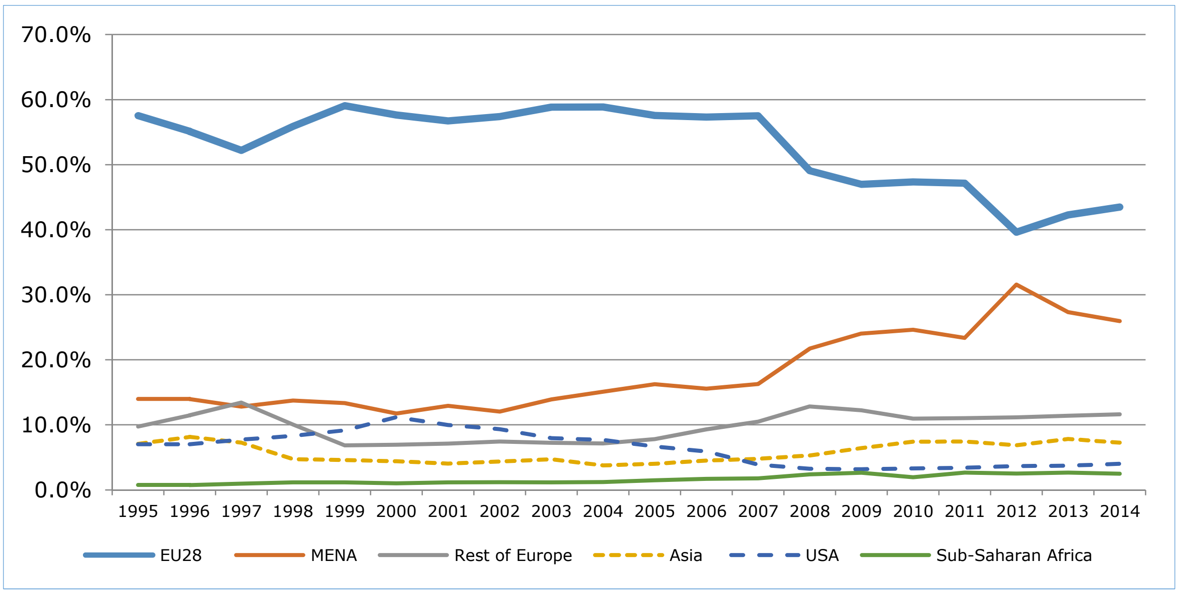
Figure 2.3: Turkey's Imports by Region, BPTF Period (% of Total)



Source: UN Comtrade (2014).

As regards Turkey's export trade (Figure 2.4), the decline in the EU's share during and following the 2008-09 crisis is largely mirrored in an increase in the MENA region's share. Other significant shifts in Turkey's export pattern include the decline of the US share, which fell from 10% in 2001 to only 4% in 2014; most of this occurred in the pre-crisis period when Turkey's exports to the rest of Europe were growing more rapidly.

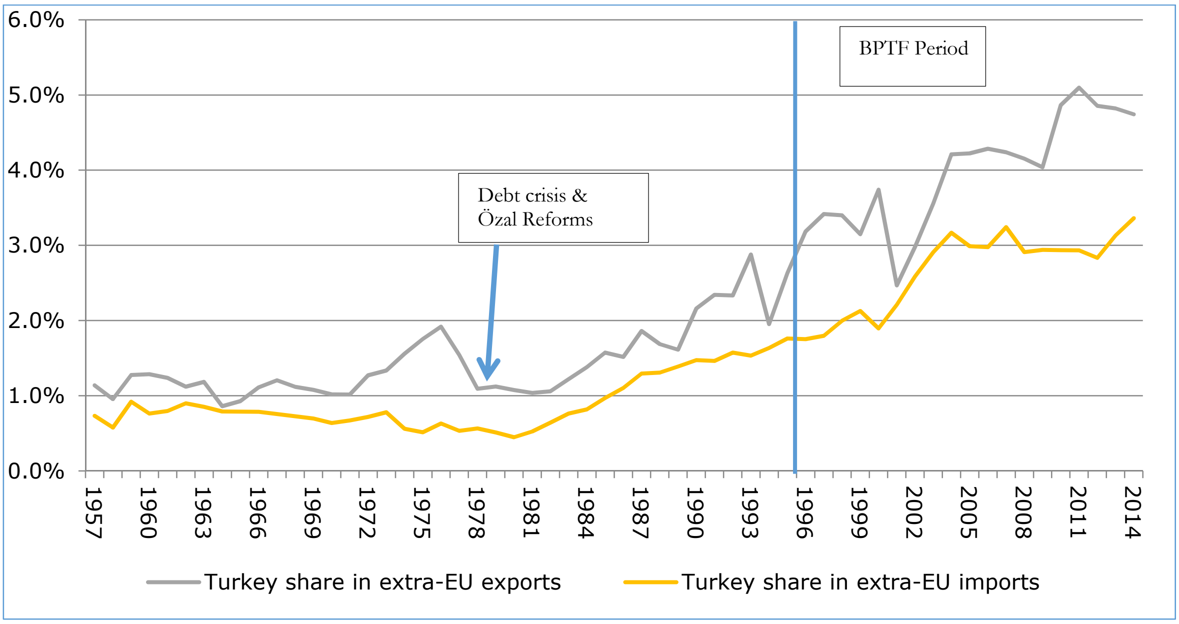
Figure 2.4: Turkey's Exports by Region, BPTF Period (% of Total)



Source: UN Comtrade (2014). Note: where the World Bank (2014) reports the EU27, the present study reports the EU28, shifting Croatia from the Rest of Europe to the EU.

Notwithstanding Turkey's diversification of export destinations, the overall steep increase in the openness of Turkey's economy, which on a *prima facie* basis dates to the period associated with the Özal reforms, resulted in Turkey becoming an increasingly important partner for the EU, both as a source of imports and as a destination for exports (Figure 2.5). From this perspective, the BPTF period appears to feature more a continuation of trends than a change in trends, at least initially.

Figure 2.5: Turkey's Share of the EU's Trade



Source: IMF, Direction of Trade Statistics (n.d.).

One of the most notable features in these data is the divergence of Turkey's share in the EU's exports versus imports following Turkey's Balance of Payments (BOP) crisis of 2001: Turkey's share of EU imports flattened out, while Turkey's share of EU exports continued to rise. The period of flattening out of imports broadly coincides with the stalling of the accession momentum following what has been termed a "golden age of reform" between 2000 and 2005 (Independent Commission on Turkey, 2009).

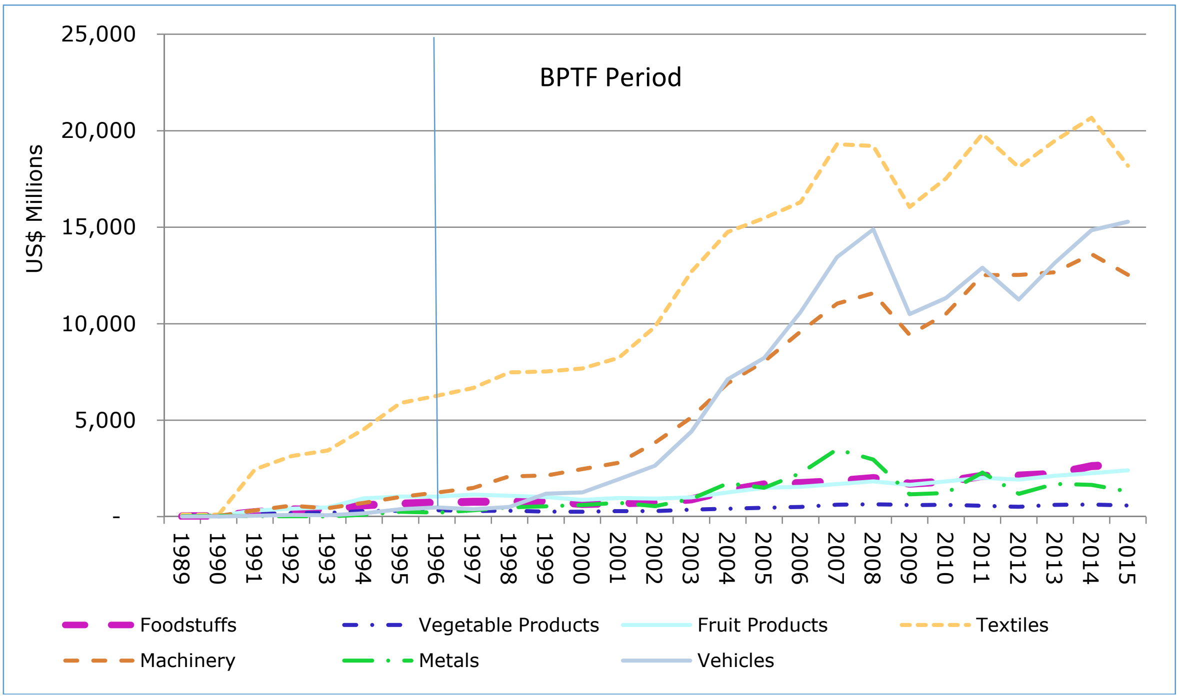
A second notable feature is the rise in Turkey's share of EU exports coming out of the Great Recession is that access to the Turkish market has been an important source of economic recovery for the EU.

As regards the product composition of Turkey's exports, this showed several notable trends during the BPTF period (Figure 2.6 and Figure 2.7).

- Textiles increased the most in absolute terms (in USD), but lost ground in relative terms, as other products cumulatively expanded to a greater extent. The decline in the relative share of textiles was coincident with the phasing out of the WTO Agreement on Textiles and Clothing;
- Motor vehicles experienced a comparable increase in absolute terms, but this constituted a significant boost in relative terms; all of this came prior to the 2008-09 crisis;
- Machinery and metal products also made notable increases both in terms of value and of their share of Turkey's total exports to the EU; and
- Fruits and foodstuffs made minimal gains in value terms and saw their share of Turkey's exports to the EU decline over the period.

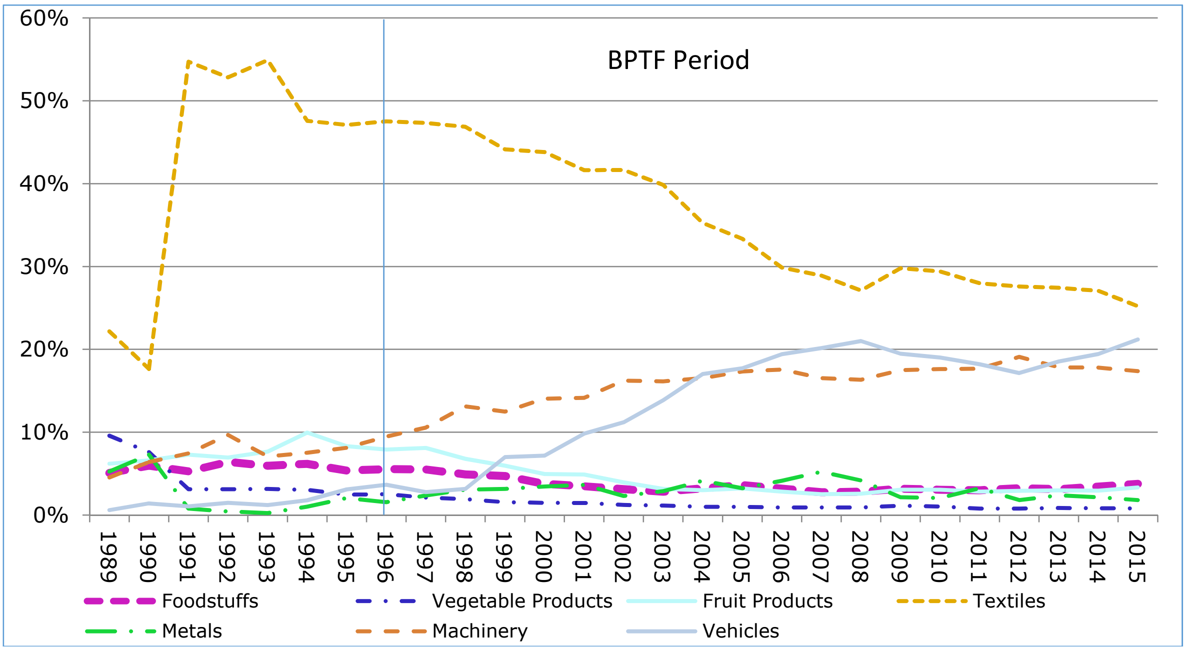
Accordingly, the trend data suggest, on a *prima facie* basis, that the limited liberalization of agriculture by Turkey worked to the disadvantage of Turkey's downstream food-processing sector.

Figure 2.6: Turkey's Exports to the EU: Product Composition (USD millions)



Source: UN Comtrade (2014).

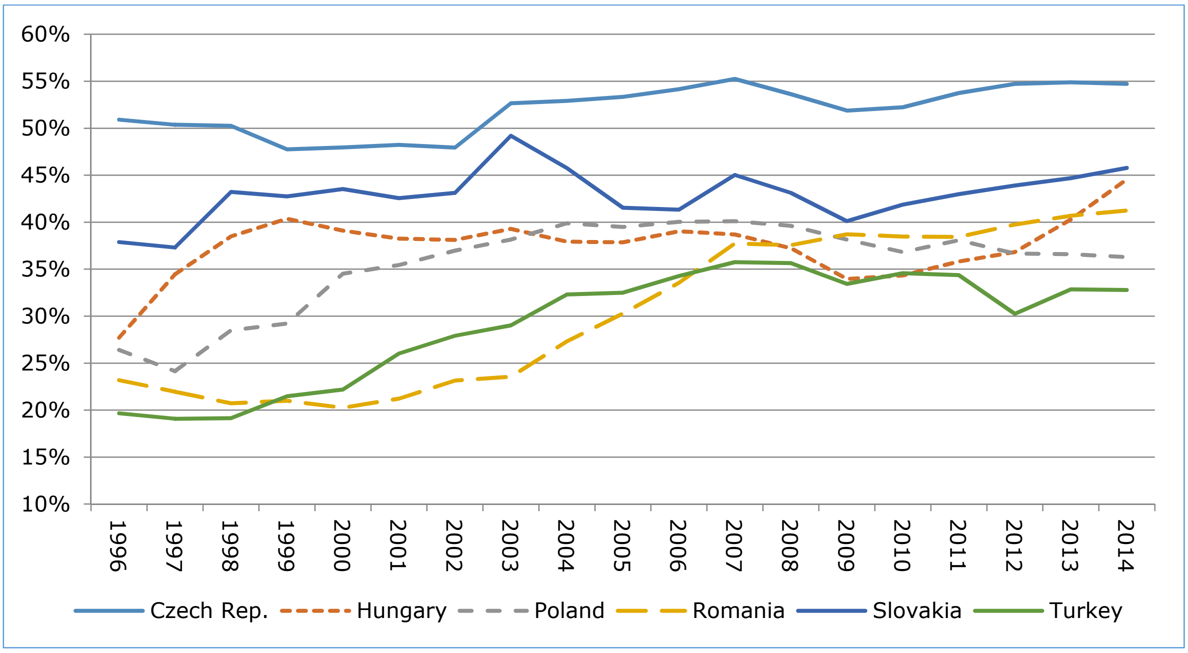
Figure 2.7: Turkey's Exports to the EU: Product Composition (% of total)



Source: UN Comtrade (2014).

The expansion of the share of medium-technology exports, such as automobiles, textiles, and iron and steel products, was associated with the reduction in trade costs under the CU, including the harmonization of standards and elimination of ROOs, which promoted the emergence of more deeply-integrated production networks between Turkish and European firms (WEF, 2013; World Bank, 2014). This allowed Turkey to perform comparably to EU accession countries in terms of expanding the sophistication of its total exports to the world, although this was mostly limited to the brief window between Turkey's 2001 BOP crisis and the 2008-09 crisis Medium-technology exports have lost ground in the most recent period, falling from a peak of 35.6% in 2007 to 32.8% in 2014.

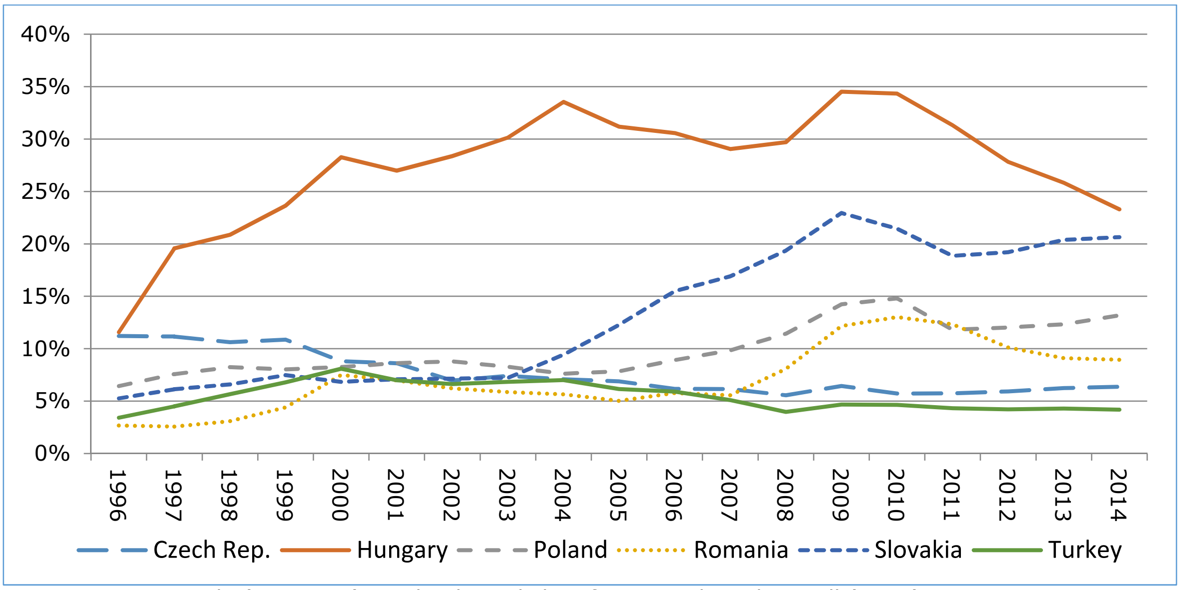
Figure 2.8: Medium-Technology Exports as % of Total Exports: Turkey and Comparator EU Member States



Source: UN Comtrade (2014: S2); Technological classification is based on Lall (2000).

High-technology exports, including such products as pharmaceuticals and computers that are intensive in research and development (R&D), made significant strides in the early part of the BPTF period, broadly consistent with the performance of EU accession economies; however, high-tech exports subsequently gave up all the ground gained, as their share of Turkey's overall exports declined from a peak of 8.1% in 2000 to 4.2% in 2014. This experience contrasted with that of most of the newer EU Member States, which expanded their share of high-tech exports: for example, Hungary went from 12% in 1996 to almost 35% in 2010 before falling back to 23% in 2014; Slovakia went from 5% in 1996 to 21% in 2014; Poland from 6% to 13%; and Romania from 3% to 9%. Only the Czech Republic failed to make ground in this export category, as its share of high-tech exports fell from 11% to 6% over the period (Figure 2.9).

Figure 2.9: High-Technology Exports as % of Total Exports: Turkey and Comparator EU Member States



Source: UN Comtrade (2014: S2); Technological classification is based on Lall (2000).

To sum up, there was some increase in the sophistication and quality of Turkey's industrial exports during the BPTF period, although this appears to have been mainly limited to medium-technology sectors. The momentum of economic transformation was lost following the 2008-09 crisis and has yet to recover.

Although the sectoral composition of exports suggests only modest changes in the sophistication of Turkey's economy during the BPTF period, the rise in the number of exporters suggests a stronger dynamic of economic transformation. Empirical evidence demonstrates that typically it is the more productive firms in an economy that can overcome the fixed costs of export market entry. Accordingly, the steep rise in the number of Turkish exporters since 2003 is a very encouraging sign of increasing productivity at the firm level in Turkey (Table 2.1).

Table 2.1: Turkish Exporter Dynamism, 2003-2013

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. of Exporters	33,938	37,580	40,203	41,966	45,818	46,270	46,946	48,609	51,371	54,366	57,999
No. of Entrants	12,311	13,026	13,088	12,939	16,069	13,958	14,029	14,058	14,909	15,681	19,699
No. of Exiters	8,592	9,384	10,465	11,176	12,217	13,506	13,353	12,395	12,147	12,686	16,066
Surviving Entrants	7,000	7,330	7,250	6,941	9,232	7,485	7,925	8,106	8,613	6,320	
Incumbents	21,627	24,554	27,115	29,027	29,749	32,312	32,917	34,551	36,462	38,685	38,300
Failing Entrants	5,311	5,696	5,838	5,998	6,837	6,473	6,104	5,952	6,296	9,361	

Source: World Bank (2016b: Table CYD_all).

That being said, consistent with firm-level dynamics globally, most of Turkey's exports are accounted for by a relatively small number of large firms that export to multiple destinations (Table 2.2) Firms that export to more than 10 destinations account for only 11% of Turkey's population of firms, but generate 70% of its exports.

Table 2.2: Market Reach of Turkish Exporters, 2014

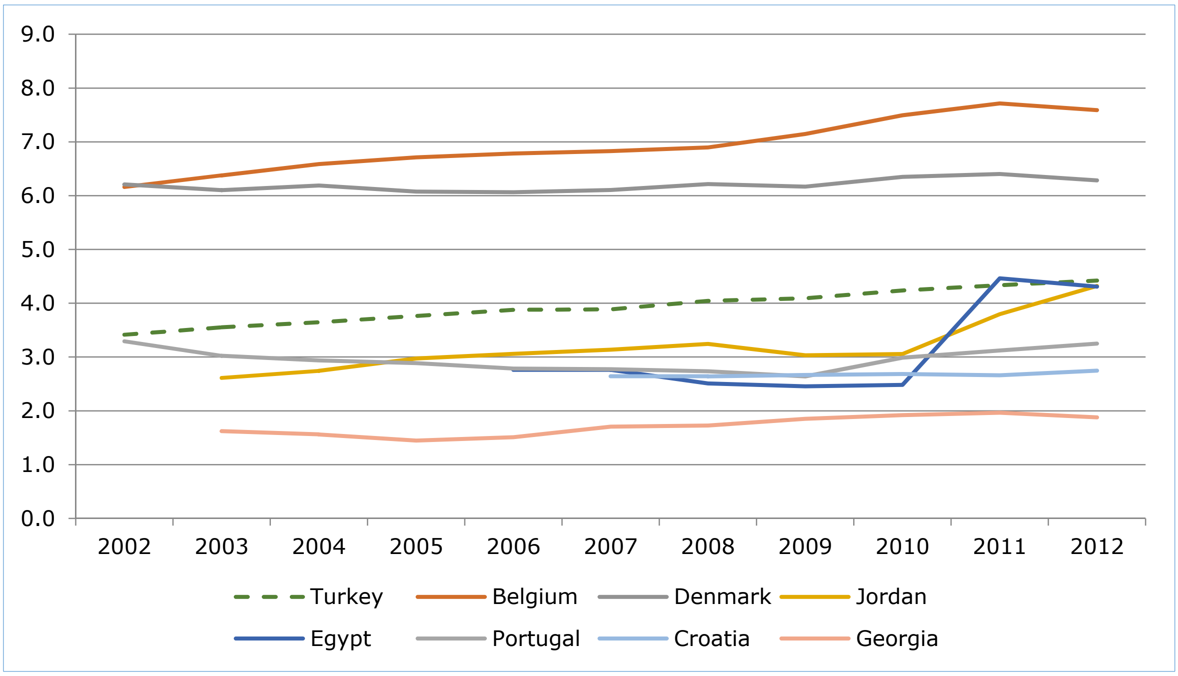
Number of Export Destinations	% of Total Number of Exporters	% of Total Exports
1	45%	7%
2 to 5	35%	14%
6 to 9	9%	9%
>=10	11%	70%
Total	100%	100%

Source: TurkStat (2015).

In international comparison, Turkey's exporters have a comparable reach in terms of number of destinations, as have exporters in Egypt and Jordan, and substantially greater reach than exporters in Georgia. Compared to reporting EU exporters, Turkey is in the middle ground, trailing Germany (which ranked first), Belgium, and Denmark, for example, but ahead of Portugal and Croatia (Figure 2.10). Among the fifty countries in the Exporter Dynamics Database (World Bank, 2016b) that reported for 2012 (mainly developing countries), Turkey ranked 7th with 4.42 destinations on average.

The diversification of Turkey's export markets is reflected at the firm level in terms of a rising number of firms entering non-traditional markets (Table 2.3). Overall, the number of Turkish firms entering the EU and EFTA markets rose over the past decade, but the number of Turkish firms entering non-traditional markets rose much faster. As a result, the share of new exporters that entered the EU/EFTA markets fell from 52% of all new exporters in 2003 to 35% in 2013. This was mirrored in a steep rise in the share of new exporters entering markets in the rest of Europe and Central Asia (a three-fold increase over the period), MENA, and the rest of the world. It is a reasonable inference that exporting to the EU served as a springboard to exporting to third parties.

Figure 2.10: Average Number of Destinations per Exporter: Turkey and Comparator Countries



Source: World Bank (2016b).

Table 2.3: Geographical Destination of Turkey's New Market Entries, 2003-13

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
						Number					
EU and EFTA	30,095	33,306	34,549	34,952	38,426	35,488	33,956	34,015	36,226	35,305	38,704
MENA	11,933	12,870	13,684	13,812	15,904	17,315	20,977	21,838	22,118	26,130	29,546
Rest of Europe and Central Asia	7,074	8,098	9,403	11,048	13,135	14,472	13,695	15,636	17,540	19,016	21,562
Rest of world	9,302	10,393	11,270	11,722	13,159	13,019	14,159	16,123	17,855	20,001	21,742
						Percent of Total New Exporters					
EU and EFTA	52%	52%	50%	49%	48%	44%	41%	39%	39%	35%	35%
MENA	20%	20%	20%	19%	20%	22%	25%	25%	24%	26%	26%
Rest of Europe and Central Asia	12%	13%	14%	15%	16%	18%	17%	18%	19%	19%	19%
Rest of world	16%	16%	16%	16%	16%	16%	17%	18%	19%	20%	19%

Source: World Bank (2016b: Table CYD_all). Note: New exporters are those that did not export in year t-1, but exported in year t to a particular market.

2.1.2 Trade in Goods Covered by the BPTF

Given the many factors impacting on EU-Turkey trade during the BPTF period, a useful benchmark for the performance of the BPTF is to consider the trends in goods trade, differentiating goods by whether they were subject to one of the BPTF agreements or traded on an MFN basis. To develop this analysis, we compare tariffs at the HS 6-digit level for EU imports from Turkey on a preferential basis vs. the MFN tariff. We match bilateral imports against those tariff lines and calculate the total imports that were received preferences under the BPTF vs. those that were not. For the current EU Member States that were not in the EU, we track their imports from Turkey. As these countries became EU Member States, their imports shift into the EU total.

As can be seen, BPTF-covered goods imports into the EU from Turkey increased more strongly than non-covered goods. Some examples of commodities that saw significant growth since the CU came into force are:

- Automobiles (commodity codes 870323, 870322, 870331) which had been increasing prior to the CU – growing from USD 36 million in exports to the EU in 1989 to USD 158 million by 1995 – saw significant growth since the CU has been in force – with USD 4 billion in exports in 2015 in this category.

- Similarly, diesel powered buses (commodity code 870210) grew from USD 3.8 million in 1989 to USD 62 million by 1995 and USD 1 billion in exports in 2015.
- Clothing has also seen significant growth over the period. For example within three commodity codes (610910, 610990, and 611020), which cover knit articles, such as T-shirts and jerseys, in 1989 Turkey was exporting USD 189 million of goods. By 1995 this had grown to USD 1.1 billion and then almost tripled during the period of the CU to end at USD 3 billion in 2015.

A striking feature that emerges from the data is the change in trend following the 2001 BOP crisis. While BPTF-covered goods marginally out-performed non-BPTF goods in the first half-decade of the BPTF period, it was the policy changes introduced to address the BOP crisis that significantly widened the performance gap, not only on an import basis but for exports as well. In other words, it was the interaction between the BPTF and the more general economic policy changes that appear to have made the major difference in realization of the liberalization potential of the BPTF.

Figure 2.11(a): EU Imports of BPTF-Covered Goods vs. non-BPTF-covered Goods (Index 1995=100) – EU 15

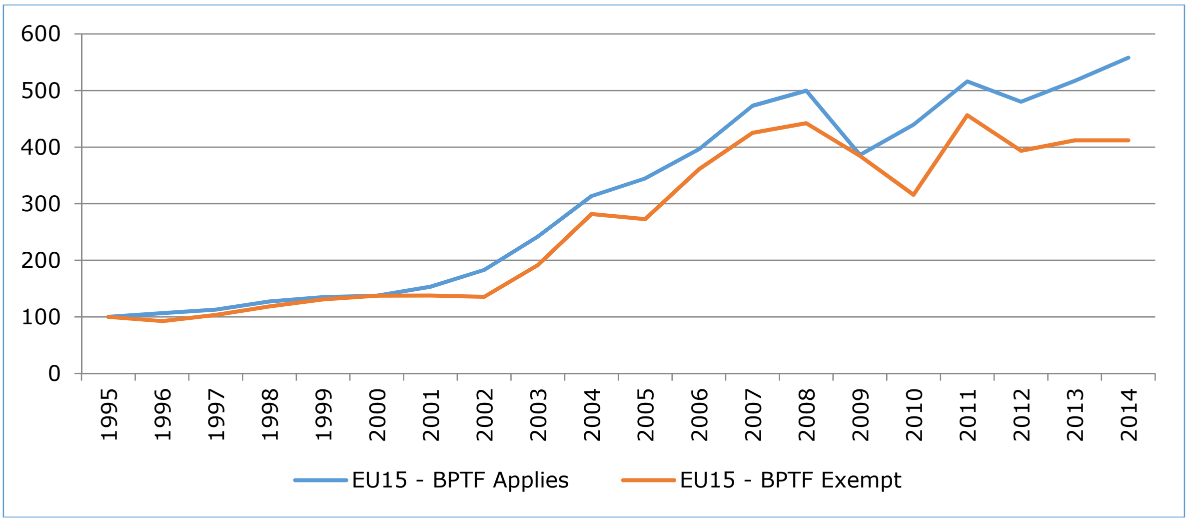
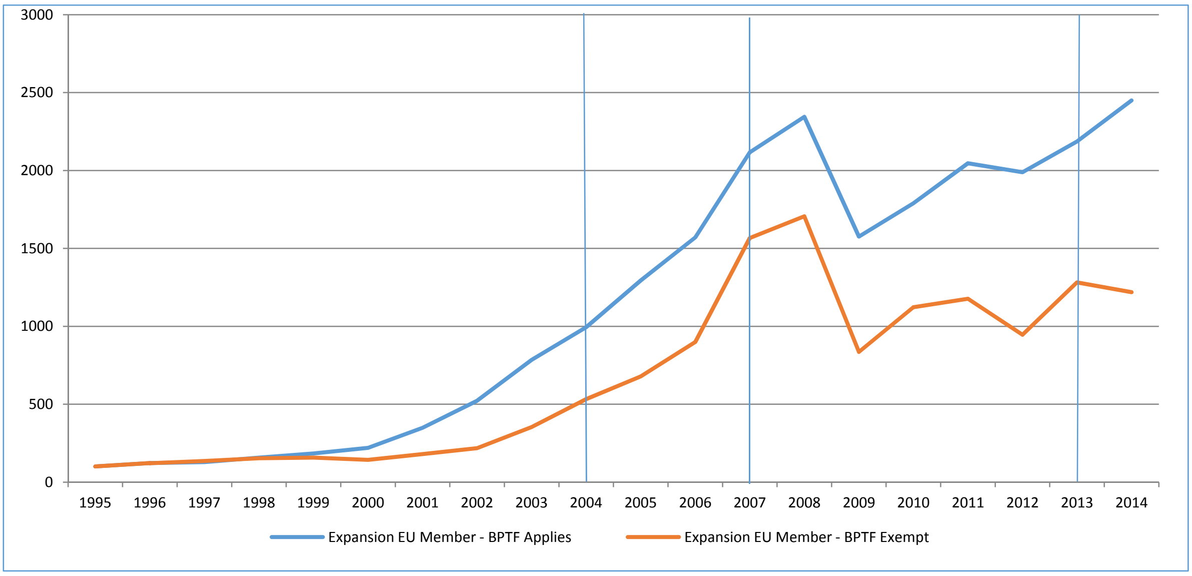


Figure 2.11(b): EU Imports of BPTF-Covered Goods vs. non-BPTF-covered Goods (Index 1995=100) – EU Expansion Members



Source: International Trade Centre (ITC), Market Access Map (2015b), Trade Map (2015c); and calculations by the study team.

Figure 2.12(a): Turkey Imports of BPTF-Covered Goods vs. non-BPTF-covered Goods (Index 1995 = 100) – From the EU15

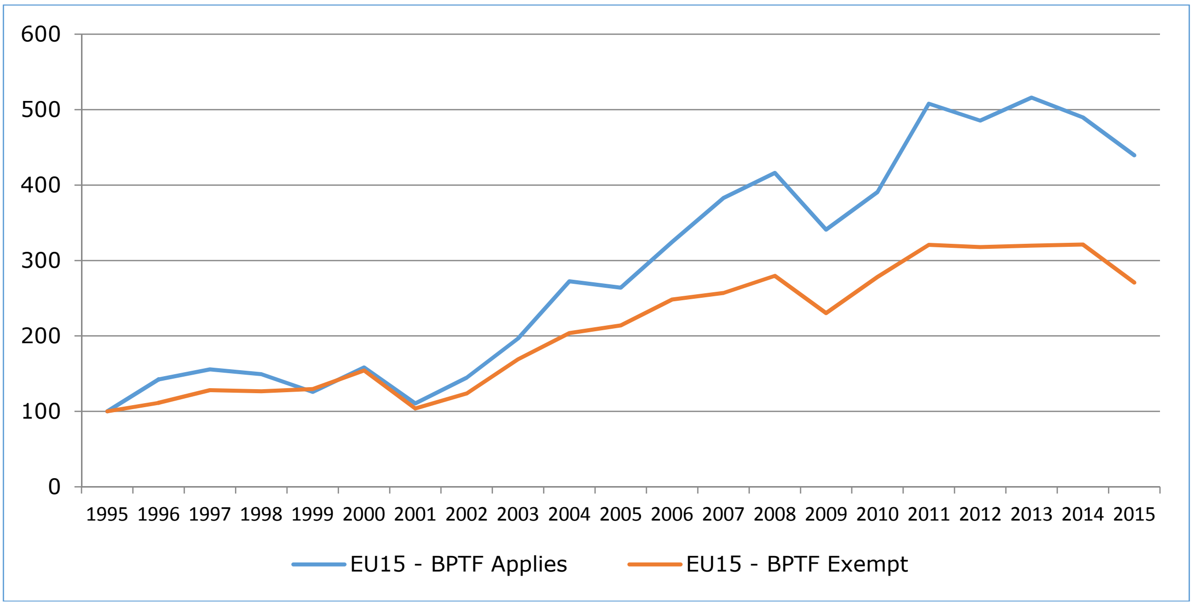
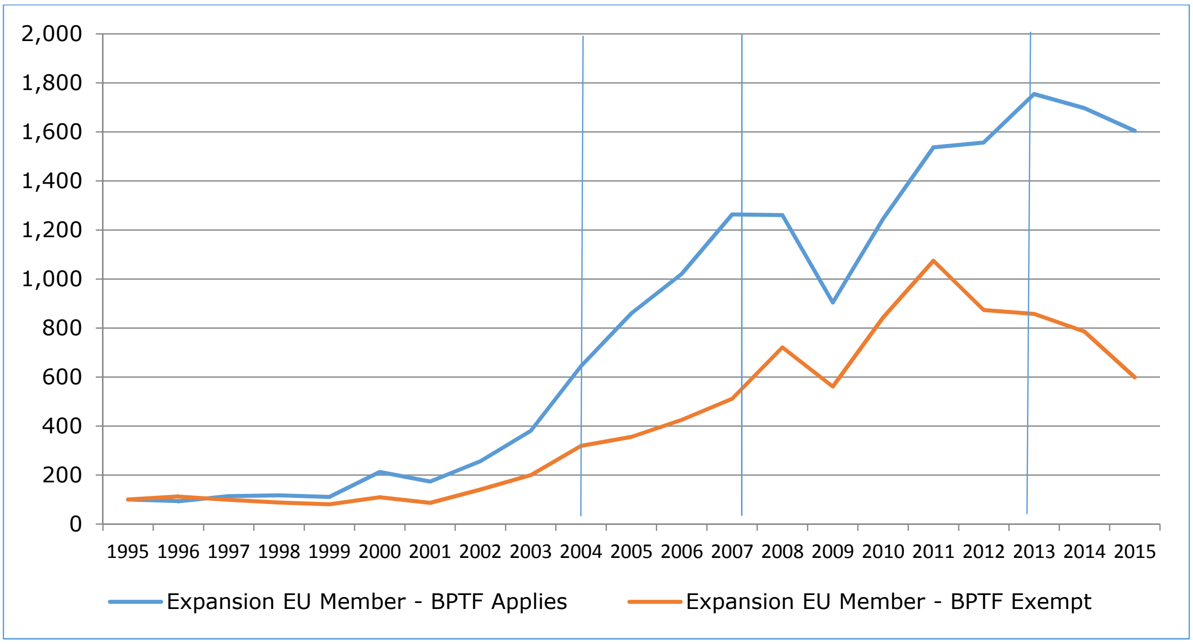


Figure 2.12(b): Turkey Imports of BPTF-Covered Goods vs. non-BPTF-covered Goods (Index 1995 = 100) – From the EU Expansion Members



Source: ITC (2015b; 2015c); and calculations by the study team.

2.1.3 Trade in Agricultural Goods

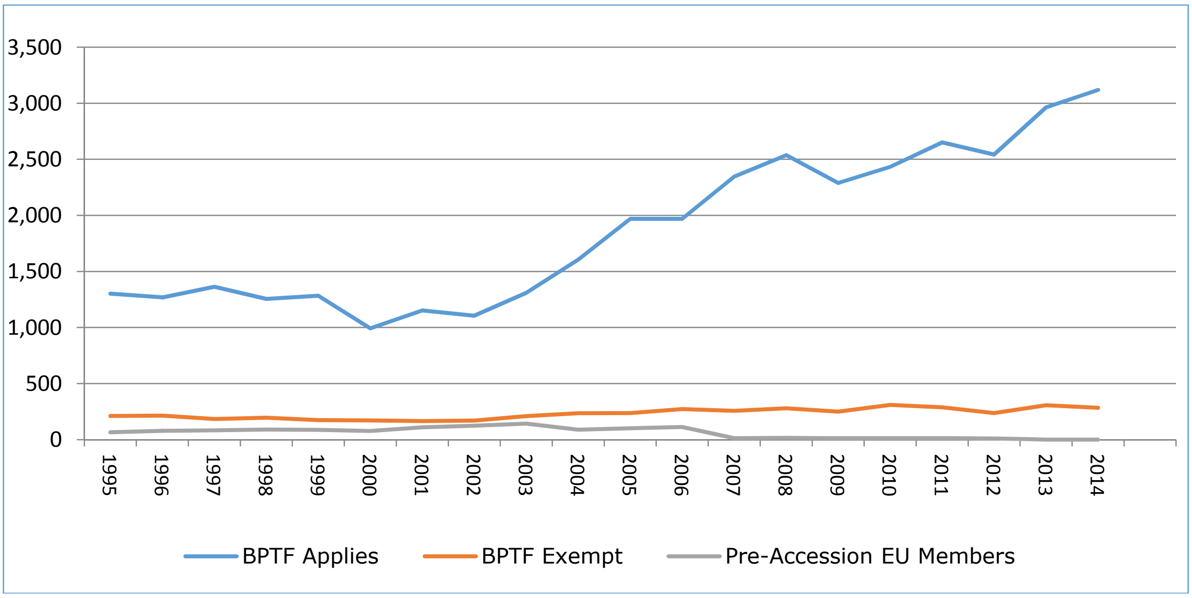
This section describes the bilateral trade performance of agricultural goods according to whether they were covered by the BPTF or not covered by these arrangements. We distinguish primary agricultural products (Figure 2.13 and Figure 2.15) from processed agricultural products (Figure 2.14 and Figure 2.16).

The same general pattern that emerges from consideration of all BPTF goods is clearly visible in the primary and in the processed agricultural products: BPTF-covered products experienced a significant surge in bilateral trade, while non-covered goods essentially flat-lined.

There is one exception, namely primary agricultural imports into Turkey (Figure 2.15), where non-BPTF covered imports rose strongly, albeit erratically. The first spike in

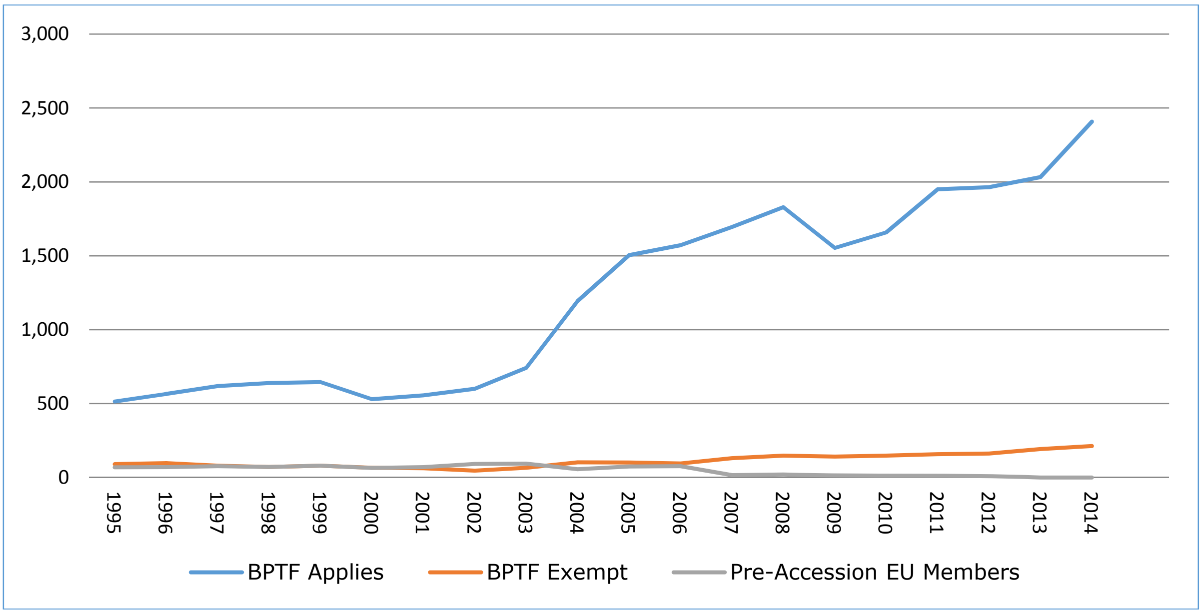
2007-2008 reflected the drought in Turkey, which resulted in Turkey importing wheat and sunflower seeds to compensate for reduced domestic production; the second spike in 2011 was due to surging beef imports, which were related to the huge increase of prices of meat in Turkey.

Figure 2.13: EU Imports of BPTF-Covered Primary Agricultural Goods vs. non-BPTF-covered Primary Agricultural Goods (USD millions)



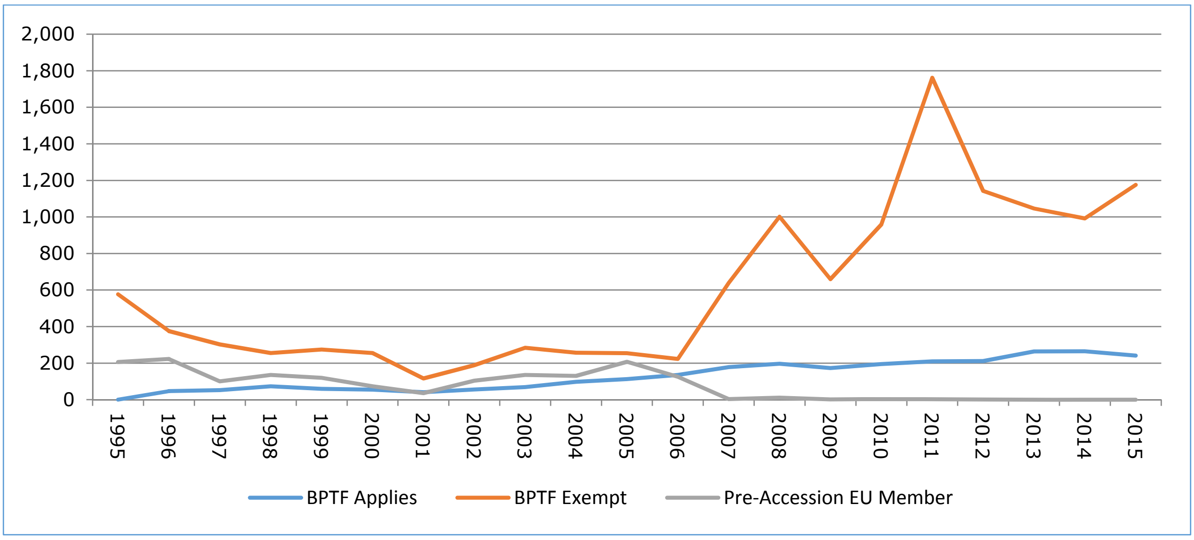
Source: ITC (2015b; 2015c); and calculations by the study team.

Figure 2.14: EU Imports of BPTF-Covered Processed Agricultural Goods vs. non-BPTF-covered Processed Agricultural Goods (USD millions)



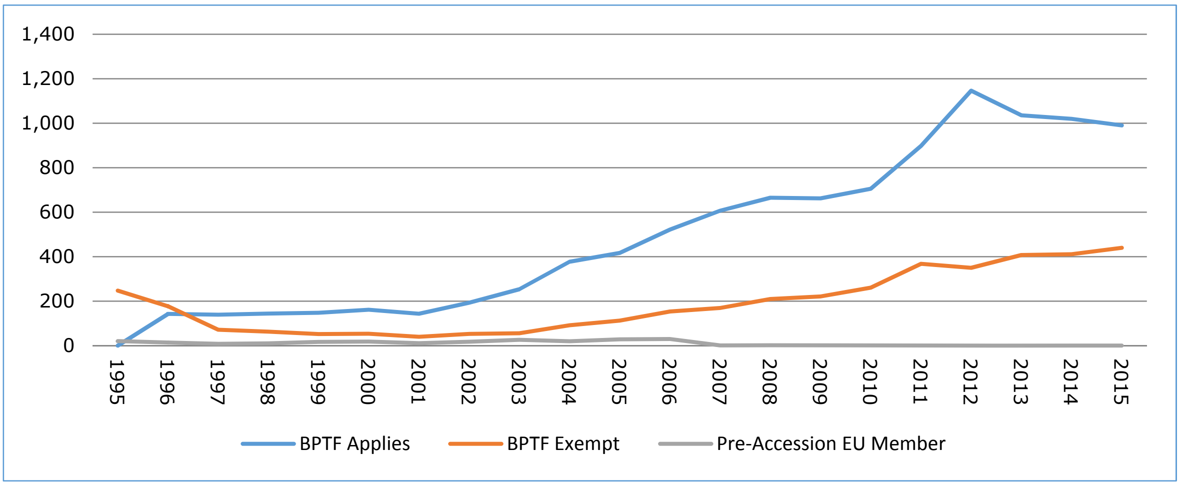
Source: ITC (2015b; 2015c); and calculations by the study team.

Figure 2.15: Turkey Imports of BPTF-Covered Primary Agricultural Goods vs. non-BPTF-covered Primary Agricultural Goods (USD millions)



Source: ITC (2015b; 2015c); and calculations by the study team.

Figure 2.16: Turkey Imports of BPTF-Covered Processed Agricultural Goods vs. non-BPTF-covered Processed Agricultural Goods (USD millions)

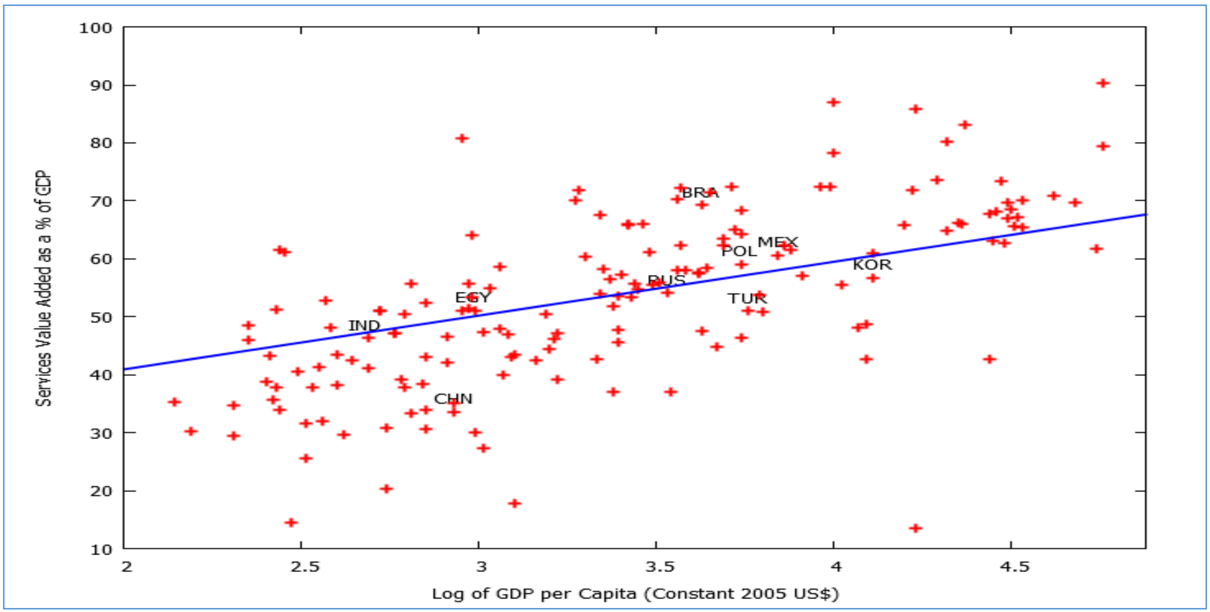


Source: ITC (2015b; 2015c); and calculations by the study team.

2.1.4 Services Trade

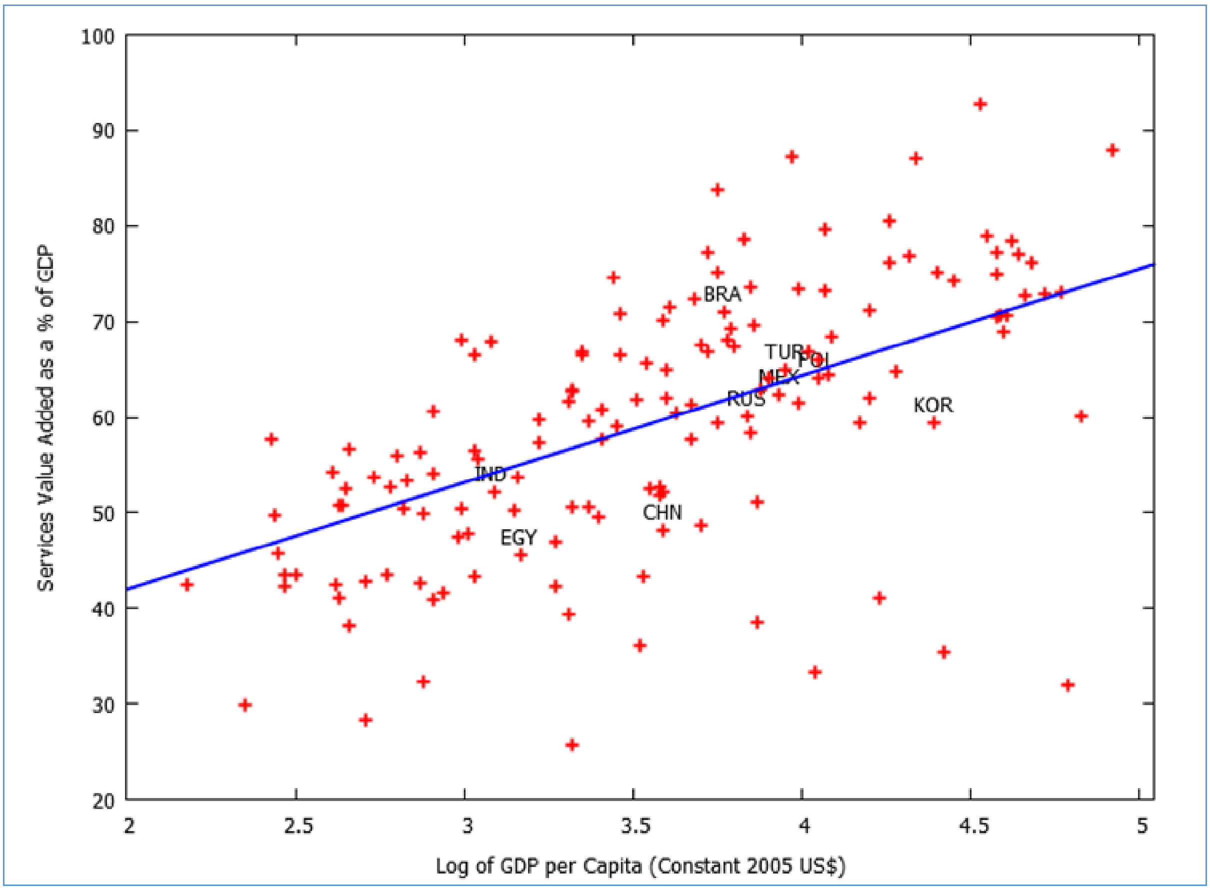
Turkey's services sector share of GDP grew strongly over the BPTF period from 51% in 1996 (Figure 2.17) to 63.5% in 2014 (Figure 2.18). In 1996, the sector was somewhat under-developed in international comparison based on per capita incomes; in 2014, it was broadly in line with that of other countries with a similar per capita income. The BPTF had no direct impact on bilateral EU-Turkey's services trade, which is governed by the MFN regimes maintained by the EU and Turkey under their respective GATS commitments, although the indirect impact flowing from synergies with strengthened goods trade and FDI relationships could have been considerable. The fact that the BPTF period largely coincided with the implementation of the WTO GATS commitments complicates any attempt to identify the separate effects. An assessment of the impact of the GATS on Turkey's services sector performance was outside the scope of the present study; it might be observed that in areas where Turkey did well in international competition – e.g., in insurance, tourism and transport, as demonstrated below – Turkey features relatively open services regimes and made relatively strong commitments in terms of binding existing levels of openness. In professional and business services, where Turkey is much less open, it under-performed. This circumstantial evidence falls short of establishing a casual link; it is however an issue for future research.

Figure 2.17: Services Value Added as Share of GDP in 1996



Source: Calculated based on World Development Indicators (WDI), (World Bank, 2015).

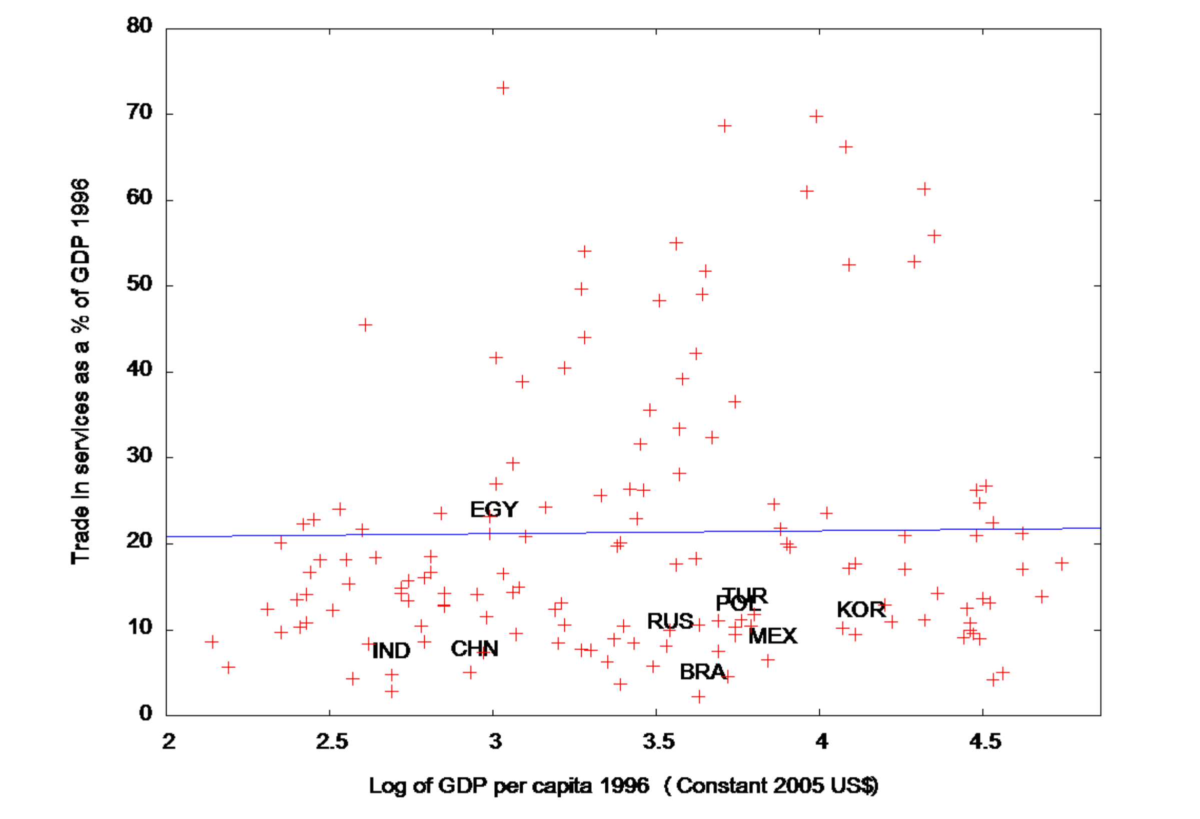
Figure 2.18: Services Value Added as Share of GDP in 2014



Source: Calculated based on WDI (World Bank, 2015).

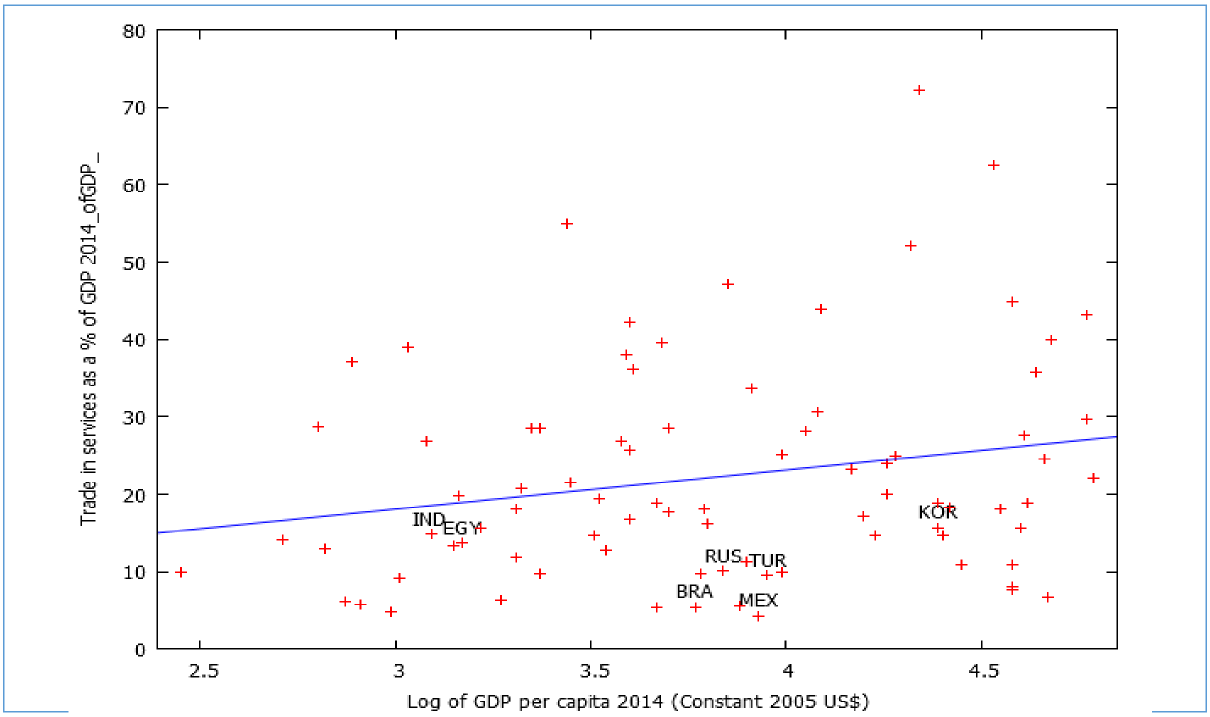
The growth in Turkey's services sector as a share of GDP was not matched by growth in services exports (Figure 2.19 and Figure 2.20). The share of services trade in GDP has trended sideways, remaining in the 10% range, in contrast to the growing share of traded services in global GDP. The share has also remained below the trend in terms of per capita income.

Figure 2.19: Trade in Services as Share of GDP in 1996



Source: Calculated based on WDI (World Bank, 2015).

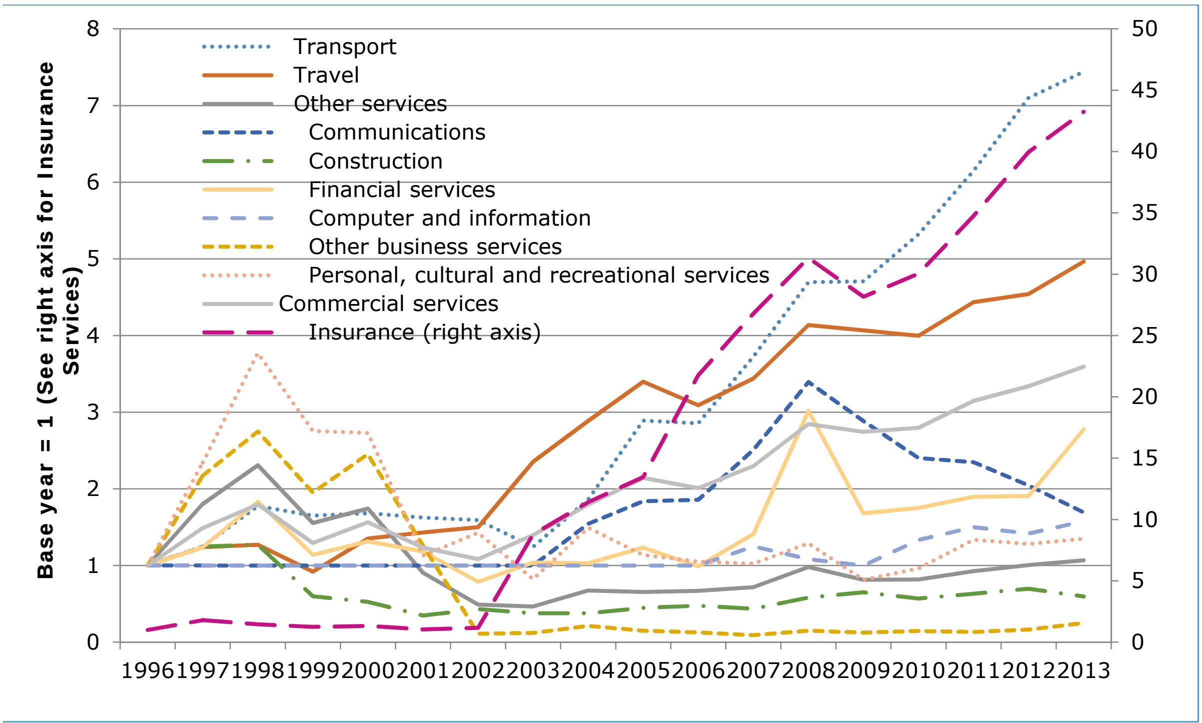
Figure 2.20: Trade in Services as Share of GDP in 2014



Source: Calculated based on WDI (World Bank, 2015).

The strength of Turkey's services exports is concentrated in tourism, transport, and insurance (Figure 2.21). In 2014, Turkey ranked 8th globally in tourism exports with 2.4% of the global market; 9th in insurance services (with 1% of the sales accounted for by the top 10 exporters); and 11th in transportation services exports, with 1.4% of the apparent global market (WTO, 2015). Turkey also has considerable strength in international construction, although this does not generate cross-border sales: Turkey had 18 of the top 250 international construction contractors in Engineering News 2015 rankings. Other producer services exports have been stagnant, however.

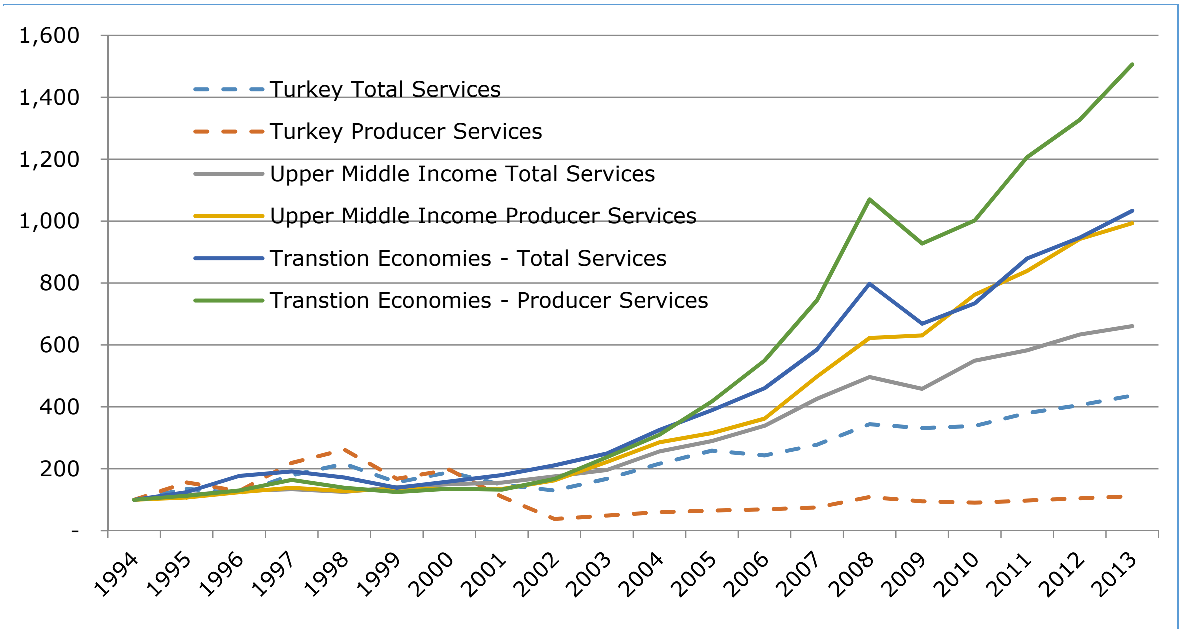
Figure 2.21: Turkey's Services Sector Exports by Sub-sector



Source: UNCTADSTAT (n.d.).

The stagnation in Turkey's producer services exports stands in stark contrast to upper middle-income countries and transition economies, where producer services exports have grown faster than total services exports. Thus, the stagnant growth in Turkey's producer services exports has been the major factor in its overall under-performance in services exports (Figure 2.22).

Figure 2.22: Growth of Turkey's Services Exports (1994 = 100)



Source: UNCTADSTAT (n.d.).

Notably, the areas where Turkey's services exports exhibited strength were also sectors in which Turkey has a relatively liberal applied services trade regime and in which Turkey made relatively strong binding commitments. For example, in insurance, tourism and transport, Turkey's score on the Services Trade Restrictiveness Index (STRI) averages about 0.2, which is relatively open (zero being fully open and 1.0 being fully closed). Moreover, the average score for openness on a bound basis under the GATS Trade Restrictiveness index (GTRI) is 0.28. By contrast, on professional and business services, where Turkey did less well, the STRI score is 0.45 and the GTRI score is 0.51.[18] Accordingly, while it might be surmised that the BPTF played a role in Turkey's overall underperformance on services trade by committing Turkey to unilateral liberalization in goods without liberalizing services, and thereby deepened Turkey's comparative advantage in trade in goods trade and exacerbated its comparative disadvantage in services trade, the strong performance of several services sectors is not consistent with that hypothesis, and the pattern of under-performance is more consistent with a story whereby protection of weak sectors in the GATS commitments perpetuated that weakness.

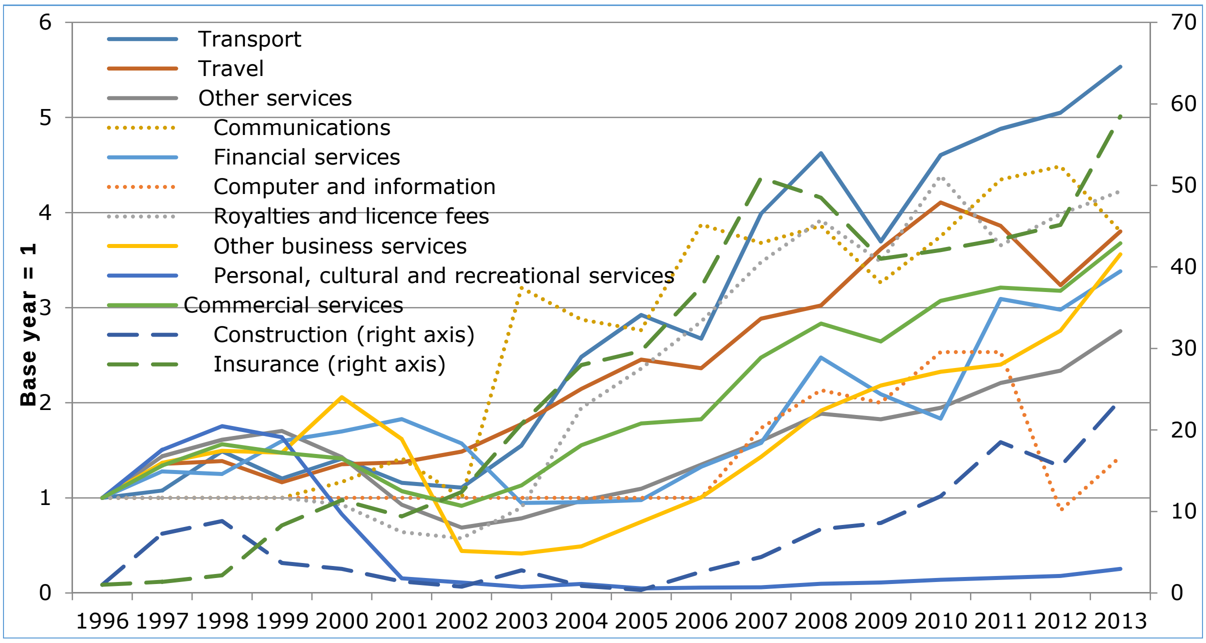
Turkey's services imports have grown, but with considerable dispersion of growth across the various sectors, with some sectors experiencing outright declines and only a handful matching the steeper rise witnessed internationally (Figure 2.23). This resulted in a visible divergence between Turkey and its comparator countries, which saw steep growth across the board (Figure 2.24).

Turkey's bilateral trade in services with the EU (Figure 2.25 and Figure 2.26) reflects its global performance. The first half of the 2000s, when Turkey's reform momentum was strong due both to the post-crisis reforms but also to the fact that technical alignment under the CU started in earnest, witnessed an increase in two-way trade between Turkey and most EU Member States, although the dynamic was by far the strongest with Germany. However, after 2005, the services exports gains flattened out and, following the 2008-09 crisis, imports from the EU fell off and failed to grow thereafter.

The strength of the services trade link with Germany stands out not only because of the gap vis-à-vis other EU Member States, but also because it started to expand earlier in the BPTF period, which suggests that it was at least partially linked to the strengthened trade and investment links between Germany and Turkey, given the well-established correlations between services and goods trade, and between FDI links and headquarters services flows. While a direct link to the CU could not be confirmed, the exploitation of the CU through FDI makes such a conclusion not implausible.

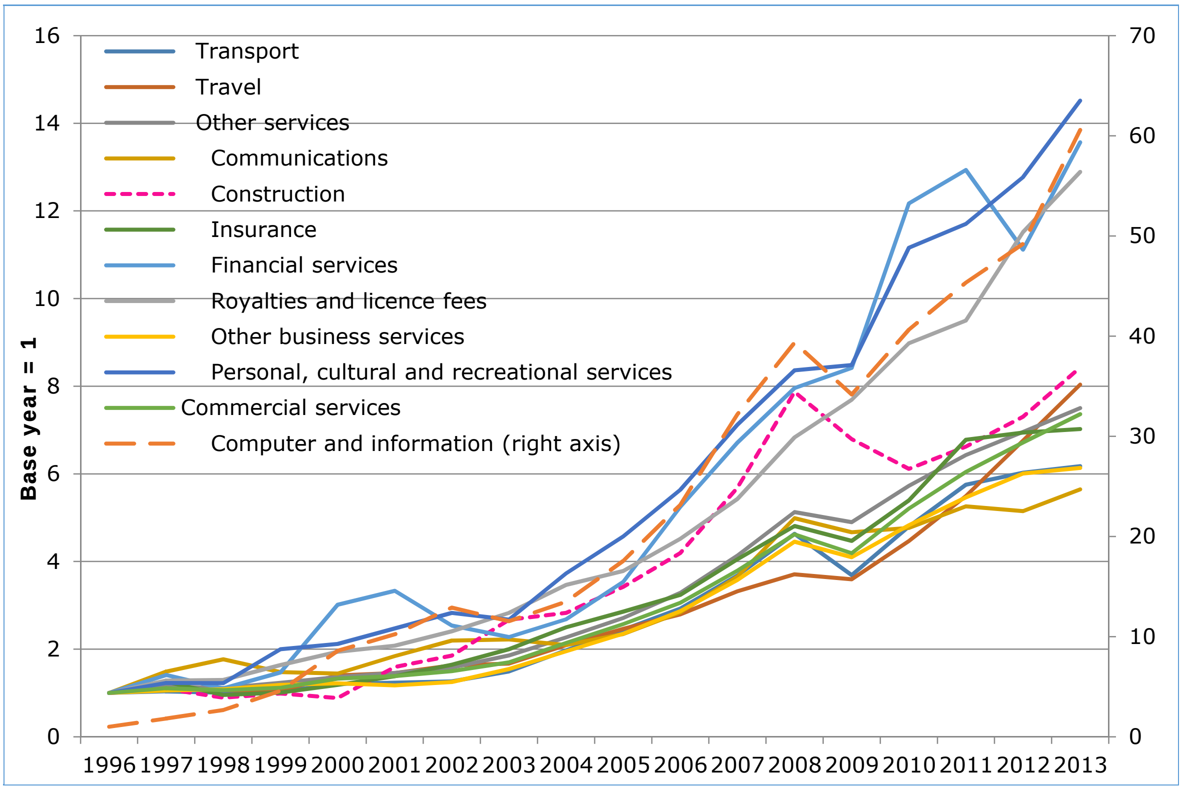
[18] These scores are based on the OECD's STRI simulator and on Miroudot and Pertel (2015) for the GTRI. The scores for the insurance sector were calculated by the study team, as these are not provided by the OECD.

Figure 2.23: Turkey: Services Imports by Sector, 1996-2013



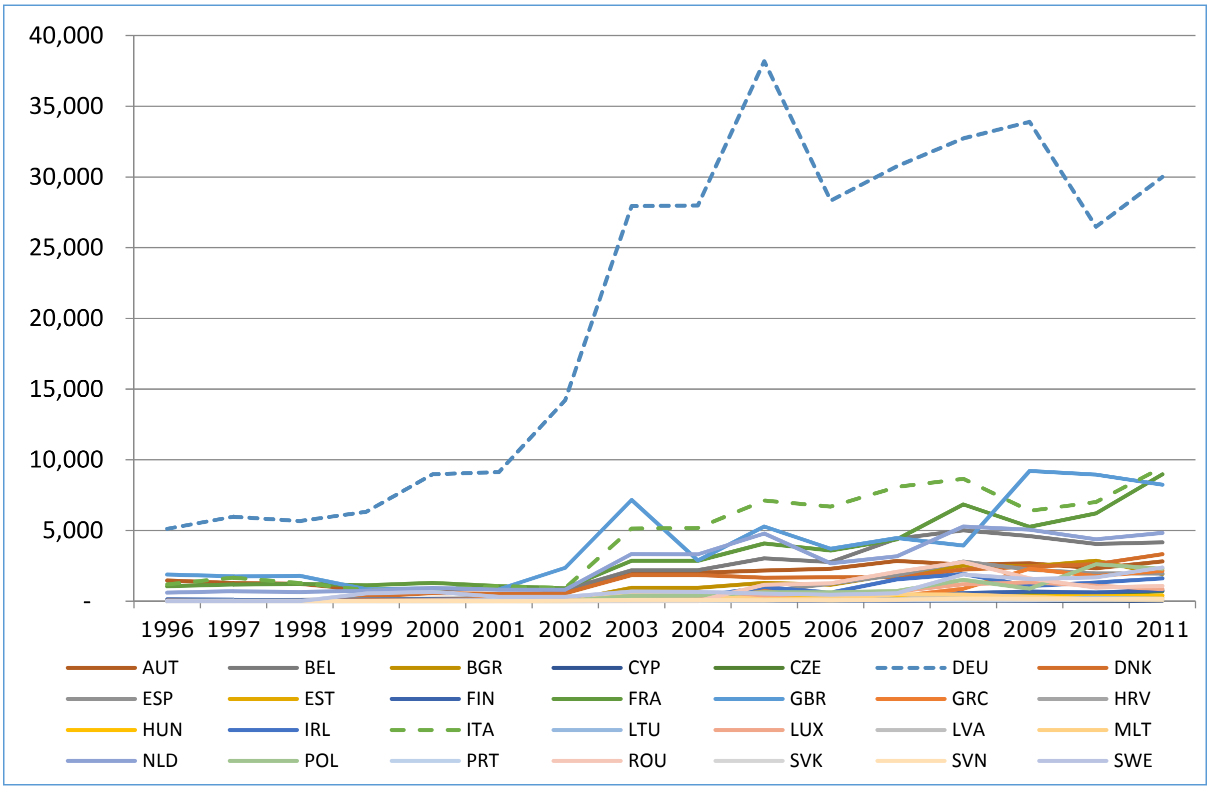
Source: UNCTADSTAT (n.d.).

Figure 2.24: Comparator Countries: Services Imports by Sector, 1996-2013



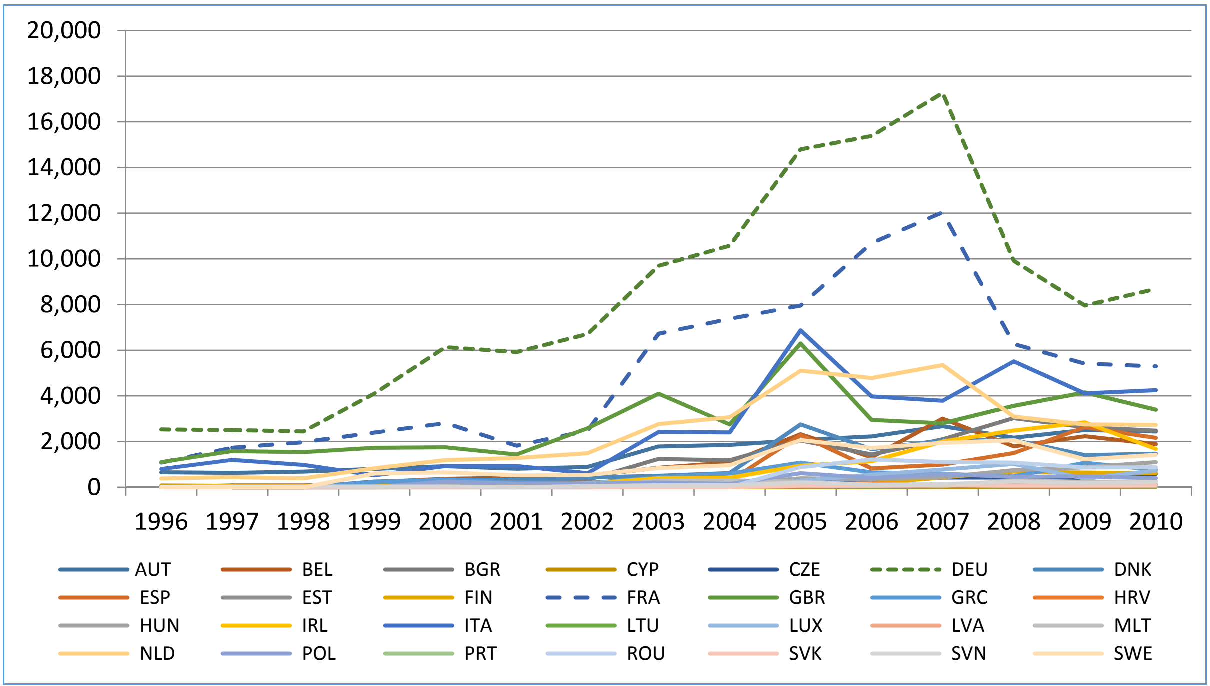
Source: UNCTADSTAT (n.d.).

Figure 2.25: Turkey's Services Exports to the EU



Source: UNCTAD (2013).

Figure 2.26: Turkey's Services Imports from the EU



Source: UNCTAD (2013).

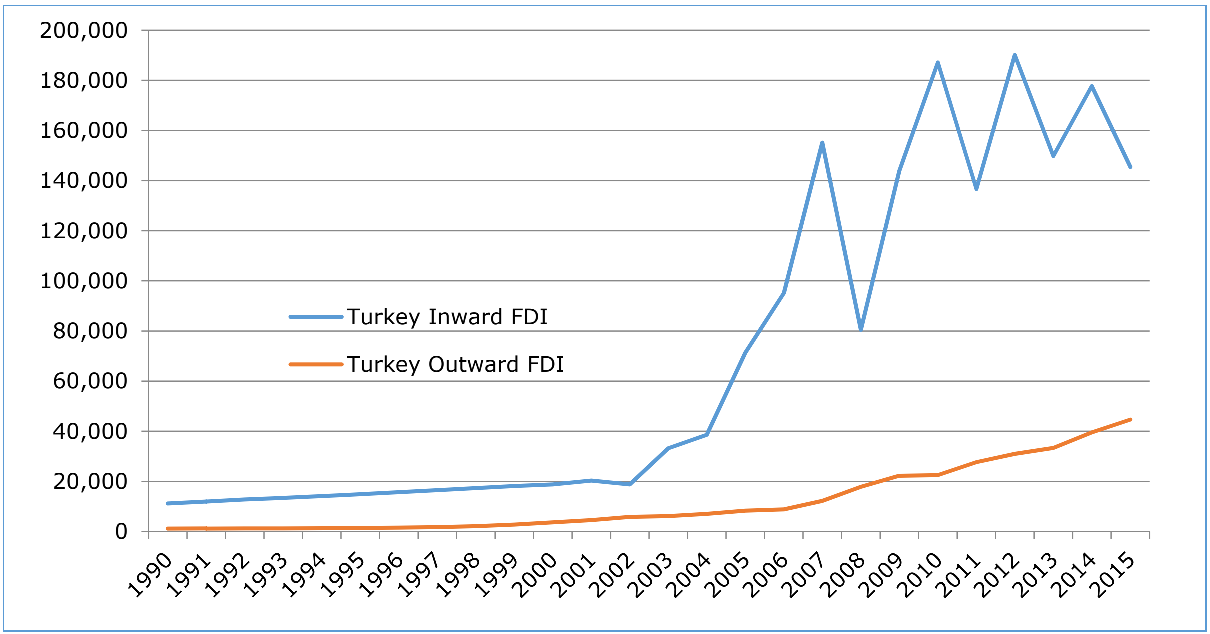
2.1.5 Trends in FDI

Turkey actively pursues FDI through a number of incentive programs and investment zones (Technology Development Zones, Organized Industrial Zones, and Free Zones), which provide investor-friendly environments and quality economic infrastructure. At the same time, Turkey impose restrictions in many sectors, including broadcasting, aviation, maritime transport, port services, fishing, accounting, financial, mining, real-estate, electricity, and education (WTO, TPR Body, 2016a).

Investment was not covered in the BPTF. However, the GATS commitments on Mode 3 in services came into effect contemporaneously with the BPTF, leading to the expectation of increased investment in the services sector. Moreover, the reduction of bilateral cost of trade in goods under the CU and the reduction of transactional costs due to increasingly aligned rules and regulations would be expected to have led to increased bilateral FDI flows in the goods sectors due to the well-established complementarity between goods trade and investment. At the same time, the eastward expansion of the EU during the BPTF period intensified competition for outward FDI from the EU15.

As shown in Figure 2.27, Turkey's inward and outward FDI stocks showed no identifiable trend change at the time of the implementation of the GATS in 1995 or the introduction of the BPTF in 1996. It was the balance of payments crisis of 2001 and the ensuring IMF-mandated reforms that resulted in a defined change in inward FDI (albeit little change in outward FDI). The post-2007 evolution of FDI stocks also shows a distinct difference in behaviour of inward stocks (highly volatile) and outward stocks (a more or less smooth acceleration in growth).

Figure 2.27: Turkey's Inward FDI Stocks, 1990-2015, USD millions



Source: UNCTAD (2016).

FDI inflows to Turkey peaked in 2007 at USD 19.1 billion but have not yet recovered to that level in the post-crisis period (Table 2.4). Following an uptick to USD 16.2 billion in 2011, FDI inflows fell again the following three years before showing an increase in 2015 (based on provisional data).

Europe accounted for 71.7% of total FDI inflows (Table 2.4). Most of this came from the EU, led by the Netherlands, Spain, United Kingdom, Austria, Germany, and Luxembourg. The EU remained the largest foreign investor in Turkey over the past five years, accounting for just under two-thirds of total FDI inflows during the period. Countries in the Gulf and Middle East, in particular Kuwait, Qatar, Saudi Arabia, and United Arab Emirates, are an increasing source of FDI inflows accounting for almost 5% of the total in the past five years. Azerbaijan overtook the United States as the largest foreign investor outside the EU over the past five years accounting for 7.14% of FDI inflows from 2011 through to 2015 versus a US contribution of 7.12%.

Table 2.4: FDI Inflows to Turkey by Source Country

	2007	2008	2009	2010	2011	2012	2013	2014*	2015*	Total 2007-2015	Last 5 years
World	19,137	14,748	6,266	6,256	16,136	10,759	9,878	8,576	11,778	103,534	57,127
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Europe	12,974	11,368	5,248	4,939	12,587	7,925	6,412	6,316	7,737	75,506	40,977
	67.8%	77.1%	83.8%	78.9%	78.0%	73.7%	64.9%	73.6%	65.7%	72.9%	71.7%
EU	12,580	11,022	4,936	4,698	11,416	7,274	5,262	5,268	6,774	69,230	35,994
	65.7%	74.7%	78.8%	75.1%	70.7%	67.6%	53.3%	61.4%	57.5%	66.9%	63.0%
Netherlands	5,442	1,343	717	486	1,424	1,381	918	2,016	1,126	14,853	6,865
	28.4%	9.1%	11.4%	7.8%	8.8%	12.8%	9.3%	23.5%	9.6%	14.3%	12.0%
Spain	583	838	145	205	2,251	193	506	74	2,178	6,973	5,202
	3.0%	5.7%	2.3%	3.3%	14.0%	1.8%	5.1%	0.9%	18.5%	6.7%	9.1%
United Kingdom	703	1,335	350	245	906	2,044	300	1,051	596	7,530	4,897
	3.7%	9.1%	5.6%	3.9%	5.6%	19.0%	3.0%	12.3%	5.1%	7.3%	8.6%
Austria	370	586	1,019	1,584	2,419	1,519	657	31	45	8,230	4,671
	1.9%	4.0%	16.3%	25.3%	15.0%	14.1%	6.7%	0.4%	0.4%	7.9%	8.2%
Germany	954	1,237	497	597	664	491	1,968	601	384	7,393	4,108
	5.0%	8.4%	7.9%	9.5%	4.1%	4.6%	19.9%	7.0%	3.3%	7.1%	7.2%
Luxembourg	583	3,140	509	311	562	1,186	278	528	1,242	8,339	3,796
	3.0%	21.3%	8.1%	5.0%	3.5%	11.0%	2.8%	6.2%	10.5%	8.1%	6.6%
Switzerland	257	201	163	123	233	454	204	149	160	1,944	1,200
	1.3%	1.4%	2.6%	2.0%	1.4%	4.2%	2.1%	1.7%	1.4%	1.9%	2.1%
Azerbaijan	10	18	69	12	1,266	338	803	884	786	4,186	4,077
	0.1%	0.1%	1.1%	0.2%	7.8%	3.1%	8.1%	10.3%	6.7%	4.0%	7.1%
Lebanon	84	34	9	29	45	315	573	35	1	1,125	969
	0.4%	0.2%	0.1%	0.5%	0.3%	2.9%	5.8%	0.4%	0.0%	1.1%	1.7%
Qatar	0	126	0	52	50	46	469	8	350	1,101	923
	0.0%	0.9%	0.0%	0.8%	0.3%	0.4%	4.7%	0.1%	3.0%	1.1%	1.6%
United States	4,212	868	260	323	1,401	439	326	334	1,566	9,729	4,066
	22.0%	5.9%	4.1%	5.2%	8.7%	4.1%	3.3%	3.9%	13.3%	9.4%	7.1%
Russia	108	71	12	2	762	11	875	723	747	3,311	3,118
	0.6%	0.5%	0.2%	0.0%	4.7%	0.1%	8.9%	8.4%	6.3%	3.2%	5.5%
Japan	2	11	3	347	231	106	439	257	361	1,757	1,394
	0.0%	0.0%	0.0%	6.0%	1.0%	1.0%	4.0%	3.0%	3.0%	1.7%	2.4%

Source: Central Bank of the Republic of Turkey; Statistics Department; Balance of Payments Division (n.d.: Tables 15 and 14); * Provisional. It would be preferable to use international sources, such as UNCTAD, World Bank, and the IMF. Eurostat also provides data on FDI.

Table 2.5 shows the sectoral breakdown of FDI inflows into Turkey.

Table 2.5: FDI Inflows to Turkey by Sector

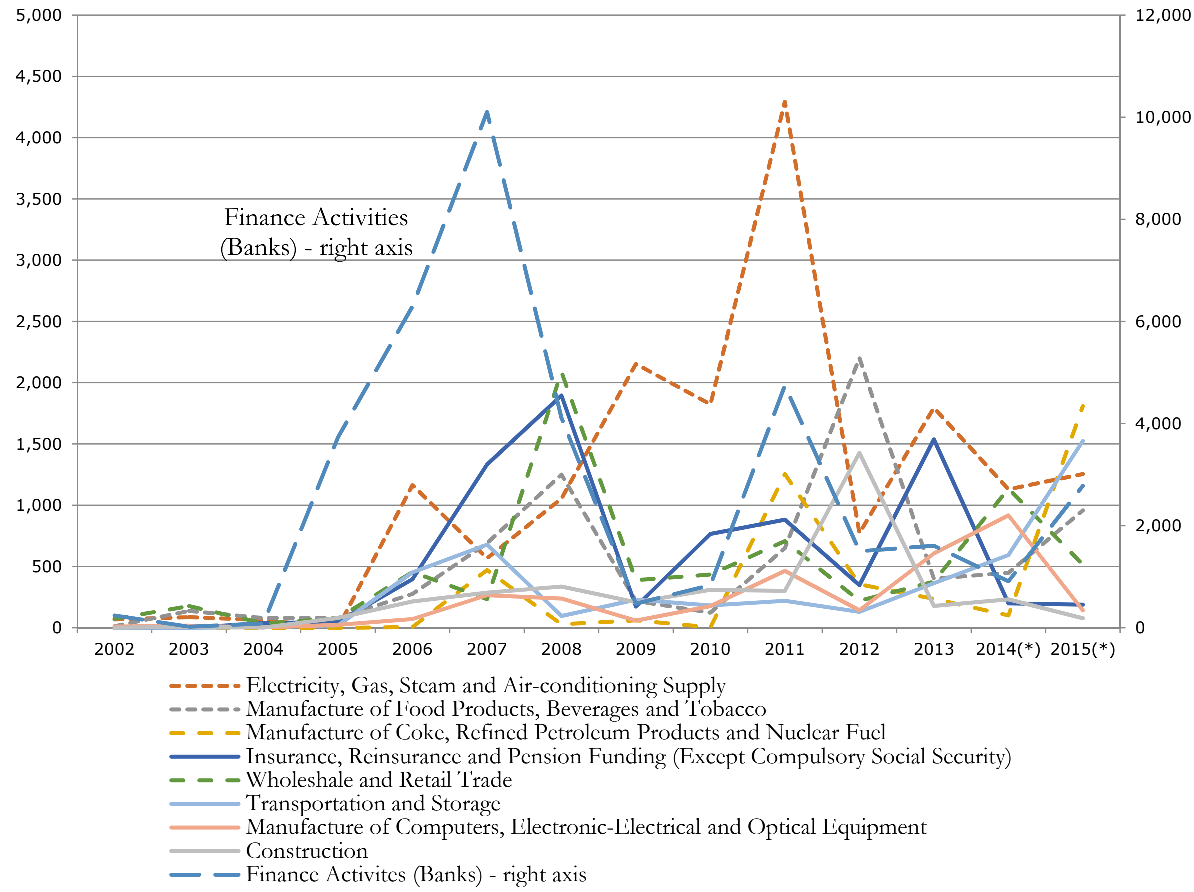
	2007	2008	2009	2010	2011	2012	2013	2014*	2015*	Total 2007-2015	Last 5 years
All	19,137	14,748	6,266	6,256	16,136	10,759	9,878	8,576	11,778	103,534	57,127
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Services	14,091	9,520	2,331	3,288	8,064	5,236	5,074	4,285	6,163	58,052	28,822
	74%	65%	37%	53%	50%	49%	51%	50%	52%	56%	50%
Banking	10,103	4,111	473	835	4,745	1,500	1,608	912	2,781	27,068	11,546
	53%	28%	8%	13%	29%	14%	16%	11%	24%	26%	20%
Insurance and pensions	1,333	1,895	174	766	882	348	1,538	199	189	7,324	3,156
	7%	13%	3%	12%	5%	3%	16%	2%	2%	7%	6%
Wholesale and retail	234	2,088	389	435	707	221	377	1,136	515	6,102	2,956
	1%	14%	6%	7%	4%	2%	4%	13%	4%	6%	5%
Transportation and Storage	679	96	230	183	221	130	364	594	1,524	4,021	2,833
	4%	1%	4%	3%	1%	1%	4%	7%	13%	4%	5%
Manufacturing	4,131	3,972	1,640	924	3,599	4,519	2,209	2,731	4,110	27,835	17,168
	22%	27%	26%	15%	22%	42%	22%	32%	35%	27%	30%
Agro-processing	691	1,251	219	124	650	2,201	400	449	958	6,943	4,658
	4%	8%	3%	2%	4%	20%	4%	5%	8%	7%	8%
Coke, refined petroleum products, and nuclear fuel	471	28	61	3	1,255	355	236	101	1,809	4,319	3,756
	2%	0%	1%	0%	8%	3%	2%	1%	15%	4%	7%
Computers, electronic, electrical, optical equipment	266	239	59	177	464	143	607	918	142	3,015	2,274
	1%	2%	1%	3%	3%	1%	6%	11%	1%	3%	4%
Electricity and gas	567	1,055	2,153	1,824	4,293	773	1,795	1,131	1,255	14,846	9,247
	3%	7%	34%	29%	27%	7%	18%	13%	11%	14%	16%
Primary agriculture, forestry, and fishing	9	41	48	81	32	43	47	61	47	409	230
	0%	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%

Source: Central Bank of the Republic of Turkey; Statistics Department; Balance of Payments Division (n.d.: Tables 13 and 12); * Provisional.

The top five sectors accounted for 57% of total FDI inflows into Turkey over the last five years. These were: financial service activities (banks); electricity, gas, steam, and air-conditioning supply; manufacture of food products, beverages, and tobacco; manufacture of coke, refined petroleum products, and nuclear fuel; and insurance, reinsurance, and pension funding (except compulsory social security).

The sectoral volatility in FDI inflows is brought out in Figure 2.28, which shows the inflows for the top sectors for inflows, accounting for 75% of FDI inflows over the period 2007-2015. The largest sector, which is very volatile for FDI inflows, is Financial Service Activities (Banks) – accounting for 20% of the inflows in the past five years. Electricity, Gas, Steam, and Air-conditioning Supply has, since 2007, attracted 14% of the FDI inflows with an average of USD 1.2 billion per annum. This sector also accounts for 32.5% of the average FDI inflows in the industrial sector. Investments in agro-processing were significant and growing, but fell sharply from USD 2.2 billion in 2012 to USD 400 million in 2013. The 140% increase observed in 2015 only brought the FDI inflow to less than half the volume in 2012. Overall this sector accounted for 7% of FDI inflows since 2007.

Figure 2.28: FDI in Turkey (USD Million) – Top Sectors

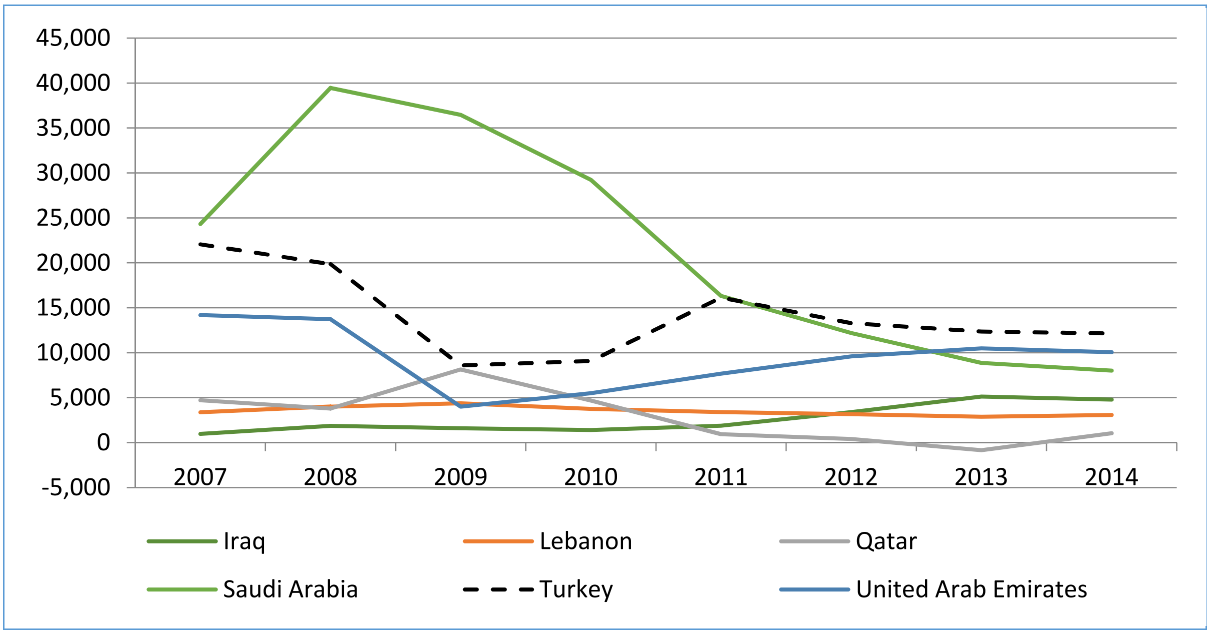


Source: Central Bank of the Republic of Turkey Statistics Department; Balance of Payments Division (n.d.: Tables 13 and 12); * Provisional.

Turkey's challenges in recent years in attracting FDI reflect in part the "bad neighbourhood" effect (Figure 2.29). In the World Investment Report 2015, UNCTAD notes that

> "FDI flows to West Asia maintained their downward trend in 2014 for the sixth consecutive year, decreasing by 4 per cent to $43 billion. This continuing decline stems from the succession of crises that have hit the region, starting with the impact of the global economic crisis, followed quickly by the eruption of political unrest that swept across the region and, in some countries, escalated into conflicts. This is deterring FDI not only in the countries directly affected – such as Iraq, the Syrian Arab Republic and Yemen – but also in neighbouring countries and across the region" (UNCTAD 2015).

Figure 2.29: Top 6 West Asian Developing Economies FDI Inflows, 2007-2014



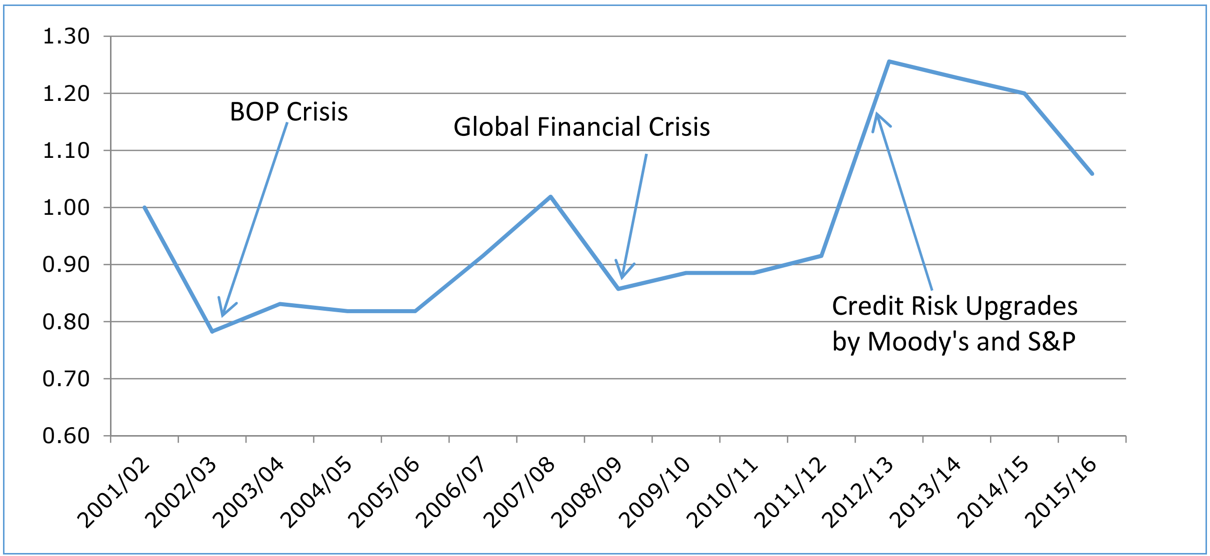
Source: World Investment Report 2015: Annex Tables
http://unctad.org/Sections/dite_dir/docs/WIR2015/WIR15_tab01.xls.

However, domestic economic and political developments have contributed to a reduction in investment attractiveness in recent years. This has been reflected in a compositional shift in capital inflows away from FDI, which in turn has reduced the quality of external financing with negative feedbacks on Turkey's investment attractiveness – a vicious circle that now poses a challenge for Turkey's policymakers. Overall macroeconomic factors include increased vulnerability to rising global interest rates due to a widening negative net international investment position, large and volatile net errors and omissions in the balance of payments (which serve as an indicator of hot money flows), and unanchored inflation expectations (IMF, 2016). Factors of relevance to the international investment community are usefully summarized by the World Economic Forum's Global Competitiveness Index (GCI). Figure 2.30 shows that, since the policy reforms of 2012, which led to a marked improvement in external perceptions of Turkey's competitiveness (including credit risk upgrades by Moody's and Standards & Poor's), there has been a tailing off in the GCI scores, with a steepening decline in 2015/16 amidst rising investor concern about Turkey's political stability, which, inter alia, pushed Turkey's credit default swap (CDS) contracts sharply higher in 2016.[19] While recent events have heightened the perceptions of rising risk, evaluations of Turkey's country risk point to trends dating back to 2011 (e.g., U.S. State Department Investment Climate reports point to a slowdown of progressive reforms and/or non-implementation[20]).

[19] See, for example, Constantine Courcoulas, "Erdoganomics Pushes Turkey Credit Risk Above Junk-Rated Russia," Bloomberg, 31 May 2016; and Phil Kuntz and Ahmed A Namatalla, "Turkey-Risk Model Shows Nation's Markets Going From Bad to Worse," Bloomberg, 26 July 2016.

[20] U.S. Bureau of Economic and Business Affairs, "Investment Climate Statements for 2016: Turkey," http://www.state.gov/e/eb/rls/othr/ics/investmentclimatestatements/index.htm#wrapper.

Figure 2.30: Turkey's Global Competitiveness Rankings, 2001/02 to 2015/16



Source: World Economic Forum, Global Competitiveness Index, 2001/02 to 2015/16, compiled by the study team. The GCI scores are presented in inverted index form such that an increase in the index reflects improved competitiveness; note that the GCI is presented as a rank ordering, with more competitive countries having lower ranks.

2.2 Impact of the BPTF on Market Access Conditions for Goods

2.2.1 Market Access Pre-BPTF

In the pre-BPTF era, Turkey benefitted from duty-free access into European markets in industrial goods. However, the benefits were relatively limited because agricultural products at that time constituted a major share of Turkey's exports. Additionally, quantitative restrictions affected market access conditions for Turkish products in several manufacturing industries making exportable products like textile and clothing.

Moreover, Turkey's ability to take advantage of the EU market opening was constrained by its domestic economic conditions, which reflected inadequate structural policies that undermined competitiveness, notwithstanding improvements made in that era in terms of macroeconomic stability (reflected in reduced inflation, improved exchange rate conditions, and strengthened capital inflows) and reforms in the state-owned sector to incentivize exports. As Figure 2.5 shows, Turkey's share in total EU imports grew, but not significantly. Its share in extra-EU imports was less than 2% in the pre-BPTF period. In the 1980s, the accession of Greece, Spain and Portugal, economies with export similarities to Turkey, also worked to erode the value of the preferences that Turkish exporters received in several sectors, including agro-industries, and textiles and clothing.

European firms, meanwhile, obtained improved market access in Turkey due to Turkey's post-1980 import liberalisation package, which reduced tariffs and partly phased out the quota regime. In addition, several restricted goods were transferred from Liberalisation List II to Liberalisation List I, which specified the products subject to free importation. Imports from EU to Turkey in this period were largely consumer products, as well as intermediate goods (Togan, 1995).

The improved market access conditions were reflected in the decline in Turkey's nominal protection rate (NPR) from 70% in 1984 to less than 30% in 1990; this was accompanied by a decline in the effective protection rate from 75% to 40% in the same period. However, in order to keep imports under control and for revenue purposes, a range of new taxes and levies were instituted which generated new costs on importers. These included the Mass Housing Fund, municipality tax, value added tax, stamp duty, transportation infrastructure tax, resource utilisation and support tax, support and price stability fund tax, and mineral surcharges. These new taxes constituted a significant increase in taxes on imports. For example, the stamp duty was as high as 10% of the CIF value of imports, comparable to a 10% *ad valorem* tariff.

Following its EC membership application in 1987, Turkey revisited its commitments to decrease tariff rates on European products and to align its external tariffs to the CCT in both the 12-year and 22-year schedules. In 1985, the cumulative reduction was only 20%. However, consecutive reductions were made in 10% increments annually until 1994; and subsequently inn 5% increments until 1996. Moreover, tariff cuts to adopt the CCT, which had been suspended until 1990, started in that year, with 20% cuts annually in the 12-year list, and 10-20% cuts in the 22-year list to complete the alignment.

The 1990s did not witness improved macroeconomic stability although access conditions of Turkish exports into EU markets progressed.

Market access also improved for European products into Turkish market thanks to lower NPRs applied by Turkey to EU goods compared to third country products. In 1993, Turkey simplified its tariff structure by applying two different rates: the customs duties applicable to imports from the EU/EFTA countries; and MFN rates applicable to other countries. This paved way for the formation of the CU. In 1994, the NPR for industrial products was set to become 10.2% for the EU, less than half that which applied to third countries (22.1%). The rate was further reduced to 1.3% for the EU with the start of the CU (0% for all industrial goods including coal, iron, mining and quarrying and forestry products, but there were exceptions, such as various processed foods and alcoholic beverages).

However, in preparing for entry into force of the CU, Turkey's average tariff facing third countries was cut from 27% in 1993 to 13% in 1996 (WTO, 1998). These lower rates to third countries, including EU GSP beneficiaries and FTA partners, increased competition for EU firms in the Turkish market. However, it should be noted that Turkey maintained, rates above CCT for certain 'sensitive' goods until 2001.

Finally, the conclusion of the Uruguay Round of multilateral trade negotiations was another substantial development that lowered both Parties' tariffs facing the rest of the world, reducing the benefits of the bilateral preferences. This was particularly significant for Turkey, which increased the share of its bound tariffs on industrial goods from 31 to 46%, and bound all of its agricultural tariffs, with an undertaking to reduce them by an average of 24%.

2.2.2 Market Access Post-BPTF

The BPTF significantly improved market access conditions for both parties in bilateral trade. The major factors were the lapsing of fulfilling ROOs requirements for CU-covered goods, and the tariff elimination under the AFTR and CSA. In Turkey, import surcharges were virtually eliminated, thereby simplifying the calculation of taxes payable on imports, while customs reforms further reduced border-related costs. Turkey's commitments towards the EU involved obligations exceeding those of the WTO commitments.

The improved market access conditions in bilateral trade were reflected in the rising level of intra-industry trade (IIT), which accelerated Turkey's industrial transformation, especially with respect to middle-technology products, if not high-technology products. As claimed by the Turkish Ministry of Economy, "following the establishment of the Customs Union, the product composition of Turkish exports transformed in parallel to changing production scales and structure due to the improved competition conditions and market access advantages gained from the Customs Union" (Republic of Turkey, n.d.).

The increasing competition brought by the CU and the Uruguay Round commitments led to behavioural changes of Turkey's domestic producers; as a result, total factor productivity increased substantially in manufacturing industries and growth of Turkey's exports of middle-tech products accelerated, especially after 2001. Thus, middle-low and middle-high technology exports together rose to over 60% from around only 40% in 1996, while the share of low-tech exports declined from 57.8% in 1996 to around 32% in 2014.

The emerging market crisis of the late 1990s, which spilled over onto Turkey resulting in a balance of payments crisis in 2001, also impacted heavily on Turkey's trade patterns. The crisis-response commitments to open up to global trade and investment led to an important phase in Turkish manufacturing due to the realization of the need to achieve international standards as the level of sophistication of Turkish products grew. The changing nature of Turkey's export basket also forced Turkish exporting firms to address the need to meet technical standards applied in the EU in order to minimise the risk of facing TBTs. Thus it became a necessity for Turkish authorities to upgrade technical domestic regulations, though it was not an easy task for many Turkish small and medium enterprises (SMEs), which represented a majority of domestic producers, to comply with the costly and onerous transformation process. Adoption of the EU *acquis* in technical measures and standards and the consequential upgrading of the institutional infrastructure have been important factors in supporting market access for Turkish manufacturing exports.

Overall, the CU–induced trade liberalisation facilitated bilateral market access between the EU and Turkey, but more importantly generated dynamic effects that helped Turkish industries to transform and leap forward thanks to domestic economic and financial reforms, institutional restructuring, and factor productivity increases. Therefore, the impact of the CU should be considered in two ways. First, dynamic aspects of integration must be separately analysed giving attention to legislative alignment and transformation in industrial basis beyond a simple tariff liberalisation. In this respect, the case for alignment of the *acquis* in related policy areas, such as TBTs, standardisation, IP protection, regulation of services, taxation, government subsidies, public procurement, competition policy, and consumer protection are important areas that need further improvement. Second, while the CU improved market access conditions, the contribution from multilateral commitments and post-crisis reforms should not be undervalued.

While the agricultural sector remained outside the CU, preferential trade arrangements improved market access conditions in bilateral agricultural trade. However, a number of restrictive measures were retained. For the EU: specific duties remained for many agricultural products, such as cereals, sugar, and olive oil; the entry price system and seasonal ad valorem tariffs for fruit and vegetables were retained; and high tariffs above the quota levels on TRQs affected market access. For Turkey: high tariff protection was maintained, limiting the access to its market of EU agricultural exports. Turkey's applied MFN rates (simple average) are 104.3% for animal and products thereof; 125.1% for dairy products; 36.4% for fruits and vegetables; 37.4% for cereals; 84.5% for sugar and confectionary; 46.5% for spirits and tobacco (WTO, 2016a: 53). Turkey applies almost 40 TRQs for agricultural imports from the EU, and in most of the products the quotas are usually filled and exceeded by the European exporters despite high above-quota tariffs. Therefore, trade preferences subject to quota limitations since 1998 need to be expanded to provide larger market access.

2.3 Impact of NTBs on EU-Turkey Trade under the BPTF

One of the potentially important limitations of the BPTF is that it formally lags modern trade agreements in addressing behind-the-border NTBs that impede trade. This section reviews known irritants to bilateral EU-Turkey trade, including those due to incomplete implementation of the CU.

In global trade, behind-the-border measures, such as technical measures to protect consumers, environment, animals/plants, labour regulations, and restrictions on competition, have long been understood to be more important than tariffs or other border measures in restricting trade. This is by no means different in Turkey-EU bilateral trade. The alignment of Turkey's regulatory framework with the *acquis* is understood to be vital for improved market access of Turkish products. It is also essential for products originating from the EU into Turkish market, as this prevents restrictions stemming from the differences in legislation, as well as arbitrary treatment.

The post-BPTF engagement brought about a substantial step of increased alignment of Turkish legislation and implementation. Turkish producers heavily linked to European markets started to ask for upgrading the domestic capacity to realise European standards, testing requirements, and certification. Turkey's alignment process regarding technical measures accelerated following the Helsinki Summit in 1999, which recognised Turkey as a candidate country, and particularly after adoption of the 2001 Law concerning the "Preparation and Implementation of Technical Legislation on Products."[21] This measure facilitated the alignment of Turkish legislation by providing necessary legal instruments and by defining principles regarding product safety; obligations to be undertaken by producers, distributors, and relevant bodies; market surveillance and inspection; and notification procedures (see Togan, 2010).

However, bilateral trade continued to be affected by restrictions on imports and exports; TDIs; local content requirements; domestic subsidies; suspension of preferential treatments; and deficiencies in IP rights enforcement. These measures constitute trade irritants that need to be revisited within the context of the revision of the BPTF, and the enhancement of the CU.

2.3.1 The Impact of NTBs on trade in goods under the CU

A number of practices have been raised by the parties as frictions affecting trade under the CU; these fall into the categories of notification of measures, market surveillance measures, testing and labelling requirements, licensing requirements, administrative practices that lead to implementation and operational costs, and trade prohibitions.

Many of these issues have been long-standing, and have been discussed by the parties in several meetings of the Customs Union Joint Committee (CUJC) and in the Association Council (AC). However, the existing structures under the BPTF (and specifically Decision No 1/95) have failed to resolve the issues to the satisfaction of both parties.

On the EU side, several measures and practices by Turkey are considered to restrict trade, or de facto ban trade, and infringe the rules of the CU. Specific examples include measures affecting textiles and apparel, footwear, and several other products; the import surveillance regime for a large number of EU-originating products; import licensing requirements for second-hand goods; deficient IP rights enforcement in various sectors; a requirement of certificates for good manufacturing practices in pharmaceuticals; some of the provisions of the legislation on cosmetics which are not consistent with the EU legislation ; and safeguard investigations.

As regards the measures affecting textiles and apparel, in 2011, Turkey imposed additional customs duties on a range of textile and apparel imports under HS Chapters 61 and 62, duties, which were subsequently extended to imports under HS Chapters 51, 52, 54, 55, 56, 58, 59, and 60. These duties affect 630 tariff lines, or 54% of all tariff lines in the textiles and apparel sector. Although Turkey later declared in Decision No 2012/3188 of 1 June 2012 that the measures will not cover goods originating in the PEM area, this is currently a barrier for goods originating from countries not covered in the context of the said Decision: i.e., countries to which Turkey has granted preferences under the GSP. Moreover, Turkey has not provided the EU with a schedule indicating the removal of these duties for PEM trade.

The EU also notes that Turkey imposes an increasing number of additional customs duties on other products contrary to its CU obligations.

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[21] Law No 4703 on Preparation and Implementation of Technical Legislation on Products.

The EU also challenges Turkey's practice of applying mandatory tests on some products (e.g., phthalates used in the footwear industry) on a random sampling basis under the Risk Based Control System (TAREKS), without recognising the results of accredited EU laboratories. Turkish authorities insist that tests be carried out by Turkish laboratories. It is also stated by EU parties that Turkish domestic producers are not facing similar tests, which makes the practice discriminatory. It is argued that the total costs of these tests exceed EUR 3 million (Foreign Trade Association, 2015).

The Turkish import surveillance regime requirement that a surveillance certificate be obtained prior to importation of various products in the case that their prices are below a certain value can be regarded as a "key barrier". The EU reminds that this practice by the Turkish authorities makes the measure similar to a non-automatic licence for a wide range of products.

The licensing regime introduced by Turkey, which obliges traders to fulfil certain pre-conditions to apply for licences to export copper and aluminium scrap, constitutes another NTB. These requirements are not only in breach of the CU but also are difficult to fulfil, which creates an obstacle for export of these products. The practice aims to limit exports so that domestic firms have the priority to use them as inputs.

Turkey also requires licenses under its Import Code to import certain old, second-hand and renovated products. Despite the liberalisation process that puts some goods under a list for which licensing is not required, such practices raise costs for EU exporters, in some case to prohibitive levels, thus creating an effective ban on exports from the EU to Turkey in these products. This requirement impacts particularly on retreaded tyres.

As regards IP rights enforcement, deficiencies in this area in Turkey are another key market access barrier especially in sectors like automotive, cosmetics, medical equipment, foodstuff, textiles and footwear. The operation of the system is regarded as weak in terms of protecting trademarks and fighting against counterfeit goods shipped to the EU. It can be argued that the establishment of several specialised courts in IP rights matters is a positive step, but the EU expects Turkey to take measures to strengthen laws and implementation further.

The absence of mutual recognition of good manufacturing practices (GMP) in pharmaceuticals between the EU and Turkey has generated additional trade frictions. Unlike other products, pharmaceuticals require a marketing authorisation before entering into the market. The EU indicates that there are legal obstacles, such as delays in registration for EU products in the Turkish market, and has urged Turkey in the Association Council to suspend its requirements on GMP, which negatively affect the marketing of these products.[22] Turkey has started the process to align its legislation in this area but still needs to take further steps to finalise it.

With respect to cosmetics, some of the provisions of the legislation are not consistent with the EU legislation and represent a potential burden for the EU industry.

Turkey also has a list of issues that it considers as limiting trade or increasing operational costs for Turkish exporters.

Thus, Turkey raised an issue[23] in relation to products for which authorisation by EU bodies is required before marketing (the relevant EU bodies are ECHA in the case of chemicals and EMEA for pharmaceuticals),[24] which it claims impacts on a wide range of Turkish industrial sectors, including chemicals, cosmetics, biocidals, fertilizers, paints, cement, adhesives, petrochemicals, textile agents, and pharmaceuticals. However, it should be noted that compliance with REACH is mandatory on a non-

22 See, 53rd meeting of the EU-Turkey Association Council (Association between the European Community and Turkey, 2015). EU officials have also argued that Turkey is bound to accept products marketed in the EU market (under Article 10 of Decision No 1/95) and hence no mutual recognition is required.

23 See the statements by Turkey at the 53rd meeting of the EU-Turkey Association Council (Association between the European Community and Turkey, 2015).

24 This is the case for REACH, CLP, and Biocidal legislation.

discriminatory basis for EU manufacturers, importers and downstream users of chemicals placed on the EU internal market, and that therefore, there should be no difference in implementation and operation costs between EU and Turkish firms. In addition, the EU states that REACH was notified to the WTO TBT[25] and questions of other WTO Members answered, and no major issues were identified; and therefore REACH should not be considered a TBT.

Turkey considers that the classification of boron compounds as dangerous substances under the EU's CLP Regulation, a treatment which in Turkey's view is not supported by the scientific evidence, constitutes an NTB.[26] Conversely, the EU states that the measure is part of the *acquis* and applies to all operators, including in the EU, so there is no discrimination.

Turkey also has raised concerns regarding the impact on Turkish exports of EU procedures for approving marketing of pharmaceuticals in the absence of mutual recognition of GMP; but according to the EU these concerns have not been substantiated. It is to be noted, however, that the EU procedures are non-discriminatory and therefore apply to all operators.

Delays in alignment of Turkish legislation with EU technical regulations under the CU can be a source of NTBs. Turkey is informed of legislative developments in the EU in the normal course; nonetheless, Turkey has raised issues in this regard and the World Bank (2014: iii) comments on a "notification deficit", which hampers Turkey's prompt and efficient adoption of the *acquis*, although problems in this area cannot explain issues that are on-going for years. This is further addressed in Section 7.1.1 below.

Table 2.6: NTBs on trade in goods under the CU

Sector	Measure	Title	Date creation
Textiles and Leather	Tariffs and Duties	Measures affecting textiles and apparel	July 2014
Other Industries	Tariff Quotas	Turkish tariff quota system for certain processed agricultural products	February 2010
Mining	Export Prohibition and Other Quantitative Restrictions	Export restrictions on copper and aluminium scrap	August 2011
Services – Energy	Subsidies	Local content requirements in Turkey's law 6094 amending the law of 2005 on the utilisation of renewable energy sources for the generation of electricity	July 2014
Horizontal	Registration, Documentation, Customs Procedures	Import Surveillance Regime	February 2010
Other Industries	IP rights	Deficient IP rights enforcement	February 2010
Horizontal	Discriminating Export Licensing	Import licenses for old-second hand-renovated goods	December 2005
Pharmaceuticals	IP rights	Pharmaceutical products: data exclusivity, good manufacturing practices requirements and pricing	November 2002

Source: European Commission, *Trade Market Access Database* (2016j).

TDIs are increasingly resorted instruments in Turkey's trade policy. The WTO Trade Policy Review in 2016 for Turkey reports that "Turkey remains a significant user of anti-dumping duties and it has been the third biggest user of safeguard measures since the WTO's inception in 1995". Turkey imposed or prolonged 3 anti-dumping measures and a new safeguard on products imported from the EU, while one anti-dumping and 3 safeguard measures lapsed, in 2015 (European Commission, 2016g). Turkey initiated one AD investigation on hot rolled flat steel imports (from France, Romania, and Slovakia); and imposed three definitive AD duties in different items from Germany and Bulgaria. One new safeguard investigation (on imports of porcelain

25 The same applies whenever REACH Annexes are amended.
26 See, Ekonomi Bakanlığı, Anlaşmalar Genel Müdürlüğü (Ministry of Economy, General Directorate of Agreements) (2015).

and ceramic tableware and kitchenware) was initiated by Turkey last year. TDIs are further analysed in Section 7.1.9 below.

2.3.2 *Impact of NTBs on Utilisation of Agri-food TRQs, Agricultural and Fishery Products*

Agricultural products are excluded in CU Decision, except processed agricultural products which are subject to partial liberalisation.[27] Accordingly, parties provided reciprocal concessions granting duty exemptions for many agricultural goods within tariff quotas. The bilateral agricultural trade was over USD 4.5 billion in 2014 with 60% benefitting from the preferences.

However, market access in agricultural goods faces several challenges (Table 2.7). For years, EU exports have suffered from Turkish restrictions on imports of beef and cattle. EU beef and live bovines have been subject to an import ban since the inception of BSE risk in Europe (in 1996) until 2010 where Turkish market has opened provisionally. By the end of 2012 it closed again until November 2014. Despite assessments in OIE reports that the ban is no longer necessary, there are still restrictions in place. The EU considers that the implementation of the restrictions is unjustified and needs to be lifted (European Commission, 2015e). Extensive negotiations have taken place and continue between the parties to end definitely the dispute.

The EU has also been challenging discriminatory taxes on spirits by Turkey since 2009. Although taxation on spirits is regulated in Turkey in line with the EU *acquis,* the discriminatory implementation in favour of domestic products, as well as an across-the-board excise tax increase have narrowed the market for EU exports. Turkey's Action Plan states that tax differentials between imported and locally produced beverages will be eliminated by 2018.[28] However, the average levels of taxes are and will continue to be high and hinder market access for alcoholic beverages.

Furthermore, excessive sampling controls by Turkish authorities, the legislation imposing a ban on advertising and promotion of alcoholic beverages, and the restriction of sale in certain premises limit market access for spirits. EU exporters are also subject to the requirement of obtaining control certificates which amount to non-automatic import licenses.

A duty-free tariff quota system for processed agricultural products was established under Council Decision No 1/2007, covering several products, such as chocolates, bakery products, pasta, and sugar confectionary. The EU claims that Turkish authorities impose additional requirements (i.e., the importers must also be the producers of these products to be able to apply for quota rights), which effectively precludes EU exporters from benefitting from the quotas.

Table 2.7: NTBs in Agri-Food under the BPTF

Sector	Measure	Title	Date
Agriculture and Fisheries	Quantitative Restrictions and Related Measures	Market access problems on alcoholic beverages	July 2000
Agriculture and Fisheries	Other Non-Tariff Measures	Market Access problems on spirits	April 2010
Agriculture and Fisheries	Sanitary and Phytosanitary measures	TURKEY - SPS - Ban on EU exports of bovine meat and live bovines (BSE)	April 2010

Source: European Commission, *Trade Market Access Database* (2016j).

27 Processed agricultural products are covered by the CU and industrial component duties have been abolished, but "agricultural components" in the form of specific duties are still applied by both the EU and Turkey. For more information see Sections 2.4.1 and 7.1.3.

28 See Statement by Turkey for 53rd meeting of the EU-Turkey AC (Association between the European Community and Turkey, 2015).

Some Turkish producers (i.e., of chocolates and sugar confectionary) have raised concerns that they cannot effectively benefit from TRQs provided by the EU. However, it should be noted that preferential quotas are reserved under Decision 1/2007 for Turkish exporters only, and they are not shared with other countries.

Almost 90% of Turkey's agro-food exports pass towards European markets via the Kapitan Andreevo gate in Bulgaria where they are subject to border checks. Turkey argues these practices constitute another major NTB. Turkey states that excessive SPS controls (covering each consignment of fruits and vegetables originating from Turkey) by Bulgarian authorities cause unnecessary delays for agricultural and food products like hazelnuts, dried apricot etc. and impose a significant cost on traders. Accordingly, Turkey claims the checks must be at a reduced frequency in line with EU Notification of reduced Plant Health Checks[29]. The fees charged are claimed to be too high. For example, many agro-food products are tested in nearest laboratories in Sofia. The costs of loading, testing, and despatching could be up to several hundred Euros and operations could take 2 to 3 days. The frequency of the testing is 5% of total exports. The total cost is regarded excessive for Turkish exporters and is claimed to affect the free movement of goods.

Import controls were placed on live poultry, fresh poultry meat or heat-treated poultry products originating in Turkey into the EU in 2009 as a result of outbreaks of Newcastle disease. The EU is determined to continue restrictions of imports from Turkey of these products until veterinary conditions are developed enough to fulfil the requirements in the EU. Turkey argues that the restrictions could be lifted based on the recommendations of the OIE.

Turkey also raised concerns, in the agenda for a recent CUJC meeting, on Commission Decision No 1506/98, which introduced a suspension to tariff preferences previously granted to its exports of tomatoes paste and watermelons following the beef ban imposed by Turkey. Turkey considers the measure should be lifted.

The **fishery sector** represents only 0.7% of total EU imports from Turkey, and likewise fisheries constitute a tiny 0.3% in total exports and 0.4 % in total GDP in Turkey. However, it is an essential economic activity for particular coastal regions in the country and in some regions of the EU.

Turkey's total export in fishery products was around USD 500 million in 2014 and 80% of total exports are destined to the EU market. Yet, this amount corresponds to a small share of total EU imports in fish products.

Turkey's fishery sector has two major components: *fish hunting* and *aquaculture.* Turkish fishing fleet is similar to Greece's fleet structure, but is quite small compared to many of its European competitors. Most fishing boats are located in the Black Sea and operate generally in coastal zones; Turkey has no EEZ except in the Black Sea. In aquaculture, Turkey mostly cultivates gilt-head sea bream, perch and trout; its competitiveness in relation to EU producers is comparatively higher than that in catches. Aquaculture represents two-thirds of total fish production in Turkey.

All tariffs on fishery products from Turkey have been removed by the EU. However, an anti-subsidy investigation on sea brass and gilt-head sea bream has been initiated in August 2015[30]. The EU also imposed definitive anti-subsidy duties ranging from 6.7% to 9.5% on rainbow trout exports originating in Turkey. The investigation was opened in February 2014 based on the complaint by Danish Aquaculture Association claiming that producers in Turkey benefitted from a number of governmental subsidies mainly in the form of loans and insurance for trout producers, and subsidies for fishing vessels. The complaint of the same producer association on dumping was withdrawn.

[29] See, the statements by Turkey for 53rd meeting of the EU-Turkey Association Council (Association between the European Community and Turkey, 2015).

[30] For details of the investigation see European Commission (2016d).

Turkey also claimed in 2014 that the suspension of the import of molluscs was a barrier. However, the Commission states the measure was taken upon the inspections made by the Food and Veterinary Office (FVO); that Turkey was expected to carry out the action plan accordingly; and that the elimination of the measure was contingent upon the visits by the FVO.

2.4 Impact of Tariff Barriers and NTBs in Sectors not Covered by the BPTF

2.4.1 Trade in Agricultural Goods

Agricultural products excluded from the BPTF altogether are traded between Turkey and the EU based on WTO rules. The role of tariffs and quotas in restricting trade in these products is demonstrated by the ex post analysis. We defer discussion of this issue to that part of the study. NTBs in agriculture are not formally part of the quantitative assessment and are reviewed here briefly.

While both Turkey and the EU have significant agricultural sectors with export potential, in broad-brush terms, they are quite complementary. Turkey is not an export threat in the core product groups of the EU's CAP – dairy, meat, cereals, and sugar. Turkey exports relatively modest amounts of cheese, poultry, fish, cereals, and processed sugar products, mainly to the MENA region, but protects its markets in these product groups with high specific tariffs. Given the high tariff wall, NTBs have not emerged as issues.

Under the AFTR, the EU provides a relatively liberal regime for agricultural imports from Turkey. The ad valorem duty is eliminated on almost all agricultural products and the majority of products enjoy duty-free access. There are TRQs in place for a selected number of agricultural products and an entry price scheme, where specific duties are applied as long as the value of the consignment falls below the entry price.

Turkey, by contrast, grants very few preferential tariffs on agricultural imports from the EU. The products subject to preferential duties are various ranging from live bovine animals to milk powder, butter, cheese, cut flowers, seed potatoes, peaches, durum wheat, maize, sugar beet seed, sunflower seed, prepared tomatoes so on. However, the quota allocations are limited and need to be enlarged. Turkey also imposes a number of non-tariff barriers.

As noted above, Turkey's agricultural exports to the EU lagged behind exports of other sectors. This is despite a perceived comparative advantage in Turkey for agricultural production, especially fruits and vegetables and nuts. This reflects in good measure the fact that Turkey shares this comparative advantage with the other Mediterranean countries, either from the EU or partners with whom the EU has also an Association Agreement (e.g., Morocco, Tunisia, and Egypt).

2.4.2 Trade in Services

Trade in services was not covered by the BPTF. Accordingly, bilateral EU-Turkey trade in services is governed by the MFN regimes maintained by the EU and Turkey under their respective GATS commitments. The services trade issues that are of relevance for an ex post assessment of the BPTF concern potential complementarities between services trade and goods trade – in particular, where services trade restrictions compromise the realization of the full benefits of the BPTF.

As background, both the EU and Turkey have relatively open services trade regimes. A good indicator of this is the scoring of their respective services trade regimes on the OECD's Services Trade Restrictiveness Index (STRI) and GATS Trade Restrictiveness Index (GTRI). The STRI and GTRI indexes cover all four modes of trade and have extensive, if not comprehensive, sectoral coverage. Bearing in mind the limitations of these relatively new indexes, they provide a quantitative perspective. Under these indexes, scores by sector can range from zero (fully open or fully bound) to one (fully restricted or no binding commitments made under the GATS). Table 2.8 reports data sourced from the OECD, but in some cases updated and extended based on analysis by the study team. The following observations may be made:

- most applied scores are in the lower end of the range;
- the restrictiveness of both regimes is lower on an applied basis than on a bound basis;
- on average, the EU applied regime is more liberal (an average score of about 0.17 for the EU on the STRI vs. about 0.26 for Turkey); the comparable scores for the sectors most directly linked to the free circulation of goods (transport, logistics, distribution, and financial services) are 0.14 for the EU and 0.26 for Turkey;
- on average, Turkey has a lower average score on the GTRI (0.38 vs. 0.49 for the EU) indicating less policy room to make services trade more restrictive; this provides greater certainty to trading firms about the future trade regime, thus affecting entry of services firms into trade, which in turn impacts on competition and costs.

Table 2.8: The EU's and Turkey's MFN Services Trade Restrictiveness, Applied and Bound

	EU		Turkey	
	STRI	GTRI*	STRI	GTRI*
Accounting	0.262	0.523	1.000	1.000
Architecture	0.231	0.440	0.161	0.217
Cargo Handling	0.162	0.839	0.280	0.280
Commercial Banking	0.132	0.214	0.132	0.266
Computer	0.174	0.299	0.182	0.325
Construction	0.161	0.284	0.193	0.307
Courier	0.141	0.499	0.447	0.516
Custom Brokerage	0.119	0.792	0.207	0.207
Distribution	0.108	0.172	0.081	0.679
Engineer	0.214	0.456	0.134	0.173
Freight Forwarding	0.099	0.136	0.197	0.197
Insurance	0.153	0.478	0.170	0.254
Legal	0.371	0.791	0.485	0.657
Maritime	0.198	0.776	0.329	0.457
Rail Fright	0.135	0.871	0.340	0.360
Recreational*	0.135	0.760	0.081	0.758
Road Freight	0.147	0.456	0.184	0.253
Storage and Warehouse	0.141	0.395	0.226	0.226
Telecommunication	0.140	0.205	0.236	0.332
Tourism*	0.179	0.358	0.156	0.209

Source: Estimates by the study team, based on original OECD STRI and GTRI data. The EU scores are simple averages for 17 Member States that are covered in the OECD research. In addition to the lack of comprehensive coverage of the EU Member States, issues of weighting (simple average vs. GDP or import weights) arise. The scores for recreational and tourism services were constructed by the study team based on OECD data for horizontal measures that apply across all services sectors, supplemented by own research. The scores in this table should accordingly be considered as indicative, not definitive.

The most significant services issue with implications for goods trade under the BPTF is road transport quotas. This issue has been raised by Turkey in several AC and CUJC meetings. Turkey considers that quotas imposed by the EU Member States cause obstacles to the free movement of goods, given that road transport accounts for almost half of the total carriage. The World Bank (2014: 4) also identifies the quotas as creating obstacles that "hinder full operation of the CU."

2.4.3 Government Procurement

Government procurement is not covered by the BPTF and Turkey is not a party to the WTO Government Procurement Agreement (GPA). There are, accordingly, no rules governing bilateral market access to procurement opportunities and the observed quantitative outcomes reported in this section reflect an absence of disciplines. This section reports very briefly on EU procurement opportunities and the available data on sourcing from Turkey-based suppliers; and provides a more extensive treatment of the Turkish procurement market.

2.4.3.1 EU Member State Public Procurement

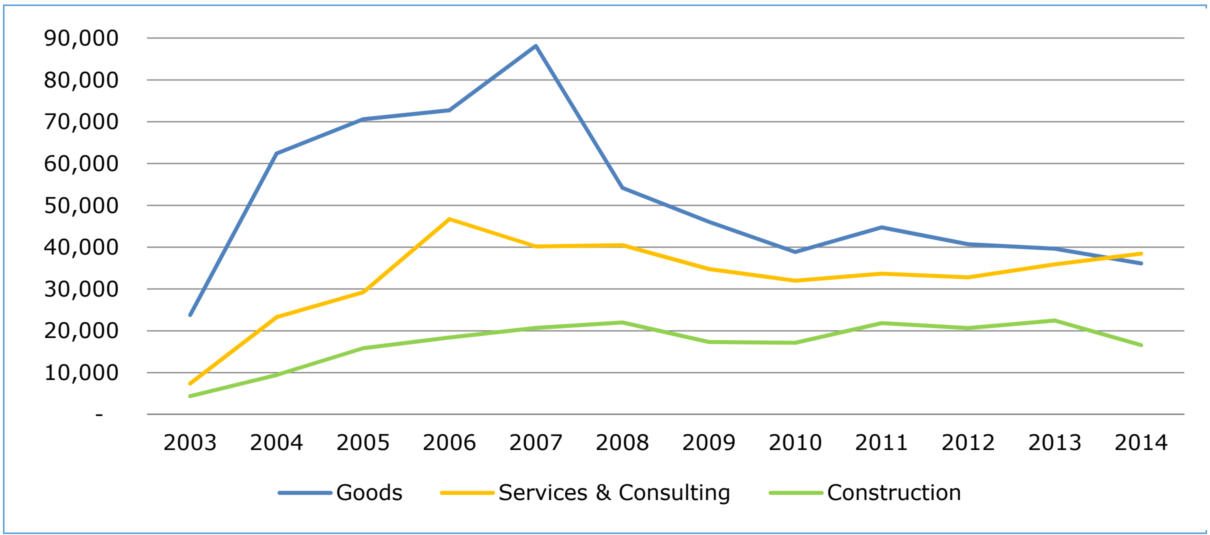
The European Commission (European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, 2016) notes in its report Public Procurement Indicators 2014 that "total general government public procurement expenditure (TGGPPE), excluding utilities and defence, was EUR 1,931.5 billion in 2014, 2.7% higher than in 2013, continuing the increased trend of recent years" (European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, 2016). The authors also note the challenges with the data reported in the EU Tender Electronics Daily (TED) database and they have developed a methodology to impute missing values and correct for outliers is needed. As the TGGPPE excludes utilities and defence it understates total procurement.

Within the TED data the majority of winning suppliers are located in an EU Member State. During the period 2006 through to 2015 there were 113,585 contract award records reported in TED. Of these only 4 contract awards were identified as sourced by a supplier from Turkey. Only one contract has a value identified – a contract for exploration and extraction of gas and oil valued at EUR 7.5 million.

2.4.3.2 Government Procurement in Turkey

The Public Procurement Monitoring Report provides information on overall government procurement in Turkey, as well as access by foreign suppliers to the tenders issued. Figure 2.31 shows the number of tenders reported. Tenders peaked in 2007 with 149 million tenders reported. They have declined in the past eight years – predominantly in Goods, which declined from a peak of 88 million in 2007 to 36 million in 2014. Over the past five years, tenders have averaged just over 94 million annually.

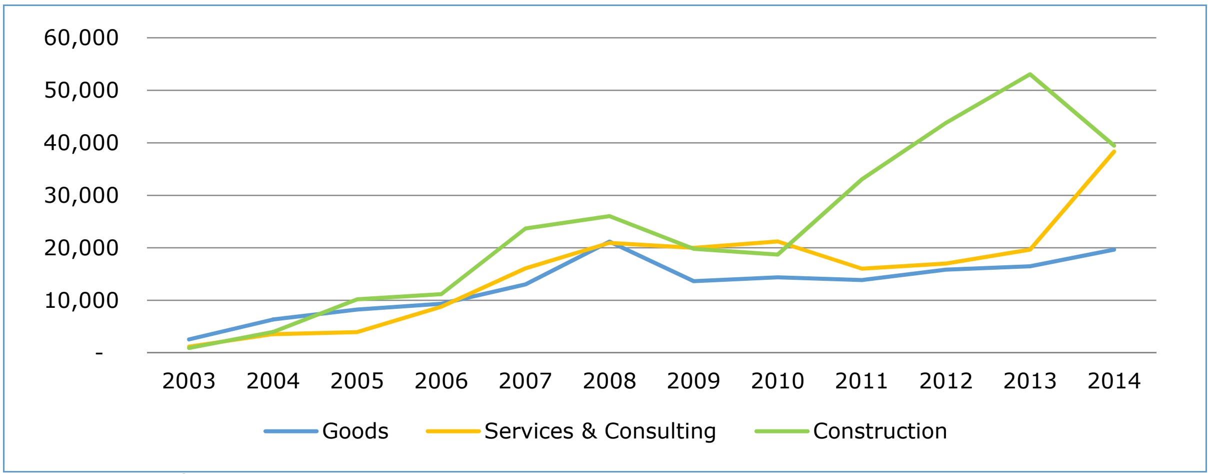
Figure 2.31: Tender by Type – Number of Tenders



Source: Kamu İhale Kurumu (2003-2014).

Figure 2.32 shows the value of the tenders reported. Despite the decline in the number of tenders there has been a general increase in the value of tenders over the period 2003-2014. The average values of tenders, particularly in construction have increased annually. Over the past five years total tenders have averaged just over TRY 76 billion annually.

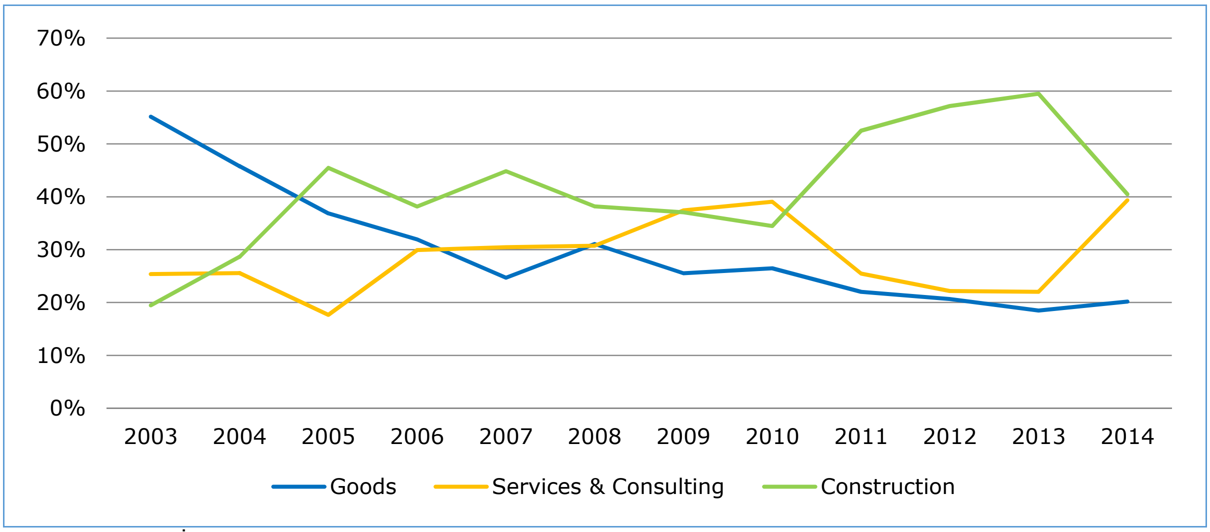
Figure 2.32: Tender by Type – Value of Contracts (TRY millions)



Source: Kamu İhale Kurumu (2003-2014).

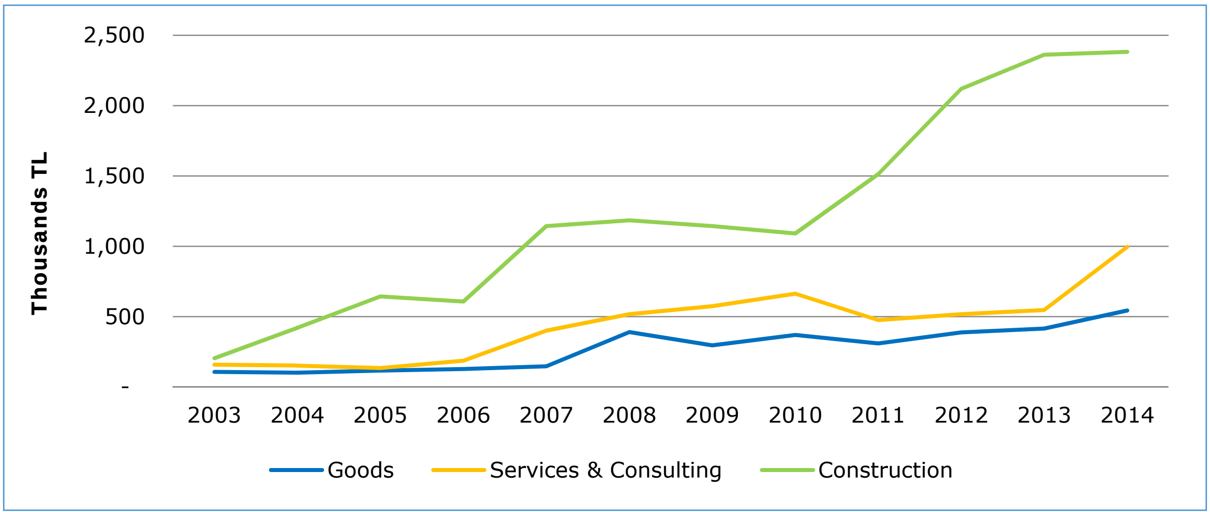
Regarding the distribution of the value of tenders by type, over the period 2003–2014 the value of tenders for goods has declined both in absolute numbers (Figure 2.31 above), but also as a percentage of the total value tendered (Figure 2.33). Goods accounted for 55% of tenders in 2003 and by 2014 this had declined to 20% of tenders. This change in the volume, size, and distribution by segment in the tenders following the global crisis may reflect the increasing attention the government is devoting to developmental mega-projects (i.e., railways, airports, motorways, dams, defence, etc.), especially in Istanbul and in the leading regions. Figure 2.34 shows the ramping up of the average value tender for construction rising several times during the period, with significant increased post-2010.

Figure 2.33: Tenders by Type - % of Value



Source: Kamu İhale Kurumu (2003-2014).

Figure 2.34: Average Tender Value (TRY '000)



Source: Kamu İhale Kurumu (2003-2014).

Turkey has three categories for tendering that are reported on:

1. Open tender: the tender procedure is open to all interested parties willing to participate;
2. Pre-qualified bidders: pre-qualified bidders are invited by the contracting entity to submit their tenders;
3. Negotiated procedure: the tender process is carried out in stages according to the terms of a bidding process to ensure that the technical details and pricing requirements are met.

The majority of tenders go through the open tender process (Table 2.9).

Table 2.9: Average Public Procurement by Tender Type Tender and Procurement Procedure- 2003 -2014

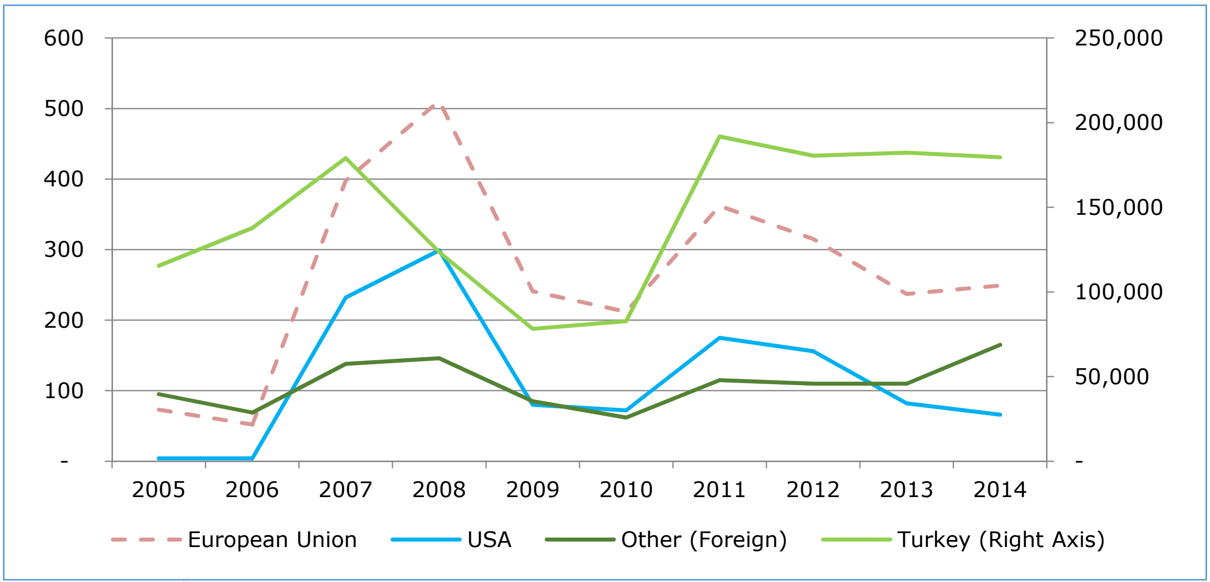
Procurement Procedure	Tender	# of Tenders	%	Value of Tenders (TRY millions)	%
Open Tender	Goods	42,225	82%	11,537	89.6%
	Services and Consulting	20,132	67%	13,152	83.2%
	Construction	16,292	95%	19,370	81.9%
	Total	78,641	80%	44,058	84.6%
Pre-qualified Bidders	Goods	152	0.3%	23	0.2%
	Services and Consulting	360	1.2%	1,367	8.6%
	Construction	63	0.4%	2,290	9.7%
	Total	470	0.5%	2,875	5.5%
Negotiated	Goods	9,110	18%	1,321	10.3%
	Services and Consulting	9,631	32%	2,163	13.7%
	Construction	873	5%	1,686	7.1%
	Total	19,602	20%	5,168	9.9%
Total	Goods	51,487	100%	12,881	100%
	Services and Consulting	30,077	100%	15,811	100%
	Construction	17,228	100%	23,659	100%
	Total	98,714	100%	52,101	100%

Source: Kamu İhale Kurumu (2003-2014).

On average, 80% of tenders follow this process and account for 85% of the value of public procurement. This is followed by those tenders that are negotiated (20%) which account for 10% of total procurement. Tenders that are offered to pre-qualified bidders account for less than 1% of all bids and 5.5% of the value on average. As expected these are predominantly used for Construction and Services procurement.

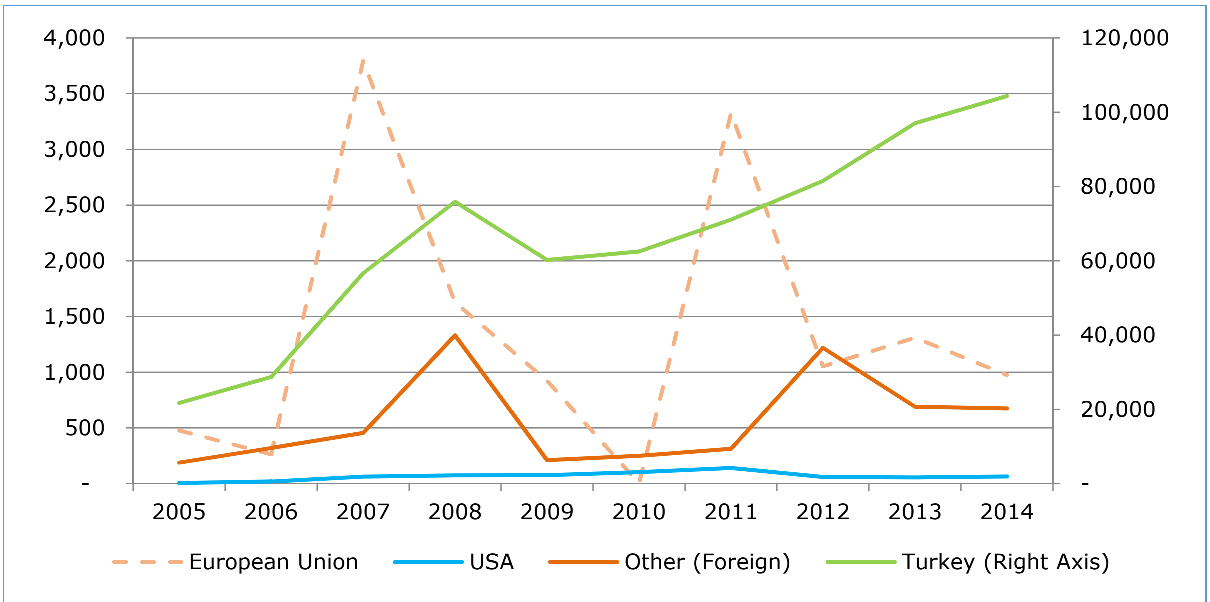
Figure 2.35 and Figure 2.36 show the distribution of contracts to domestic suppliers and suppliers from EU Member States, the US, and other foreign sources.

Figure 2.35: Number of contracts by nationality of the contractor 2005-2014



Source: Kamu İhale Kurumu (2005-2014).

Figure 2.36: Value of contracts by nationality of the contractor 2005-2014 (TRY millions)



Source: Kamu İhale Kurumu (2005-2014).

On average over the past four years, domestic suppliers captured virtually all contracts – 99.7% which accounted for 97.3% of public procurement (Table 2.10).

Table 2.10: Average Number and Value of Contracts 2011-2014

Nationality	# of Contracts	% Total Contracts	Value (TRY millions)	% Total Tender Value
Turkey	183,533	99.71%	88,492	97.28%
EU	291	0.16%	1,666	1.83%
USA	120	0.07%	80	0.09%
Other (Foreign)	125	0.07%	724	0.80%
Total	184,069	100%	90,962	100%

Source: Kamu İhale Kurumu (2011-2014).

Turkey does not allow foreign suppliers unrestricted access to tenders and has implemented restrictive measures that provide for domestic price advantages and enable the entity engaging in the tender to legally "demand compensating measures if goods are not produced domestically [and thus] contradict the EU acquis" (European Commission, 2015d).

Table 2.11 presents a breakout of access of tenders to foreigners for the period 2005 through to 2012. On average, despite the restrictions on access, foreign suppliers could bid on tenders that accounted for 65% of total procurement value. The Goods and Services categories have 68% and 79%, respectively, of the value open to foreign suppliers. Just over half of construction tenders by value were open to foreign bidders.

Notwithstanding their ability to bid on tenders, foreign suppliers are not winning the bids. The price advantage of up to 15% for domestic suppliers in the tender process is an important aspect in the success of these domestic suppliers in winning bids. It is noteworthy that suppliers in EU Member States have been successful intermittently - rising and declining sharply. This suggests that they, and other foreign suppliers, are successful when they bid on specific tenders where they have a skills or product advantage that domestic firms cannot match.

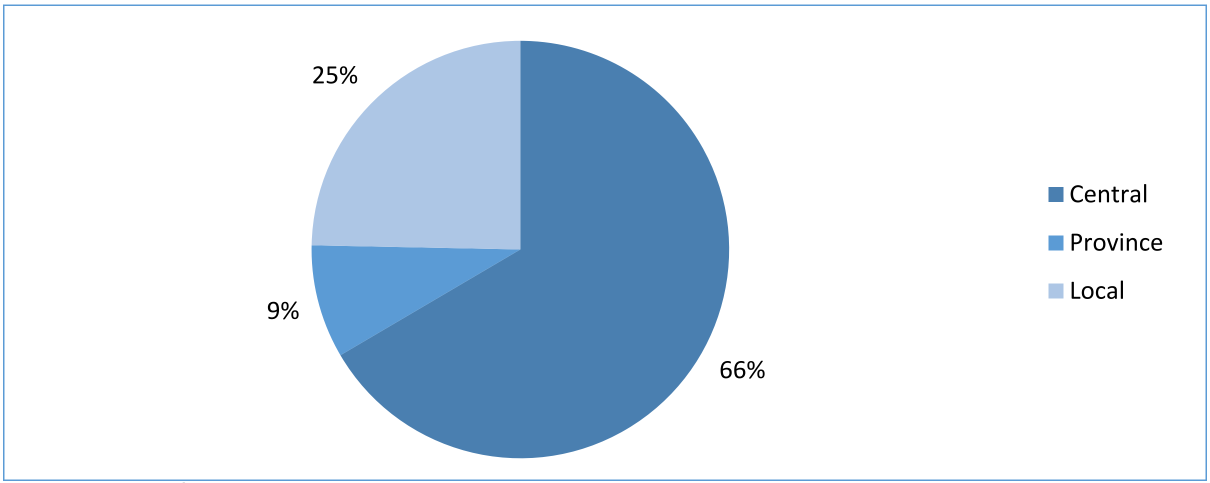
Table 2.11: Number and Value of Tenders Open to Foreign Bidders, average 2005-2012

	Open to foreign bidders	Not Open to foreign bidders	Open to foreign bidders	Not Open to foreign bidders
	# of Tenders	**# of Tenders**	**% of Tenders**	**% of Tenders**
Goods	13,673	50,128	21.4%	78.6%
Services	4,699	32,870	12.5%	87.5%
Construction	875	18,439	4.5%	95.5%
Total	19,247	101,438	15.9%	84.1%
	Value of Tenders (TRY millions)	**Value of Tenders (TRY millions)**	**% of Value of Tenders**	**% of Value of Tenders**
Goods	10,511	4,863	68.4%	31.6%
Services	12,668	3,330	79.2%	20.8%
Construction	12,270	11,203	52.3%	47.7%
Total	35,449	19,396	64.6%	35.4%

Source: Kamu İhale Kurumu (2005-2012).

As Figure 2.37 shows, the majority of contracts are issued at the central government level (66% of contracts) with local government contracting accounting for 25% of the contracts and provincial level contracting accounting for 9%.

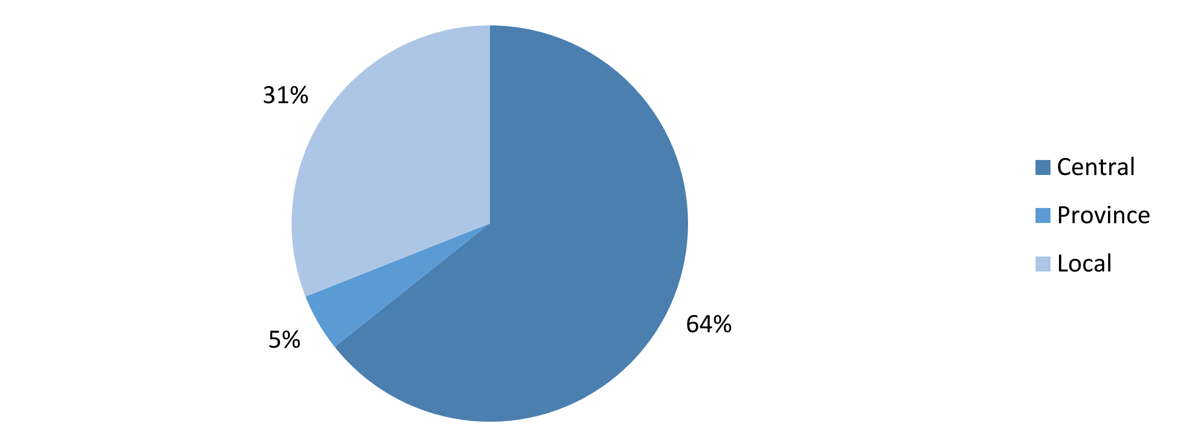
Figure 2.37: Distribution of Contracts by Level of Government 2012-2014, number of contracts



Source: Kamu İhale Kurumu (2012-2014).

Figure 2.38 shows a similar split with the majority of the spending occurring at the Central level (64%) again followed by the local level with 31% of the spending and only 5% of spending at the provincial level.

Figure 2.38: Distribution of Contracts by Level of Government 2012-2014, value of contracts



Source: Kamu İhale Kurumu (2012-2014).

2.5 Welfare Implications of the BPTF Based on Trends in Trade

The foregoing analysis provides the basis for a first estimate of the welfare effects of the BPTF. Arkolakis et al. (2012) demonstrate that the total welfare gains from trade, measured in a comparative static analysis with given technologies that are known ex post, depends only on the share of imports in domestic consumption and the elasticity of those imports with respect to trade costs. More precisely, the real income gains from moving from autarky to an observed level of import penetration under widely used applied trade models can be calculated by the following expression:

$$\text{Real income gains from trade} = 1 - \lambda^{-1/\varepsilon}$$

where λ is the share of domestic goods in domestic expenditure and ε is the elasticity that measures the degree of substitutability of imports for domestic production. Based on this equation, the gains from trade are greater (a) the higher the share of imports in domestic final expenditure and (b) the less that domestic production is substitutable for imports (i.e., the lower the trade elasticity).

As shown by Ossa (2012), the gains from trade rise steeply when this approach is modified by disaggregating imports across sectors and taking into account that some goods and services are not traded and that in some industries critical inputs must be imported (i.e., there is no domestic supply and as a result the trade elasticity falls to near zero). The expansion of variety of imports adds to the consumer welfare gains.

We observe that the rise of Turkey's imports from the EU's FTA partners documented in the trend analysis is direct evidence of such an effect. This provides theoretically-based support for the welfare gains from the BPTF for Turkey.

3 GRAVITY MODEL ANALYSIS OF THE BPTF'S IMPACT ON TRADE AND FDI

In this section, we seek to evaluate the effects of the BPTF on trade in goods, trade in services, and FDI, using gravity modelling techniques.

Gravity models are the most commonly used models in the trade literature today for ex post analysis of trade policy impacts. Based on an analogy to the concept of gravity in physics, gravity equations relate bilateral trade between two countries to the size of trading partners and the distance between them. Gravity models have also become a widely used tool to evaluate the determinants of FDI flows and stocks, introducing additional variables relevant to the investment decision, such as tax burdens, availability of factors of production, and so forth.

A consensus cannot be said to exist on the appropriate research design and choice of statistical estimation technique to measure the impact of preferential arrangements on trade or investment using gravity modelling. Accordingly, conclusions are always subject to significant caveats. Details on the technical aspects of the analysis reported in this section are provided in Annex B.

In the case of the BPTF, the prior expectation is that the reduction of bilateral trade costs increased bilateral trade in industrial goods. Since the BPTF did not directly involve commitments on services trade or investment, any impacts on these flows would have been indirect, working through the direct impacts on trade and income.

3.1 Trade in Goods

As the historical trends showed, overall bilateral trade in goods between the EU and Turkey expanded very strongly during the BPTF period. The trend analysis also suggests that trade in BPTF-covered goods expanded much more than trade in non-BPTF-covered goods. Moreover, there is a prior expectation that the BPTF enhanced bilateral trade as it reduced the cost of industrial goods covered by the CU.

However, identifying a clear-cut impact of the BPTF on bilateral goods trade from trend analysis alone is difficult, given the many other factors that impacted on the intensity of the bilateral trade relationship during this period, including the multilateral liberalization under the WTO Agreement, China's accession to the WTO and the expansion of its share of both parties' trade, the deterioration of the economic climate in West Asia, and the various episodes of turbulence, including the emerging market crisis of the late 1990s-early 2000s which contributed to Turkey's balance of payments crisis in 2001, and the global economic and financial crisis of 2008-09.

Applying a gravity model helps shed light on whether a statistically significant impact can be identified of the CU on bilateral industrial goods trade. There is a relatively extensive gravity modelling literature on the impact of the BPTF; however, it is generally inconclusive, as it features a very wide range of estimates, with some studies finding large positive impacts and others finding no significant impact (including the World Bank's 2014 review of the CU) or even, counter-intuitively, a negative impact. Some studies reach different conclusions for Turkey's exports to the EU versus for the EU's exports to Turkey.

Table 3.1 reports the results for regressions run for the present study separately for Turkey's imports, partner imports from Turkey, and two-way trade between Turkey and its partners. As well, we consider four periods: 1990-2000, the period that covers the entry into force of the CU and the post-Uruguay Round liberalization; 2001-07, the period that covers the BOP crisis and post-crisis recovery; 2008-2009, the global financial crisis years; and 2010-15, the post-crisis period.

For 1990-2000, the CU dummy has a positive sign for all trade flows indicating that the early days of the CU resulted in increasing both Turkey's imports from the EU, as well as the EU's imports from Turkey. Over the full sample, the CU dummy has the expected positive sign and is statistically significant for partner imports from Turkey. This is consistent across time periods. However, in the more recent sub-periods, the CU dummy has a negative sign for Turkey's imports from the EU. This is consistent with the fact that the CU required Turkey to liberalize its imports from EU FTA partners and GSP beneficiaries; this reduction of trade diversion in favour of bilateral intra-CU trade appears to have dominated the bilateral trade cost reduction between Turkey and the EU under the CU. For the full two-way trade sample, the reduction-of-trade-diversion effect dominates and the effect of the CU is seen to be negative. However, seen from the perspective of improving welfare, reduction of trade diversion is a positive for Turkey.

Table 3.1: Main Results for CU impacts on goods trade

	Turkey Imports	Partner Imports from Turkey	Two-way trade
1990-2015	-0.44	0.37	-0.14
	(0.00000165)***	(0.00000222)***	(0.00000131)***
1990-2000	0.12	0.40	0.33
	(0.00000462)***	(0.00000661)***	(0.00000325)***
2001-2007	-0.68	0.40	-0.23
	(0.00000346)***	(0.00000489)***	(0.00000274)***
2008-2009	-1.01	0.07	-0.61
	(0.00000468)***	(0.00000615)***	(0.00000366)***
2010-2015	-0.49	0.33	-0.19
	(0.00000248)***	(0.0000033)***	(0.00000196)***

Source: Calculations by the study team. *** significant at the .001 percent level.

3.2 Trade in Services

Services were not subject to the BPTF and bilateral trade in services has been governed by the parties' GATS commitments. Any impact on services trade between the EU and Turkey was thus indirect, running through the impact on goods trade, which was subject to the BPTF, or through the broader commitment for approximation of laws.

On a priori grounds, the BPTF would be expected to have worked to stimulate bilateral services trade through some effects and to discourage it through other effects.

The positive effect will have come from the complementarity between goods trade and services trade, from the consequential impact of bilateral FDI motivated by the low-cost bilateral industrial goods trade framework on the flow of bilateral services (e.g., headquarters services from the home to the host country), and from the reduction of services trade costs from greater alignment of regulations.

The negative effect will have come through the forces of comparative advantage, which will have worked to favour goods trade between the EU and Turkey and, by the same token, to disfavour services trade.

Overall, there is no prior expectation that the BPTF had a major impact on bilateral services trade one way or the other, since the above-mentioned factors work in offsetting directions.

The trend analysis shows that Turkey's services sector developed well during the BPTF period, growing from below-average as a share of GDP for its income class to about average. Turkey indeed became a prominent services exporter in several categories, including insurance, construction, and tourism. There was one major exception, however, namely business and professional services, where Turkey's export performance lagged badly the performance in comparator countries. Notably, The BPTF period is almost exactly contemporaneous with the period following the implementation of the GATS and it is noteworthy that the sectors in which Turkey recorded strong performance were those subject to GATS commitments, while the sectors in which it lagged were those that were not subject to commitments.

Moreover, the lagging export performance on business and professional services largely accounts for the divergence in Turkey's overall services export performance vis-à-vis comparator countries.

Accordingly, we focus on selected professional and business services, and closely related services to determine whether the under-performance could be attributed to the BPTF.

We observe that the gravity model applied to Turkey's exports of business and professional services is well-behaved: exports increase as the size of the destination market increases and as Turkey's supply capacity as measured by its own GDP increases; exports decrease with increasing distance. The size and distance elasticities are within accepted ranges for services trade. Exports expand as economic freedom in the source and destination countries expands. Exports decrease as services restrictions as measured by the STRI and uncertainty about market access as measured by "water" (the difference between bound and applied market access) in destination countries increase. Common language, common currency and membership in the EU increase export intensity.

Against this background, we find an insignificant impact of the CU on trade in professional and business services. Prior considerations point to this result and the quantitative analysis provides corroborating support for this conclusion.

Table 3.2: Impact of the BPTF on Business and Professional Services Trade

	Coefficient	Standard Error	
ln GDP Destination	0.75	0.0009	***
ln GDP Origin	0.58	0.0009	***
ln Distance	-0.34	0.0016	***
ln Economic Freedom Origin	7.16	0.0251	***
ln Economic Freedom Destination	3.93	0.0325	***
ln STRI Destination	-1.36	0.0029	***
ln Water Destination	-0.74	0.0013	***
Dummy Common Official Language	0.88	0.0030	***
Dummy Common Currency	0.27	0.0036	***
Dummy EU Member	0.54	0.0045	***
Dummy CU	**0.002**	**0.0224**	

Source: Calculations by the study team. *** significant at the .001 percent level.

3.3 The Impact of the BPTF on Bilateral FDI

Investment was not covered by the BPTF and thus, as in the case of services trade, the impact on FDI flows and stocks between the EU and Turkey was indirect, running through the impact on goods trade, which was subject to the BPTF, or through the broader commitment for approximation of laws. Investment in services, where the major restrictions tend to be found, was governed by the parties commitments under the WTO GATS which imposed MFN disciplines in the areas where commitments were made.

The trend analysis generally corroborates prior expectations of limited effects. The entry into force of the BPTF had no discernible impact on Turkey's total inward FDI; it was not until the balance of payments crisis in 2001 that resulted in significant IMF-mandated reforms that inward FDI into Turkey took off. While the EU was a major source of this FDI – consistent with a gravity model interpretation – the causal factor was not the BPTF per se.

While it is useful to examine the impact of the BPTF empirically, for a number of reasons (see Annex B for a more detailed discussion), gravity modelling results permit only qualified inferences to be drawn concerning the impact of the BPTF on bilateral EU-Turkey investment.

We focus on separate regressions for Turkey's inward and outward FDI to identify BTPF impacts. The results suggest that Turkey's attractiveness as an FDI destination increased through the positive impulse to real growth provided by the BPTF (as shown by the high elasticity of inward investment to Turkey's GDP over the period of observation). Turkey's ability to engage in outward FDI was also significantly related to growth dividends from the BPTF (as shown by the high elasticity of Turkey's outward FDI to its own GDP).

Free trade agreements had little impact on Turkey's FDI pattern; this is consistent with the general finding that bilateral investment treaties have no established impact on the pattern of global FDI. Money flowing through tax havens constituted an important source of FDI into Turkey.

Overall, the results suggest that the BPTF had a strong positive impact on bilateral flows of FDI. This must be mostly attributed to the indirect effect of unfettered access to the EU market for industrial products manufactured in Turkey, and secondarily to the investment-facilitating effect of approximation of laws (although the relative strength of these factors cannot be discerned from the available evidence, making this a judgement call).

As with services trade, the effects of the BPTF appear to have been asymmetric, an important consideration for future research.

Table 3.3: Gravity Model Results for Turkey's Two-Way FDI

	Inward FDI	Outward FDI	Two-Way FDI
ln GDP_o	1.532	2.769	1.73
	(14.87)**	(3.64)**	(15.85)**
ln GDP_d	3.041	0.548	1.249
	(7.33)**	(4.22)**	(13.28)**
ln Distw	-0.418	-0.273	-0.88
	-1.4	-0.8	(3.20)**
EU28_o	1.563		1.823
	(7.13)**		(8.25)**
EU28_d		1.466	-0.365
		(4.38)**	-1.38
RTA	-0.069	0.396	-0.128
	-0.29	-1.01	-0.52
Tax Haven	1.045		1.185
	(4.11)**		(5.54)**
MENA_d		1.162	-0.162
		(4.19)**	-0.52
R^2	0.34	0.05	0.33
N	944	996	1,940

Source: Calculations by the study team. Z-statistic is in parenthesis. * *p-value*<0.05; ** *p-value*<0.01

4 CGE ANALYSIS OF THE ECONOMIC EFFECTS OF THE BPTF

This chapter develops an alternative assessment of the impact of the BPTF using a computable general equilibrium (CGE) modelling approach. Applied in the current context, a counterfactual scenario is developed that describes the way the EU and Turkish economies would look today if the BPTF had not been put in place.

This chapter is organized as follows. Box 4.1 provides a general, non-technical description of CGE modelling. Section 4.1 describes the construct the counterfactual scenario in which the BPTF did not exist. Section 4.2 describes the results of the simulations. Section 4.3 draws conclusions from this analysis. A technical description of the model, the data sources it draws on, and the modelling approach used for the simulations is provided in Appendix C.

Box 4.1: CGE Modelling of the BPTF

The analysis of economy-wide trade policy changes, such as were introduced in the BPTF, is conventionally conducted using a multi-sector, multi-region CGE model. The present study uses a dynamic version of the widely used Global Trade Analysis Project (GTAP) model, based on the most recent version of the GTAP database (version 9.0). The 57 GTAP sectors are aggregated into 31 sectors for the study. The regional aggregation consists of the EU28, Turkey, and 15 other regions.

At the core of the model is a set of Social Accounting Matrices (SAMs), one for each country/region represented. A SAM sets out the linkages between supply and use of goods and services and traces the circular flow of income within an economy in response to a policy shock, such as the BPTF. The sectors in the model are linked through input-output coefficients which trace the intermediate inputs from one sector to another in response to changes in demand. Each sector features a representative firm that draws on available production factors (land, skilled and unskilled labour, and capital). In response to a policy shock, these factors are reallocated across sectors to their most efficient use through competition in primary factor markets. The total supply of labour and land is fixed; in the dynamic model, however, savings and investment augment the capital stock over time in response to changes in rates of return induced by the policy shock. The individual regions are linked by trade, which is modelled on the assumption that goods produced in different regions are imperfect substitutes for each other (the Armington assumption). The key parameters are the elasticities of substitution which determine the response of trade to changes in tariffs or trade costs.

The model used for the simulations in the present study is based on the assumption of perfect competition in product and factor markets. Its key distinguishing feature is that it separates the representative firm in each goods and services sector in each region into a domestically-owned firm and a foreign-invested firm. This allows the impact of policy changes that affect barriers to investment to be directly modelled. As barriers to investment change, global capital flows reallocate investment to restore equilibrium in capital markets. The dynamic framework is implemented by projecting the GTAP database forward, based on available projections for the global economy from the IMF and other sources; in the present study, the data are projected to 2026. Policy shocks are modelled on a recursive basis: that is, the impact of changes that occur in one year modify the base for the following year, with the capital stock augmented by the investment response in the first year.

The model translates the impact of a policy shock like the BPTF into impacts on trade flows, changes in national income (including the standard national income accounting aggregates of gross domestic product, consumer expenditure, etc.), changes in sectoral employment and wages, and as a summary statistic, the impact on economic welfare, which is expressed as the lump sum payment that would have to paid to households in each region to leave them as well off without the policy shock as with it.

4.1 Simulating the BPTF

To conduct the counterfactual analysis of the impact of the current BPTF we simulate the effect of the EU and Turkey reverting to a pre-BPTF trade relationship. We implement the shock in the GTAP V9 base year of 2011, which allows the dynamic elements of the model to be reflected fully in the results for 2016. The results may be interpreted as the difference in 2016 if the BPTF had not been implemented.

4.1.1 The Tariff Shock

The EU and Turkey tariffs facing each other in the counterfactual scenario are those that would have applied based on their Additional Protocol commitments. While conceptually the issue is straightforward, in practice the construction of this scenario requires a number of assumptions.

The Additional Protocol committed the EU to eliminate all tariffs immediately: Article 9 stated that "On the entry into force of this Protocol, the Community shall abolish customs duties and charges having equivalent effect on imports from Turkey." Accordingly, there is no tariff shock in the counterfactual to be applied to Turkey for its exports to the EU in goods covered by the CU.

For Turkey, the Additional Protocol also committed it to eliminate duties on covered products towards the EU, to eliminate quantitative restrictions towards the EU, and to adopt the CET. Articles 10 and 11 required that all industrial products and the industrial component of processed agricultural products have tariffs completely removed. Tariff removal was according to two lists: one, which applied to a long list of products specified in Annex 3 of the Additional Protocol, allowed for a 22-year phase-out; all other covered products were to have tariffs removed in 12 years (the list for these products was not explicitly set out in the Additional Protocol).

The Additional Protocol committed Turkey to aligning its external tariff with the EU tariff. Turkey delayed bringing its MFN tariff into line with the EU tariff. The WTO Trade Policy Review for Turkey in 1998 reports that: "The simple average MFN tariff has, as a consequence, fallen from 27% in 1993 to 13% in 1998 (second half). However, tariffs on agricultural (except processed) products have been relatively unaffected as they are not required to be lowered by the Customs Union Decision" (WTO, 1998). Accordingly, as late as 1993, Turkey had not taken significant (or any) steps to align its MFN tariff with the EU's. However, the commitment was made in the Additional Protocol and is thus not subject to roll-back in the counterfactual scenario, even though the most significant trade liberalizing impact on Turkey at the time of the entry into force of the CU was the liberalization against third parties, which eroded the value of trade preferences within the CU. This is an important consideration to be taken into account in evaluating the impact of the CU in econometric terms.

Turkey delayed implementing a number of Additional Protocol commitments in respect of a number of sensitive sectors. Indeed, alignment with the EU tariff for these sectors was not implemented until 2001. Again, however, this commitment was part of the Additional Protocol commitments in preparation for the CU and not part of the CU undertakings.

The above considerations restrict the tariff shock in the counterfactual to the following:

- Rolling-back the CSA and AFTR, which entered into force subsequent to the CU.
- Rolling back extension of GSP preferences by Turkey to EU GSP beneficiaries, which was contingent on adopting the CET.
- Rolling-back FTAs that Turkey negotiated or unilaterally applied, which were contingent on the CU.

The list of Turkey's FTAs to be rolled back and the study regions to which they belong are set out in Table 4.1:

Table 4.1: Turkey's FTAs Assumed to be Conditional on the CU

Turkey FTA Partner	Study Region	Turkey FTA Partner	Study Region
Belize	CSA	Antigua and Barbuda	ODC
Colombia	CSA	Bahamas	ODC
Costa Rica	CSA	Barbados	ODC
El Salvador	CSA	Dominica	ODC
Guatemala	CSA	Dominican Republic	ODC
Guyana	CSA	Grenada	ODC
Honduras	CSA	Haiti	ODC
Nicaragua	CSA	Jamaica	ODC
Panama	CSA	South Africa	ODC
Peru	CSA	St Kitts and Nevis	ODC
Suriname	CSA	St Lucia	ODC
Mexico	Mexico	St Vincent and the Grenadines	ODC
Algeria	O/North Africa	Trinidad and Tobago	ODC
Georgia	EP	Bosnia-Herzegovina	ROW
Israel	SP	FYROM	ROW
Seychelles	LDC	PNG	ROW

Source: Assumptions by the study team, as agreed with the European Commission.

To implement the shock, we construct MFN-level tariffs from HS-6 data sourced from the International Trade Centre, using the most current tariffs (2015) and an average of trade flows over the past 4 years to take into account the often erratic movement of trade flows at that level from year to year. We shock the GTAP protection data to boost the tariffs in the V9 dataset to MFN levels. The specific calculations are in spreadsheet form, given the very large scale of the datasets involved.

4.1.2 ROOs Compliance Costs

For covered goods, a major benefit of the CU was to remove the requirement for application of a ROOs regime and its related costs. Accordingly, the ex post counterfactual analysis involves imposing a ROOs regime on the preferential trade regime developed under the Additional Protocol. The ROOs cost shock applies to the following model sectors:

Table 4.2: ROOs Shock Sectors

	Description	GTAP Sectors
10	Other processed food	25 (OFD)
12	Beverages and tobacco	26 (B_T)
17	Chemicals, rubber, and plastics	33 (CRP)
18	Textiles, clothing, and footwear	27 (TEX), 28 (WAP), 29 (LEA)
19	Other industrial goods	GTAP 30 to 42, ex 32 (P_C), 33 (CRP) and 35 (I_S)

The CU did not remove the need for documentation, as it involved adoption of the A.TR movement certificate (evidence of free circulation) for circulation of goods between the two parts of the CU.[31] This replaced the EUR.1 or EUR-MED movement certificates (which are used for evidence of origin) for access to EU preferences. However, the difference mostly lies in the compliance costs that otherwise would have applied had preferential trade continued under the Additional Protocol regime.

We observe that the ROOs costs were estimated by the World Bank (2014) to be between 2% and 6% ad valorem; moreover, this is consistent with the range reported in Ciuriak and Bienen (2014) of 1% to 7%, based on a review of the literature. We adopt an estimate at the low end of the World Bank (2014) range and report the impacts based on the average of 2%. This reflects the fact that there is a high utilization of EU preferences for products facing MFN tariffs below 4%.

[31] Decision No 1/2006 of the EC-Turkey Customs Cooperation Committee of 26 September 2006 laying down detailed rules for the application of Decision No 1/95 of the EC-Turkey Association Council.

4.1.3 Preference Underutilization

In rolling back the AFTR/CSA, the FTAs, and the GSP, preference under-utilization is fully and automatically taken into account since the tariff mark-up for industrial goods and processed foods is from the existing level of tariffs applied in the GTAP V9 dataset to the MFN level that is calculated in developing the policy shock.

4.1.4 NTBs to Cross-Border Goods Trade

Regulatory harmonization is not considered as part of the counterfactual quantitative scenario; rather it is taken into account in the analysis of the regulatory/institutional impacts of the CU. Implicitly, in quantitative terms, the harmonization impacts on trade flows are attributed to the accession process rather than to the CU per se.

Recent research on goods trade (Osnago et al., 2015) indicates that "squeezing water out of the tariff" – i.e., binding tariffs at applied rates – has a significant trade liberalizing effect. This is consistent with more general research on trade and FDI that shows that reducing uncertainty stimulates both. In other words, uncertainty constitutes a component of the composite NTBs that face cross-border goods trade. The CU should have had an impact in terms of reducing uncertainty about market access and, thus, reduced this uncertainty, independent of the alignment process. The estimates we provide do not reflect this and thus to some extent we under-estimate the positive impact of the BPTF.

4.2 Results: Ex Post CGE Analysis of the BPTF

Examined through the lens of a CGE framework, the BPTF's main impact was to reduce the costs of bilateral trade in goods covered by the CU, due to the lapsing of requirements for ROOs documentation. The AFTR and CSA contributed but by a relatively modest amount, as did the requirement for Turkey to liberalize its trade regime vis-à-vis third parties, both through granting GSP market access terms to developing countries and through providing tariff-free access to EU FTA partners, for the most part on a unilateral basis. All values are reported in euros at 2016 prices.[32]

4.2.1 Trade Impacts

Table 4.3 sets out the results of the counterfactual simulation in which the BPTF had not been implemented on total goods and services trade for Turkey and the EU, bilaterally and with third parties.

The results show that the BPTF increased bilateral trade significantly. Removing the liberalization induced by the BPTF reduces two-way bilateral trade by about EUR 14.8 billion as measured by exports. The reduction is greater for EU28 exports to Turkey (about EUR 8.7 billion) compared to the reduction of exports from Turkey to the EU28 (about EUR 6.0 billion).

A little over one-quarter of the EU's foregone exports to Turkey from removal of the BPTF are offset by increased exports to third parties of about EUR 2.5 billion; this reduces the total export reduction to about EUR 6.3 billion; for Turkey, the offset is similar in value terms (about EUR 2.1 billion) but greater in percentage terms (about 35% vs. 28% for the EU).

The deflection of trade from removal of the BPTF varies across third parties. EU exports would be deflected across a broad spectrum of trading partners with more exports headed to the United States and China; EU imports would shift from Turkey

[32] The GTAP V9 database contains values in USD at 2011 prices. The conversion to euros at 2016 prices involves first converting the USD prices from 2011 to 2016 level; this is accomplished by raising USD values by 7.3%, which is the estimated growth in the US GDP deflator between 2011 and 2016, according to the IMF World Economic Outlook database, April 2016. The resulting figure is then converted to euros at an estimated exchange rate of 1 euro = 1.1 USD.

primarily to China and to developing countries, which compete more directly in trade with Turkey.

For Turkey, exports currently destined for the EU would be deflected broadly, with Russia, followed by the Southern Partnership countries, being the main targets (note that the data for the simulations do not reflect the impacts on Russia-Turkey trade relations flowing from the Middle East conflict). The main beneficiaries of the re-direction of import sourcing by Turkey would be the United States and China.

Developing countries would not, in net terms benefit from the lapsing of the CU as they would lose market share to other third parties and also participate in the general reduction of trade due to lower incomes. EU imports from LDCs would increase but Turkey's imports from LDCs would decrease by far more; this reflects the fact that Turkey's production of goods that compete with LDC goods shifts from the EU market to the domestic market.

The bilateral liberalization under the BPTF accounts for the vast majority of the trade gains attributable to the CU; nonetheless, there is a solid contribution from the additional liberalization vis-à-vis third parties by Turkey as a consequence of its CU obligation of adopting the EU external tariff.

Table 4.3: Trade Impacts of removing the BPTF by Region, EUR millions

	EU		Turkey	
	Exports	Imports	Exports	Imports
EU28	-	-	-6,046	-9,182
Turkey	-8,734	-6,448	-	-
EFTA	154	-28	96	216
EP	50	-17	6	39
SP	217	58	328	68
Russia	49	-195	391	408
US	548	-305	276	1,396
Canada	80	-20	44	66
Mexico	53	-1	12	-66
CSA	161	-67	96	112
China	412	331	217	711
Japan	129	-15	27	125
Korea	116	-5	69	214
ASEAN7	150	47	101	-32
LDCs	115	330	133	-1,060
ODCs	79	15	73	-58
ROW	146	-46	218	193
Total	-6,276	-6,366	-3,959	-6,850

Source: Simulations by the study team. All figures are for 2016, baseline minus counterfactual, in EUR at 2016 prices. Note: in bilateral trade, import values include transportation margin and thus are higher than corresponding export flows.

4.2.2 Real GDP and Welfare Impacts by Region

The BPTF worked to increase welfare significantly for the parties, with the major gains accruing to Turkey. For the EU, removing the BPTF in our simulation results in a decline in real GDP of -0.008% and a change in consumer welfare of EUR -1.6 billion.

For Turkey, the comparable figures are a change in real GDP of -0.72% and in welfare of EUR -7.5 billion. The larger impact on Turkey reflects the much larger share of its trade affected by rising trade costs, and the larger reduction in its degree of openness.

The EU's and Turkey's gains under the BPTF come to some extent at the expense of third parties through standard trade diversion effects. Accordingly, the removal of the BPTF works to increase both real GDP and welfare in third parties. The impacts are quite marginal in terms of real GDP, while the welfare impacts only amount to significant levels in dollar terms for China and the US. The impact of the BPTF on LDCs and ODCs is modest: removing the BPTF and the trade diversion it induces would 72 million.

Table 4.4: Real GDP and Welfare Impacts of removing the BPTF by Region

	Real GDP (%)	Welfare (EUR millions)
EU28	-0.008	-1,627
Turkey	-0.722	-7,475
EFTA	0.003	107
EP	0.006	319
SP	0.007	1,713
Russia	0.004	125
US	0.001	179
Canada	0.002	289
Mexico	0.007	367
CSA	0.003	51
China	0.004	226
Japan	0.002	11
Korea	0.006	381
ASEAN7	0.004	138
LDCs	0.001	2
ODCs	0.005	70
ROW	0.004	184
Total	-0.007	-4,940
Memo: EU and Turkey combined	-0.010	-9,102

Source: Simulations by the study team. All figures are for 2016, baseline minus counterfactual.

4.2.3 Macroeconomic Impacts on the EU and Turkey

For the EU, most of the major macroeconomic variables are little affected by the BPTF. For Turkey, the macroeconomic impacts of the BPTF have been significant; removal of the BPTF is deflationary and worsens outcomes in all save one dimension: the trade balance improves due to the reduced imports driven by lower domestic demand.

Table 4.5: Macroeconomic Impacts of removing the BPTF on the EU and Turkey

	EU	Turkey
Economic Welfare (EUR millions)	-1,627	-7,475
Economic Welfare (% change)	-0.010	-0.95
GDP Value Change (EUR millions)	-1,360	-6,078
GDP Volume (% change)	-0.008	-0.72
Consumption (% change)	-0.013	-1.00
Government Expenditure (% change)	-0.004	-0.46
Investment (% change)	0.002	-2.07
Exports of Goods and Services (% change)	-0.029	-1.28
Imports of Goods and Services (% change)	-0.029	-2.59
Trade Balance (EUR millions)	-184	2,888
Capital Stock (% change)	0.001	-0.67
Terms of Trade (% change)	-0.004	-0.66
Consumer Price Index (% change)	-0.002	-0.88

Source: Simulations by the study team. All figures are for 2016, baseline minus counterfactual.

The relationship between trade loss and GDP decline is intensified for Turkey, as it is for the EU, by the fact that it is driven by increases in administrative costs of trade, which affects production inputs, and thus the cost of production. This has pervasive effects, including for domestically-oriented cost of production.

4.2.4 *Sources of the Impacts of the BPTF*

Trade liberalization generally has a positive impact on both real output and consumer welfare.

For the EU, the reduction in trade costs under the CU and the liberalization under the AFTR and CSA contribute to output and welfare gains. This is shown by the negative impact of removing these features of the BPTF. The lion's share of the impact is due to the reduction of trade costs for industrial goods under the CU. However, Turkey's liberalization to comply with the FTA/GSP requirements has a modestly negative effect on the EU due to trade diversion. Accordingly, removing these features of the BPTF generates small positive gains.

For Turkey, each element of the BPTF makes a positive contribution to real GDP as shown by the negative impact of removal of each element. By far the largest effect for Turkey comes from the reduction of trade costs under the CU. The AFTR and CSA make a solid contribution as does the FTA program. The extension of the GSP has a minor impact on real GDP and a negligible impact on welfare (note: the effect is so close to zero that a different solution algorithm for the model could change the sign).

For third parties, the removal of the CU and AFTR and CSA has a small positive effect on real GDP due to the elimination of trade diversion. Removal of Turkey's CU-mandated FTAs and the GSP is positive for some regions but negative for others (note: the individual effects are so close to zero that alternative solution algorithms could flip signs). For LDCs, removal of the trade-diverting elements of the BPTF is positive, but removal of Turkey's GSP extension is negative; the effects roughly balance.

Table 4.6: Sources of Impact by BPTF Component

	Real GDP %Change				Economic Welfare (EUR millions)			
	CU Costs	AFTR and CSA	FTAs	GSP	CU Costs	AFTR and CSA	FTAs	GSP
EU28	-0.0076	-0.0005	0.0002	0.0002	-1,448	-1,806	-1,690	-1,627
Turkey	-0.516	-0.170	-0.025	-0.011	-5,486	-7,090	-7,448	-7,475
EFTA	0.002	0.001	0.000	0.000	79	96	100	107
EP	0.007	0.001	-0.003	0.000	265	474	333	319
SP	0.007	0.001	-0.002	0.000	1,757	1,880	1,527	1,713
Russia	0.004	0.001	0.000	0.000	86	114	117	125
US	0.001	0.000	0.000	0.000	72	158	168	179
Canada	0.002	0.000	0.000	0.000	220	268	282	289
Mexico	0.006	0.001	0.000	0.000	379	399	344	367
CSA	0.002	0.001	0.000	0.000	32	53	53	51
China	0.004	0.000	0.000	0.000	179	195	212	226
Japan	0.001	0.000	0.000	0.000	10	10	11	11
Korea	0.005	0.000	0.001	0.000	340	329	372	381
ASEAN7	0.004	0.001	0.000	0.000	125	152	165	138
LDC	0.005	0.001	0.001	-0.006	275	326	367	2
ODC	0.004	0.001	0.000	0.000	76	89	73	70
ROW	0.003	0.001	0.000	0.000	140	183	195	184
Total	-0.005	-0.002	0.000	0.000	-2,900	-4,169	-4,819	-4,940
Memo: EU and Turkey combined	-0.007	-0.002	0.000	0.000	-6,935	-8,896	-9,138	-9,102

Source: Simulations by the study team.

4.2.5 *Sectoral Impacts of the BPTF*

Table 4.7 and Table 4.8 set out the impacts of the BPTF on the EU and Turkey, respectively, at the sectoral level. The major sector impacted in the EU is industrial goods. In the counterfactual, exports to Turkey decline by EUR 4.7 billion; at the same time, however, imports from Turkey decline by about EUR 3.9 billion. As markets reshuffle, EU production for the domestic market increases and some of the exports destined for Turkey are deflected to third markets. In this sector, the net effect for EU producers, taking into account internal supply chain linkages, is a modest increase in value added of about 0.02%.

For the chemicals, rubber, and plastics complex, without the BPTF there is also a large reduction in exports to Turkey (EUR -1.3 billion) and imports from Turkey (EUR -614 million). In this case, the reshuffling of markets is not enough to offset the loss of exports to Turkey and overall value-added in the sector declines by -0.002%.

The coal and steel and oilseed sectors both experience losses of exports to Turkey that are not made up by sales to the domestic market and exports to third parties and all experience a decline in value added on the order of -0.2%.

The import-competing textiles, clothing and footwear sectors, however, more than make up their lost exports to Turkey of EUR 392 million with increased production for the domestic market, resulting in an increase in value added of about 0.125% The import-competing vegetables and fruit sector also experiences a gain in production from the higher level of protection against Turkey without the BPTF; in this case, the model predicts value added would be 0.14% higher without the BPTF.

Other EU sectors are impacted more marginally, mainly by the overall decline in incomes due to the removal of the BPTF and/or the shifts in the sectoral production patterns within the EU.

For Turkey, the sectors hardest hit by declining exports to the EU are industrial goods (EUR -3.6 billion); and textiles, clothing and footwear (EUR -1.8 billion). In the case of industrial goods, the export reduction is partly offset by increased sales to the domestic market and third countries; accordingly the decline in value-added is mitigated and amounts to only -0.2%. However, for textiles, clothing and footwear, the loss of the EU markets is compounded by the negative income effect in Turkey’s domestic market; accordingly, total production value-added falls by -1.34%. The difference in outcomes in this case reflects the fact that the sector has less scope to displace imports from the EU.

Other goods sectors negatively affected by declining exports to the EU also have differing overall impacts depending on their ability to expand exports to third markets or to displace imports from the EU. Thus, the chemicals, rubber, and plastics complex, which suffers a loss of exports to the EU of EUR 570 million, displace EU imports in the domestic market and emerges with a boost to overall production value-added of 0.5%. Turkey’s vegetables and fruit sector, by contrast, has a smaller reduction in bilateral exports to the EU (EUR -194 million) but has less scope to displace EU imports and thus suffers a larger decline in output of -0.16%. Otherwise, the largest reduction in output is in the services sectors, reflecting weaker domestic demand. Trade, financial services and construction are the hardest hit.

Several of Turkey’s import-competing sectors would be larger without the BPTF. In particular the coal and steel sector which would see a sharp reduction in imports from the EU and a resulting substantial rise in production value added of 1.3%. Turkey’s oilseed sector would also see an increase in production of 1.4%.

Note that the structure of bilateral trade reflects the structure in the GTAP data set in 2011. Actual trade patterns can vary at times sharply from year to year. Accordingly the actual sectoral impacts identified in a simulation would vary depending on which year’s trade pattern is adopted for the purposes of the analysis.

Table 4.7: Sectoral Impacts of removing the BPTF in the EU, EUR millions unless otherwise indicated

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	Value Added %	Value Added Share	Unskilled Labour %	Skilled Labour %
Rice	-10	0	-9	-4	-27.68	2.15	-0.08	0.02	-0.12	-0.12
Cereals (wheat, coarse grain)	-4	2	17	-14	-1.36	5.14	-0.03	0.27	-0.04	-0.04
Vegetables, fruits	-6	-218	-21	-154	-7.01	-10.02	0.14	0.36	0.15	0.15
Oil seeds, vegetable oils	-251	-11	-225	-95	-56.31	-8.55	-0.23	0.17	-0.30	-0.30
Sugar	0	0	1	-3	-2.98	-4.73	0.02	0.11	0.01	0.01
Other primary agricultural products	-49	-84	-42	-79	-13.40	-26.14	0.03	0.34	0.03	0.03
Dairy products	-49	1	-30	-4	-94.02	4.48	-0.02	0.65	-0.04	-0.04
Beef, sheep, and other bovine meat	-467	-15	-445	-46	-81.66	-44.66	-0.47	0.13	-0.72	-0.72
Other meat products	-1	-18	32	-36	-3.14	-43.26	0.05	0.34	0.07	0.07
Other processed food	-47	-84	-37	-108	-5.17	-3.42	-0.00	1.38	-0.01	-0.01
Other primary animal products	-405	-2	-393	-13	-47.92	-4.78	-0.34	0.34	-0.39	-0.39
Beverages and tobacco	-71	-36	-58	-37	-10.15	-19.74	-0.01	0.74	-0.02	-0.02
Fishing (including aquaculture)	-1	-22	-1	-17	-19.34	-14.56	0.01	0.09	0.02	0.02
Other primary products	-11	-12	-2	-9	-1.77	-1.23	0.01	0.47	0.01	0.01
Energy	52	26	90	-146	1.54	2.41	0.01	2.36	0.01	0.01
Coal and steel	-952	-31	-842	-189	-10.71	-1.03	-0.18	0.82	-0.26	-0.26
Chemicals, rubber, and plastics	-1,256	-614	-865	-681	-6.66	-8.80	-0.00	3.27	-0.00	-0.01
Textiles, clothing, and footwear	-392	-1,909	-432	-951	-12.00	-8.48	0.13	1.15	0.18	0.17
Other industrial goods	-4,691	-3,855	-3,250	-3,619	-9.13	-9.05	0.09	13.41	0.03	0.02
Water	0	2	0	0	-4.21	6.44	-0.01	0.29	-0.01	-0.01
Construction	-1	3	17	-12	-4.32	3.64	0.00	6.99	0.00	0.00
Trade (retail, wholesale, import/export)	-11	31	52	-37	-3.60	4.44	-0.00	7.37	-0.00	-0.01
Transport nec	-7	143	-9	42	-1.99	2.63	-0.02	2.88	-0.03	-0.03
Water transport	0	17	-5	-2	-2.03	2.42	-0.03	0.41	-0.05	-0.05
Air transport	-15	58	-5	11	-1.58	1.79	-0.01	0.35	-0.02	-0.02
Communication	-7	18	4	-6	-2.64	3.27	0.00	2.45	0.00	-0.00
Financial services nec	-20	49	12	-20	-3.32	4.31	0.00	3.62	0.01	0.00
Insurance	-11	7	19	-7	-2.04	3.13	0.00	0.95	0.01	0.00
Business services nec	-28	11	129	-125	-2.65	3.46	0.01	15.25	0.01	0.01
Recreational and other services	-7	78	0	24	-2.92	3.78	-0.01	3.56	-0.01	-0.01
Public administration, defence, education, health, and dwellings	-18	17	21	-27	-3.49	4.82	-0.00	29.47	-0.00	-0.01

Note: Sectors are as defined in the CGE model; see Annex C.
Source: Simulations by the study team.

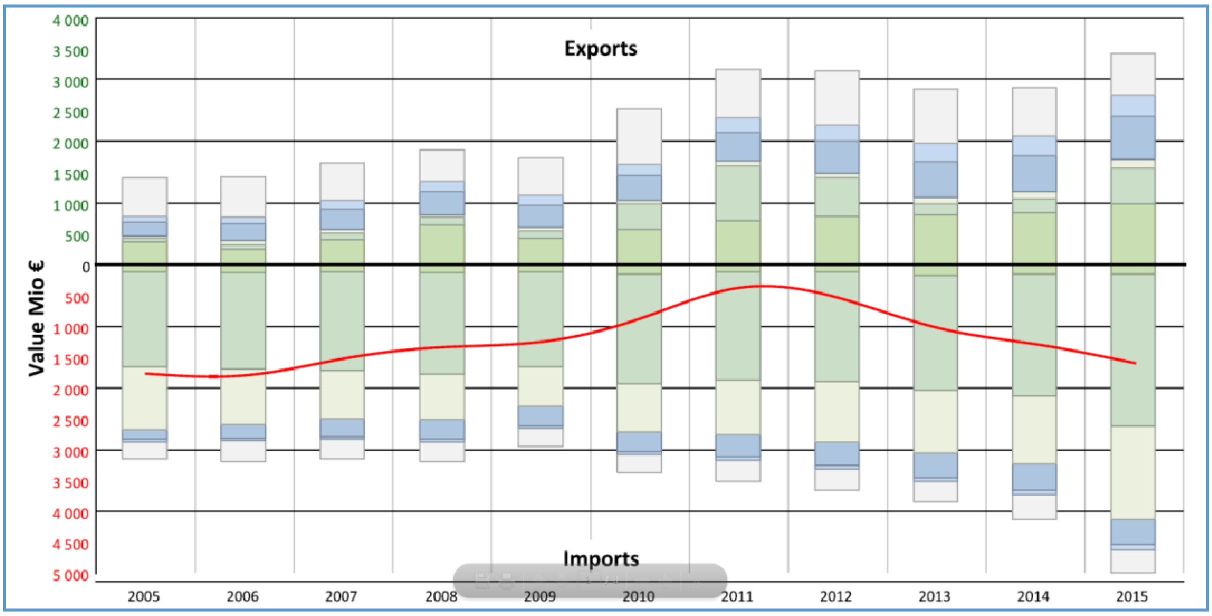
Table 4.8: Sectoral Impacts of removing the BPTF in Turkey, EUR millions unless otherwise indicated

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	Value Added %	Value Added Share	Unskilled Labour %	Skilled Labour %
Rice	0	-11	2	-6	2.09	-27.68	1.71	0.04	2.30	2.30
Cereals (wheat, coarse grain)	2	-4	3	-30	5.07	-1.36	0.83	0.76	1.03	1.03
Vegetables, fruits	-194	-7	-122	-18	-10.16	-7.01	-0.16	3.60	-0.01	-0.01
Oil seeds, vegetable oils	-10	-278	12	-77	-8.59	-56.31	1.36	0.42	2.03	2.03
Sugar	0	0	2	-1	-4.73	-2.98	-0.24	0.25	0.24	0.24
Other primary agricultural products	-79	-52	-47	-74	-26.19	-13.40	-0.11	0.33	0.03	0.03
Dairy products	1	-52	20	-33	4.48	-94.02	0.05	1.26	0.47	0.47
Beef, sheep, and other bovine meat	-15	-482	-16	398	-44.66	-81.66	-0.32	0.33	0.87	0.87
Other meat products	-18	-1	15	-3	-43.27	-3.14	-0.50	0.17	0.69	0.69
Other processed food	-78	-51	20	-69	-3.50	-5.17	-0.03	1.72	1.07	1.07
Other primary animal products	-2	-420	3	-152	-4.82	-47.91	2.81	0.62	3.09	3.08
Beverages and tobacco	-33	25	-29	-65	-19.79	-10.15	-0.30	0.49	0.83	0.83
Fishing (including aquaculture)	-18	-1	-16	-3	-15.08	-19.35	-0.53	0.19	-0.93	-0.93
Other primary products	-11	-13	4	-10	-1.48	-1.77	0.25	1.48	0.47	0.47
Energy	25	55	85	-284	2.40	1.54	0.63	2.14	1.21	1.21
Coal and steel	-29	-1,016	34	-525	-1.04	-10.71	1.14	1.22	2.59	2.59
Chemicals, rubber, and plastics	-570	-1,335	-549	-1,023	-8.82	-6.66	0.50	2.52	1.80	1.80
Textiles, clothing, and footwear	-1,810	-416	-1,501	-765	-8.51	-12.00	-1.34	3.97	-1.42	-1.41
Other industrial goods	-3,642	-4,898	-2,965	-3,754	-9.08	-9.13	-0.20	9.90	0.72	0.72
Water	2	0	3	-1	6.44	-4.21	-0.66	0.64	0.04	0.04
Construction	3	-1	46	-8	3.64	-4.32	-1.87	5.55	-1.89	-1.88
Trade (retail, wholesale, import/export)	31	-11	67	-35	4.44	-3.60	-0.59	14.19	-0.17	-0.16
Transport nec	143	-7	335	-27	2.63	-1.99	-0.21	6.99	1.22	1.22
Water transport	17	0	39	-2	2.42	-2.03	-0.16	2.34	1.50	1.49
Air transport	58	-15	128	-42	1.79	-1.58	0.89	0.45	3.04	3.03
Communication	18	-7	38	-15	3.27	-2.64	-0.44	1.96	0.76	0.76
Financial services nec	49	-20	112	-49	4.31	-3.32	-0.56	14.92	0.09	0.09
Insurance	7	-11	38	-30	3.13	-2.04	1.16	0.39	2.41	2.41
Business services nec	11	-28	32	-46	3.46	-2.65	-0.38	4.14	0.41	0.41
Recreational and other services	78	-7	184	-25	3.78	-2.92	-0.38	5.18	0.28	0.28
Public administration, defence, education, health, and dwellings	17	-18	63	-73	4.82	-3.49	-0.33	11.85	-0.23	-0.23

Source: Simulations by the study team.

In terms of trade in agricultural and fishery products, the main impact of the BPTF has been on EU oilseed sector exports and Turkey's fruits and vegetables exports. The model results for beef and other primary product exports by the EU to Turkey are likely somewhat overstated; the reported estimates reflect large export values in 2011, the base year for the modelling framework. EU beef exports were unusually high in 2011 and have since fallen to lower levels. Similarly, EU exports of other primary animal products have fallen substantially since 2012. As shown in the chart below (Figure 4.1), 2011 was an unusual year in EU-Turkey agri-food trade.

Figure 4.1: Structure of EU-Turkey Agri-Food Trade, 2005-2015



Source: European Commission.

In terms of the CSA, the model results suggest the main liberalization impact was by Turkey while the EU's further liberalization was minimal.

4.2.6 Impacts on Consumers

The BPTF impacted on consumers in various ways, including in terms of income, prices, safety, quality, and choice.

In terms of overall income, the BPTF has relatively strong positive impacts on household income in Turkey and quite modest ones in the EU. Withdrawal of the BPTF accordingly reduces Turkey's household income by EUR 7.5 billion – which on a per capita basis is about EUR 119 or about EUR 490 for an average Turkish household of 4.11 persons. The comparable income gain in EU household income of about EUR 1.8 billion translates into about eight euros for an average household.

In terms of prices, the CGE simulations suggest that the BPTF tended to raise prices in both the EU and Turkey, driven by the positive effect on wages. This is shown by the fall in prices when we remove the BPTF. For the EU, the impact of removing the BPTF on prices is marginal (-0.002%) but for Turkey it is quite substantial (-0.88%). The impact works as follows: removal of the BPTF raises costs in the first instance, the higher costs work to reduce the competitiveness of the Turkish economy, which drive down sales and production. The decline in sales reduces demand for labour, driving down wages.

The CGE simulations do not address all the possible influences of the BPTF on consumer prices.

First, the CGE simulations do not take into account the impact of TDIs. Turkey became a fairly frequent user of TDIs during the BPTF period, initiating 105 cases covering 204 countries in total (World Bank, 2016a). Of these, 7 cases covered 16 EU Member

States plus one more which covered the whole EU. Given the share of Turkish imports sourced from the EU, this is substantially less than proportionate. The major target of Turkish TDI was China, consistent with the practice in much of the rest of the world. Excluding the cases that targeted China, the share of cases brought against the EU Member States is still less than proportionate to the EU's share of Turkey's imports. Of the FTAs that are considered conditional upon the CU, the only country targeted by AD on the list is Israel, which was involved in four cases. While EU GSP beneficiaries are included on the list of AD targets, it does not appear to be GSP status as much as the fact that they are competitive Asian emerging markets which leads to the AD measures. Accordingly, the BPTF does not appear to have been a factor in raising consumer prices above what they would have been by inducing a disproportionate number of TDI cases.

Second, the CGE simulations also do not take into account the impact on consumer welfare from the change in the variety and quality of imports. For the EU, the impact of expanded varieties over the period 1999-2008 was examined by Mohler and Seitz (2012); this study found, on aggregate, a negligible impact on the EU from the expansion of varieties over this period, which covered much of the BPTF period. For Turkey, the main expansion in trade with the EU occurred pursuant to the liberalization under the Additional Protocol to prepare for the CU. Subsequently, the share of Turkey's imports from EU FTA partners against which Turkey liberalized conditional on the CU rose marginally from 3.2% of Turkey's imports in 1996 to 3.6% of Turkey's imports in 2014. This resulted in a small consumer benefit.

Third, it is well established that, when firms enter into trade with more advanced markets, they raise the level of their production quality through "learning" effects, including the adoption of foreign technology and also the typically the need to meet the higher standards in those markets. There is accordingly some basis to infer a significant quality effect on Turkish production contingent on the BPTF from the impact on its exports.

Fourth, the requirement under the CU Agreement for approximation of laws worked in the same direction of aligning Turkey's standards with the EU's, which have been the global pace setter for quality.

Nonetheless, in the EU, there has been concern expressed about the increased import of sub-standard and potentially hazardous goods under the BPTF. To assess this, we examine the absolute and relative incidence of notifications under the RAPEX system related to imports from Turkey. Both the incidence and share of notifications related to imports from Turkey increased from 2001, when RAPEX was introduced, until 2012 – and especially since 2007-08, but has been decreasing since (Table 4.9), which might indicate that a strengthening of the quality infrastructure in Turkey during the BPTF period may have shown results. Whereas the notifications until 2007 were evenly distributed across product groups, since 2008 the vast majority of notifications related to clothes and textile products, although recent trends show the growing importance of motor vehicles and parts, and cosmetics (Figure 4.2). It should be noted that the shifts in notifications are not related to the pattern of EU imports from Turkey. Rather, the single most explanatory factor for the sudden rise in notifications regarding products from Turkey after 2007 was Bulgaria's accession to the EU: Bulgaria accounts for the overwhelming majority (exactly two thirds) of notifications on Turkish products (mostly related the clothes and textile products), whereas the other notifications were roughly evenly distributed across EU Member States.[33]

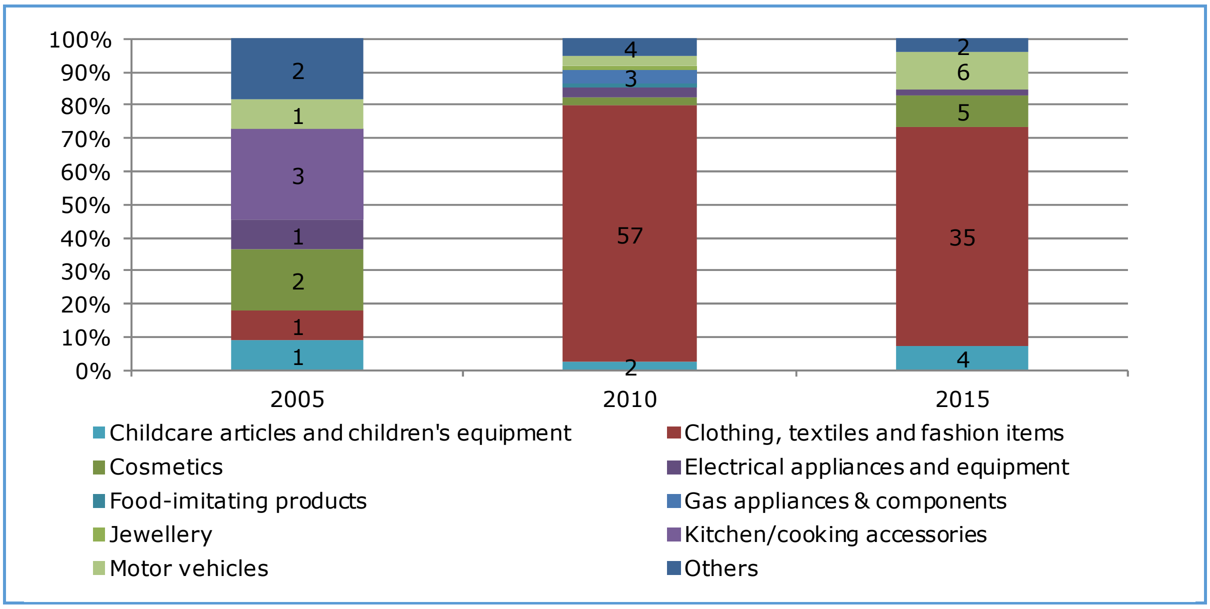
[33] No other Member State accounted for more than 5% of notifications relating to products from Turkey.

Table 4.9: RAPEX notifications and share of products originating in Turkey, 2003-2015

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Notifications total	139	468	847	1051	1605	1866	1993	2244	1803	2278	2364	2435	1839
Notifications Turkey	..	3	..	12	16	33	48	73	50	89	82	66	43
Share Turkey		0.6%		1.1%	1.0%	1.8%	2.4%	3.3%	2.8%	3.9%	3.5%	2.7%	2.3%

Source: Calculations by the study team based on RAPEX annual reports (European Commission, 2016i).[34]

Figure 4.2: RAPEX notifications on projects from Turkey by product category, 2005-2015



Source: Calculations by the study team based on RAPEX notifications database (European Commission, 2016h).

Otherwise, the major developments on consumer prices came from macroeconomic developments, as Turkey implemented International Monetary Fund (IMF) recommendations for monetary, fiscal, and exchange rate management and are not closely related to the effects of the BPTF.

4.2.7 SME Impacts

As a general observation, the CU improved matters for SMEs producing CU-eligible industrial products due to the absence of ROOs requirements. The fixed-cost component of ROOs requirements creates a disadvantage for SMEs, which ship smaller quantities less frequently, in taking advantage of trade opportunities compared to larger firms, including in e-commerce trade (Ciuriak et al., 2015).

Second, by lowering the cost threshold for entering into international trade, the CU encouraged SMEs in both the EU and Turkey to take that step, which an extensive literature demonstrates drives productivity improvements for the new exporters and firms that start to import intermediate inputs. Compared to the preceding preferential trade arrangements, the CU helped level the playing field for SMEs vis-à-vis their larger competitors, helping them attain greater scale, and generally improved their performance both in the domestic and export markets.

The impact of the CU on EU-based SMEs is likely to have been small. Survey information suggests that the majority (70%) of EU SMEs are not familiar with the Turkish market. Further, of those that do business in Turkey, the large majority (87%) are not export-intensive companies and Turkey accounts for only a small share of their exports (EUROCHAMBERS and TOBB, 2013). Thus, 62% of the surveyed companies

[34] Note that figures in the RAPEX notifications database slightly differ from data in the annual reports, but the overall trends related to products from Turkey are the same.

exported less than 10% of their turnover in 2012 to Turkey while only 8% of the respondents exported more than 50% of their turnover. From the latter statistic, it can be readily inferred that the main benefits of entry into exporting for most EU SMEs are likely achieved by entry into exporting within the EU itself and to other destinations. Nonetheless, although only a relatively small share of EU SMEs is heavily dependent on the Turkish market,[35] for the small segment that does engage the Turkish market significantly, the trading relationship will have tended to improve their overall performance.

For Turkish SMEs, the effect will have been larger. Erzan and Filiztekin (1997) studying the expected impact of the CU on SMEs concluded that the CU could improve conditions for SMEs by reducing economic instability, which had been a particular problem for Turkish SMEs compared to their larger competitors. Given the high level of sectoral aggregation in the CGE analysis for industry, the modelling results permit only limited inferences concerning the impact of the BPTF on Turkey's SMEs.

The main inference that may be drawn from the analysis is that the CU did favour Turkey's exports of textiles, clothing and footwear. Since this sector is mainly comprised of SMEs in Turkey, the CU will have had a positive impact in terms of enabling Turkish SMEs to engage in trade.

Nonetheless, the evidence on under-performance of Turkish SMEs (World Bank, 2011) leads to the conclusions that, while the CU helped SME performance, the effect was not sufficiently powerful to overcome other factors that have resulted in general under-performance of SMEs in Turkey. As the World Bank (2011: 16) documents, Turkish SMEs lagged in growth behind larger enterprises in Turkey and SMEs in comparator countries. Moreover, the gap in firm size is larger in Turkey than in comparator countries. And Turkish SMEs lag in their use of modern methods, technology and business practices (World Bank, 2011: 48).

The major impediments to improved SME performance in Turkey have been identified as access to finance (which is a typical problem for SMEs across many countries), and weak technological development. Notably, by favouring textiles, clothing and footwear production – a sector that is not technology-intensive – the CU may have contributed to intensifying Turkey's comparative advantage in non-technology-intensive production. While this contributed to job creation – the textiles and clothing sector is highly labour-intensive – it may have worked to slow Turkey's progress up the technological ladder.

This tendency is seen even within the textiles sector: over the BPTF period, Turkey enjoyed a growing surplus in textiles trade across a wide range of products, but in textiles for technological uses (HS 5911), it had limited exports and it is the EU that enjoyed the surplus in trade.

4.2.8 Impact on the EU Budget

For the EU, the foregone tariffs on imports from Turkey are estimated to amount to EUR 100 million, based on the level of EU imports from Turkey in 2016 and the tariffs that would have applied to those imports. This estimate does not take into account the reduction in baseline imports that would result from the higher tariffs. As well, it does not take into account the impact of removing the BPTF on EU total revenues from changes in tariff revenues on imports from third parties and from implied lower revenues from the VAT-based and GNI-based budgetary resources that would likely accompany the removal of the BPTF. Taking these factors into account, the overall improvement in EU budgetary resources from removal of the BPTF would be less than implied by the foregone tariffs on bilateral imports from Turkey.

[35] The 8% of respondents is likely to have a significant upward bias in terms of the share of all EU SMEs, since companies that were approached by the survey that have significant business in Turkey are more likely to have participated in the survey.

4.2.9 Summary

In sum, the ex post CGE analysis of the BPTF establishes that it had a positive impact on both the EU and Turkey, both in terms of increasing real output and in terms of expanding economic welfare.

The gains are substantially greater for Turkey in both percentage and value terms, reflecting the much greater impact of the BPTF on Turkey's overall trade as compared to the impact of the BPTF on the EU's overall trade.

The main source of impact of the BPTF comes from the reduction of trade costs under the CU due to the lapsing of the requirements associated with compliance with ROOs. We adopt an estimate of this cost (an AVE of 2%) at the low end of the range established by a range of empirical studies and also adopted by the World Bank in its 2014 review of the CU. The key role of this assumption means that the scale of the impacts is sensitive to the specific figure chosen. However, under any reasonable assumption within the empirically established range, the CU cost reduction will dominate the effects of the BPTF.

The macroeconomic impacts of the BPTF on the EU are muted.

Consistent with the primary role of reduced costs under the CU, the main sectors benefiting from the BPTF are the industrial goods sectors in both the EU and Turkey. In the EU, the chemicals, rubber, and plastics group, and coal and steel also benefit particularly from the BPTF. In the agricultural area, meat products and oilseeds benefit from the BPTF. In Turkey, benefits accrue across a wide range of sectors, with most services sectors making significant gains driven by income effects of the BPTF. Industrial goods, textiles, clothing and footwear, processed food, and fruits and vegetables benefit particularly.

Consumers benefited considerably from the BPTF with the main sources of benefits coming from increased incomes (and/or jobs, depending on how the economic gains translate into either wages or higher employment – the assumptions underlying the present analysis channel the impacts into wages rather than jobs; clearly, a stronger labour supply response would imply broader sharing of the benefits as more households share in the gains). Consumer prices, however, are higher in both the EU and in Turkey because of the BPTF. This is the other side of the coin of higher wages. Consumers make gains from the BPTF in terms of variety and quality, both impacts are judged to be relatively minor. By and large, the benefits in this area accrue to Turkish consumers. Moreover, the BPTF would have been only one of many sources of stimulus for progress in Turkey's improvement in its quality infrastructure. . We do not identify any significant unintended consequence from the BPTF (e.g., higher resort to use of TDI).

This analysis sheds light on three specific questions raised by the ToR:

- *Q 3: To what extent has the liberalisation of trade in agricultural and fishery products progressed?*

  The counterfactual analysis suggests that agricultural and fishery trade was boosted by the BPTF, notwithstanding the partial nature of this liberalization, with the main impact being on EU oilseed sector exports and Turkey's fruit and vegetable sector exports.

- *Q 4: To what extent has the CU contributed to strengthening trade and economic relations between the EU and Turkey, and deepened the industrial, trade and economic integration between the parties?*

  The counterfactual analysis shows that the BPTF boosted bilateral trade between the parties, with the EU's exports to Turkey being about 10% higher than they otherwise would have been and Turkey's exports to the EU about 7%

higher than they otherwise would have been, notwithstanding the preference erosion due to liberalization vis-à-vis third parties. The trend analysis shows that the EU's overall share in Turkey's trade declined during the BPTF period, while Turkey became somewhat more important for the EU as a trading partner, both as an export destination and a source of imports. The gravity modelling analysis suggests that the BPTF expanded goods trade in both directions initially but that Turkey's post-2001 opening up eroded the EU's position in Turkey's market while powering Turkey's export performance in the EU market. Services trade was minimally impacted by the BPTF, while the strengthening of FDI links was likely due primarily to Turkey's real growth, which increased its attractiveness as an FDI destination and generated new-found capacity for outward investment. The overall sense of the analysis is that the BPTF acted to offset significant headwinds facing bilateral trade that emerged during the BPTF period, and kept the relationship larger and deeper than it otherwise would have been, even though the momentum in the deepening of the relationship ebbed in the latter part of the BPTF period.

- *Q 5: To what extent has the CU contributed to economic development in Turkey and in the EU, and has enabled increased competitiveness of the former on the global markets?*

  The analysis suggests that Turkey's progress up the technology ladder during the BPTF period was concentrated on medium-technology production, while higher-technology production failed to take off. Turkey was already a middle-income economy by the time the BPTF came into force. The subsequent transformation of the Turkish economy towards the profile of a high-income economy appears to have stalled midway during the period, as shown by the trend analysis. The counterfactual CGE analysis confirms that the BPTF favoured industrial production, including in the traditional textiles, clothing and footwear area. However, it does not have the granularity to expose whether the BPTF favoured or disfavoured higher-technology goods production. Whether the failure to break through into higher-technology production could be attributed to the comparative advantage effects of the BPTF which favoured EU high technology exports, or whether it reflected structural factors in the Turkish economy (e.g., weakness in the innovation system, weak SME performance, and the under-development of its professional business services) is not laid bare by the counterfactual. The analysis does suggest that Turkey's global competitiveness and growth prospects were improved as a result of the lowered cost of trade in industrial products with the EU, as well as through greater alignment of rules, which worked to improve Turkey's ability to make stronger undertakings in its recent FTAs with third parties.

5 SOCIAL IMPACTS OF THE BPTF

This chapter assesses the impacts of the BPTF on social outcomes in a number of dimensions. It builds on and complements prior analysis (e.g., World Bank, 2014), with a focus on how the bilateral trade relationship between the EU and Turkey may have influenced laws and regulations governing labour markets (and vice versa), including compliance with the Decent Work Agenda promulgated by the ILO (2016); and whether the BPTF constrained the use of incentives that weaken labour market protections in order to attract more investment from the other party. Strictly speaking, given its scope, the BPTF has not required the EU or Turkey to amend labour laws and regulations. However, the BPTF may nevertheless have indirectly resulted in such changes, driven by actual changes in investment and trade.

As the causal direction between trade and investment, on the one hand, and social change and labour regulation, on the other, is not clear ex ante, we analyse the social impacts of the BPTF through a three-pronged approach, including the following:

(a) Quantitative analysis derived from the CGE counterfactual analysis of the BPTF economic impact;
(b) Sector-specific analysis on sectors particularly affected by the BPTF in terms of output and the importance of these sectors to social indicators (e.g., incidence of female employment, unskilled labour); and
(c) Horizontal analysis focusing on the BPTF's effect on individual social indicators.

The social impact dimensions covered by the analysis are guided by the four pillars of the ILO Decent Work Agenda (2016): employment and unemployment (Section 5.1) and income effects and poverty (Section 5.2) address the pillar "employment creation". Sections 5.3 to 5.5 each address one of the remaining three pillars of the Decent Work Agenda: job quality and working conditions (Section 5.3), social protection (Section 5.4) and social dialogue (Section 5.5). The impact of the BPTF on gender issues is addressed horizontally across all social impact dimensions.

5.1 Employment

The CGE analysis assumes full employment and the modelling protocol thus assumes no net job creation or loss. Accordingly, the quantitative modelling sheds no light on employment impacts, including on potential differential impacts on skilled versus unskilled labour, apart from sectoral reallocation of labour. Since labour is mobile across sectors, inter-sectoral movement of labour ensures that wage impacts are identical across sectors for both skilled and unskilled labour (although the impacts might differ for skilled labour in total versus unskilled labour in total).

Table 5.1 shows the impact of the BPTF on sectoral output and employment of skilled and unskilled labour in the EU and Turkey.

In the EU, as a result of the BPTF, employment is higher than it otherwise would have been in the oil seed sector (by 0.30%) and the coal and steel sector (by 0.26%). Sectors that may have experienced less job creation than otherwise might have been the case include textiles, clothing and footwear (by 0.17%), and vegetables and fruits (by 0.15%).[36] Given the small size of the employment effects, further analysis of BPTF employment and other social effects in the EU is not undertaken.

In Turkey, the BPTF impacted significantly on the relative strength of job creation across sectors. As a result of the BPTF employment is higher than it otherwise would have been in construction (1.9%), textiles, clothing and footwear (1.4%) and the fishery sector (0.9%). Employment is lower than it otherwise would have been in coal

[36] The model-generated impacts for the beef/sheep meat and other primary animal products are open to question based on the unusual circumstances in 2011, the base year for the modelling results; accordingly, they are not emphasized in the present analysis.

and steel (2.6%), insurance (2.4%), the oil seeds sector (2%) and the chemicals, rubber and plastics complex (1.8%).

The redistribution of employment across industry sectors and (probably) regions may have caused temporary frictional unemployment. However, since the restructuring effect came early and was transient, and the main effect was in influencing which sectors were creating the most jobs over the longer run, any such additional frictional unemployment is likely to have been a relatively minor factor in the overall impact of the BPTF, compared to the estimated differences in employment outcomes across sectors.

Table 5.1: BPTF employment effects by sector, Turkey and EU

	Turkey				EU			
	Value-added Share	Value-added	Unskilled Labour %	Skilled Labour %	Value-added Share	Value-added	Unskilled Labour %	Skilled Labour %
Rice	0.04	1.71	2.30	2.30	0.02	-0.08	-0.12	-0.12
Cereals (wheat, coarse grain)	0.76	0.83	1.03	1.03	0.27	-0.03	-0.04	-0.04
Vegetables, fruits	3.60	-0.16	-0.01	-0.01	0.36	0.14	0.15	0.15
Oil seeds, vegetable oils	0.42	1.36	2.03	2.03	0.17	-0.23	-0.30	-0.30
Sugar	0.25	-0.24	0.24	0.24	0.11	0.01	0.01	0.01
Other primary agriculture	0.33	-0.11	0.03	0.03	0.34	0.03	0.03	0.03
Dairy products	1.26	0.05	0.47	0.47	0.65	-0.02	-0.04	-0.04
Beef, sheep & other bovine meat	0.33	-0.32	0.87	0.87	0.13	-0.47	-0.72	-0.72
Other meat products	0.17	-0.50	0.69	0.69	0.34	0.05	0.07	0.07
Other processed food	1.72	-0.03	1.07	1.07	1.38	0.00	0.00	-0.01
Other primary animal products	0.62	2.81	3.09	3.08	0.34	-0.34	-0.39	-0.39
Beverages and tobacco	0.49	-0.30	0.83	0.83	0.74	-0.01	-0.02	-0.02
Fishing (including aquaculture)	0.19	-0.53	-0.93	-0.93	0.09	0.01	0.02	0.02
Other primary products	1.48	0.25	0.47	0.47	0.47	0.01	0.01	0.01
Energy	2.14	0.63	1.21	1.21	2.36	0.01	0.01	0.01
Coal and Steel	1.22	1.14	2.59	2.59	0.82	-0.18	-0.26	-0.26
Chemicals, rubber & plastics	2.52	0.50	1.80	1.80	3.27	0.00	0.00	-0.01
Textiles, clothing & footwear	3.97	-1.34	-1.42	-1.41	1.15	0.12	0.17	0.17
Other Industrial Goods	9.90	-0.20	0.72	0.72	13.41	0.02	0.03	0.02
Water	0.64	-0.65	0.04	0.04	0.29	-0.01	-0.01	-0.01
Construction	5.55	-1.87	-1.89	-1.88	6.99	0.00	0.00	0.00
Trade (retail, wholesale, import/export)	14.19	-0.59	-0.17	-0.16	7.37	0.00	0.00	0.00
Transport nec	6.99	-0.21	1.22	1.22	2.88	-0.02	-0.03	-0.03
Water transport	2.34	-0.16	1.50	1.49	0.41	-0.03	-0.05	-0.05
Air transport	0.45	0.89	3.04	3.03	0.35	-0.01	-0.02	-0.02
Communication	1.96	-0.44	0.76	0.76	2.45	0.00	0.00	0.00
Financial services nec	14.92	-0.56	0.09	0.09	3.62	0.00	0.01	0.00
Insurance	0.39	1.16	2.41	2.41	0.95	0.00	0.00	0.00
Business services nec	4.14	-0.38	0.41	0.41	15.25	0.01	0.01	0.01
Recreational and other services	5.18	-0.38	0.28	0.28	3.56	-0.01	-0.01	-0.01
Public Administration etc.	11.85	-0.32	-0.23	-0.23	29.47	0.00	0.00	-0.01

Note: The table reports the impact of removing the BPTF; accordingly negative values indicate that the BPTF led to an increase in output/employment in a given sector. Source: Simulations by the study team.

With regard to women's role in the labour market, female labour market participation amounted to 35% in 2015, against 71.6% for men, more than half of the female population of 15 years and older not in the labour force was engaged in (unpaid) household labour (TurkStat, n.d.b). However, although female labour participation in Turkey is significantly below that in the EU28 – the corresponding figures are 67% for women and 78% for men based on EUROSTAT data – it has increased significantly since 2004, when it was about 25%, following a long period of decline (World Bank, 2006). The enactment of the 2003 Labour Law, which included a number of provisions facilitating female employment – e.g., by allowing part-time employment and lifting the ban on female employment in night shifts of manufacturing establishments (World Bank, 2006: ix) – contributed to this positive development. To the extent that the passing of the law was supported by the BPTF, as described in Section 5.3 below, the BPTF contributed to this. However, as the still-low labour force participation shows, there is still much room for improvement. For example, the lack of institutions to care for children, the elderly, and the sick acts as a barrier for further participation of women in the labour market (European Commission, 2015e: 53).

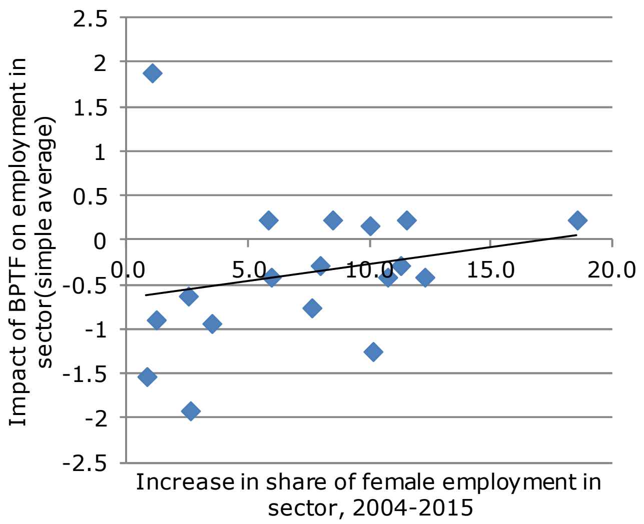
In line with the turnaround in labour force participation, female employment has also increased in Turkey since 2004, across all sectors (Table 5.2).[37] Comparing the BPTF effects on sectoral employment with the sector distribution of female employment in Turkey (Table 5.2) is made difficult due to the differences in sector definitions. Nevertheless, there is a positive correlation between the BPTF effect on employment in a sector and the growth in female employment in that sector, which indicates that the BPTF effect on female employment may have been slightly positive (Figure 5.1).

Table 5.2: Female employment by sector, Turkey, 2004 vs. 2015 (% of total)

Sector	2004	2015	Change 2004-15
Total	25.7	30.3	4.6
Agriculture, forestry, and fishing (A)	44.9	46.1	1.2
Mining and quarrying (B)	1.7	2.5	0.8
Manufacturing (C)	20.8	24.3	3.5
Electricity, gas, steam, water supply, sewerage etc. (D+E)	6.4	8.9	2.5
Construction (F)	2.7	3.7	1.0
Wholesale and retail trade (G)	13.4	23.4	10.0
Transportation and storage (H)	5.1	7.7	2.6
Accommodation and food service activities (I)	10.6	21.9	11.3
Information and communication (J)	17.9	25.5	7.6
Financial and insurance activities (K)	36.5	46.6	10.1
Real estate activities (L)	12.0	17.9	5.9
Professional, scientific and technical activities (M)	29.5	40.3	10.7
Administrative and support service activities (N)	21.4	33.7	12.3
Public administration and defence (O)	10.9	16.7	5.8
Education (P)	38.7	50.2	11.5
Human health and social work activities (Q)	50.5	69.1	18.6
Arts, entertainment and recreation (R)	13.5	21.5	8.0
Other social, community and personal service activities (S+T+U)	27.0	35.4	8.5

Source: Authors' calculations based on TurkStat, Labour Force Statistics.

Figure 5.1: Correlation between BPTF impact on sector employment and growth in female employment per sector



Source: Calculations by the study team.

[37] It should be noted that reported numbers on female employment are somewhat unreliable, as informal work activities of women in rural and urban areas are considered an extension of housework and care work; women carrying out these activities are registered as housewives in the official data; see The Ministry of Family and Social Policies General Directorate on the Status of Women (2014). Also, the UNDP has released statistics showing that 50% of the women working in agriculture are part of family work force without wage (UNDP, 2016).

In a similar development, although female unemployment in Turkey in 2015 was still higher (12.6%) than male unemployment (9.2%), the gap has declined substantially over time, and female unemployment has declined over the longer term from 28% in 1988 to 18% by 2004 and finally less than 13% in 2015. Although the World Bank interpreted the decline until 2004 as an expression of the discouraged worker effect as it was aligned with reduced female labour force participation (World Bank, 2006), the reversal of the latter trend in the presence of further reduction in female unemployment is a positive sign, and we consider that the BPTF contributed to it.

A similar analysis can be undertaken for youth employment, which in Turkey – as in many other countries – is a particular concern due to high youth unemployment rates. In 2015, the unemployment rate for persons aged 15-19 was 16.5%, and for persons aged 20-24 19.7% (TurkStat, n.d.b). Similarly, the employment rate of young people (15-24 years) is low, at 34.2% in 2015; it dropped from 47% in 1990 to 29% in 2009 before increasing again somewhat until 2015.

Youth employment in particularly high in the following sectors: accommodation and food service; arts, entertainment and recreation; trade and miscellaneous services; construction; social services; and information and communication (Table 5.3). The BPTF has had mixed effects on these sectors: employment contracted in recreational and travel services (-0.28%), communication (-0.76%) and business services (-0.41%); and expanded in trade (+0.17), construction (+1.9) and social services (+0.23%). The net effect cannot be determined from available data.

Table 5.3: Share of youth in employment by sector of industry, Turkey, 2015

	Share of persons aged 15-25 in total employment (%), 2015
Agriculture, forestry, and fishing	14
Mining and quarrying	10
Manufacturing	17
Electricity, gas, steam, air conditioning supply, water supply, sewage, etc.	13
Construction	19
Wholesale and retail trade; repair of motor vehicles and motorcycles	20
Transport and storage	9
Accommodation and food service activities	24
Information and communication	18
Financial and insurance activities	10
Real estate activities	9
Professional, scientific and technical activities	13
Administrative and support service activities	10
Public administration and defence; compulsory social security	5
Education	8
Human health and social work activities	14
Arts, entertainment and recreation	21
Other social, community and personal service activities	19
Total	15

Source: TurkStat, Labour Force Statistics

Finally, concerns have been raised, both by NGOs and by the EU, with respect to Turkey's efforts to eliminate or reduce discrimination on the labour market on the basis of disability. Problems there continue to be fundamental, as both labour force participation and employment of disabled persons are low. For example, Turkey's report to the UN Committee on Economic, Social and Cultural Rights in 2008 stated that, of the almost 1.2 million "handicapped" persons in Turkey, only 21.7% were considered to be part of the labour force; of these, 29% were in employment while

71% were unemployed.[38] TurkStat's figures of 2010 also show low participation rates in employment. Of the 280,014 persons with disabilities considered, 19.7% were part of the labour force, with 73% in employment and 27% looking for work.[39]

These cannot be attributed to the BPTF. At the same time, because the BPTF in its current form does not address issues of social inclusion, it has not provided a tool to further the social inclusion agenda in Turkey.

5.2 Household Income, Wages and Poverty

Turkey's exports to the EU contribute the most to increases in average wages and growth in productivity in Turkey. Cebeci (2014) evaluates the role of export destinations on productivity and wages of Turkish firms by comparing the performance of firms that export to low-income destinations, those exporting to high-income destinations, and those that do not export. Beginning to export to the EU market enhances firm productivity in Turkey, significantly increasing total factor productivity by 7.4, 8.1, and 9.7% (compared to non-exporting firms) in the first, second and third year of exporting to the EU, respectively. For average wages, the impact of exporting to the EU is estimated to be 1.3, 3.5, and 3.8% (relative to non-exporting firms). By boosting bilateral trade, the BPTF likely increased labour income in Turkey.

Furthermore, this effect does not appear to have been regressive –real minimum wages increased during the BPTF period (Figure 5.2) but the increase in inequality witnessed prior to the BPTF period was reversed during the BPTF period (Figure 5.3).

Figure 5.2: Annual real minimum wages in Turkey, 1994-2015 (2014 constant prices at 2014 USD PPPs)

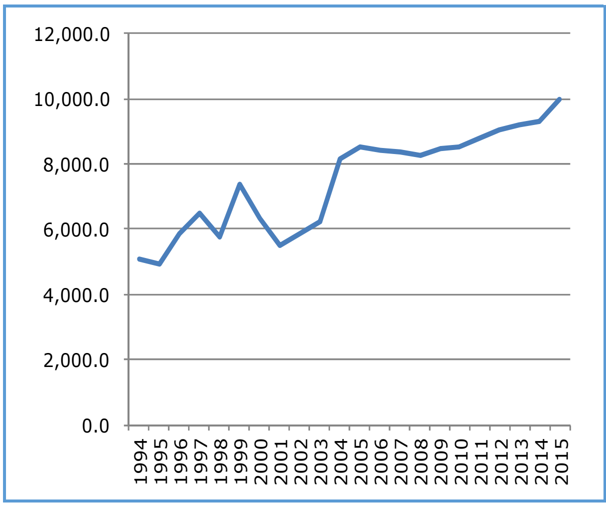
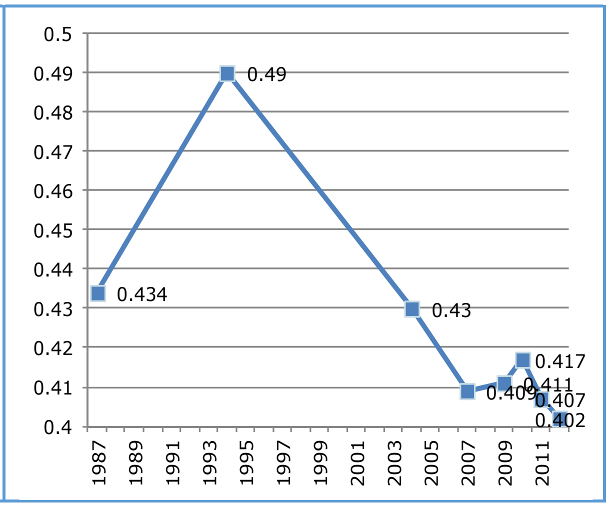


Figure 5.3: Income distribution in Turkey, 1987-2012 (Gini coefficient)



Source: OECD, http://stats.oecd.org/.

According to OECD statistics, income inequality in Turkey is consistently higher than in the OECD countries on average. The BPTF could have impacted on this positively by contributing to the redistribution of employment from high to low wage sectors, or negatively by shifting employment from low wage sectors to high wage sectors. Also, sectoral relative wage changes induced by the BPTF could have had an impact. As has been mentioned above, the quantitative analysis does not shed light on whether the BPTF resulted in shifts between unskilled and skilled employment on an intra-sectoral

[38] UN Committee on Economic, Social and Cultural Rights (2009: para. 133). The report contains no definition of "handicapped"; however, a footnote indicates that it comprises "Orthopaedic, seeing, hearing, speaking and mental" disabilities.

[39] Figures extrapolated from TurkStat (2010: Table 1.7).

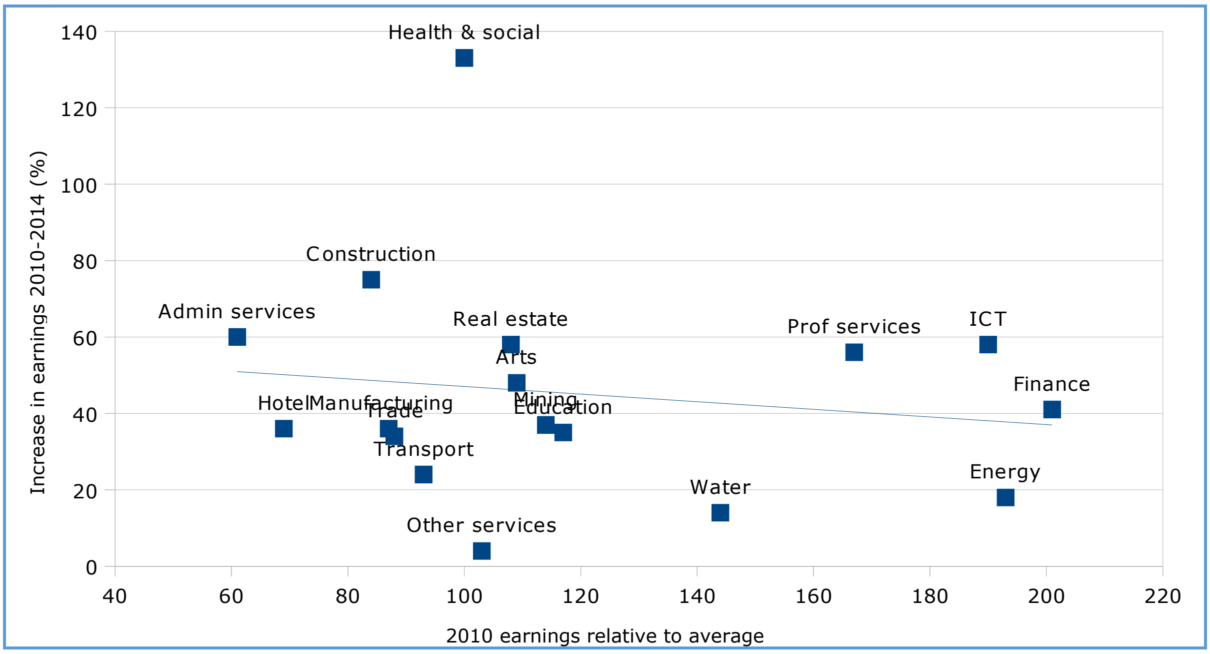
basis; the redistribution of sectoral output, which will have changed the overall composition of skilled versus unskilled jobs in the economy, was modest in size.

Table 5.4 compares average annual earnings by sector between 2010 and 2014. Over the four-year period, earnings increased (in nominal terms) by 45%. The sectors where incomes increased fastest were health and social services and construction, followed by a number of other services sub-sectors. Overall, sectors with faster growth in earnings tended to be the ones with lower earnings in 2010 (Figure 5.4), implying that the overall development of sector wages in the period was progressive. Interestingly, the sectors with fastest-growing wages also were the ones in which the BPTF led to the highest growth in output, in relative terms (see Table 5.1 above); it is therefore not unlikely that the BPTF contributed to the growth in wages; what is more, given the progressive income redistribution observed over the period 2010-2014, the BPTF also appears to have contributed to reduced income inequality at the sector level.

Sectoral gender wage gaps in Turkey vary significantly across sectors (Table 5.4), and at an aggregate (total economy) level there is no overall gender wage gap; this stems from the fact that women tend to be employed over-proportionately in high-wage sectors such as financial, professional, and health services. However, controlling for levels of education and occupational position, women’s wages lag behind their male peers in all cases, according to TurkStat’s labour cost and earnings statistics.

The BPTF’s effect on gender income equality is difficult to determine – while some of the sectors benefitting most from the BPTF in terms of output saw a closing of the gender wage gap, such as construction, in others, including trade and financial services, the wage gap actually widened.

Figure 5.4: Change in earnings 2010-14 vs. relative earnings level in 2010 (sectors)



Source: Calculations by the study team based on TurkStat Labour cost and earnings statistics (n.d.b).

Table 5.4: Turkey average annual gross earnings by economic activity and sex, 2010 and 2014

	2010					2014					2014 vs. 2010		
	Distribution of employees	Average annual gross earnings	Average annual gross earnings	Average annual gross earnings	Gender wage gap	Distribution of employees	Average annual gross earnings	Average annual gross earnings	Average annual gross earnings	Gender wage gap	Change in av annual earnings		Change in gender wage gap (+ improved; - worsened)
	(%)	TL	TL	TL		(%)	TL	TL	TL		(%)		
Economic activity (NACE Rev.2)	Total		Male	Female		Total		Male	Female		Total	Female	
Total	**100.0**	**23 208**	**22 936**	**24 084**	**-5.0**	**100.0**	**33 627**	**33 147**	**34 957**	**-5.5**	**44.9**	**45.1**	**0.5**
Mining and quarrying	2.2	26 456	26 188	30 744	-17.4	0.8	36 332	36 433	35 089	3.7	37.3	14.1	-21.1
Manufacturing	29.1	20 261	20 846	17 558	15.8	34.3	27 462	28 321	24 042	15.1	35.5	36.9	0.7
Electricity, gas, steam and air conditioning supply	1.8	44 832	45 198	41 177	8.9	1.3	52 942	53 814	45 580	15.3	18.1	10.7	-6.4
Water supply; sewerage, waste management and remediation activities	2.2	33 367	33 740	29 063	13.9	0.6	37 995	38 512	28 123	27.0	13.9	-3.2	-13.1
Construction	2.8	19 604	19 941	17 995	9.8	4.6	34 364	34 926	32 689	6.4	75.3	81.7	3.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	17.6	20 397	19 808	22 200	-12.1	20.0	27 369	27 699	26 443	4.5	34.2	19.1	-16.6
Transportarion and storage	7.2	21 476	20 926	24 805	-18.5	5.9	26 734	25 749	33 064	-28.4	24.5	33.3	9.9
Accommodation and food service activities	4.2	16 002	16 084	15 610	2.9	6.1	21 752	21 980	20 713	5.8	35.9	32.7	-2.8
Information and communication	5.7	44 168	44 179	44 136	0.1	3.4	69 905	71 202	65 877	7.5	58.3	49.3	-7.4
Financial and insurance activities	7.2	46 588	46 721	46 431	0.6	3.8	65 864	70 146	62 326	11.1	41.4	34.2	-10.5
Real estate activities	0.4	25 140	25 068	25 368	-1.2	0.5	39 775	38 571	44 103	-14.3	58.2	73.9	13.1
Professional, scientific and technical activities	5.5	38 862	41 709	34 419	17.5	3.8	60 770	63 888	54 578	14.6	56.4	58.6	2.9
Administrative and support service activities	5.4	14 264	14 017	14 978	-6.9	4.6	22 752	22 263	24 368	-9.5	59.5	62.7	2.6
Education	2.2	27 145	25 261	28 932	-14.5	3.7	36 680	35 640	37 586	-5.5	35.1	29.9	-9.1
Human health and social work activities	3.0	23 131	27 815	19 958	28.2	5.4	53 883	66 672	46 560	30.2	132.9	133.3	-1.9
Arts, entertainment and recreation	1.4	25 313	25 509	24 618	3.5	0.3	37 375	39 024	32 331	17.2	47.7	31.3	-13.7
Other service activities	2.1	23 957	24 470	22 708	7.2	1.0	24 994	26 466	21 280	19.6	4.3	-6.3	-12.4

Source: Calculations by the study team based on TurkStat Labour cost and earnings statistics (n.d.b).

Given the above analysis and the fact that poverty in Turkey declined over time (Table 5.5), the impact of the BPTF on poverty reduction is considered to have been positive: not only did the BPTF contribute to increasing incomes overall, but it also appears to have had a positive impact on income distribution across sectors. In addition, it has not negatively affected unskilled workers (who tend to be poor). The combined result of these developments is a positive impact on poverty reduction.

Table 5.5: Number of the poor, poverty rate and poverty gap by household disposable income, Turkey, 2006-2014 (poverty threshold: 50% of median income)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Poverty threshold (TL)	2 351	3 041	3 164	3 522	3 714	4 069	4 515	5 007	5 554
Number of poor ('000)	12 548	11 163	11 580	12 097	12 025	11 670	11 998	11 137	11 332
Poverty rate (%)	18.6	16.3	16.7	17.1	16.9	16.1	16.3	15.0	15.0
Poverty gap(1)	31.7	26.4	25.6	28.0	26.6	26.3	26.9	26.0	24.4

Source: TurkStat, Income and Living Conditions Survey, 2006-2014 (n.d.a).
(1) Poverty gap ratio informs about poverty level. It represents the severity of poverty is too much if it approaches to "100" and it represents the poverty risk degree is lower if it reduces. Poverty gap is calculated as: Poverty gap = ((Poverty threshold-Median income of poor by EII)/Poverty threshold)*100.

5.3 Job Quality and Working Conditions

This section covers the ILO Decent Work Agenda pillar addressing standards and fundamental principles and rights at work. We consider the impact of the BPTF on Turkey's adoption of international labour standards, as well as the following Decent Work indicators (ILO and EU, 2012):

- Excessive working hours (more than 48 hours per week; 'usual' hours; annual hours worked per employed person); and
- Occupational injury rate.

Child labour, which is another Decent Work indicator in this area, is addressed in Chapter 8 below.

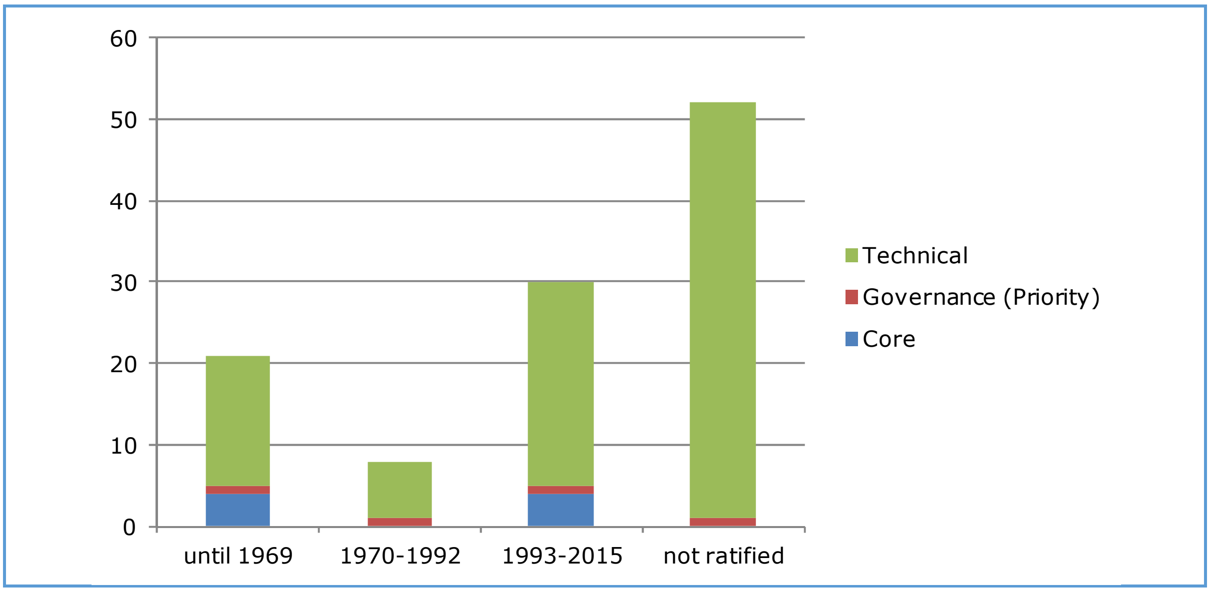
Adoption of international labour standards

Although the BPTF legal texts do not specifically refer to labour standards or rights at work, as part of the BPTF and accession process the EU has consistently addressed labour issues in a variety of channels, including the annual accession progress reports, Council meetings and EU-Turkey Joint Consultative Committee, as well as by providing financial and technical support through the pre-accession assistance programme. Although it is difficult to distinguish the BPTF from the accession process, both appear to have had a positive impact on Turkey's adherence to international labour standards, as measured by its ratification of ILO instruments. Thus, during the BPTF period (including its negotiation period), Turkey ratified the remaining four fundamental ILO Conventions which it had not previously ratified:[40] Convention No 87 on Freedom of Association and Protection of the Right to Organise in 1993, Conventions No 29 on Forced Labour and No 139 on Workers' Minimum Age in 1998, and Convention No 182 on the Worst Forms of Child Labour. It also ratified one priority governance convention in 2003 – Convention No 144 of 1976 on Tripartite Consultation (International Labour Standards) – as well as a number of technical conventions, especially in 2005, when 16 conventions were ratified. In total, during the BPTF period (including the negotiation period) Turkey ratified 30 out of the 59 ILO conventions which it has ratified in total (Figure 5.5). Over the period 1970 to 1992, only eight conventions had been ratified. Although the increase in Turkey's ratifications in the 1993-2015 period was likely mainly stimulated by the accession process, the BPTF and consultations with

[40] Turkey had already ratified the other four fundamental conventions in the 1950s and 1960s: Convention No. 98 of 1949 on the Right to Organise and Collective Bargaining in 1952, No. 105 of 1957 on the Abolition of Forced Labour in 1961, and No. 100 of 1951 on Equal Remuneration and No. 111 of 1958 on Discrimination (Employment and Occupation) in 1967.

the EU in the BPTF context also played a role (e.g. over the period 1993-1995, Turkey ratified seven conventions).

Figure 5.5: Ratification of ILO conventions by Turkey



Source: ILO NORMLEX, http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102893.

Transposition of these conventions into Turkish labour law was slow in certain cases. Although new laws on the unionisation of civil servants (Law No 4688) and on the Establishment and Functioning of the Economic and Social Council (Law No 4641) were adopted in 2001, as well as a new Labour Law (Law No 4857) in 2003, amendments to ensure that the existing legislation complies with the ILO Conventions No 87, No 98, and No 151, as well as with the revised European Social Charter, were protracted for many years: thus the revision of the Law on Trade Unions (Law No 2821) and the Law on Collective Labour Agreement, Strike and Lock-out (Law No 2822), both of 1983, which started in 2003 (Agartan, 2010), were not completed until 2012 when a new law, on Trade Unions and Collective Labour Relations (Law No 6356), was enacted, combining and replacing the older two laws; harmonisation of Turkey's collective labour relations with EU and international standards was an explicit objective of the new law (Aydin, 2015). Regarding child labour, the 2014 national employment strategy committed to prevent the phenomenon but its implementation is very limited (European Commission, 2015e: 67).

In any case, Turkey's National Action Programmes related to labour legislation brought the existing labour legislation more in line with EU rules, including with regard to regulations on annual paid leave, working times, the Wage Guarantee Fund to protect employees in cases of bankruptcy, child and adolescent labour, the obligations of employers to inform and consult employees, part-time employment, fixed-term contracts), occupational health and safety, combating discrimination, and equal opportunities for men and women (Agartan, 2010). Although the process and progress may have been slow and imperfect,[41] the BPTF relationship appears to have been one of the incentives for Turkey to implement labour laws that adhere to international and EU standards.

Long working hours

Data regarding excessive working hours are not available. Average working hours across sectors (Table 5.6) do not vary sufficiently as to draw any conclusions regarding the potential effect, which the BPTF may have had on working hours.

[41] For example, the 2015 EU progress report found that subcontracted workers, particularly in the mining sector, continue to lack protection, as well as temporary workers (European Commission, 2015e: 51).

Table 5.6: Average working hours per week, by sector, Turkey, 2006-2014

	2006	2010	2014
Total	**44.9**	**44.7**	**44.7**
Mining and quarrying	45.2	44.8	45.1
Manufacturing	45.1	44.9	44.9
Electricity, gas, steam and air conditioning supply	*42.9*	42.7	45.0
Water supply; sewerage, waste management etc.	*42.9*	42.2	44.2
Construction	44.8	44.9	44.4
Wholesale and retail trade; repair of vehicles	45.1	45.0	45.0
Transportarion and storage	*44.7*	44.4	44.8
Accommodation and food service activities	45.1	45.1	44.9
Information and communication	*44.7*	43.7	44.7
Financial and insurance activities	41.5	41.4	42.2
Real estate activities	*44.6*	44.3	44.7
Professional, scientific and technical activities	*44.6*	44.5	44.3
Administrative and support service activities	*44.6*	44.9	44.9
Education	43.4	43.8	42.3
Human health and social work activities	45.0	45.2	45.0
Arts, entertainment and recreation	*44.7*	45.1	44.5
Other service activities	*44.7*	44.4	44.1

Source: TurkStat Labour Force Statistics.

Occupational injury rate

Occupational Safety and Health (OSH) is generally regarded a problem in Turkey, particularly in mining and construction. The BPTF may have impacted on OSH in Turkey through a variety of channels. Positive causal links between the BPTF and OSH could exist, first, in the form of EU firms opening subsidiaries in Turkey, assuming that investors will be larger firms and larger firms have better safety at work procedures. Second, a BPTF-induced increase in the proportion of skilled labour could have improved OSH. Conversely, the BPTF could have had negative impacts if it promoted production under unfavourable working conditions, or social dumping.

For the assessment of the BPTF’s impact we consider, first, the incidence of occupational injury rates in Turkey broken down by the size of the workplace (Table 5.7). This shows that the incidence of accidents is not clearly related to the size of the workplace. The data show an unexpected slight positive relationship between the two, i.e., larger firms reporting more accidents; this may however be the consequence of a higher rate of reporting in larger workplaces. Second, across all size groups, the incidence of accidents reduced between 2007 and 2013. However, it is unclear to what extent the BPTF contributed to the improvement in OSH, for a number of reasons: first, the legal texts entail no provisions on OSH and hence no commitment (or incentive) for firms to invest in OSH can be derived. Second, longer-term time series of OSH indicators which would allow a comparison of the pre-BPTF and BPTF period are not available. The only indication that the BPTF may have contributed to an improvement comes from the fact that, in relative terms, OSH has improved more in larger companies, notably those with 250 and more employees.

The quantitative analysis does not shed light on whether the BPTF resulted in an over-proportional increase in skilled labour employment; accordingly, it is silent on the second causal link for a positive impact of the BPTF on OSH.

Table 5.7: Accidents at work and work related health problems in Turkey, by size of workplace, 2007-2013

Size of workplace (persons)	Accident at Work — Number of persons encountered accident at work in the last 12 months — Rate (%)		Work Related Health Problem — Number of persons suffered from work-related health problem in the last 12 months — Rate (%)	
	2007	**2013**	**2007**	**2013**
Total	**3,0**	**2,3**	**3,7**	**2,1**
1 - 9	2,9	2,2	3,5	2,5
10 - 24	3,4	2,7	3,5	2,5
25 - 49	3,2	2,3	3,2	2,3
50 - 249	3,5	2,5	3,5	2,4
250 - 499	5,8	3,4	3,2	2,7
500 +	4,2	2,7	4,3	3,3

Source: TurkStat Labour Force Statistics.

Finally, considering the OSH performance at sector level (Table 5.8) and comparing it with the sectoral impact of the BPTF also yields no clear results – mostly due to the lack of sufficiently disaggregated data for OSH and hence a limited match between OSH and CGE sectors. The sector breakdown shows the expected high incidence of accidents at work in the mining sector (twice as high as in any other sector), as well as equally expected low incidence of accidents in most services sectors. An interesting finding is that improvements in OSH are almost entirely the result of improvements in manufacturing, trade and tourism, and transport and communication. The overall impact of the BPTF on these sectors is, however, not clearly positive (which would have supported the hypothesis that the BPTF has contributed to OSH performance in Turkey) – some manufacturing sectors, such as textiles, garments, and shoes, have benefitted most, whereas others, such as chemicals or coal and steel, have not benefitted; a similar mixed impact of the BPTF applies to the services sectors.

In sum, therefore, the impact of the BPTF on OSH cannot clearly be established.

Table 5.8: Accidents at work and work related health problems in Turkey, by sector, 2007-2013

		Percent of persons encountering accident at work in the last 12 months		**Percent of persons suffering work-related health problems in the last 12 months**	
NACE Rev. 2	Sector	2007	2013	2007	2013
A	Agriculture, forestry and fishing	2.0	2.0	3.3	2.0
B	Mining and quarrying	10.3	10.4	10.1	5.5
C	Manufacturing	5.1	3.3	3.6	2.7
D, E	Electricity, gas, steam, water supply, and sewerage	5.2	5.2	5.6	3.8
F	Construction	4.5	4.3	5.4	3.5
G, I	Wholesale and retail trade, hotels and restaurants	2.6	1.9	3.6	2.1
H, J	Transportation, storage and communication	3.6	2.6	4.6	2.7
K-N	Finance, insurance, real estate and business services	1.3	1.3	2.8	2.0
O-U	Community, social and personal services	1.7	1.2	3.8	2.2
	Total	3.0	2.3	3.7	2.1

Source: TurkStat Labour Force Statistics.

5.4 Social Protection

This section covers the third pillar of the ILO Decent Work Agenda. The guiding Decent Work indicators (ILO and EU, 2012) for this analysis are the share of population aged 65 and above benefiting from a pension, and public social security expenditure. Unfortunately, for Turkey time series data on the share of the population benefitting from a pension are not available; therefore the analysis is based primarily on social expenditure data.

As Table 5.9 shows, total public social expenditure increased substantially, and constantly, over the period 1980 to 2012, both in relation to GDP (from 3.1% to 12.3%[42]) and when measured on a per capita basis in real terms (from USD 184 to 1,667). In the pre-CU period (1980-1995), average annual growth of total per capita expenditure was 6.6%; this increased to 7.6% since the CU has been in place (1995-2012). Although there is no proof that this increase in social spending can be attributed to the BPTF, given the findings of the CGE analysis, which show an overall positive impact on Turkey's economy – an increase in GDP by 0.72% and in welfare by EUR 7.5 billion – it is plausible to assume that the BPTF contributed to the increase in social security spending.

Table 5.9: Social expenditure, Turkey, 1980-2012

		1980	1985	1990	1995	2000	2007	2010	2011	2012
Old age	% of GDP	1.0	1.1	1.6	2.1	0.0	5.5	6.6	6.2	6.4
	USD/head*	56.5	69.6	130.4	183.7	0.0	682.0	821.6	834.9	860.9
Survivors	% of GDP	0.3	0.3	0.7	0.6	0.0	1.2	1.2	1.4	1.5
	USD/head*	17.9	18.8	58.0	52.7	0.0	151.0	155.1	192.8	207.9
Incapacity related	% of GDP	0.3	0.1	0.2	0.2	..	0.1	0.3	0.3	0.2
	USD/head*	19.9	9.3	13.8	15.9	..	17.6	35.7	37.9	23.9
Health	% of GDP	0.6	0.7	1.5	1.8	2.9	3.8	4.4	4.2	4.1
	USD/head*	33.6	49.1	118.9	150.7	284.1	472.2	552.5	565.5	561.1
Family	% of GDP	0.6	0.5	0.9	0.2	..	0.0	0.0	0.0	0.0
	USD/head*	38.0	35.0	72.7	21.2	..	1.1	2.7	3.2	3.6
Active labour market programmes	% of GDP	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	USD/head*	..	..	1.0	0.6	0.6	0.3	0.6	0.4	0.5
Unemployment	% of GDP	0.3	0.3	0.4	0.5	0.0	0.0	0.1	0.1	0.1
	USD/head*	17.3	18.8	34.4	43.2	0.1	5.4	10.6	8.3	9.3
Others	% of GDP	0.0	0.0	0.1	0.1	..	0.0	0.0	0.0	0.0
	USD/head*	0.8	1.2	8.8	10.3	..	0.0	0.0	0.0	0.0
Total	**% of GDP**	**3.1**	**3.1**	**5.5**	**5.6**	**..**	**10.7**	**12.6**	**12.2**	**12.3**
	USD/head*	**184.0**	**201.8**	**438.0**	**478.3**	**..**	**1,329.5**	**1,578.8**	**1,642.9**	**1,667.2**

*USD per head, at constant prices (2005) and constant PPPs (2005)
Source: OECD.stat.

There are, however, important differences across the branches of social spending: whereas pension and health expenditures increased substantially in the BTPF period, spending on families (including family allowances and maternity/parental leave), as well as on unemployment benefits and active labour market programmes stagnated or even decreased. These shifts reflect policy choices by the Turkish government, which are not directly influenced by the BPTF (as these issues are not specifically addressed in the legal texts and therefore remain largely outside its scope). From a gender equality perspective, the decline in family related social expenditure is unfortunate; at the same time it is in line with the finding above that the BPTF failed to contribute to a strengthened participation of women in the economy.

In sum, the BPTF appears to have contributed to a strengthening of social protection overall but this was mostly concentrated in pensions and health, whereas family and unemployment benefits were not positively affected by the BPTF, nor were, as a consequence, women, who would have been the primary beneficiaries of spending on family benefits.

5.5 Social Dialogue

Gaps in trade union rights in Turkey are regularly highlighted in the Commission's annual country reports. These have to be seen in the context of a rapidly declining membership in trade unions and, in general, a changing labour relations model.

For the analysis of the potential impact which the BPTF may have had on social dialogue in Turkey, in the absence of any direct reference in the BPTF legal texts to social dialogue or labour rights,[43] following the findings of a UNDP report on CSR in Turkey (UNDP, 2008) we assume the following causal link between the BPTF and

[42] The European Commission reports a further increase in 2013 to 13.8% (European Commission, 2015e: 53).

[43] Changes to Turkish labour law, including related to social dialogue, that may have been facilitated by the BPTF, have been addressed in Section 5.3 above.

social dialogue indicators: a positive effect results from investment by large EU firms in Turkey, as large firms tend to have stronger social dialogue mechanisms in place by putting pressure on their local subsidiaries and their suppliers, and this process set trends for Turkish companies.

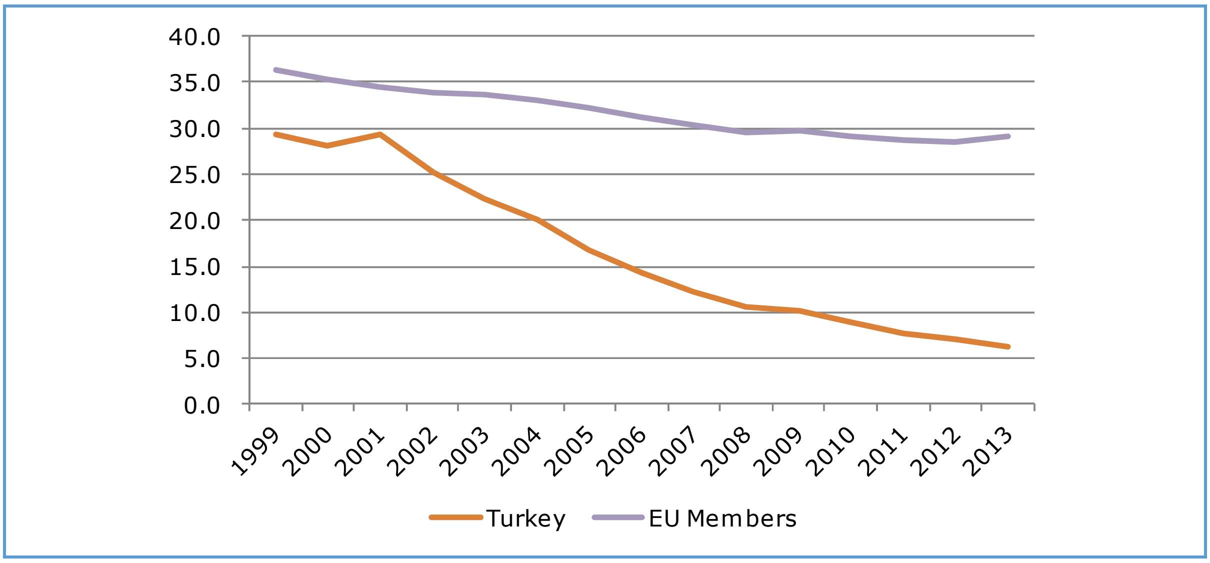
This section analyses the potential impact of the BPTF on social dialogue in Turkey (the fourth and last pillar of the ILO Decent Work Agenda) through the following guiding Decent Work indicators (ILO and EU, 2012):

- Union density and collective bargaining coverage rates; and
- Incidence of labour conflicts (strikes and lock-outs).

Trade union density and collective bargaining coverage

Trade union density in Turkey has rapidly decreased over the past 15 years. Although a decline in union density is a general trend also in the EU, it is significantly stronger in Turkey, where density dropped from almost 30% in 2001 to 6% in 2013 (Figure 5.6). Likewise, collective bargaining coverage is very limited today – also estimated to be in the range of 6-7% of the workforce (Sur, 2016).

Figure 5.6: Trade union density in Turkey and the OECD, 1999-2013(%)



Note: EU Members refer to simple average of 21 EU Member States for which time series data are available (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, and United Kingdom).
Source: OECD.Stat.

It is not clear however, whether and to what extent the BPTF contributed to this decline of union membership during the CU period. On the one hand, union membership in large EU investments, such as in the car industry, is relatively high, which would point a positive effect of the BPTF on social dialogue. However, the BPTF arguably has also contributed to the spread of outsourcing and sub-contracting, which today is a widespread practice in Turkey – subcontractors often work on the premises of the main employer but are not covered by the same collective agreement, nor have they necessarily access to membership in the same union. Which effect prevails is difficult to establish; however, one must note that the trend to subcontracting was not caused by the BPTF but that – in the absence of any regulation under the BPTF legal texts that would prevent them from doing so, or encourage Turkey to amend its labour laws – EU investors in Turkey, just like other businesses, make use of the existing flexibilities. This would seem to call for increased attention to social dialogue issues in a future enhanced bilateral commercial framework.

Labour conflicts

Although longer-term time series, which would permit a systems comparison between the pre- and post-BPTF period, are not available, the existing data show a decline in labour conflicts: in the period 1999-2008, the only years for which data are available, the number of strikes dropped by more than half, from 34 to 15 (Table 5.10). Nevertheless, the intensity of conflict, as measured by the number of workdays lost, has remained more or less constant over the same period; in other words, there has been a tendency towards fewer but larger and longer conflicts.

The extent to which the BPTF contributed to this trend is not easy to determine. At the end of the 1990s, labour conflicts were concentrated in two sectors, manufacturing and transport, storage and communications. One decade later, virtually all strike activity occurred in the manufacturing industries only. Both of these sectors benefited from the BPTF in terms of higher output than otherwise would have been realized. Manufacturing employment was essentially unchanged; employment in transport and communications was less than otherwise would have been the case (see Table 5.1 above). Thus, the BPTF may have weakened labour's bargaining position in transport and communications by reducing demand for labour, thereby subduing conflict, while it maintained labour's bargaining strength in manufacturing, thereby allowing workers to more actively pursue their rights than in other sectors, and against the overall trend in Turkey.

Table 5.10: Number of strikes in Turkey by sector, 1999-2008

Sector	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
A Agriculture, Hunting and Forestry	0	0	0	0	0	0	0	0	0	0
B Fishing	0	0	0	0	0	0	0	0	0	0
C Mining and Quarrying	2	3	2	1	2	1	1	0	0	0
D Manufacturing	16	19	26	11	12	22	25	18	10	14
E Electricity, Gas and Water Supply	0	0	0	0	1	0	0	0	0	0
F Construction	0	0	0	1	1	1	0	0	0	0
G Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	0	0	0	0	0	0	0	0	0	0
H Hotels and Restaurants	3	4	3	3	2	3	5	1	1	0
I Transport, Storage and Communications	11	7	0	4	5	2	3	4	3	0
J Financial Intermediation	0	0	0	0	0	0	0	0	0	0
K Real Estate, Renting and Business Activities	0	0	0	0	0	0	0	0	0	0
L Public Administration and Defence; Compulsory Social Security	0	0	0	0	0	0	0	0	0	0
M Education	0	0	0	0	0	0	0	0	0	0
N Health and Social Work	0	0	0	0	0	0	0	0	0	0
O Other Community,Social and Personal Service Activities	2	19	4	7	0	1	0	3	1	1
Total	**34**	**52**	**35**	**27**	**23**	**30**	**34**	**26**	**15**	**15**

Source: ILO LABORSTA.

This interpretation appears to be supported at least by anecdotal evidence, such as the 2015 strike in the automotive sector, which was essentially driven by employees in factories established by EU car manufacturers.

In sum, the effect of the BPTF on social dialogue in Turkey seems to have been limited to those firms and sectors, which have witnessed increased investment from the EU; increased trade between Turkey and the EU does not seem to have had any noticeable impact on social dialogue.

5.6 Summary

The CGE-based quantitative analysis conducted in this study assumes full employment and the modelling protocol assumes no net job creation or loss. Accordingly, the quantitative modelling sheds no light on the BPTF's impact on total employment levels, or on potential differential impacts on skilled versus unskilled labour, apart from sectoral reallocation of labour. Moreover, the assumption of labour mobility across sectors removes differential impacts on skilled labour across sectors, or on unskilled labour across sectors. Nonetheless, the analysis undertaken in this chapter allows providing a qualified response to evaluation question 6.

- *Q6: To what extent has the CU contributed to improving employment, living conditions and overall welfare in the EU and Turkey?*

At the sector level, the BPTF has impacted on **employment** both in the EU and in Turkey by changing the sectoral composition. In the EU, the sector allocation effects were small: the BPTF resulted in employment in the oil seeds and vegetable oils and steel sectors being marginally higher than it otherwise would have been, while employment in textiles, clothing and footwear, and vegetables and fruits being marginally lower than it otherwise would have been. In Turkey, based on the foregone employment from removing the BPTF, the BPTF shifted employment creation towards construction (1.9% over baseline), textiles, clothing and footwear (1.4%) and the fishery sector (0.9%); and it shifted employment creation away from coal and steel (2.6% below baseline), insurance (2.4%), the oil seeds sector (2%) and the chemicals, rubber and plastics complex (1.8%). The BPTF impact on women's employment appears to have been slightly positive; its impact on youth employment cannot be determined from the available information.

With regard to the BPTF impact on overall **welfare**, the CGE analysis shows positive effects on household incomes (welfare) both in the EU and Turkey, of EUR 1.6 billion and EUR 7.5 billion, respectively (Section 4.2.2). Given the small effects of the BPTF on the EU in terms of aggregate welfare and sectoral allocation of employment, the further analysis of the BPTF's social effects focussed on outcomes in Turkey.

The effect of the BPTF on **incomes** has been positive: it raised average disposable income and there is some evidence to suggest that the distributional effect was not regressive: not only have real minimum wages increased, but the increase in inequality observed in the period preceding the BPTF was reversed during the BPTF period. This is further supported by the modelling results that the BPTF contributed to growth in wages and the progressive income redistribution observed over the period 2010-14. As regards gender income equality, the BPTF impacts appear to have been mixed: some of the sectors benefitting most from the BPTF in terms of output (e.g., construction) saw a closing of the gender wage gap, while others, including trade and financial services, saw the wage gap actually widen.

The impact of the BPTF on **poverty** in Turkey is considered to have been positive: not only did the BPTF contribute to increasing incomes overall, but it also appears to have had a positive impact on income distribution.

Regarding **job quality and non-income related living conditions**, data regarding excessive working hours are not available for Turkey. Average working hours across sectors do not vary sufficiently as to draw any conclusions regarding the potential effect, which the BPTF may have had on working hours. Similarly, the impact of the BPTF on occupational health and safety cannot clearly be established.

In terms of **social protection**, the BPTF appears to have contributed to a strengthening overall in Turkey, but this was mostly concentrated in pensions and health, whereas family and unemployment benefits were not positively affected by the BPTF, nor were, as a consequence, women, who would have been the primary beneficiaries of spending on family benefits.

Finally, the effect of the BPTF on **social dialogue** in Turkey seems to have been limited to those firms and sectors that attracted increased investment from the EU; increased trade between Turkey and the EU does not seem to have had any noticeable impact on social dialogue.

A general weakness in the current BPTF framework is that social implications are not addressed explicitly in the legal documents. Therefore, any social benefits that have been achieved under the BPTF have "trickled down" from the economic impact. While this has worked reasonably well for employment, wages and income, at an aggregate level, specific benefits for women and youth, as well as progress in labour standards have been more limited. Although these have been pushed in the context of the bilateral policy and civil society dialogue, a stronger legal basis for this would have been desirable.

6 ENVIRONMENTAL IMPACTS OF THE BPTF

This chapter analyses the environmental impacts of the BPTF in an ex post context. For CO_2 emissions and air pollution, the impacts of the BPTF are calculated quantitatively based on the sectoral impacts identified in the CGE-based economic analysis. We decompose the effects into a scale effect (pure output changes) and a composition effect (due to relative shifts between sectors). Other environmental impacts of the BPTF are analysed in qualitative terms; these include the impacts of the framework on water, air, climate change, ecosystems and biodiversity, and waste, drawing on the WDI (World Bank, 2015) for assessment of the change in indicators, and on the Yale Environmental Performance Index (EPI) (Hsu et al., 2014) for an assessment of the progress in policy performance.

6.1 BPTF Impacts on Greenhouse Gas and Air Pollutant Emissions

The CGE model simulations indicate both scale and sectoral impacts from the BPTF. The scale effects can be measured through the effects GHG translated into CO_2 equivalent emissions. These effects in Turkey and the EU are presented in Table 6.1.

Table 6.1: Total CO_2 emission changes induced by the BPTF

	Change in emissions '000 MT CO_2 equivalent	% increase compared to baseline	% GDP variation	Social Cost of CO_2, 2015-2050 5% Average (EUR M)	Social Cost of CO_2, 2015-2050 2.5% Average (EUR M)
EU	269.64	0.01	0.008	3.0	15.1
Turkey	61.84	0.02	0.722	0.7	3.5
Rest of the World	1,185.82	0.00	0.004	13.0	66.4
Total	1,517.30	0.00	0.007	16.7	85.0

Note: Positive values indicate increase induced by the BPTF.
Source: CGE simulations and calculations by the study team.

The BPTF has led to an increase in CO_2 emissions: Globally, the total change in emissions accounts for 1.5 million MT of CO_2 equivalents, with a very limited variation in Turkey, due to the relatively larger increase in economic activity there caused by the CU. In relative terms, the CU has led to an increase in CO_2 emissions in Turkey of 0.72%; globally however, the effect has been negligible. A positive correlation exists between changes in economic activity and emissions: The higher the GDP increase, the more important is the increase in emissions of CO_2 equivalents.

When expressed in monetary terms, the BPTF has led to a social cost of carbon that ranges from EUR 3.0 million to 15.1 million for the EU (2015 rates) and from EUR 0.7 million to 3.5 million for Turkey, depending on which of the two estimates for social costs of CO_2 were used (i.e., the average SC-CO_2 at 5% and 2.5%; EPA, 2016). Globally, the social cost of increased CO_2 emissions ranged from EUR 16.7 million to 85 million.

Table 6.2 classifies economic sectors into three categories, taking into account their impact on the environment as measured by their total toxic pollution to air, water and land, per a given unit of GDP (million USD).

Table 6.2: Products and pollution effects

	Category 1 Most Polluting Sectors	Category 2 Moderately Polluting Sectors	Category 3 Least Polluting Sectors
Definition	ToxTot ≥ 1500 pnds/USD million	500 pnds/USD million < ToxTot < 1500 pnds/USD million	ToxTot ≤ 500 pnds/ USD million
Sectors (ISIC)	industrial chemicals (351) non-ferrous metals (372) iron and steel (371) leather products (323) pulp and paper (341) petroleum refineries (353) other chemicals (352) plastic products (356) fabricated metal products (381) furniture, except metal (332)	pottery, china, earthenware (361) electrical machinery (383) rubber products (355) other non-metallic mineral products (369) textiles (321) transport equipment (384) other manufactured products (390) misc. petroleum and coal products (354) non-electrical machinery (382)	professional & scientific equipment (385) footwear, except rubber or plastic (324) printing and publishing (342) wood products, except furniture (331) glass and products (362) tobacco (314) food products (311) beverages (313) wearing apparel, except footwear (322)
Section (HS)	metals (HS 71-83) chemicals (HS 28-38) plastics (HS 39) pulp and paper (HS 47-49) hides and leather (HS 41-43)	machinery and electrical appliances (HS 84-85) mineral products (HS 25-27) textiles and apparel (HS 50-63) rubber products (HS 40) vehicles (HS 86-89) misc. manufactured articles (HS 93-96)	vegetable products (HS 6-14) wood and wood articles (44-46) opticals, precision and musical instruments (HS 90-92) stone/cement/ceramics (HS 68-70) prepared foodstuffs (HS 15-24) footwear (HS 64-67)

Source: Vutha and Jalilian (2008).

Following this categorisation, the sectors defined for the CGE model analysis have been allocated to the three categories of least, moderately and most polluting sectors (Table 6.3).

Table 6.3: Allocation of CGE model sectors by pollution effects

Most Polluting sector	Moderately Polluting	Least Polluting
Energy	Dairy products	Rice
Coal and steel	Beef, sheep, and other bovine meat	Cereals (wheat, coarse grain)
Chemicals, rubber, and plastics	Other meat products	Vegetables, fruits
Transport nec	Other primary animal products	Oil seeds, vegetable oils
	Textiles, clothing, and footwear	Sugar
	Other industrial goods	Other primary agriculture
	Construction	Other processed food
	Trade	Beverages and tobacco
	Air transport	Fishing (including aquaculture)
		Other primary products
		Water
		Water transport
		Communication
		Financial services nec
		Insurance
		Business services nec
		Recreational and other services
		Public administration, defence, education, health, and dwellings

Source: The study team.

The quantitative analysis (Table 6.4) shows that air pollution has increased for all polluting sectors due to both the scale and composition effects.

Table 6.4: BPTF effects by polluting sector

	Baseline (MT '000)			BPTF impact (MT '000)			BPTF impact (%)		
Polluting Sector	EU28	Turkey	World	EU28	Turkey	World	EU28	Turkey	World
Least polluting	381,711	28,943	2,003,411	47.4	10.7	170.3	0.01	0.04	0.01
Moderately	462,661	42,812	3,565,728	15.2	259.9	222.8	0.00	0.61	0.01
Most Polluting	2,165,434	158,477	19,344,751	120.4	-764.4	690.0	0.01	-0.48	0.00
Total	3,009,806	230,232	24,913,890	183.1	-493.8	1083.0	0.01	-0.21	0.00

Source: CGE simulations and calculations by the study team.

Concerning the EU28, in absolute terms the largest increase in emissions has resulted from the most polluting sectors, followed by the least polluting ones. In relative terms, however, the impact of the BPTF was negligible across all categories.

In Turkey the BPTF impact was highest in the moderately polluting sectors (in particular, construction) both in absolute and relative terms, leading to an increase in emissions. Conversely, the BPTF has positively affected energy production and the coal and steel industry, leading to a decrease in emissions in the most polluting sectors that overcompensates all of the negative effects in the other sectors and leads to a reduction in emissions of the productive sectors in Turkey.

The shift in emissions from Turkey to the Rest of the World on the most polluting sectors is to be clearly highlighted. One can observe a “carbon leaking” from Turkey to countries like China and the least developed countries that have seen an increase in emissions parallel to the decrease in emissions in Turkey.

6.2 Other BPTF Environmental Impacts

This section reviews performance on environmental indicators during the BPTF period and attempts to determine causality. As the quantitative analysis has shown that effects in the EU have been negligible, this section concentrates on the effects in Turkey.

It is difficult, especially for the qualitative analysis, to precisely single out the effect of the BPTF. The total BPTF environmental effects are a combination of the effects of different sectors’ growth and technological, regulatory and other transformations influencing the environment, on different aspects of the environment (Table 6.5).

Table 6.5: Overview of potential environmental effects of the BPTF

Environmental aspect	Type of effect
Air Pollution	Direct consequence from economic / industrial activity. To be distinguished from CO_2 equivalent emissions which directly affects climate change, Air pollution indicators are nitrogen oxide and particulate matter (PM2.5 and PM10) that directly affect human health; Influence from BPTF: Sectoral shift, change in economic activity
Biodiversity	Increased trade activity can make illegal trade of protected species easier. Increased land use and pollution can endanger species.
Ecosystems	Increased air pollution / acid rain or water use due to BPTF can damage ecosystems.
Waste	Changing activity in certain industries (e.g., industry) and changing overall welfare can lead to a change in waste production.
Water	Changing activity in certain industries (esp. agriculture) can lead to a change in water use.
Green Economy	BPTF may create a larger demand market for green products and foster compliance with environmental product standards.
Most aspects	Economic growth is usually associated with increased pollution.

The environmental analysis follows three steps per each environmental sector: The first part deals with the current state of the environment and environmental policy in Turkey, introducing the key issues and developments to be considered.[44] The second step consists of a pre-analysis of how the BPTF has affected the state of the environment in turkey. The third and final part looks at the likely impacts of the BPTF on the environmental aspects described.

6.2.1 Air pollution

Turkey ratified the Kyoto Protocol in 2009 but has not yet signed the Paris COP 21 Agreement. Turkey scores slightly below average on air quality in the Yale Environmental Performance Index (Hsu et al., 2014), especially due to the high exposure to nitrogen dioxide (ranking far below average, at 151 out of 181) and particulate matter (ranking below average, at 125 out of 181).

According to the European Environmental Agency (2015), the main sectors that affect both nitrogen dioxide and particulate matter are the following:

[44] Most of the information on the current environmental status has been obtained from Hsu et al. (2014).

1) Energy production and distribution: emissions from public heat and electricity generation, oil refining production of solid fuels, extraction and distribution of solid fossil fuels and geothermal energy;
2) Energy use in industry: emissions from combustion processes used in the manufacturing industry including boilers, gas turbines and stationary engines;
3) Industrial processes: emissions derived from non-combustion related processes, such as the production of minerals, chemicals, and metals;
4) Road transport: light and heavy duty vehicles, passenger cars and motorcycles;
5) Non-road transport: railways, domestic shipping, certain aircraft movements, and non-road mobile machinery used in agriculture and forestry;
6) Commercial, institutional and households: emissions principally occurring from fuel combustion in the services and household sectors;
7) Solvent and product use: non-combustion related emissions mainly in the services and households sectors including activities, such as paint application, dry-cleaning, and other use of solvents;
8) Agriculture: manure management, fertiliser application, field-burning of agricultural wastes
9) Waste: incineration, waste-water management;
10) Other: emissions included in national total for entire territory not allocated to any other sector.

Particulate matter (PM) is a big concern: measurements show that citizens all over the country breathe in air that is considered harmful to health. The air quality standard for PM2.5 and concentrations of PM10 are much higher than what the EU and the World Health Organization (WHO) have set to protect health.

According to the EEA, 97.2% of the urban population in Turkey are exposed to unhealthy levels of particulate matter (PM10) (European Environmental Agency, 2014). Ankara has yearly average PM concentrations of 58 $\mu g/m^3$, and Istanbul 48 $\mu g/m^3$. According to the Turkish Ministry of Environment and Urbanization, the cities with the most polluted air are Iğdır, Batman, and Afyon (WHO, 2016).

The overall effect of the BPTF on nitrogen dioxide and PM levels can be considered as mixed. Energy production is the biggest contributor, but the decrease in production has led to a decrease in energy related air pollution. On the other hand, the production increase in other industrial goods sectors, as well as in the construction, trade and in transport sectors create an overall negative impact. Although these sectors negatively influence nitrogen and PM, the BPTF effect can be considered negligible.

6.2.2 Water Sanitation

Water sanitation includes multiple factors, including the ingestion of unsafe water, lack of water linked to inadequate hygiene, poor personal and domestic hygiene, and agricultural practices, contact with unsafe water, and inadequate development and management of water resources or water systems. Turkey scores slightly above average on water sanitation in the Environmental Performance Index, at 75 on the quality of drinking water and 65 on the unsafe sanitation (Hsu et al., 2014). The overall trend is positive; currently, 631 wastewater treatment plants are operational and new ones are constantly being designed and constructed. As a result of this, the rate of wastewater treatment for the municipal population passed from 36.3% to 81% between 2003 and 2012.

Based on an analysis of purely economic changes, the BPTF is estimated to have had a strong impact on water sanitation since it has positively influenced sectors like the textile production and most industrial and agricultural goods. However, these needs to be seen in a context of water scarcity problems and a number of other factors are contributing to difficulties with a higher direct impact (growing population, agricultural subsidies, dependence on water inflows from foreign countries, climate change, etc.).

In terms of water pollution, it was clear in the baseline that the main pollution sources are agriculture through organic compounds and nutrients, and partly industry through organic compounds and iron.

The overall effect of the BPTF is negligible. Remaining challenges include the need to further increase wastewater treatment, to reduce the high level of non-revenue water hovering around 50% and to expand access to adequate sanitation in rural areas. The investment required to comply with EU standards in the sector, especially in wastewater treatment is estimated to be in the order of EUR 2 billion per year, more than double the current level of investment (Republic of Turkey, Ministry of Environment and Forestry, 2007: 17).

6.2.3 Waste

Waste does not feature as a separate category in the EPI, but in many countries it is a concern because waste production tends to increase with economic development, and insufficient waste management can have detrimental consequences for water quality or ecosystems. Turkey is no exception, with strong increases in municipal solid waste generation (28.9 million t/yr in 2014), less than 77% of solid waste collected in 2014, and reported contamination of water supplies (Baba and Tayfur, 2011).

Waste production is currently increasing in line with GDP. Given insufficient waste management, water, soils, and air are additionally polluted by waste. Hazardous waste production is largely determined by chemicals, petrochemicals, pharmaceuticals, textiles and leather, and fabricated metal production. Excluding the small decrease in chemical production, all the sectors have faced an increase in output due to the BPTF.

While the overall effect of the BPTF on waste production can therefore be considered negative, Turkey's per capita waste production from 2001 to 2010 was fairly stable and indeed declined slightly, from 454 kg/cap in 2001 to 407 kg/cap in 2010 (European Environmental Agency, 2013: 6).

TurkStat reports that waste was Turkey's largest source of methane emissions with 58% between 1990-2011. Eurostat data indicates that Turkey did not recycle any of its municipal solid waste between 2001-2010, although poor reporting, not performance, was given as the cause (European Environmental Agency, 2013: 11).

Most EU waste management directives concerning MSW have been transposed into Turkey's national legislation (European Environmental Agency, 2013: 9):

- By-Law on General Principles of Waste Management (5 July 2008);
- By-Law on Control of Packaging Waste (24 August 2011);
- By-Law on Landfilling of Waste (26 March 2010).

The National strategy on the reduction of biodegradable waste to be disposed of in landfill facilities has also been developed at a draft stage. This strategy includes measures to be taken with the methods, such as recycling, composting, biogas production, or energy/material recovery, and foresees the implementation of the EU Landfill Directive (99/31/EC) by 2025 (MoEU, 2012). An extraordinary effort and an improvement in communication and cooperation between the government, local authorities and the public and private sectors will required if the proper implementation of the regulations mentioned above is to be achieved.

6.2.4 Climate Change

Turkey has increased its energy consumption by 400% since 1990. Meanwhile, Turkey's enormous wind and solar energy potential are largely unused, with almost all its renewable energy attributed to dams (Kick, 2011).

As mentioned above, the impact of the BPTF on climate change through an increase in CO_2 emissions has been marginally negative. The CGE results indicate an increase of emissions of 0.03%, which corresponds to an overall increase of 75.7 million MT of CO_2 emissions compared to the counterfactual.

Adaptation to climate change is not likely to be affected by the BPTF, except for increased means for adaptation through BPTF induced welfare gains. Vulnerability to desertification will increase, due to a further reduction in rainfall in Turkey itself.

The overall effect of the BPTF on climate change has been marginally negative because of its positive impact on economic activity.

6.2.5 Ecosystems and Biodiversity

Turkey's biodiversity value is almost unparalleled. It is home to three of the world's 35 biodiversity hotspots, including the Caucasus, Irano-Anatolian, and Mediterranean. More than 10,000 plant species and 80,000 animal species are present, thousands of which are endemic to the territory. But despite its rich biodiversity, conservation is low on the list of priorities. The EPI ranks Turkey among the worst countries in biodiversity and habitat conservation – its rank is 177 out of 180 on Terrestrial Protected Areas and 178 in the species protection. The trends are also negative. About 5% of Turkey's territory is considered protected, falling far short of EPI and OECD targets. Only 1.2% is strictly protected (Sekercioglu et al., 2011). Many of Turkey's other protected areas have been under threat by excessive development and hydraulic construction projects (OECD, 2008). Development has already led to extreme losses: 1,300,000 hectares of wetlands and 87% of peat-lands are just some of them.

Intensity of land use has increased in the modelled scenarios. This could have led to an increase in pressure on habitats due to land conversion for agriculture and the strong development of the construction sector. Furthermore, with the results above showing an estimated increase in air pollution, an increase in water scarcity and vulnerability to desertification, and an increase in water pollution, the net effect of the BPTF on biodiversity appears to have been negative, although the direct correlation is limited.

Concerning Forestry, Turkey forest lands cover 21.2 million ha, or 27.2% of the national territory. Almost half of these forest resources are degraded; the other half is productive. Trends have are however been positive, and the total net forest coverage increased by 17% between 1990 and 2010. The effect of the BPTF on forest coverage is hard to assess.

In 2012, the 2B law took effect in Turkey. Its consequences are felt by over 4 million acres of forested land—areas which were previously free from construction and agricultural activity. Under the new legislation, previously protected forestland is now open to development and construction, as the law redefined some forests as "not forests" and also added the category "forests that will not benefit from protection." The draft Law on Nature and Biological Diversity Conservation only poses greater threats to Turkey's natural habitats and protected areas (Tabiat Kanunu İzleme Girişimi - Natural Law Monitoring Initiative, 2013).

Despite the name, this piece of legislation has the potential to further decrease protection of land. Critically vague, the law stipulates that protected areas strategic for "great public welfare" will be managed "under certain conditions" (Songün Demirezen, 2013). Fears abound that this will leave protected areas wide open to construction with public welfare as the excuse. Furthermore, the notable absence of the term "national park" in the law leads to concerns that the entire concept will no longer be a part of Turkish environmental laws.

Concerning fisheries, the CGE model shows a small increase in fisheries production for Turkey that is linked to the BPTF. This increase is mainly due to the development of the aquaculture sector. Furthermore, Turkey scores 35th out of 120 countries in the fish stocks management with positive trends. The overall effect of the BPTF on fish stocks is therefore be considered to be negligible.

6.2.6 Greening the Economy

While the relationship between economic activity and the environment is usually considered to be negative – and this relationship underlies most of this analysis of effects of the BPTF – increasing efforts are made in Turkey, with EU support, to change this relationship and to engage the private sector to green the economy.

The composition effects show a decrease in emissions in the highly pollutant sectors while emissions have increased only in the low and moderately pollutant sectors. The sections on air pollution and water can give a first indication of whether the BPTF has made Turkish production less pollution- and resource-intensive. The quantitative analysis showed that sectoral shifts induced by the BPTF increased air pollution but decreased water use, with the primary factor being a shift of economic activity away from industry and the fossil fuels energy sector into the service sectors.

The impact can thus be regarded as mixed.

However, the results of this quantitative exercise do not take into account potential intra-industry improvements in resource efficiency. Looking at the increases of exports from Turkey to the EU, it can be assumed that especially the marketing possibilities for sustainably produced and organic products have improved, which may affect water use and pollution positively. Similarly, increased efforts to align the national legislation with the REACH regulation are already being made due to increased exports to the EU of industrial goods and specifically chemical products, potentially reducing the pollution intensity of the Turkish chemical industry. However, it is worrying in this context that Turkey has not ratified the Rotterdam Convention (Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides on International Trade).

6.3 BPTF Impacts on Trade in Environmental Goods and Services

The direct impact of the BPTF on trade in environmental goods and services was limited to the impact of the CU in reducing bilateral trade costs on Turkey’s trade in goods in general and in reducing tariffs resulting from Turkey’s liberalization vis-à-vis third parties, as required under the CU terms.

Since the BPTF did not include services, and since the CU did not mandate services FTAs between Turkey and the EU’s FTA partners, there is no direct effect of the BPTF on trade in environmental services.

Since Turkey is not a major provider of environmental goods and services, the increased openness to trade mandated by the CU arrangements was important in improving access to these goods and services by Turkey’s enterprises and households.

6.4 Summary and Inferences for the ECF/DCFTA Analysis

The effects of the BPTF on Turkey’s environment are generally negative, although the impact can often be considered as negligible.

Based on the quantitative analysis, the BPTF has resulted in an increase in CO_2 emissions globally; the total change in emissions accounts for 1.5 million MT of $C0_2$ equivalent, of which only a small part is due to emissions in Turkey, due to the relatively larger increase in economic activity there caused by the CU. In relative terms, the CU has led to an increase in CO_2 emissions in Turkey of 0.03%. The biggest portion (77% of the total) of the emission increase was generated in the rest of the world. Globally, however, the effect has been negligible. When expressed in monetary terms, the BPTF has led to a social cost of carbon that ranges from EUR 2.7 million to 13.7 million in the EU (2015 rates) and from EUR 0.75 million to 3.8 million for Turkey.

On the qualitative side, the environmental profile of Turkey shows that the impact of the BPTF has been limited compared to other sources of environmental damages, mostly derived from Turkish environmental policies and legislative protection. Table

6.6 shows Turkey's current rank in the Environmental Performance Index per environmental field, the sector that affects the ranking, and the estimated impact of the BPTF in qualitative terms.

Table 6.6: Summary of BPTF environmental effects in Turkey (qualitative analysis)

Environmental aspect	Current EPI ranking	Correlation with BPTF	BPTF impact
Air Pollution	151th/180	Yes – Related to industrial production and construction sectors	Negligible
Water	75th/180	Yes – Related to industrial production (mainly textile) and agricultural goods	Negligible
Waste	Not Ranked	Yes - Related to petrochemicals, pharmaceuticals, textiles and leather and fabricated metal production	Negative (but limited)
Climate change	Not Ranked	Yes – Increased CO_2 emissions	Negligible
Ecosystems and Biodiversity	177th /180	Indirect – Land use, agriculture, construction, land and water pollution	Negative (but limited)
Green Economy	Not Ranked	Yes – Shift in sectors and higher standards	Mixed

7 THE BPTF'S REGULATORY AND INSTITUTIONAL EFFECTS

This chapter assesses how well the BPTF has functioned from a regulatory, institutional and administrative perspective; analyses the underlying reasons for successes and weaknesses; and considers how performance could be improved. Specifically, it addresses the following issues:

- Regulatory convergence undertaken by the partners as a result of the BPTF in terms of comprehensiveness and timeliness of passing regulatory changes required for the implementation of the BPTF and the CU in particular; Turkey's compliance with notification obligations of draft technical regulations;[45] and more general issues, including the (potential) impact of the BPTF on the rule of law, governance and anti-corruption;[46]
- Commercial policy convergence facilitated by the BPTF – i.e., the extent to which has Turkey aligned its commercial policy with the EU's, including conclusion of FTAs mandated by the CU;
- Performance of the institutional framework for the BPTF; and
- Options to improve the functioning of the bilateral framework, both institutionally and for settling relevant trade disputes.

This analysis draws heavily on the following sources:

- Decisions of the EU-Turkey Association Council;
- Progress reports prepared by the Commission and the Government of Turkey under the EU accession process;
- Turkey's National Programmes for the Adoption of the *Acquis* (2001, 2003, 2008), Turkey's Programme for Alignment with the *Acquis* (2007-2013) (Republic of Turkey, Ministry for EU Affairs, 2008) and National Action Plan for EU Accession, Phase I (November 2014-June 2015) (Republic of Turkey, n.d.);
- WTO TPR of Turkey (1998, 2003, 2008, 2012a, 2016a);
- The amended Turkish laws and corresponding EU legal instruments. In view of the high number, only a selection of these legal documents is reviewed in detail; and
- Interviews with representatives of the business community in the EU and Turkey, as well as other stakeholders.

7.1 Regulatory Convergence

This section addresses the extent of regulatory convergence that was elicited by the BPTF. It is structured principally around a review of the implementation of Chapters I to IV of Decision No 1/95 of the EC-Turkey Association Council,[47] together with a review of regulatory amendments, as well as reforms in administrative practices (primarily in Turkey), in response to the BPTF. In Decision No 1/95, both parties undertook obligations with respect to industrial and processed agricultural products. Accordingly, customs duties and charges having equivalent effect on imports and exports, all quantitative restrictions and other measures having equivalent effect to protect domestic production were prohibited (with the exception of the "agricultural element" specific duty for processed agricultural products that both sides apply). Besides customs legislation, Turkey undertook an obligation to fully align its laws to the EU *acquis* in a wide range of issues including EU commercial policy and preferential trade regimes with third countries, abolition of TBTs in industrial products, competition, and industrial and IP issues.

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[45] As set out in Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (Text with EEA relevance), OJ L 241, 17.9.2015, p. 1–15.

[46] This is in line with the Commission's commitment to use FTAs in its fight against corruption and promote good governance as laid out in *Trade for All* (European Commission, 2015d: 26).

[47] Chapter V is reviewed in Section 7.3 below.

The main objective of the regulatory convergence analysis is to derive lessons from past practice for a potential improvement in an enhanced framework.

7.1.1 Technical Barriers to Trade

Articles 8 to 11 of Decision No 1/95 address Turkey's commitment to align its legislation and administrative practice related to TBTs and conformity assessment with EU rules. Article 9 of the Decision stipulates that "when Turkey has put into force the provisions of the Community instrument or instruments necessary for the elimination of technical barriers to trade in a particular product, trade in that product between the parties shall take place in accordance with the conditions laid down by those instruments." Thus, the CU regime clearly defines the framework within which trade between the EU and Turkey is regulated. It is Turkey's responsibility to incorporate EU legislation into its domestic regulations, so that Turkish products can enter into the EU market without further hindrance in terms of technical barriers.[48]

According to this, by the start of 2001 Turkey was expected to have aligned its relevant legislation. The relevant EU instruments to be incorporated by Turkey were enumerated in Decision No 2/97 of the Association Council, which totalled around 350 acts in a wide range of areas covering motor vehicles (45), agricultural and forestry tractors (23), lifting and mechanical handling appliances (5), household appliances (4), gas appliances (3), construction plant and equipment (12), other machines (1), pressure vessels (8), measuring instruments (46), electrical material (25), textiles (6), foodstuffs (59), medicinal products (17), fertilisers (7), dangerous substances (18), cosmetics (7), environment protection (7), information technology, telecommunication and data processing (6), general (12), free movement of goods general (2), construction products (3), personal protective equipment (4), toys (3), machinery (4), tobacco (2), energy (1), spirit drinks (6), cultural goods (1), explosive (1), medical devices (1), recreational craft (1), and miscellaneous (2).[49]

For Turkey, whose technical standards and regulations prior to the enactment of the CU were designed mainly on the basis of international standards, it was a burdensome task to accomplish while its capacity in terms of technical infrastructure and qualified staff was limited. In addition, despite commercial considerations, the political motivation to carry out such a challenging exercise was limited in the early years of the BPTF. As Misrahi (2010) argues, it was an "unwarranted concession" for Turkish policymakers to immediately execute the commitments when a failure was not judicially challenged under a weak dispute settlement mechanism.

However, Turkey accelerated its alignment process regarding technical barriers from 2000 onwards, particularly under political motivation of the Helsinki Summit in 1999, which recognised Turkey as a candidate country. Moreover, Turkish producers linked to foreign markets and European buyers asked for upgrading the capacity to realise European standards, testing requirements and certification. Thus, the harmonization process accelerated, especially following the adoption of the Law on the Preparation and Implementation of Technical Legislation on Products (Law No 4703).[50] The Law has been in force since 2002 and aims at adopting and implementing EU legislation related to general product safety, CE marking, notified bodies and market surveillance, and provides for the tasks of producers, distributors, third party conformity assessment bodies, as well as competent authorities. Turkey also implemented the following regulations to complement Law No 4703 (Republic of Turkey, 2014a):

- Regulation on CE Marking;
- Regulation on Conformity Assessment Bodies and Notified Bodies;
- Regulation on Market Surveillance of the Goods;

[48] Otherwise, Turkish products would be subject to further testing by the EU authorities until the Turkish legislation is fully aligned, hence putting extra costs for Turkish producers in their access to EU market.
[49] Note that these include only the main acts specified in Decision No 2/97 without having any reference to the amendments, as well as Turkey's adoption of legislation for the implementation.
[50] Law No 4703 was promulgated in Turkey's Official Journal on 11 July 2001.

- Regulation on the Exchange of Information on Technical Legislation on Goods and Standards between Turkey and the EU;
- Regulation on Mutual Recognition in the Non-Harmonised Area.[51]

A majority of the acts stipulated in Decision No 2/97 were incorporated during the peak years 2000-2002. Furthermore, to implement the changes introduced by the EU over the years (i.e. after Decision No 2/1997), Turkey amended and changed its regulations in 2012 as far as they relate to product safety, CE marking, conformity assessment bodies, and notified bodies. In order to achieve a higher degree of alignment with the EU legislation on product safety and also to ensure transparency, the "Ministerial Decree on the Regime Regarding Technical Regulations and Standardization for Foreign Trade" has been repealed by the "Ministerial Decree on the Regime Regarding Technical Regulations" (No 2013/4284), which entered into force in 2013.

In the early 2000s, Turkey also started to improve its quality infrastructure by revising the institutional structure. The main standardisation body was TSE (Turkish Standards Institute), which had multiple functions, such as to set technical regulations/ standards; to provide conformity assessment (certification, testing, inspection so on); and to act as the main "accreditation body". The new post-BPTF system was founded on a reshuffling of the bodies' roles. TURKAK (Turkish Accreditation Body), established in 1999, became the leading accreditation body. It was recognised internationally following its commitments under multilateral agreements with other EA (European Cooperation for Accreditation) members. TSE (which became full member of European standardisation bodies like CEN and CENELEC in 2012) had an operational system with TURKAK and National Metrology Institute (UME) with increased capacity to function as key units of Turkey's national quality infrastructure.

The level of transposition of standards by Turkey, overall, is also high. In accordance with information provided by the Ministry of Economy and based on data provided by TSE so far, Turkey has adopted over 34,000 (34,266) standards. Of these, 3,469 are ISO; 228 are IEC and 18,385 are European standards (CEN, CENELEC, and ETSI). According to the TSE, 99% of European standards have been harmonised and accepted as Turkish standards (TSE, n.d.: 27). Although the exact numbers are slightly different, the European Commission's overall assessment is basically in line with this finding of a high level of alignment: in its Progress Report on Turkey 2015 the Commission states that "Turkey has to date adopted 18,981 standards set by CEN and CENELEC and 427 standards set by the ETSI" while "the overall rate of harmonisation with EU standards is 97%" (European Commission, 2015e).

As mentioned above, Turkey has adopted most of the EU legislation listed in the Annex to Decision No 2/97. This also includes accompanying mechanisms, such as the notification of national conformity assessment bodies. Currently, as listed in DG GROW's Notified Body database (NANDO), 32 notified bodies exist for conformity assessment, in addition to one technical approval body.[52]

In the area of metrology, a national metrology strategy and action plan was adopted for the period 2015-2018. UME claims that the number of bodies supplying industrial metrology is sufficient.

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[51] Republic of Turkey (2014c). Also see Ministerial Decree No 2012/3169 on Regulation on Mutual Recognition on the Non-harmonized Area (Düzenlenmemis Alanda Karsilikli Tanima Yonetmeligi). For the corresponding EU regulation, see Regulation (EC) No 764/2008 of the European Parliament and of the Council of 9 July 2008 laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State and repealing Decision No 3052/95/EC.

[52] For the whole list of the notified bodies, see http://ec.europa.eu/growth/tools-databases/nando/index.cfm?fuseaction=country.notifiedbody&cou_id=792. However, according to European Commission (2015e), the number of notified bodies is 36. Turkish authorities state that the number is subject to change over time. The latest figure provided by the Turkish side is 31 notified and two technical approval bodies.

However, Turkey's transposition record and the degree of alignment differ under distinct approaches. With regard to "New Approach" legislation,[53] the above figures show that Turkey's performance overall is good, even though there were several problems in transposition.

Under the "Old Approach" legislation, where product standards are harmonised in a more detailed form, Turkey is considered to have completed a majority of the acts listed in Decision No 2/97.[54] New and/or amending legislation was adopted in motor vehicles, cosmetics and textile fibres. Only recently a decree was approved to revise the exchange rate between Euro and Turkish Lira in the pricing of pharmaceuticals, but excessive price controls continue. Alignment with REACH is insufficient, although draft legislation in Turkey that aims to better align with REACH has been notified to the Commission services and is being developed; consultations with the Commission are ongoing.

The Ministry of Economy assumes the coordination of the country's legislative alignment work that is being undertaken by various authorities with a view to comply with the EU's vertical legislation. Accordingly and although there is still work to be done, Turkey transposed the majority of the EU's sectoral/vertical legislation that had been provided in the Association Council Decision No 2/97. The said transposition consists of some 250 pieces of EU legislation concerning, inter alia, radio and telecommunication terminal equipment, batteries and accumulators, toys, personal protective equipment, construction products, medical devices, gas appliances, civil explosives, and lifts (Republic of Turkey, 2014c).

Association Council Decision No 1/2006 on the implementation of Article 9 of Decision No 1/95 was adopted on 15 May 2006. The Decision provides the procedures and modalities for the assessment of technical legislation, notification of Turkish conformity assessment bodies, and their verification. The Decision provides legal guidance by establishing the administrative infrastructure for Turkey's putting into force the provisions of EU instruments or instruments for the elimination of TBTs. Accordingly, the CUJC is "the competent authority to ascertain that Turkey has effectively put into force the provisions." The CUJC finally decides to adopt a "statement" after which Turkey notifies the Commission and the EU Member States of the names and details of any conformity assessment body it has designated. The criteria for the designation of these bodies and their responsibilities are laid down in Law No 4703 (4), and the Implementing Regulation on Conformity Assessment Bodies and Notified Bodies. The notified bodies become effective once these procedures are completed.

Turkey adopts the EU Directives on technical regulations in their integrity and aims at synchronising the transposition time of the relevant legislation with the timing of the same legislation within the EU. In cases where this simultaneous exercise cannot be accomplished due to technical reasons, then Turkey works towards harmonizing its legislation within 1-2 years following its transposition in EU Member States.[55] In practice, Turkish authorities in the Ministry of Economy and Ministry of EU Affairs interviewed acknowledge that the process is lengthy and delays in responses

[53] Under this approach, harmonisation is limited to essential requirements only, in order to protect public health, safety and environment, whereas the development of supporting standards is left to European standardisation bodies. The new legislative framework was adopted in 2008 in the EU, repealing Council Decision No 93/465/EEC in order to improve market surveillance and upgrade the quality of conformity assessment. It consists of Regulations No 264/2008 and No 265/2008 and Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products. The latter is a template for future product harmonisation legislation. See European Commission (2016f).

[54] The World Bank (2014) claimed that 85% was transposed already, but the report noted that European Commission cannot verify all of the instruments.

[55] See http://www.ekonomi.gov.tr/portal/faces/home/urun-guvenligi/ab-teknik-mevzuat- uyumu/yararlikaynaklar?_afrLoop=249873482779461&_afrWindowMode=0&_afrWindowId=83phal8sy_575#!%40%40%3F_afrWindowId%3D83phal8sy_575%26_afrLoop%3D249873482779461%26_afrWindowMode%3D0%26_adf.ctrl-state%3D83phal8sy_629.

sometimes extend to several months, or even years as in the cases of toys or transportable pressure equipment, thus preventing the timely notification of the relevant bodies. It was also stated that "in some cases, the interpretations are diverging and cause delays for the CUJC to set its Statement."

As a way to ensure better coordination and thus the consistency of the legislation to be transposed in Turkey, the Working Group on Technical Legislation (WGTL) was set up under the CUJC, in May 2004. It was entrusted with the task of solving problems related to the approximation of technical legislation, and serves as a forum to exchange information and discuss views on technical regulations. The WGTL was designated to meet regularly (i.e., twice a year), but since 2010 meetings appear to have been with lower frequency, whenever necessary.

In the non-harmonised area, where mutual recognition is applied to prevent domestic regulations develop into TBTs, Turkey adopted its legislation, which entered into force on 1 January 2013. This was an important step to apply the mutual recognition to trade in products for which no significant harmonisation was achieved.

In terms of its alignment with the EU rules on risk assessment, Turkey initiated TAREKS (Risk-Based Trade Control System) in 2011, a pilot implementation of a risk-based trade control system in order to run safety checks on imported and exported goods on the basis of risk assessment where the import controls of only the risky products are subject to safety and conformity checks where the examination is performed electronically. Accordingly, since 2012 conformity assessment related to certain imported products (toys, medical devices, telecommunication products, personal protective equipment, batteries and accumulators, construction products, and shoes), as well as transactions related to cotton controls are completed through TAREKS. Further to the existing products, the conformity assessment possibility through TAREKS has been extended from 2013 onwards to certain other imported goods, such as machinery, lifts, pressure vessels, electrical equipment, gas appliances, and some industrial raw materials (WTO, TPR Body, 2016a: 73). Overall, the TAREKS system appears to function properly, in line with new developments in the "risk algorithm." The rules and conditions applicable to the import control system of Turkey are laid down in product-specific Communiqués that are published annually. In 2015, 23 new Communiqués (21 on safety controls on imports and two on quality controls on exports) were issued.

With respect to TBT and SPS measures, since 2002 and in accordance with Directive (EU) 2015/1535 (formerly Directive 98/34), which has been complemented by additional elements as foreseen in the Association Council Decision No 2/97, Turkey has been notifying its draft technical regulations applicable in the non-harmonized field to the Commission (Republic of Turkey, 2014e). The DG Product Safety and Inspection also acts as an intermediary to inform various units of the Turkish administration about the notifications that are received from EU Member States.[56] In terms of compliance with transparency requirements, Turkey publishes all of its legislation, including technical regulations in the Official Gazette and also makes them available on the web through the Gazette's website.

Regarding consultation of the relevant stakeholders (sector, public and private institutions and Ministries), the Ministry runs a consultation process on draft legislation. Draft legislation that is subject to such consultation is also made available on the websites of relevant national authorities at draft stage.

Moreover, in accordance with the WTO TBT Agreement, a national enquiry point has been set up at the Ministry of Economy for technical regulations related queries including the notification of draft technical regulations and conformity assessment procedures. As such, the National Enquiry Point is also responsible for the exchange of

[56] The rules and procedures are laid down in the Regulation on the Exchange of Information on Technical Legislation on Goods and Standards between Turkey and the European Union.

information with both domestic and foreign authorities.[57] By way of the informative and coordinating work that it undertakes, the Enquiry Point aims at ensuring that the administrative and regulatory authorities are reminded of their duty and thus responsibility for the notification of new legislation and possible amendment and revisions. Along the same line, Turkey is also using the on-line TBT Notification Submission System (TBT NSS).

In sum, although Turkey undertook major efforts of alignment with the EU legislation and subsequent implementation, as described in this section, some barriers still remain in terms of technical regulations. For example, in the case of pharmaceuticals legislation has not been harmonised yet. The successful implementation of the *acquis* can only be achieved if the transposition of the EU legislation in Turkey is achieved promptly; presently, transposition in many cases takes up to two years and longer.

7.1.2 Harmonisation of customs tariffs

Articles 13 to 16 of Decision No 1/95 address Turkey's alignment to the EU Common Customs Tariff (CCT) and preferential tariff policies. According to Article 13, Turkey is obliged to align, and keep aligned, its tariffs with the CCT, for those goods covered by the CU. The CU regime thus obliges Turkey not to keep its customs duties above the CCT rates. Turkey also cannot lower its tariffs below the CCT under any circumstances. Thus, Turkey cannot grant tariff preferences in WTO negotiations independently of the EU, nor can it apply lower tariffs than the CCT in its bilateral trade agreements.[58]

Under the CU, the EU decides on its own tariffs (i.e., duties are set depending on EU domestic considerations), and Turkey has to adopt the rates established by the EU without participating in the EU tariff-setting process. This is referred to as the asymmetric characteristic of the CU. Nevertheless Article 14(2) of Decision No 1/95 stipulates that "where the Turkish customs tariff cannot be aligned simultaneously on the Common Customs Tariff, the CUJC may decide to grant a period of time for this to be undertaken." Hence, when harmonisation of customs tariffs is concerned, the CU provides flexibility to the Turkish side, through the CUJC, but only in cases where the time for alignment is not sufficient.

To facilitate the tariff alignment requirement, Article 14(1) lays down that Turkey shall be informed of any decision taken by the EC to amend the CCT, to suspend or reintroduce duties and any decision concerning tariff quotas or ceilings in sufficient time.

Turkey's full alignment with the CCT was planned to be phased in, for specific products, until 2001. The list of these products, as stipulated in Article 15, was agreed by the Association Council. Turkey had retained for the first five years the right to keep higher customs tariffs for products that were regarded as sensitive, i.e., transport vehicles, such as automobiles, trucks, and buses; shoes; leather products; travel goods, such as luggage; and furniture.[59] Since the end of the transition period (which was an extension to the 22-year list in Articles 18 and 19 of the Additional Protocol) Turkey has fully aligned its tariffs in the specified products to CCT.

Turkey's tariffs are based on the 2012 Harmonised Commodity Description and Coding System (HS2012) and comprise 16,515 tariff lines at the 12 digit-level. Almost all of the tariff lines (98.3%) are *ad valorem* rates, with the remaining goods being subject to specific, compound and mixed duties.

Turkey's simple average applied MFN tariffs for non-agricultural goods are 5.4% compared to the EU's applied tariffs of 4.2%. Turkey's trade-weighted average applied

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[57] In its capacity as the national enquiry point of Turkey for TBT related notifications of Turkey's trading partners, the Ministry of Economy has made available a website that provides related information at *www.teknikengel.gov.tr.*

[58] Preferential regimes are addressed in Section 7.2 below.

[59] These products were listed in Decision No 2/95 of the Association Council.

tariff on industrial products was 3.5% in 2013, lower than simple average MFN applied rates, thus indicating a lower overall trade restrictiveness. Duty-free products account for almost a quarter of Turkey's imports and more than 60% of tariffs are under 5%. The figures are very close to EU tariff structure.

The differences between the EU and Turkish applied rates are due to the definition differences for categorization of products in Decision No 1/95 and in the WTO's classification of "non-agricultural" products, which contain several goods outside the scope of the CU. Indeed, the CU has helped progressive trimming of tariffs towards third countries. As the average level of tariffs bound by the then EC dropped as a result of the Uruguay Round, Turkey started to approximate its levels to the EU.

However, more recently Turkey's application of lower tariff rates for non-agricultural goods than many other emerging and developing economies has led to increasing pressure from domestic producers. Turkey responded to this by increasing its applied tariffs, thereby causing a deviation from the CCT. Although this was within the scope of its WTO bound tariffs, it violates Turkey's CU obligations. Indeed, Turkey's simple average applied tariff rate has increased in recent years.[60] Additional duties of up to 50% can be imposed on many products by a decree from the Turkish Council of Ministers. The implementation of these additional duties affects imports from third countries, including the GSP beneficiaries, and goods in free circulation in the EU. This practice has become a "new protectionist" measure in Turkey during the last two years and aims to protect domestic producers of a wide range of goods, including textiles, footwear, carpets and rugs, furniture, electrical devices and parts thereof, lamps, household appliances, bags, tableware, knives, etc. The measures are also implemented to reduce the current account imbalances by limiting imports within the context of Turkey's Medium-Term Programme 2015-2017.

Agricultural goods are not covered by the CU, and therefore no alignment of Turkey's agricultural tariffs with the CCT is required. Indeed, Turkeys agricultural tariffs are highly protective. Final bound MFN tariffs (simple average) are 60% and applied rates are 42.2%, in 2014 while the EU rates are 12.5 and 12.2%, respectively (WTO, TPR Body, 2016a). These figures indicate that Turkey protects its domestic agricultural production by means of tariffs four to five times larger than the EU. The MFN applied duties for animal and dairy products vary between 103% and 130% in Turkey, while being only 17% to 42% in the EU. High tariff rates are applied to 76 tariff lines including meat products, edible offal of bovine animals, sheep, goats, mules and hinnies (up to 225%). Trade protection in sugar and confectionery goods, beverages and tobacco and coffee and tea are also high. The marked difference between bound and applied rates increases the rate of protection by introducing additional risks for exporters about further tariffs increased for protectionist purposes. In sum, no alignment of agricultural tariffs has taken place.[61]

With regard to bound tariffs (which need not be aligned under the CU), only half (50.4%) of Turkey's tariff lines are bound at the multilateral level compared to 100% binding coverage of the EU. In addition, Turkey's simple average bound duty is around 17% for non-agricultural products, which is more than four times the bound level of the EU (3.9%) in 2014. This constitutes a significant divergence from the EU tariff policy, which however has no practical relevance as long as the CU is in place. The impact of the "water" between currently applied and bound duty levels would however become a palpable risk for exporters to Turkey if the CU was not in place, as it would allow Turkey to increase applied tariffs at any time up to the bound level (or, for unbound tariff lines, ad infinitum). The WTO considers that the CU functions as an important instrument against Turkey's potential to increase applied tariffs for non-agricultural products (WTO, TPR Body, 2016a).

[60] This is observed in WTO, TPR Body (2016a: 3.32).
[61] For more details on agricultural policy alignment, see the next section.

In sum, Turkey's customs tariffs have been largely aligned with the EU's CCT, as stipulated in Article 13(1) of Decision No 1/95. Turkey also normally makes the necessary amendments to its tariffs taking into account the changes introduced by the EU either unilaterally or under bilateral and multilateral trade negotiations. Thus, for the products falling under the scope of Decision No 1/95, Turkey applies tariffs and preferential rates to third country products that are largely in line with the EU. Nevertheless, recent trends point towards a substantial misalignment for many tariff lines. In addition, Turkey continues to apply TRQs against third countries on some industrial products including electrical machinery and equipment, sound recorders, mattresses, machinery and mechanical appliances.

7.1.3 Agricultural Polices

The CU covers "products other than agricultural products". Therefore, agricultural and fishery products are excluded and only industrial goods may benefit from the CU. A specific treatment is provided in Decision No 1/95 for processed agricultural products which are only partially liberalised.

As far as trade in agricultural[62] and fishery goods[63] is concerned, the EC and Turkey reaffirmed their objectives, in Article 24(1) of Decision No 1/95, to provide for the free movement of agricultural products between themselves referring to relevant provisions of the Additional Protocol.[64]

The Ankara Agreement also provides that the Association shall likewise extend to agriculture and trade in agricultural products in accordance with special rules, which shall take into account the CAP. Given the differences in the agricultural policies of both sides, the Parties did not see fit to embark on the free movement of agricultural products right away. An "additional period" was therefore introduced in Article 24(2) of Decision No 1/95 to put in place the necessary conditions.

Thus, the Parties would progressively improve the preferential arrangements for their trade in agricultural products. Meanwhile Turkey is expected to "adjust its policy in such a way to adopt the common agricultural policy measures required to establish freedom of movement of agricultural products" (Article 25(1)).

The CU regime requires both Parties to take responsibility for the purposes of achieving the free movement of agricultural products. For this purpose, it is Turkey's responsibility to adjust its policy to developments in the CAP (Article 25(1)) and make consultations within the Association Council for the measures it intends to take in adopting the CAP. The EU, meanwhile, is asked to consider "Turkish agricultural interests when developing its agricultural policy and notify Turkey of the relevant proposals and decisions" thereof (Article 25(2)).

However, so far Turkey's adoption of the CAP has not been achieved and the basis for a free movement of agricultural products is therefore still lacking.

On the other hand, Article 26 of Decision No 1/95 asked the Parties to progressively improve the preferential arrangements to grant each other in their trade in agricultural products. Decision No 1/98 of the EC-Turkey Association Council was adopted for that purpose. The most important provision of the Decision No 1/98 was to prohibit quantitative restrictions on bilateral trade in agricultural products between the Parties. The Parties, however, were released to take necessary measures in pursuing their agricultural policies.

The EU has been granting trade preferences to Turkey for agricultural products since the Ankara Agreement. As part of this process, the EU offered Turkey a general exemption of *ad valorem* duties in 1987, except for some TRQs. The rates of specific

62 As defined in Annex II of the Treaty Establishing the European Community (The Rome Treaty).

63 Fishery products originating in Turkey enjoy duty-free treatment on the EU market. Fishery products originating in the EU are however subject to Turkish customs duties.

64 Articles 32 to 35 of the Additional Protocol.

tariffs for some products have been lowered.[65] These preferences and duty-free EU MFN rates for some agricultural products made almost two thirds of EU agricultural tariff lines. A majority of Turkish agricultural exports benefits from these arrangements, contributing to Turkey's bilateral trade surplus in agricultural goods.

"Processed agricultural products" are not completely regarded as industrial products as they contain an important "agricultural component". These products are regulated through specific provisions of Decision No 1/95, abolishing the industrial part of tariff protection, but allowing both sides to apply an "agricultural component" duty set in specific terms.[66] Agricultural components in accordance with Article 19 may be obtained by "adding together the quantities of basic agricultural products considered to have been used for the manufacture of the goods in question", multiplied by the "basic amount" corresponding to each of these basic agricultural products. The EU applies to Turkey the same specific duties that represent the "agricultural component" applicable to third countries. Turkey, too, applies the "agricultural component" to imports from the EU. Annexes 2 to 5 to Decision No 1/95 explain the procedure concerning processed agricultural products. With Association Council Decision No 1/2007, the Parties have granted reciprocal concessions in the form of duty free tariff quotas on certain processed agricultural products.

In the context of the adoption of the CAP, Turkey is also expected to implement EU rules on SPS measures. Because differences in legislation, implementation and interpretation of SPS measures bring costs on trade, Turkey's alignment with the EU *acquis* is important. Harmonisation is mostly undertaken in the context of the accession negotiations. The relevant chapter (Chapter 12 concerning Food Safety, Veterinary and Phytosanitary Policy) was opened in 2010, and Turkey has partially aligned its legislation in this area pursuant to Law No 5996 on Veterinary Services, Plant Health, Food and Feed (2010). Within the scope of harmonization several measures have been implemented (Table 7.1).

More than 100 regulations under Law No 5996 have also been enacted. These include, among others, the import and transit of live animals, procedures regarding animal health conditions, agricultural control equipment and machinery, animals and products subject to veterinary certificate at the entrance to the country, control on animal food, and agricultural quarantine.

Turkey also enacted its Biosafety Law (No 5977 of 18 March 2010) in its reform process, to regulate the approval of agricultural biotechnology products. The law is vital for the review and approval of biotechnology products before entry into the Turkish market. A Biosafety Board was established to review and approve of these products before their entry into the Turkish market. However, EU-approved biotech products are not necessarily approved by the Board.

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[65] The EU reintroduced duties in response to Turkey's ban on imports of beef.

[66] Although customs duties and measures having equivalent effect have been abolished, according to Article 18, Turkey and the EU may apply "agricultural components" in processed goods listed in Annex I of Decision No 1/95.

Table 7.1: Harmonization in SPS measures by Turkey (main issues)

Regulation in Turkey	Corresponding EU legislation
Control of Foot-and-Mouth Disease	Council Directive 2003/85/EEC
Notifiable animal diseases and their notification	Council Directive 82/894/EEC Commission Decision No 2005/176/EC
Prevention and Fight against Avian Influenza	Council Directive 2005/94/EC repealing Directive 92/40/EEC
Prevention and Fight against Newcastle Disease	Council Directive 92/66/EEC
Regulation on Health Conditions of Aquatic Animals and Prevention and Fight against Aquatic Animal Diseases	Council Directive 2006/88/EC Commission Decision No 2008/946/EC
Identification, Registration and Monitoring of Bovine Animals	Council Regulation No 1760/2000/EC, Commission Regulation No 494/98/EC, Commission Regulation No 1082/2003/EC, Commission Regulation No 911/2004/EC Commission Decision No 2006/28/EC
Identification, Registration and Traceability of Ovine Animals	Regulation (EC) 1782/2003 Directives 92/102/EEC, 64/432/EEC, and 21/2004/EC
Protection and Welfare of Animals to be used for Experimental and Scientific Purposes	EU Directive 2010/63/EC
Struggle with Brucellosis	Council Directives 64/432/EEC, 78/52/EEC, and 91/68/EEC
Bovine Tuberculosis	Council Directive 64/432/EEC
General Provisions Concerning Welfare of Farm Animals	Council Directive 98/58/EC
Minimum Standards Regarding Protection of Laying Hens	Council Directives 1999/74/EC and 2002/4.
Minimum Standards for the Protection of Calves	Council Directive 2008/119/EC

Source: Ministry of Food, Agriculture and Livestock.

7.1.4 Customs Provisions

An efficient operation of the CU requires the harmonisation of customs legislation and customs procedures between the Parties. Article 28 of Decision No 1/95 imposed on Turkey the obligation to adopt provisions in her customs legislation based on the Community Customs Code (Council Regulation (EEC) No 2913/92), replaced since 1 May 2016 by the Union Customs Code (Regulation (EU) No 952/2013) and Commission Regulation (EEC) No 2454/93 (replaced since 1 May 2016 by Commission Delegated Regulation (EU) No 2015/2446, Commission Implementing Regulation (EU) No 2015/2447 and Commission Delegated Regulation (EU) No 2016/341), in specified areas. These are namely the origin of goods; customs value of goods; introduction of goods into the territory of the CU; customs declaration; release for free circulation; suspensive arrangements and customs procedures with economic impact; movement of goods; customs debt and right of appeal.

Turkey was also asked to take necessary measures in line with

- Council Regulation (EEC) No 3842/86 laying down measures to prohibit the release into free circulation of counterfeit goods (replaced by Regulation (EU) No 608/2013);
- Council Regulation (EEC) No 918/83 with respect to the system of reliefs from customs duties (recast by Regulation (EC) No 1186/2009); and
- Council Regulation (EEC) No 616/78 on proof of origin for certain textile products (replaced by Regulation (EC) No 1541/98 itself repealed by Regulation (EU) No 955/2011).

Decision No 1/95 authorised the Customs Cooperation Committee between the EC and Turkey to lay down appropriate measures for the implementation of these obligations. The Parties were further expected to mutually assist each other on customs matters, in accordance with Annex 7 of the Decision.

In Turkey, the Ministry of Customs and Trade is the main institution in the field of customs. The Directorate General for EU and External Relations in the Ministry is responsible for administrating relations with the EU in the context of the CU. It conducts negotiations for bilateral and multilateral agreements and establishes relations with the EU institutions and other international organizations on behalf of the Ministry.

Customs matters are regulated through several acts in Turkey. The most basic one is Customs Law No 4458 (referred to as the "Turkish Customs Code") of 27 October 1999. The Law was enacted in parallel to the EC Council Regulation No 2913/92 (the CCT) to make the necessary regulations in customs matters in Turkey in line with EU rules. It contains several parts and provisions relevant to issues mentioned specifically in Article 28(1) of Decision No 1/95.

Since the establishment of the CU, the EU has amended several pieces of its customs legislation, which obliged Turkey to transpose these changes into its own legislation. The adoption by the EU in 2013 of a new Union Customs Code (Regulation (EU) No 952/2013) brought new concepts and the need for operational developments, including the electronic exchange and storage of data between customs authorities and between customs authorities and economic operators, centralised clearance, and "single window" and "one-stop-shop" systems, which Turkey had to consider in her alignment process (see below).

Decision No 1/96 of the Customs Cooperation Committee was adopted to implement provisions applicable to trade in goods between the EU and Turkey and with third countries, thus introducing an integrated approach for customs. That Decision was replaced by Decision 1/2001 which was repealed by Decision 1/2006 of the Customs Cooperation Committee (the so-called "bridging legislation"). Decision 1/2006 consolidated in a single framework all decisions of the Committee. Turkey adopted her implementing act in 2006 (Decision No 2006/10895) accordingly.

Customs reform in Turkey

Turkey started customs reforms in the post-CU era as a result of the requirements of the EU and as a part of a broader process of modernizing public sector management. At the outset, a four-year action plan envisaged the introduction of a modernised customs law to bring simplification of the procedures, develop and computerize the system; train customs staff; and acquire electronic customs management system. The reform process improved the capacity in Turkey's customs especially by bringing new and simplified import procedures, improving the physical infrastructure especially through automation; and reorganizing the customs administration. The 2001-2005 Reform Programme was initiated to adapt customs services to developments in international trade so as to reduce the cost of trade through simplified and accelerated customs formalities; to improve the capacity in fighting with fraud and corruption; and to ensure public security, health and the environment. The reform process was timely and essential for Turkey's adoption of EU practices.

In 2003, the EU started to fund projects in order to assist Turkey for capacity-building and modernization of the customs. 2003 programming initiated GÜMSİS (Customs Offices Security Systems) within which several border check points were equipped with tracking and assessment systems. Under GÜMSİS, other modules have been integrated, including a vehicle and container inspection (x-ray) system, a nuclear detection system, a GPS-based transit-vehicle-tracking system, and a licence-plate scanning system. In 2002, BILGE (a computer software package) was introduced to carry out all real-time customs formalities. BILGE includes subsystems for summary declarations, warehouse management, tariffs, and accounting.

These projects continued (Table 7.2) on an annual-programming basis covering a total budget over EUR 90 million (between 2003-2014) under Instrument for Pre-Accession (IPA). These projects helped Turkey to transform its customs policy in the following areas:

- achieving connectivity between Turkish administration and EU information technology systems;
- launching new computerized transit system;

- providing customs laboratories with modern equipment compatible with EU standards;
- improving the capacity of Turkish officers for fighting against smuggling; and
- adopting a strategic planning.

Table 7.2: EU Projects for the modernization of Turkish customs administration

Project	Programming year	Budget (EUR million)	Main outputs
Modernization of TCA-I	2003	6.87	GÜMSİS (Customs Offices Security Systems) Increasing the administrative capacity of the TCA
Modernization of TCA-II	2004	20.1	Customs IT systems project Customs enforcement project Customs archive and disaster centre building project
Modernization of TCA-III	2006	14.5	Customs IT component Customs enforcement component Increasing the administrative capacity of the TCA
Modernization of TCA-IV	2007	4.95	Component of customs laboratories
Modernization of TCA-V	2008	3.87	Customs enforcement component
Modernization of TCA-VI	2009	16.6	Customs enforcement component Risk management component
Modernization of TCA-VII	2010	0.50	Procuring CCN-CSI system
Modernization of TCA-VIII	2012	11.88	Project on repayment/remission of customs debt Customs enforcement component Component of customs laboratories IP rights component Organizational restructuring and HR management
	2013	5.42	Customs enforcement project
	2014	5.50	Customs enforcement project

Source: Compiled by the study team based on Republic of Turkey, Ministry of Customs and Trade (2015).

Other technical support and visit programs for officers were also financed and implemented through TAIEX. These initiatives were about inward processing; outward processing; catch all system[67]; integrated tariff management system; free zones; customs regimes with economic impact; international container transportation; customs warehousing procedure; ROOs; vehicle and container search; cash controls at customs; IP rights; TARIC database; single window; customs recovery; and guarantee systems.

During IPA-II, further training and twinning projects are envisaged to start in improving Turkey’s capacity in customs matters. This includes the Custom 2020 Programme (following Customs 2002, 2007, and 2013 programmes) and TAIEX for the 2014-2020 period with the objective of standardizing customs procedures of EU Member States and Turkey as far as possible, and achieving best implementation.

Several elements in Turkey’s national strategy to restructure and modernize the works of the Ministry are generally compatible with EU legislation (i.e. Decision 624/2007/EC establishing an action programme for customs (Customs 2013); replaced by Regulation (EU) No 1294/2013 establishing an action programme for customs in the EU for the period 2014-2020 (Customs 2020)) as well as international documents (such as Revised Kyoto Convention, Customs Blueprints and WCO SAFE Framework of Standards). Some prominent developments in Turkey for the adoption of EU practices in customs matters are: simplification of customs declarations; e-customs practices; modernisation of customs laboratories; struggling with customs offence; and the initiation of simplified customs corridor.

[67] Catch-all-system refers to higher-quality control on sensitive end-use rather than all-inclusive control.

Turkey adopted the Single Window system whereby trade-related information and documents may only be submitted once at a single point through information Technologies to fulfil all export, import and transit-related requirements, and central procedures for the entire customs duties and fees. This facilitates customs procedures for traders.

Turkey applies the same ROOs as the EU to third countries under the CU. In the case of non-preferential ROOs, Turkish law regulates all measures including surveillance, quotas, safeguards, etc. in line with EU practices. Preferential ROOs are applied by Turkey in the case of preferential agreements. Turkey has been a part of the Pan-European Origin Cumulation System since 1999, which extends diagonal cumulation to Euro-Mediterranean countries. Turkey also extends it to Kosovo, with which it has just concluded an FTA, and to Algeria, despite the non-existence of an FTA. Turkey's alignment for GSP-related ROOs is advancing, but further steps in product and geographic coverage are needed.

Turkey recently notified her acceptance of the TFA to the WTO. Under this Agreement, Turkey commits to implement provisions for expediting the movement, release and clearance of goods, including goods in transit.[68]

Turkey has also taken a number of steps to facilitate trade with its regional neighbours. Of these, an initiative with Georgia and a one-stop shop project launched with Bulgaria, aiming to reduce customs processing delays through coordinated implementation of customs procedures, can be mentioned.

In sum, Turkey's level of alignment with the EU's customs legislation is overall high. Turkey's implementation and enforcement capacity is adequate. However, Progress Reports by the Commission in 2014 and 2015 state that Turkey has to fully align some of the customs rules with the *acquis,* especially in the areas of free zones/duty relief, duty free shops, surveillance and management of tariff quotas, and authorized economic operators. Turkey's requirement to present proof of origin for some goods in free circulation in the EU, such as woven fabrics and apparel, when imported to Turkey; and designation of specialised customs offices to complete import formalities in certain goods are other challenging issues that need to be tackled. Many of these issues have been in the CUJC agenda for a long time without solution, thus indicating the ineffectiveness of the CUJC in solving disputed issues.

7.1.5 Protection of Intellectual, Industrial and Commercial Property Rights

Article 31 and Annex 8 of Decision No 1/95 require Turkey to ensure adequate protection and enforcement of IP rights, implement the Uruguay Round TRIPS Agreement by 1999, adopt legislation by 1 January 1999, and also become party to various international conventions on IP rights as laid down in Decision No 1/95.

The adoption and alignment of intellectual, industrial, and commercial property rights with the *acquis communautaire* are being governed and conducted by the Directorate General of Copyrights in the Ministry of Culture and Tourism for copyright and related rights; the Turkish Patent Institute (TPI) for patents, trademarks, geographical indications, designs, and chip topographies; and the Ministry of Food Agriculture and Livestock for plant breeders' rights.

In order to develop IP rights strategies and improve coordination among government agencies and stakeholders, the Intellectual and Industrial Property Coordination Board convenes twice per year. With a view to lay down a strategy that would make an impact on IP policy, the Board produced a National Intellectual and Industrial Property Strategy paper to cover years 2015-18 (Turkish Patent Institute, 2014a). As such, the Strategy Paper aims at addressing the peculiarities of the legislation and practice that will represent Turkey's need to improve IP rights through effective implementation,

68 Turkey submitted its "Category A" notification to the WTO indicating that it intends to implement all but one of the TFA provisions upon entry into force of the agreement without any transitional period.

securing appropriate human and institutional capacity that is necessary for the judicial, customs and law enforcement services to effectively protect IP rights, improving the efficacy of the tools required for commercialization, market perception, and infrastructure in advocating for and protecting IP rights; and raising public awareness about the IP protection mechanism.

Turkey accepted the Protocol Amending the TRIPS Agreement in May 2014 which provides for special compulsory licenses for the export of medicines to countries with insufficient or no manufacturing capacities in the pharmaceutical sector to become a permanent part of the TRIPS Agreement. Turkey also enacted decree-laws for the protection of patents, trademarks, and industrial designs have provisions for the implementation of national exhaustion in relation to parallel imports (WTO, 2016: 3.2.18). However, certain potential differences may occur and need to be noted as far as the IP protection systems that are reigning in the EU and Turkey are concerned. Article 10(2) of Annex 8 of Decision No 1/95 stipulates: "This decision does not imply exhaustion of intellectual, industrial and commercial property rights applied in the trade relations between the two Parties under this Decision." Like currently Turkey, the EU applies the national (due to the Single Market it becomes regional) exhaustion doctrine within its territories for the application and implementation of IP protection.

Turkey has however signalled that it may change the exhaustion regime and in future apply international exhaustion of IP rights. Such a change of the level of IPR protection in Turkey may discourage EU right holders from commercialising their IPR protected products in Turkey.

In terms of geographical indications (GIs), the Working Group that is established to identify national policies set out five goals for the strategy which was published in July 2015 along with an action document for 2015-2018: developing a policy in parallel to the developments of national and international legislation and administrative developments; developing and improving the capacity for scientific geographical indicators; effective protection of GIs in all sectors of society and raising awareness; creation of a functioning and effective control system for the preparation of the application, improving the quality of applications; and to improve the effectiveness of marketing, increasing the value added of GIs (Turkish Patent Institute, 2014b). Nevertheless, the EU Commission opined in its Progress Report for Turkey that further work is needed on geographical indications similarly to plant variety and regulatory data protection for pharmaceuticals (European Commission, 2015e: 40; WTO, TPR Body, 2016a: 3.204).

As for genetic resources, traditional knowledge and traditional cultural expressions, Turkey is in the process of laying down a policy and a Design Strategy Document and Action Plan were adopted by the High Planning Council in 2014 (WTO, TPR Body, 2016a: 3.205).

The Law on Intellectual and Artistic Works No 5846 (Turkey's copyright law), is perceived to be substantially aligned with international agreements, treaties and the EU *acquis*. Nonetheless, the Ministry of Culture and Tourism is currently undertaking a further review in order to reflect the recent developments at national and international level and to bring it into complete convergence with international conventions and the EU *acquis*. Main features of the recent changes, amendments relate to the mechanism to fight digital piracy, changes to make collecting societies function more effectively. Moreover, Article 47 on expropriation has also been subject to changes whereby works that are considered to be important for the culture of the country are allowed to be expropriated under certain conditions following the death of the author but prior to the expiry of the term of protection. Moreover, the National Intellectual and Industrial Property Strategy of Turkey, which was published in Official Gazette on 04/07/2015 and which provides an overall strategy for the sector for the period of 2015-18, had spelled out four objectives in the field: legislation and practice in line with Turkey's need to improve IP rights with effective implementation; ensuring adequate human and institutional capacity for the judicial, customs and law enforcement services actively involved in protecting IP rights; to improve the effectiveness of the mechanisms for commercialization, market perception, and infrastructure in developing IP rights; and increase public awareness about the IP rights system, with the target of becoming an information and knowledge-based society.

The Constitutional Court, in four decisions that it issued and published in the *Official Gazette* since 2012, cancelled, a provision of the Decree Law No 551 for the protection of patents, and three provisions of the Decree Law No 556 for the protection of trademarks.[69]

Turkey's patent legislation contains a Provision on granting of compulsory licences (CLs) and the Decree-Law No 551 administers the application and implementation of CLs in Turkey. By the end of 2015, the only CL to have been granted dated back in 1998.

The international exhaustion doctrine has been adopted to incorporate related provisions within the law for topographies of integrated circuits.

Turkey is party to a number of IP rights related agreements and treaties and has also signed the WIPO Marrakesh Treaty to Facilitate Access to Published Works for Persons who are Blind, Visually Impaired or Otherwise Print Disabled on 1 November 2013 and the ratification process is still ongoing (WTO, TPR Body, 2016a: 3.220).

Turkey is also taking part in the joint Turkey-EU IP Rights Working Group intended to meet on institutional, legislative, enforcement and public-awareness-related issues. Those meetings revealed that the fields where legislative amendments are still required towards full harmonization and which will be addressed within the pending copyright law changes are: "revision of the definition of some of the rights of authors and related right holders in line with EU Directives; extension of the scope of the prohibition of the act of circumvention of technological measures and revision of database protection taking into consideration electronic and non-electronic databases" (WTO, TPR Body, 2016a: 3.221).

There are working group meetings being held at least once a year where IP rights stakeholders from the private sector can also participate to discuss among others, "a new draft law on industrial and IP rights, seized counterfeit goods which were released back to the Turkish market as a consequence of the Decision No 2008/2 of July 2008 of the Turkish Constitutional Court, bad faith trademark and design registrations, security-related issues during the counterfeit goods raids, protection of well-known trademarks, mechanisms of collective management of rights and collecting societies in Turkey, digital piracy, private copying levies, public performance rights, software use in the public sector, EU's Technical Assistance and Information Exchange (TAIEX) technical assistance, awareness raising activities, EU Orphan Works Directive, copyright exceptions in educational institutions and public lending, examinations, decisions and oppositions related to trademarks and designs, biotechnological inventions, secondary medical use patents, patentability criterion, filing process for patents, expert witness system in Turkey, compensations, enforcement issues, and customs-related issues (i.e., risk management system, border measures, etc.)" (WTO, TPR Body, 2016a: 3.222).

In order to strengthen the IP laws and fight against counterfeiting the Directorate-General of Customs in the Ministry of Customs and Trade remains the responsible authority for border measures and has been engaged in "Border Enforcement of IP Rights Project" in the context of the EU Instrument for Pre-Accession Assistance. Main objective of the Project is to establish a modernized and effective system of border protection of IP rights in a way to ensure operational control throughout Turkish Customs Territory. The Directorate General is authorized to suspend customs transactions in relation to goods that are considered to be infringing IP rights either on

[69] *Official Gazette* of 29 May 2014 (patents), 24 July 2014 (trademark), 15 May 2015 (trademark) and 2 June 2015 (trademark).

the basis of an application by a rights holder or its representative, or on its own initiative (WTO, TPR Body, 2016a: 3.224).

The articles of the Turkish Customs Law and its Implementing Provisions regarding customs enforcement of IP rights have been strengthened by way of amendments in October 2009, and thus have been harmonized to a great extent with that of EU Regulation No 1383/2003, which is replaced by the recent EU Regulation No 608/2013. The Ministry of Customs and Trade is responsible for drafting the necessary amendments for harmonizing national IP rights border legislation with the new EU Regulation No 608/2013 within the framework of the "Border Enforcement of IP Rights Project".

Existing IP Decree Laws are being strengthened through although the process is still ongoing. A new draft law was produced and made available for public for comments until 04/03/2016.[70]

The Ministry of Culture and Tourism is conducting further amendment to be brought to the Law No 5846 on Intellectual and Artistic Works (Copyright Law), as a way to reflect the current developments at national and international level and to bring the law in full harmonization and compliance with international conventions and the EU *acquis*.

In relation to the enforcement regarding copyright and fight against piracy, in particular as far as the copyright protection is concerned, Turkey has set up specialized Inspection Commissions to deal with copyright infringement in its 81 provincial police departments and district directorates, which are authorized to inspect pirated goods. To that end, the Turkish Government reported that 55 QR code readers with the ability to detect the authenticity of intellectual and artistic works through the brand new banderoles and to access to the rights management information of these works were distributed to the Provincial Inspection Commissions from 2012 to 2015 in order to consolidate the technical infrastructure of combats against piracy. Along the same line, the banderole security is reported to be tightened with the renewed "Encrypted Laser Code System" piloted for the first time in 2015 through new banderoles and 200 Laser Code Reader Devices were distributed to 81 provinces of Turkey to render inspections swifter. As an incentive to assist officials and inform the concerned citizens to detect the improper or fraudulent banderole use throughout the anti-piracy inspections and within the framework of the "Banderole Inspection with Smart Phones Project", new software is currently being developed through all iOS or Android based smart phones (WTO, TPR Body, 2016b).

Capacity building through training seminars on related legislation and operation procedures geared towards securing uniformity in enforcement are being organized on a regular basis with a view to strengthen the administrative capacity and increase the efficiency of Provincial Inspection Commissions that were established for fight against piracy. Accordingly, 12 regional seminars were held between 2011 – 2015 in cooperation with Ministry of Culture and Tourism and Ministry of Interior, on related legislation, operation procedures, application system of banderole and certification, new methods of combating piracy, as well as of the working procedures and on securing uniformity in enforcement, where more than 100 representatives of these Commissions for each seminars have been trained in the field. The instructors to train the participants were chosen among the prosecutors and judges working in the field of IP rights.

As for the legislation regulating collective management organizations, the Turkish Government reported that the ongoing work related to the amendments to be brought to the Law No 5846 on "Intellectual and Artistic Works" by the Ministry of Culture and Tourism, will be revised and updated as to reflect the needs of the CMOs. Accordingly, the possibility of open membership to all right holders is being considered and discussed (WTO, TPR Body, 2016b).

[70] The draft law in Turkish language is accessible at www.tpe.gov.tr.

Although Turkey made a major effort by aligning its legislation with the *acquis* since 1995, and by establishing the TPI in 1994, the challenges ahead are mainly related to the enforcement of IP rights policies as it requires specific skills. Even though substantial training on IP rights related matters has been provided to a considerable number of judges, lawyers, enforcement staff, police force members, and customs officers, there is still room for capacity building, Turkey needs to improve the existing scheme of measures, procedures and remedies, mindful of the necessity to provide for a fair and equitable enforcement of IP rights.

Table 7.3: Summary of Turkey's protection of IP rights, 2015 (WTO, TPR Body, 2016a)

Main legislation	Duration	Selected coverage, exclusions and limitations	Fees/levies (2015)
Copyrights			
Law on Intellectual and Artistic Works (No 5846) as amended by Law No 4110 of 7 June 1995, Law No 5101 of 2 December 2004, Law No 5571 of 28 December 2006, Law No 5728 of 23 January 2008, Law No 6279 of 29 February 2012, and Law No 6552 of 10 September 2014	70 years from author's death (or if there is more than one author, from the death of the last remaining author). For related rights, 70 years from the date of: -first fixation or making public of the performance, - first fixation of music or film productions, -first broadcasting of radio-TV programmes.	Law No 5846 covers: the moral and economic rights of authors and related right holders (performers, phonogram and film producers and radio-television organizations), the rules and procedures regarding transactions on such rights, and ways of legal recourse and sanctions. Law No 5846 provides a series of exceptions for: -Due to public order (use works as evidence in court) (Art.30) -Legislation and court decisions (Art.31) -Speeches made in the official assemblies (Art.32) -For the purpose of face-to-face education (Art.33) -Selected and collected works for educational and instructional purposes (Art.34) -Freedom of quotation (Art.35) -Contents of newspapers (Art.36) -News (use works for giving information in relation to current events) (Art.37) -Personal use (Art.38) -Works of fine arts permanently placed on public streets (Art 40) -For the benefit of the people with disability (Additional Art. 11)	According to Article 44 of the Copyright Law, natural and legal persons who manufacture or import for commercial purposes any kind of materials, such as blank cassettes, computer discs, CDs, DVDs, and any kind of technical devices enabling reproduction of works, are obliged to deposit a certain amount which does not exceed 3% of the manufacturing or importation costs. This amount shall be exploited for strengthening IP system and supporting cultural and artistic activities.
Patents			
Patent Rights Protection Decree (No 551) and Amendment of the Transition Period of Patent Protection on Pharmaceutical and Veterinary Products and Processes Decree (No566)	20 years from date of filing for fully protected patent following examination process 7 years for non-examined patents 10 years for utility models	Patentability criteria: novelty, inventive activity/step, industrial applicability. Covers micro-organisms and microbiological processes and pharmaceutical products and processes. Exclusions include: discoveries, scientific theories and mathematical methods, games, surgical techniques, and plant and animal species, or methods of plant or animal breeding based on biological principles	Patent filing fee of TRY 60 (TRY 40 online). Other fees for priority applications, time requests, publication, priority documents, registration, investigation, search report, examination report, etc., ranging from TRY 15 to TRY 2,110 (TRY 10 to TRY 1,755 online).
Trade marks			
Trade Mark Protection Decree (No 556) and Directive on Trade and Service Marks	10 years (renewable). Failure to use marks within 5 years of registration, or subsequent 5 year periods may result in cancellation.	Covers goods, service, guarantee marks and collective marks. Exclusions include: marks that might confuse the public.	Single filing fee of TRY 255 (TRY 180 online). Registration certificate fee of TRY 625 (TRY 520 online). Other fees for renewals, copies, recording, editing, opposition, handling fee, division of application, appeals, etc., ranging from TRY 45 to TRY 1,120 (TRY 30 to TRY 930 online).
Geographical indications			
Protection of Geographical Signs Decree (No 555)[b]	Indefinite	Covers all goods, in addition to wines and spirits.	Application fee of TRY 115. Other fees for appeals, registration, copies, document fee, editing, etc., ranging from TRY 50 to TRY 165

Main legislation	Duration	Selected coverage, exclusions and limitations	Fees/levies (2015)
Industrial Designs			
Industrial Designs Decree (No 554)	5 years from filing date, renewable for 5-year periods to a maximum of 25 years.	Covers new and distinctive designs. Exclusions include: protection of textiles and computer programmes (covered by Copyright Law) and topographies of semi-conductors	Single filing fee of TRY 185 (130 online). Other fees for publication, deferment, renewal, registration, transfer, licence, priority, examination, etc., ranging from TRY 40 to TRY 640 (TRY 25 to TRY 530 online).
Plant Varieties			
Law on the Protection of Plant Breeder's Rights for New Plant Varieties (No 5042), and the Seed Law (No 5553)	25 years after registration (30 years for trees, vines and potatoes)	Covers plant varieties that are found to be new, distinct, uniform and stable. Covers all plants.	Application fee of TRY 620. Other fees for priority application, examinations, etc. ranging from TRY 62 to 1,100.
Integrated circuit topographies			
Law on the Protection of Integrated Circuit Topographies (No 5147)	10 years from the date of first commercial exploitation by rights holder anywhere in the world.	Covers original designs. Does not apply to the concepts, processes, systems or techniques on which the topography is based or to information stored in a microelectronic semiconductor product. Reproduction for evaluation, analysis, research or teaching is permitted.	Application fee of TRY 350. Other fees for objections, registration, amendments, extension, publication, mergers, re-registration, etc. ranging from TRY 50 to TRY 1,100.
Protection of undisclosed information			
Human Medicinal Products Licensing Regulation (Article 9)	Data exclusivity period of six years to commence as of first registration date in the Customs Union Area. With regard to those products which benefit from patent protection in Turkey, the data exclusivity period is limited to the term of the patent	Medicinal products for human use	Not applicable.

a) Industrial designs may be covered by both the Copyright and the Industrial Design Law. The term is 70 years under the former and 20 years under the latter. Where the work is protected under both laws, a rights holder may choose either or both.

b) Protection for unregistered GIs is provided through the unfair competition provisions of the Turkish Commercial Code. These laws were amended by the Amending Law of Patent, Design, Geographical Indications and Trade Mark Decree (No 1428). These laws were amended by the Law Amending the Decree-Laws on the Protection of Patent, Industrial Designs, Geographical Indications and Trade Mark (No 5194).

Source: WTO (2012b); The Economist Intelligence Unit (2016); WIPO Lex (n.d.).

7.1.6 Protection of Competition

According to Article 167 of the Turkish Constitution, the state has a duty and responsibility to take "measures to ensure and promote the sound, orderly functioning of the money, credit, capital, goods and services markets" and to prevent "the formation, in practice or by agreement, of monopolies and cartels in the markets". Accordingly, the Act no 4054 on the Protection of Competition aims at fulfilling this constitutional task.

Moreover, Turkey's obligations in the field within the framework of the Ankara Agreement is stipulated in Article 16, which specifies that competition laid down in the Treaty of Rome concerning competition, taxation and the approximation of laws must be made applicable in the association relationship. In any event, the establishment of the CU between the European Union and Turkey in 1995 played the most important role in the adoption process of the Law No 4054 on the Protection of Competition.

Law No 4054 was approved by the Parliament on 7 December 1994 and entered into force pursuant to publication in the Official Gazette dated 13 December 1994. However, the Competition Board which the decision-making organ of the Competition Authority responsible for the enforcement of the Law, was appointed only in 1997 with a delay of 27 months.

Law No 4054 aims at the protection of competition by ensuring necessary regulation, supervision and the prevention of abuse of dominant position by undertakings holding dominant position in the market and the agreements, decisions and concerted practices which prevent, restrict or distort competition within the markets for goods and services within the territory of the Turkish Republic. As such, the Turkish Competition Act has been drafted mostly based on Articles 85 and 86 (now Articles 101 and 102 of the TFEU) of the Treaty of Rome. As a matter of fact, Article 4 of Law No 4054 which is geared towards preventing the distortion of competition due to the agreements or concerted practices among undertakings or decisions of associations of undertakings preventing, restricting or distorting competition within the markets for goods and services and Article 6 of the same Law that aims at preventing the abuse of dominant position by the undertakings holding a dominant position in the relevant markets are in parallel with Articles 85 and 86 of the Rome Treaty. According to Article 40 of the Law and where the Articles 4 or 6 of the Law are infringed in markets for goods and services and upon an application or with its own initiative, the Board is entitled to decide to initiate an investigation directly or to initiate preliminary inquiry in order to determine whether or not it is necessary to initiate an investigation regarding those undertakings which infringe competition. In case the Board takes a decision on the infringement of Articles 4 or 6 at the end of the investigation, Article 16 of the Act requires that it decides to impose an administrative penalty on the undertaking or association of undertakings, which infringe competition. Judicial review is possible and in fact since 2012, the decisions of the Competition Board can be made subject to appeal before the Ankara Administrative Court, as court of first instance.

Right after the establishment of the Turkish Competition Authority, the following rules and secondary legislation, were put into effect in 1998:

- Communiqué No 1998/2, "Communiqué on the Amendment of the Article 4 of the Communiqué No 1997/1 Concerning Mergers and Acquisitions Subject to the Authorization of the Competition Board" (regarding turnover and market share threshold).
- Communiqué No 1998/3, "Communiqué on Group Exemption Regarding Distribution and Servicing Agreements In Relation To Motor Vehicles".
- Communiqué No 1998/4, "Communiqué Regarding the Methods and Principles to be Pursued During The Course of Pre-notifications and Applications for Authorization Made to the Competition Authority in Order the Acquisitions via Privatization to Be Valid".
- Communiqué No 1998/5, "Communiqué Concerning the Amendment in the Communiqué Regarding the Methods and Principles to be Pursued During The Course of Pre-notifications and Applications for Authorization Made to the Competition Authority in Order the Acquisitions via Privatization to Be Valid".
- Communiqué No 1998/6, "Communiqué Concerning the Amendment in the Communiqué on the Mergers and Acquisitions Subject to the Authorization of the Competition Board" (regarding turnover and market share threshold for financial institutions).
- Communiqué No 1998/7, "Group Exemption Communiqué Regarding Franchise Agreements".

Moreover, the Turkish Competition Authority has published several guidelines geared towards aligning its practices with the EU. The following guidelines among others can be cited:

- Guidelines on Undertakings Concerned, Turnover and Ancillary Restraints in Mergers and Acquisitions (2011);

- Guidelines on Remedies that are Acceptable by the TCA in Merger/Acquisition Transactions (2011);
- Guidelines on Leniency Process (2013);
- Guidelines on Horizontal Cooperation Agreements (2013);
- Guidelines on Horizontal Mergers (2013);
- Guidelines on Non-Horizontal Mergers (2013);
- Guidelines on the concept of 'Control' (2013);
- Guidelines on the General Principles of Exemption (2013);
- Guidelines on the Assessment of Exclusionary Abusive Conduct by Dominant Undertakings (2014).[71]

Among the Guidelines, the one on “Vertical Agreements” was adopted by Turkish Competition Authority Board in 2009 and its purpose was stated as to clarify the points that will be taken into consideration by the Board both in the application of the Vertical Agreements Communiqué No 2002/2, and in the assessments to be made within the framework of Article 5 of the Competition Act concerning those vertical agreements which are not covered by the Communiqué so as to minimize any uncertainties that may arise in the interpretation of the Communiqué, as well as of article 5 of the Act. The Turkish Competition Authority Board brought some changes to the Guideline in 2015 as a way to clarify how the Board will treat the start and end date of non-competition clauses in vertical agreements between gas stations and oil distributors (OECD, 2016a).

Apart from the Guidelines, the Turkish Competition Authority is also keen on continuing to publish the so-called communiqués with a view to enhance the regulation and advocacy of competition. The following Communiqués can be cited to illustrate the work that has been undertaken although there are many others that are available for consultation on the TCA’s website:[72]

- Communiqué on the Increase of the Lower Threshold for Administrative Fines Specified In Paragraph 1, Article 16 of the Act No 4054 on the Protection of Competition (Communiqué No 2016/1);
- Communiqué Concerning the Increase of the Minimum Administrative Fines Specified in Paragraph 1 of Article 16 of the Act No 4054 on the Protection of Competition, To Be Valid Until 31 December 2015 (Communiqué No 2015/1);
- Block Exemption Communiqué on Specialization Agreements (2013);
- Communiqué on The Procedures and Principles to be Pursued in Pre-Notifications and Authorization Applications to be Filed with the Competition Authority in Order for Acquisitions via Privatization to Become Legally Valid (2013);
- Communiqué on the Application Procedure for Infringements of Competition which provides a list of information required from complainants and aims to avoid the misuse of complaint rights by undertakings or consumers (2012).

The Regulation for Leniency and the Regulation on Fines were introduced in February 2009 whereby undertakings and individuals that were found to have taken part in a cartel can settle their case by acknowledging their involvement in the cartel and their participation in the enquiry (Turkish Competition Authority, n.d.).

Most of the cases involving infringement of competition and investigated by the TCA are being examined on the basis of Article 4 on anti-competitive agreements and Article 6 on abuse of dominant position of the Law on Protection of Competition. Apart from its work related to anti-trust, a major part of the TCA's activity relates to merger investigations. Having said this, the Authority in most of the cases clears the applications related to mergers and acquisitions.

As it stands, the Commission opined in its last Progress Report for Turkey that the level of alignment with the *acquis* is advanced in the field of anti-trust and mergers.

[71] Available at http://www.rekabet.gov.tr/en-US/Guide-List.
[72] http://www.rekabet.gov.tr/en-US/Communique-List/Communiqu-List.

Nevertheless, it is very important that the Turkish Competition Authority maintains a considerable level of administrative and operational independence and this point is clearly spelled out in the Commission's Progress Report (European Commission, 2015d: 40).

7.1.7 Rules on State Aid

Turkey is bound to regulate state aids on the basis of the EU norms as foreseen by Decision No 1/95, and its regulations are also informed and guided by the WTO rules on the Agreement on Subsidies and Countervailing Measures. In line with Decision No 1/95 (in particular its Article 44), Turkey undertook to harmonize its legislation on competition law and state aid with the EU's legislation in accordance with its duties arising from the CU and the negotiations for full accession to the EU.

The deepening and enhancement of the CU will require Turkey to adapt and practice a state aid regime in accordance with the EU *acquis*. Turkey has already committed to comply with this obligation under Decision No 1/95 and with its National Programme. It should be noted that the concept of state aid, in EU terminology, goes beyond Turkey's existing investment promotion scheme and pertains to many different actors and areas of implementation. By way of example, a decision of the Banking Regulation and Supervision Agency on the utilization of the Savings Deposits Insurance Fund, a Central Bank's decision to provide liquidity to a bank, a local government allocating realty or privatizing parking management, a Treasury decision guaranteeing select private sector projects, a Council of Ministers decision for preferential taxation regulations targeting specific industries, a Ministry of Finance decision allowing for the postponing of the payment of tax arrears to select industries or companies are subject to a possible analysis under the state aid disciplines.

Compliance with rules on state aid (e.g., see Art. 39 of Decision No 1/95) and notification requirements are mandated under the BPTF. However, it is to be noted that no Law is effectively in force in Turkey, and it is therefore likely that the notification requirement has not been observed either. The 2015 Progress Report states in this respect that:

> "The entry into force of legislation implementing the state aid law was again postponed, until 31 December 2015, delaying the requirement to notify state aid schemes and measures. A comprehensive state aid inventory is yet to be set up and an action plan for aligning all state aid schemes with the *acquis* is yet to be adopted. The 2012 decree on the incentives package was amended twice, extending its scope to sectors such as chemicals, mining and technology-intensive products; it now also grants additional tax incentives for large-scale, regional or strategic projects. A number of aid schemes continue to breach Turkey's obligations under the Customs Union" (European Commission, 2015d: 41)

As stated above, although Turkey has aligned most of its legislation with EU competition law disciplines through the adoption of Law No 4054 on the Protection of Competition, a state aid monitoring mechanism has not been materialized for quite some time. Law No 6015 on the Monitoring and Control of State Aid ("Law No 6015") entered into force following its publication in the Official Gazette on 13 October 2010, however the entry into force of the secondary legislation was regularly postponed to date. The Law No 6015 initially foresaw the creation of a Board for the Monitoring and Supervision of State Aids under the Undersecretariat of the Treasury of Turkey. The Board is authorized to provide clearance to state aid schemes and individual aid grants, as well as to recover unlawfully granted aid. However, the law is yet to be operational since the entry into force the regulations on notification and monitoring of state aid is extended to 31 December 2016 by the Resolution of Council of Ministers, delaying the requirement to notify state aid schemes and measures. By doing so, the Council of Ministers delayed the entry into force of the legislation for the fourth time.

As it stands, Turkey provides considerable incentives or support to encourage investment both for exporters and SMEs through some eleven state aid schemes covering a number of fields. As a part of its commitments within the context of competition policy, Turkey's efforts in disciplining state aid will be geared towards regulating general conditions; recovery; rules of permission, monitoring, and implementation of state aids.

The Commission's 2015 Progress Report states among others that a comprehensive state aid inventory is yet to be set up, and an action plan for aligning all state aid schemes with the acquis is yet to be adopted since a number of aid schemes may already be in breach of Turkey's obligations under the CU (European Commission, 2015d: 41).

In terms of institutional structure for disciplining the state aids, there is no sole Ministry at present to be held responsible to oversee incentives and subsidies. As it stands, each Ministry lays down its own work programme deriving from their mandate. Accordingly, the Ministry of Food, Agriculture and Livestock is overseeing agricultural subsidies, the Ministry of Economy has the authority to handle investment incentives and export support, KOSGEB deals with SME support, and the Ministry of Science, Industry and Technology is responsible for aid pertaining to R&D (WTO, TPR Body, 2016a: 3.155).

According to Law No 6015, state aid is defined as "any aid providing a financial benefit to its beneficiary granted by the State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, in so far as it affects trade between European Union and Turkey." This definition, being parallel with the one that is laid down in Article 107 of the Treaty on the Functioning of the European Union ("TFEU"), requires the measure to have five features to be state aid: the measure must be granted by the State or through State resources; the measure must grant an advantage to the beneficiary or beneficiaries, the advantage must be on a selective basis, the measure must distort or threaten to distort competition, and the measure must be likely to affect trade between the EU and Turkey (affect trade between Member States, according to the EU legislation).

In accordance with the EU institutions' interpretation, the aid granted by the State or through State resources does not need to take the form of monetary aid. As such, state aid not only includes the aid actively granted by the State or through State resources, but it also pertains to the removal of financial obligation from undertakings which they normally should have assumed, which in the end tantamount a decrease in State revenues. Moreover, the aid granted by the State or through state resources, should also represent itself to be an advantage for the beneficiary when compared to its competitors in the market. Last but not least, the advantage should be transferred on a selective basis which makes the case that unless it is being granted on a selective basis, there will be no claim of breach in accordance with Art. 3/4 of Law No 6015. In case of doubt, Art. 35 of Decision No 1/95 requires that any practices contrary to state aid rules will be assessed on the basis of criteria arising from the application of the European Union's legislation. Accordingly, while applying the rules, the state aid practice of the Commission should be taken into account.

In terms of exemptions and illegal aid, both Art. 107 of the TFEU, and Art. 3 of Law No 6015 provides that the aid be compatible, or may be considered compatible, with state aid legislation. Consequently and similarly to the EU disciplines, aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned, and aid to make good damages caused by natural disasters or exceptional occurrences, shall be deemed to be compatible for the purposes of Law No 6015.

As for the aid to promote the economic development of areas where the standard of living is abnormally low as compared to the EU, or where there is serious underemployment; aid aiming to accomplish structural adjustments between Turkey and the EU; aid to facilitate the development of certain economic activities or of certain economic areas; aid to promote culture and heritage conservation; aid to promote the execution of an important project of common interest of Turkey and the European Union, or to remedy a serious disturbance in the economy of Turkey, and such other categories of aid as may be specified by the Association Council can be subject to consideration for compatibility for the purposes of Law No 6015.

In accordance with Art. 3/3, the Regulation may provide for the possibility of block exemption for certain types of state aid, or may find the state aid granted to an enterprise for a certain period up to a certain limit to be compatible with law, as long as it does not significantly distort the competition. In this case, the exemption will enable those who are concerned to set aside their duty to notify the aid scheme to the State Aid Monitoring and Supervision Board.

State aid that cannot be included within the scope of the exemptions will be deemed to be illegal, and consequently such aid will need to be recovered with its accrued interest if it is already granted to the enterprise. Art. 10 of Law No 6015 lays down the principles regarding the recovery of the illegal state aid whereby the illegal aid must be recovered in ten years as of the date of receipt of the aid by the beneficiary in accordance with Art. 11.

Apart from the delays that occur in relation to the implementation of the secondary regulation on the monitoring of state aid, Law No 6015, is also subject to criticism, in particular as far as the creation of an independent authority, agency that would be authorized to oversee state aid rules is concerned. Art. 4 of Law No 6015 confers the right and obligation to monitor the state aid to the State Aid Monitoring and Supervision Board rather than the independent Competition Authority. In comparison with the Competition Authority, the projected State Aid Monitoring and Supervision Board enjoys more limited guarantees in terms of administrative and financial independence, and does not possess legal personality. As a matter of fact, the opinion that emerged among the stakeholders through the consultation period for adoption of Law No 6015, pointed out that the monitoring of the state aid granted by the State should not be conferred to a governmental body, in particular considering that there currently is a well-functioning and fairly independent Competition Authority that enjoys the required expertise for monitoring state aid. Despite this sound criticism, no amendment or change has been brought to the existing scheme. To point out this shortcoming, the business circles opine that the compatibility of Turkish state aid monitoring structure with the European Union law may well raise certain concerns (Açikalin, 2010: 3-4). The consultation process leading to the preparation of the Law revealed that the Turkish business circles are clearly in favour of a state aid regime that would allow the effective monitoring of state aids and that the enforcement of the relevant disciplines are rather important. As a matter of fact, most consider that a proper enactment to be brought in the field would bring a sound complementarity within the holistic structure of the Competition Law that is in force since 1994. In other words, the way the Competition Act prohibits the anti- competitive practices of companies, the State Aid Law should prohibit the anti-competitive behaviour of the state and its agencies. Consequently, competition rule can successfully be consolidated and thus the state can genuinely create the working environment for free and fair competition since the new regime would be strengthened by transparency to be established market players and the state. As such, the state authority mandated to monitor state aids cannot create a politically motivated, unfair competitive advantage neither for public companies nor for private companies.

Another point of criticism relates to the scope of application of Law No 6015 since it does not include aid in agriculture, fisheries, and services sectors and which was again expressed as a major shortcoming during the consultations, and the stakeholders had suggested that the carve out, if any, should be limited to the scope to agriculture, fishery and livestock sectors (Açikalin, 2010: 1).

By way of conclusion, it needs to be stated that although Law No 6015 that was adopted in October 2010 is seen to be generally in conformity with the European Union state aid legislation, the regulation for implementation of the monitoring and control process has not yet entered into force. Moreover, the 2015 Progress Report opines that certain aid granted by Turkey does not comply with the European Union legislation, and Turkey, once again, postponed the entry into force of secondary regulation. As it stands, the regulation implementing the requirement to notify state aid schemes and measures will enter into force on 31 December 2016 and the Commission's practice is expected to be taken into account in the implementation phase. Moreover, the State Aid Authority is yet to formally lay down a comprehensive state aid inventory or adopt an action plan to align all state aid schemes with the *acquis* (European Commission, 2015d: 32).

7.1.8 Special Rights of Public Undertakings and State Monopolies

The Turkish Decree Law No 233 on State-Owned Enterprises (SOEs), which is the basic legal framework on SOEs in Turkey, is a regulation dating back to 1984 which pertains to the formation of state-owned enterprises and their subsidiaries and lays down their economic needs and productivity, as well as specific provisions granted to them.

The leading role that SOEs play in the Turkish economy has remained constant for quite some time, in particular as far as the capital-intensive sectors are concerned. During the mid-1980s, there were 48 enterprises that were considered and treated within the framework of the Decree Law No 233. The share of those SOEs on the basis of their gross sales revenue within the overall GDP was over 20%. Following the extensive privatization efforts and works that Turkey undertook since 1980s, some 18 SOEs and three affiliated partnerships remain within the framework of the Decree Law. Moreover, six actively operating enterprises with a more than 50% public share are placed within the privatization portfolio of the Turkish Government. The data available by the Turkish Government illustrate that, despite the privatization strategy, SOEs still have a major impact on Turkish economy.

By the end of October 2015, there were a total of 36 majority-owned companies in the Treasury and Privatization portfolio. The largest SOEs were companies operating in industry, in particular mining, energy, and transport.[73]

In terms of work to be undertaken for transparency and accountability, a Communiqué was issued in 2009 regarding the notification, reporting and monitoring of SOEs. In line with this trend, the 2015 Annual General Investment and Financing Programme foresaw that SOEs are required to establish an internal control system by the end of 2016. Moreover, the Cabinet Decree enacted based on the Turkish Commercial Code lays down the requirement for SOEs to be subject to review by an independent external audit as of 2015.

The administrative unit that is responsible for overseeing the SOEs is the DG of SOEs that is attached to the Undersecretariat of the Treasury. The Directorate General is mandated to exercise ownership functions on behalf of the state, tmonitor that their activities are in accordance with laws and regulations, contribute to policy development for SOEs, and provide for the efficient functioning of SOEs (Republic of Turkey, Undersecretariat of Treasury, n.d.a). Turkish SOEs are required to report annually to the DG of SOEs (WTO, TPR Body, 2016a: 3.178-80). In Turkey, the role of the Undersecretariat of Treasury has been enhanced in terms of both its duty to collect information from SOEs and also prepare a yearly aggregate SOE sector report deriving from the Council of Ministers' Decree of 2007 and a Communiqué of 2009. As such the Treasury has already been preparing aggregate reports for the last couple of years, however, following the recent amendments, the scope of the Treasury's reporting has been extended as to cover the companies owned and run by municipalities, as well as the SOEs that are subject to special legal frameworks (OECD, 2011).

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[73] For a list of the enterprises listed in the portfolio, see Republic of Turkey, Prime Ministry Privatization Administration (2016).

By way of example, we will be citing two sectors as to illustrate the nature of the state's involvement in markets: Railway and petroleum and gas sectors. Turkish railway sector has long been run by the monopoly of Turkish State Railways, which is a state owned institution. The Government eventually decided to liberalize this railway sector as to promote a competitive market and achieve a considerable level of harmonization with the EU legislation. Accordingly since 2003, Turkish railway sector and the rules regulating the field have been subject to a significant transition.

The Law on the Liberalization of Railway Transportation in Turkey No 6461 (Law No 6461) was enacted and entered into force on 1 May 2013, which provided for the liberalization of the railway transportation market. The Law was subsequently followed by secondary legislation and only one of them so far has been enacted. Accordingly, the Regulation on Access to Railway Infrastructure and Capacity Allocation ("Regulation") was published in the Official Gazette No 29343 on 2 May 2015 and entered into force on the same day.

Law No 6461 provided the public entities and private companies registered with the trade registry with the possibility to run businesses as railway operator and also enabled them to enjoy the authority to build and have access to the railway infrastructure. As for the capacity allocation and pricing issues, they were not regulated by Law No 6461 and were clearly left to be dealt with by the secondary legislation. Consequently, the above-mentioned issues and the procedures and principles to be applied to them were laid down in 2015 Regulation as prepared by the Ministry of Transport, Maritime Affairs and Communications.

As laid down in the Regulation, the railway infrastructure and railway operation services markets are considered to have a characteristic of a regulated market in terms of competition law, such as energy, fuel oil, and telecommunication markets. In fact, this approach seems to be in line with the EU competition disciplines related to network enterprises, which include railway sector among others where the infrastructure is understood to be a key factor.

Although the Regulation entered into force on its date of publication, 2 May 2015, its Provisional Article 1 stipulates that the Turkish State Railways Directorate General will be able to make the network notifications for 2015 and 2016 without necessarily respecting the time limits stated under the Regulation into consideration.

As such, even though the enactment of the Regulation is a welcome development, considering in particular the fact that it marks the initial secondary legislation in the field that is geared towards the liberalization of the relevant market, there certainly is room for improvement to the extent it relates to the qualification of the sufficiency of railway operator companies, regulation of the insurance and registration matters.

Another sector that is of particular importance and thus interest in the Turkish market relates to petroleum and natural gas. As it stands, natural resources related to petroleum in Turkey belong to and come under the disposal of the Turkish State. The subject matter of the Turkish Petroleum Law No 6491 is crude oil and natural gas. Although the owner of the petroleum and natural gas is the State, companies may be granted utilization rights through licences that are provided for a certain period of time. In this context, the license holders that enjoy the right to explore and exploit come under the duty to pay the State a one-eighth share as far as the petroleum procured from an exploration area or an exploitation area are concerned.

In this very sector, the state authority that is responsible is the Ministry of Energy and Natural Resources (MENR), which also oversees the determination and implementation of appropriate energy policies. As such, the Ministry's operations and responsibilities are governed by the Law Regarding Organisation and Functions of Ministry of Energy and Natural Resources, No 3154 ("Law No 3154"). Within the Ministry, the core unit that is mandated with the task of regulating the upstream and downstream petroleum activities, including the transit passage of hydrocarbons, is the General Directorate of Petroleum Affairs (GDPA), which among others, is authorized to issue and monitor permits and licences related to the exploration for, and the operation, production and exploitation of petroleum. This sector is also subject to regulatory supervision whereby the Energy Market Regulatory Authority (EMRA), governed by the Law Regarding Organisation and Functions of Energy Market Regulatory Authority, No 4628, acts as an agency to regulate and monitor energy market activities, grants licences to conduct market activities. Accordingly, EMRA is mandated with the authority to impose administrative fines and cancel licences where parties may fail to comply with the relevant rules and legislations, is the governing legislation for the EMRA's organisation, authority and responsibilities.

Within this heavily regulated field, the Turkish Petroleum Corporation (Türkiye Petrolleri Anonim Ortaklığı, TPAO), governed by the Statutory Decree Regarding State Economic Enterprises, No 233, is a major SOE that acts as both the national oil company and the main exploration and production entity in Turkey. It enjoys the rights and duties of importing and exporting crude oil, natural gas, petroleum products, and is mandated with the task of organising the public petroleum sector, and the distribution and marketing of petroleum as defined under the Petroleum Market Law, No 5015.

Owing to the recent changes brought to Turkey's energy regulation where investment is encouraged, TPAO no longer enjoys the exclusivity in exploring and exploiting the petroleum. In other words, private companies and entities are now enabled to acquire permits and licenses with a view to explore and exploit petroleum. Similarly, foreign entities have been entitled to have access to upstream activities.[74]

The existing scheme provides for some special rights attributed to national companies, as well as some local content requirements. The areas that are subject to exploitation areas where licenses have expired can no longer automatically handed over to the TPAO, even though TPAO enjoys special and exclusive rights in relation to exploitation license auctions. According to the Turkish Petroleum Law, the right to submit requests to undertake upstream activities can be enjoyed by both foreign and Turkish companies. Having said this, the applicants will not be granted investigation permits or exploration and exploitation licenses if they do not have and thus notify an address in Turkey. Consequently, foreign entities are obliged to either establish a branch or incorporate a company in Turkey. Moreover, the Turkish Petroleum Law provides for a special provision concerning the employment of foreign staff. Accordingly, petroleum right holders may, following an approval granted by the MENR, employ foreign staff for a period up to six months only without being subject to the provisions of the Law on Work Permits of the Foreigners, No 4817. In case the projected working period is foreseen for a period exceeding six months, then the Law on Work Permits for Foreigners will be applicable.

Another major and crucial SOE is the Turkish Petroleum Pipeline Corporation (Boru Hatlariyla Petrol Tasima Anonim Sirketi) (the "BOTAS"), governed by the Statutory Decree Regarding State Economic Enterprises, No 233, which is mandated with the task of constructing and operating oil and gas pipelines, transferring or leasing of petroleum, petroleum products and natural gas pipelines, transportation, purchase and sale of petroleum, petroleum products and natural gas. As such, BOTAS does not enjoy any authority to regulate the market and only undertakes activities that are subject to the governing provisions of the Natural Gas Market Law, No 4646.

Similarly and in relation to natural gas sector, the Natural Gas Market Law provides that BOTAS, which is effectively a monopoly and currently the only transmission licensee, owns the existing in-construction or planned national transmission networks. In case new pipelines will be constructed by transmission companies leading to form a connected system including the existing lines for the purpose of transmission, they may be operated by other investing transmission companies in case the constructing

74 The Turkish Petroleum Law provides for two major types of licences (an exploration licence and an exploitation licence) and a permit for upstream activities (a survey permit).

transmission company is the owner. As such, BOTAS is missioned to operate the transmission network and thus manages and handles the co-ordination of the access of third parties to the network. BOTAS enjoyed a substantial monopoly for a long time in Turkey and therefore no other party than BOTAS would be allowed to have access to its transmission network. However, since a couple of years now, the EMRA started issuing transmission licenses for the transportation of natural gas through pipelines, with the exclusion of gathering lines used for generation purposes and the distribution network. Within the sense of special and exclusive rights that are provided to national companies, BOTAS effectively handles the operation of the transmission network, and management and co-ordination of third parties' access to the network. As such, the existing and planned national transmission networks come under the ownership of BOTAS. Furthermore, although natural gas-related receivables enjoyed by BOTAS are subject to the Law on Collection of Public Receivables, No 6183, the same possibility is not provided for private legal entities in the absence of any pertinent regulation. Moreover, the existing regulation which brings along a limitation to import volumes by stating that no new gas purchase agreements may be executed by, or between, any import companies, or the countries which already have executed agreements with BOTAS, until such time as these agreements expire, effectively prevents competition in favour of BOTAS.

To sum up, it remains an important priority that the existing SOEs operate in line with the principles of efficiency and productivity in order not to cause a burden to market nor to the public. Accordingly, these enterprises need to operate in accordance with the universally recognized principles and also mindful of corporate governance rules. On the basis of the EU's *acquis* in the field, there is major room for improvement to be undertaken for SOE disciplines in Turkey as to enable the system to adapt to the increasing local, regional and global scale of competitiveness through the respect of basic principles of transparency, accountability, and responsibility.

Table 7.4: List of majority-owned state enterprises in the Treasury and Privatization Portfolio as of 31 October 2015 (WTO, TPR Body, 2016a)

Enterprise	Sector	% Public ownership
A. Treasury portfolio		
1. State-owned enterprises		
State economic enterprises		
MKEK (Makina ve Kimya Endüstrisi Kurumu) (Machinery and Chemical Industries)	Manufacturing	100%
DMO (Devlet Malzeme Ofisi Genel Müdürlüğü) (State Supply Office)	Manufacturing	100%
TTK (Türkiye Taşkömürü Kurumu) (Turkish Hard Coal Enterprise)	Mining	100%
TKI (Türkiye Kömür İşletmeleri Kurumu Genel Müdürlüğü) (Turkish Coal Enterprises)	Mining	100%
Eti Maden İşletmeleri Genel Müdürlüğü (Directorate General of Eti Mine Works)	Mining	100%
EUAS (Elektrik Üretim Anonim Şirketi) (Electricity Generation Company)	Energy	100%
TEIAS (Türkiye Elektrik İletim A.Ş.) (Turkish Electricity Transmission Company)	Energy	100%
TETAS (Türkiye Elektrik Ticaret ve Taahhüt A.Ş.) (Turkish Electricity Trading and Contracting Company)	Energy	100%
BOTAS (Boru Hatları ile Petrol Taşıma A.Ş.) (Petroleum Pipeline Corporation)	Oil and natural gas	100%
TPAO (Türkiye Petrolleri Anonim Ortaklığı) (Turkish Petroleum Corporation)	Oil and natural gas	100%
TMO (Toprak Mahsülleri Ofisi) (Turkish Grain Board)	Agriculture and livestock	100%
CAYKUR (Çay İşletmeleri Genel Müdürlüğü) (Directorate General of Tea Enterprises)	Agriculture and livestock	100%
TIGEM (Tarım İşletmeleri Genel Müdürlüğü) (Directorate General of Agricultural Enterprises)	Agriculture and livestock	100%
ESK (Et ve Süt Kurumu Genel Müdürlüğü) Meat and Milk Board	Agriculture and livestock	100%
TCDD (T.C. Devlet Demiryolları İşletmesi Genel Müdürlüğü) (Turkish State Railways)	Transport	100%
Public economic institutions		
DHMI (Devlet Hava Meydanları İşletmesi Genel Müdürlüğü)	Transport	100%

Enterprise	Sector	% Public ownership
(Directorate General of State Airports Authority)		
KEGM (Kıyı Emniyeti Genel Müdürlüğü) (Directorate General of Coastal Safety)	Transport	100%
2. Majority public-owned banks having a special law		
T.C. Ziraat Bankası A.Ş. (Ziraat Bank)	Banking	100%
Eximbank (Türkiye İhracat Kredi Bankası A.Ş.) (Export Credit Bank of Turkey)	Banking	100%
T. Kalkınma Bankası A.Ş. (Development Bank of Turkey)	Banking	99.08%
Tasfiye Halinde T. Emlak Bankası A.Ş.	Banking	99.99%
Türkiye Cumhuriyet Merkez Bankası (Central Bank of the Republic of Turkey)	Banking	55.12%
3. Other enterprises having a special law		
TURKSAT (TÜRKSAT Uydu Haberleşme Kablo TV ve İşletme A.Ş.) (Turkish Satellite Communication and Cable Operation)	Telecommunications	100%
TRT (Türkiye Radyo-Televizyon Kurumu) (Turkey Radio-Television Corporation)	Broadcasting	100%
AOC (Atatürk Orman Çiftliği Müdürlüğü) (Ataturk Forest Farm)	Food production	100%
PTT (Posta ve Telgraf Teşkilatı A.Ş.) (Post and Telegraph Organization)	Post and telecommunications	100%
B. Privatization Portfolio		
Corporations within the context and programme of privatization		
T. Halk Bankası A.Ş. (Halkbank)	Banking	51.11%
Sumer Holding (Textiles)	Manufacturing	100%
Doğusan Boru Sanayii ve Ticaret A.Ş. (Pipe Industry and Trade)	Manufacturing	56.09%
KBI (Tasfiye Halinde Karadeniz Bakır İşletmeleri A.Ş.) (Copper Industries)	Mining	99.99%
TEMSAN (Türkiye Elektromekanik Sanayi A.Ş.) (Turkey Electro-Mechanical Industry Directorate)	Manufacturing	100%
TEDAS (Türkiye Elektrik Dağıtım A.Ş.) (Turkey Electrical Distribution)	Energy	100%
ADUAS (Ankara Doğal Elektrik Üretim ve Ticaret A.Ş.) (Ankara Electric Enterprises)	Energy	100%
tta Gayrimenkul A.Ş. Genel Müdürlüğü (tta Real Estate Inc.)	Agriculture	100%
TSFAS (Türkiye Şeker Fabrikaları A.Ş.) (Turkey Sugar Factories Inc.)	Agriculture	100%
TDI (Türkiye Denizcilik İşletmeleri A.Ş.) (Turkey Shipping Enterprises)	Transport	100%

Source: Republic of Turkey, Undersecretariat of Treasury (n.d.b) and information provided by the authorities.

7.1.9 Use of Trade Defence Instruments

TDIs are addressed Articles 44-47 of Decision No 1/95. These provisions do not establish a requirement for Turkey or the EU to harmonise trade defence regulations, but they:

- Provide that the procedures for the application of anti-dumping measures affecting the other party established in Article 47 of the Additional Protocol of 1970 remain in force. These provide for a different treatment than under the WTO Anti-Dumping Agreement – they require that the Party affected by dumping shall first address recommendations at the entity that is dumping and accord an important role to the Council of Association (Art. 44);
- Exclude TDIs from the dispute settlement provisions (Art. 45);
- Foresee a coordinated approach for the application of TDIs targeting third countries (Art. 45);
- Foresee the exemption of goods on which one Party has imposed TDIs from the free movement of goods (Art. 46); and
- Establish additional rights and requirements regarding the proof of origin for goods covered by TDIs to prevent circumvention of such measures (Art. 47).

Turkey has been a heavy user of TDIs during the BPTF period, including against the EU, with 11 measures in force, about half of which for a long time (Table 7.5); conversely, the EU currently has two measures in force against Turkey (Table 7.6). The EU is particularly concerned about Turkey's "practice of systematic extensions of safeguard measures for the maximum duration of 8 years […], because the situation of the Turkish domestic industries concerned has significantly improved. Therefore the repeated prolongation of the measures does not seem to be warranted" (European Commission, 2015b: 4f). In addition, Turkey has imposed additional duties and implemented measures on imports, such as surveillance, which may be in breach of the CU obligations.

Table 7.5: Definitive trade defence measures taken by Turkey against EU exporters, in force as of 30 April 2016

Product	Instrument	Initiation	Definitive measure	Countries investigated
Wall paper	Safeguard	12.12.2014	06.08.2015	European Union
Laminated flooring	Anti-Dumping	18.12.2013	13.06.2015	Germany
Trephtalic Acid	Safeguard	08.01.2013	15.08.2014	European Union
Float glass colourless	Anti-Dumping	27.11.2012	17.11.2013	Romania
Water heaters	Anti-Dumping	20.03.2012	19.09.2013	Italy
Bags	Safeguard	05.06.2006	07.03.2008	European Union
Fittings	Anti-Dumping	28.04.2006	07.09.2006	Not applicable
PET	Safeguard	11.03.2006	07.11.2011	European Union
Dioctyl phthalate	Anti-Dumping	19.02.2006	29.11.2011	Romania
Frames & mountings	Safeguard	11.02.2006	05.03.2008	European Union
PVC	Anti-Dumping	02.11.2001	06.02.2003	Greece, Belgium, Germany, Hungary, Italy, Netherlands, Romania

Source: European Commission (2016a).

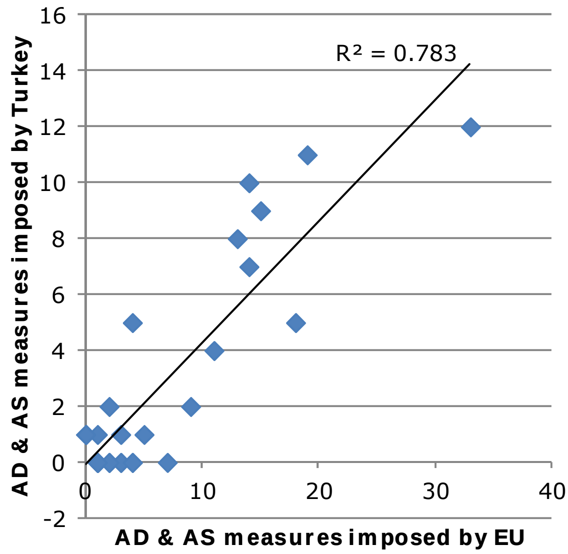
Table 7.6: Definitive trade defence measures taken by the EU against Turkey, in force as of 30 April 2016

Product	Instrument	Initiation	Definitive measure	Level of measure
Trout (certain rainbow)	Anti-Subsidy	15.02.2014	27.02.2015	6.7%-9.5%
Tube and pipe fittings of iron or steel (certain)	Anti-Dumping	01.11.2011	29.01.2013	2.9%-16.7%

Source: European Commission (2016c).

Regarding the use of TDI against third countries, coordination during investigations does not take place, and the World Bank (2014) found that indeed no coordinated approach is visible. This is true with regard to the use of instruments which is not aligned – Turkey mostly applies safeguards, which the EU does not apply at all, whereas Turkey has so far never imposed any anti-subsidy measure, which the EU regularly uses. Nevertheless regarding the countries targeted by measures, a similar pattern emerges, whereby countries against which the EU has imposed a high number of measures also tend to be targeted by Turkey. Even leaving out China, the coefficient of determination (R^2) is 0.783, which indicates a 78% correlation between the EU's and Turkey's measures in terms of export countries affected.[75]

Figure 7.1: Correlation of countries targeted by EU and Turkish TDI (definitive measures imposed 1995-2014)



Source: Calculations by the study team based on WTO data.

[75] If China is included, the coefficient of determination increases to 0.946.

Nevertheless, this high level of correlation is not necessarily indicative of a coordinated approach: indeed, it is mostly based on the fact that both the EU and Turkey have imposed a relatively high number of measures against some – mostly Asian – countries (in addition to China), i.e., India, Thailand, Russia, Indonesia, Taiwan, Korea, and Malaysia, whereas for many other countries targeted there is no match between EU and Turkish practice. In addition, the measure used for establishing "alignment" (matching the overall geographical pattern over a 20 year period) is quite imprecise as it neither considers the time when the measure where imposed nor the products covered.

Given that no active coordination takes place during investigations, it can therefore be concluded that the level of harmonisation of TDI against third countries is low.

7.1.10 Government Procurement

Trends in government procurement under the BPTF are analysed in quantitative terms in Section 2.4.3 above. This section reviews the legal and institutional structure of the public procurement regime in Turkey and considers performance under the BPTF in that light, including remaining challenges.

Decision No 1/95 requires mutual opening of the respective government procurement markets by the EU and Turkey. Thus, it becomes one of the areas where approximation of laws is vital. Within this framework, steps must be taken by the parties to provide legal certainty of market access for operators.

Moreover, public procurement is one of the chapters in Turkey's accession negotiations, where Turkey has a legal obligation to align its regime to the EU legislation. The benchmarks for the chapter are as follows:

- Giving an organisation for procurement the task of guaranteeing a coherent policy and steering its implementation;
- Presenting a comprehensive strategy which will include all reforms necessary for legislative alignment and institutional capacity building in order to comply with the *acquis*; and
- Implementing the public procurement strategy.

The screening process was finalised in 2005, but opening of the chapter was not possible since the criteria had not been fulfilled by Turkey.

The regulation of public procurement in Turkey is mainly governed by Public Procurement Law, Law No 4734 (PPL) and Public Procurement Contracts Law, Law No 4735 (PPCL), both adopted in 2002.

The principles and procedures to be applied in any procurement held by public authorities and institutions under the public law were established by the PPL. A wide spectrum of public agencies is subject to the general public procurement regime in Turkey. These include all public and private institutions within the scope of ministries covered by the general budget; administrative bodies with special budgets; special provisional administrations; municipalities and their revolving funds; certain legal entities; state economic enterprises; and social security establishments. Overall, procurement undertaken by authorities at the central and local (sub-central) level is covered by the regime.

The Public Procurement Authority (PPA) is the main body responsible for implementing the PPL, regulatory and operational activities, reviewing appeals, and monitoring the system, while the Ministry of Finance coordinates the formulation of policies.

The fact that the Public Procurement Board, which is in charge of the review of appeals, is located within the PPA creates a potential conflict of interest as both the advisory and review functions are within a single institution.

However, a comprehensive public procurement strategy is still incomplete. Such a strategy normally entails all reforms necessary in terms of legislative alignment and institutional capacity building in order to comply with the EU *acquis*. However, further steps need to be taken to harmonise Turkish legislation in line with the EU directives that were adopted in 2014.

The Turkish public procurement regime largely follows the principles embodied in the EU regime. It is based on the principles of competition, transparency and non-discrimination. Administrative capacity has been developed to implement procedures based on the principles of transparency and efficiency while competition is largely ensured. The Electronic Public Procurement Platform represents a key step for this purpose. Nevertheless, specific provisions and procedures in practice may constitute discrepancies with the EU regime. The following need to be considered as caveats:

Turkey’s public procurement legislation is one of the most frequently amended pieces of legislation in the country. The PPL has been subject to several amendments allegedly to make the system more harmonised with the EU legislation. However, a number of these changes have introduced challenges in terms of transparency in practice, while providing public authorities and policy makers with broader political and administrative discretionary powers. As revealed in the Turkey progress report by the European Commission in 2015, the amendments caused divergence rather than alignment with the EU acquis (European Commission, 2015e: 37).

On 6 February 2014, the Turkish Parliament enacted Law No 6518, known as the Omnibus Bill, which adjoined a provision to Article 3 of the PPL stipulating that purchase of goods and services provided to ensure innovation, local production and technology transfer under offset/industrial participation applications is not subject to the PPL. However, in implementation, it requires more detailed secondary legislation as the issue of civil offsets is a complex one.

A better alignment of Turkey with Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors is necessary.

Another challenge regards the treatment of “abnormally low tenders” with respect to Law No 6518. Before, the contracting authority was obliged to request explanation from the related tenderer. Following the amendment in 2014, the relevant authorities were also provided with the option to conclude the procurement procedure; or reject the tenderer without asking for an explanation. Thus, the authorities competence increased, but also their discretionary power.

Amendments also provided new exemptions for procurement of goods and services like programs, news etc. to Turkish Radio-Television Corporation (TRT); and procurement of goods, services and works realised in the scope of Turkey’s G-20 Presidency organisations. This proliferation in exemptions narrows the scope of the PPL, and may create discrepancies vis-a-vis the EU *acquis*.

The Turkish public procurement regime does not, in principle, restrict the participation of foreign undertakings in public procurement processes. In particular, it does not explicitly require foreign companies to set up branches/subsidiaries with local partners in order to participate in public tenders. However, the contracting authorities are allowed to include specific measures/provisions in tenders that may restrict the participation of foreign undertakings. Moreover, the PPL prevents foreign undertakings from participating in public construction works, if these projects are outside the scope of the Law.

A challenging issue for EU participation in Turkey’s procurement derives from the domestic price advantages that are provided for under Turkey’s regime. The authorities may apply a “price advantage” for domestic undertakings up to 15% in service procurements; and they can offer the preference up to 15%, if the domestic companies offer domestic products in the procurement of goods. A further restriction affecting participation by EU bidders is that domestic tenderers cannot gain the benefit of this advantage if they enter into procurement proceedings under joint ventures with foreign parties. Thus, it is a national preference scheme that provides a positive discrimination to domestic tenderers over their EU rivals. This application of the national preference scheme is not mandatory, but has practical effect. The amendments in 2014, also made its implementation compulsory for medium and high technology industrial goods, such as medical devices and pharmaceuticals (WTO, TPR Body, 2016a: 111). Sector-specific changes also gave the Ministry of Science, Industry and Technology the power to decide which products can be listed for compulsory application of price advantage favouring domestic undertakings.

The Turkish regulatory framework for public-private partnerships and concessions is very fragmented and there are no harmonised policies and procedures in place. New legislative improvements and amendments are needed in this field in order to be in full compliance with the EU public procurement system, especially with Directive 2014/23/EU on the award of concession contracts.

To date, Turkey has not made binding commitments in public procurement under any multilateral or bilateral agreement. However, it is currently an observer to the plurilateral Agreement on Government Procurement in the WTO and is expected to become a full member based on its earlier statements. Accordingly, there are prospects for Turkey taking concrete steps in the international arena to regulate its domestic government procurement market. This would provide legal certainty and help overcome the discretion in this field. The liberalisation in practice would also help Turkey’s domestic companies to operate and take part in dynamic markets in a competitive way and generate additional welfare gains for the Parties. Improved alignment with the EU public procurement *acquis* would also reduce discretion of public authorities and, with greater transparency, help address more effectively corrupt and fraudulent practices.

7.1.11 Taxation

The provisions of Decision No 1/95 concerning taxation issues entail different obligations regarding the approximation of laws. In the case of direct taxation, no harmonization requirement exists (Article 49). Conversely, the provision on indirect taxation (Article 50) brings obligations on the Parties banning any discriminatory use of internal taxation. Accordingly, Article 50(1) precludes either of the Parties to impose on the products of the other Party any internal taxation of any kind in excess of that provided directly or indirectly on similar domestic products. This provision covers extensively the case for *value-added tax* (VAT) and *excise duties*.

Turkey’s practices in value-added tax legislation, in accordance with the evaluation of the European Commission, do not fully comply with the EU *acquis* (European Commission, 2015e: 48f). In the area of excise duties, Turkey’s application of higher duties on tobacco products and alcoholic beverages constitute discriminatory practices, which need to be eliminated.

The taxation chapter in the accession negotiations was opened in 2009 upon Turkey’s concrete steps in eliminating discriminatory taxes and introduction of the Taxation Action Plan scheduling eradication of discriminatory taxation in alcoholic beverages and imported tobacco products. Accordingly, Turkey subsequently reduced the specific duty that finances the Tobacco Fund on imported and blended tobacco, in line with the Action Plan. This is a concrete and belated step by Turkey in the context of the CU as it conforms to the relevant provision of Decision No 1/95.

However, the current implementation is not in complete harmony with the requirements of the CU as far as both VAT and excise duties are concerned. A further alignment of VAT legislation is essential, especially in terms of its “structure, exemptions, special schemes and the scope of reduced rates”. Regarding excise duties, despite the reduced differences in taxation of imported and domestic alcoholic beverages and the alignment with respect to the level of taxes on cigarettes, full compliance is still pending.

Overall, the 2015 Progress Report (European Commission, 2015e) finds positive steps towards meeting the objectives set out in the Action Plan of 2009, whereas an across the board rise of excise duties in July 2015 increased the taxation differentials once again. Therefore, the EU observation that a "gradual elimination of discriminatory practices for further progress" is needed in the taxation chapter in the accession negotiations also constitutes a key element for the effective implementation of Article 50 of Decision No 1/95.

7.2 Commercial Policy Convergence

Article 16 of Decision No 1/95 stipulates that, "with a view to harmonising its commercial policy, Turkey shall align itself progressively with the preferential regime of the Community." This alignment has a geographical as well as a substantive dimension. Regarding the former, Turkey is expected to negotiate and sign FTAs with the same third countries that negotiate and sign FTAs with the EU, as well as apply the EU's unilateral preferential trade regimes vis-à-vis the same beneficiary countries. Regarding the latter, the content of Turkey's FTAs with third parties should also be aligned with those of the EU.

The issue of commercial policy convergence has substantially gained in importance during the BPTF period. Regional trade agreements have proliferated especially following the deadlock in Doha Round of multilateral trade negotiations. This trend became more visible with the Global Europe Strategy in 2006 (European Commission, 2006). Furthermore, the scope of the EU's trade agreements has substantially expanded from mere trade in goods to complex DCFTAs also including services and investment as well as numerous trade-related issues.

This section reviews the FTAs that Turkey has concluded since 1995 and assesses their coherence with Turkey's obligations under the CU. Specifically, it assesses:

- The extent to which Turkey's FTAs are aligned geographically with the EU's FTAs, i.e. whether FTA's have been concluded with the same trading partners, and whether the EU's unilateral preference regimes are applied by Turkey vis-à-vis the same beneficiary countries (Section 7.2.1);
- The extent of substantive alignment of Turkey's FTAs with those concluded by the EU, including in terms of tariffs and other provisions relevant to trade policy, as well as the degree of alignment of the Turkish unilateral preference schemes with the EU GSP system (Section 7.2.2); and
- Where the EU has concluded FTAs with third countries, which have not been followed on by corresponding FTAs between Turkey and the same third countries, the rationale for this gap in compliance, as well as the consequences of the asymmetric structure of FTAs for the CU and Turkey (7.2.3).

7.2.1 Geographical Alignment between Turkey's and EU FTAs with Third Countries

Full geographical alignment of Turkey's commercial policy with the EU would mean that Turkey and the EU have concluded, and are negotiating, FTAs with the exact same countries, and unilateral preference regimes are extended to the same beneficiary countries. This is not the case: both the EU and Turkey have FTAs with third countries with which the other CU partner has no agreement (Table 7.7). As of August 2016, the EU has 35 trade agreements in place (in addition to the BPTF),[76] almost half of which (16) are not also in place with Turkey. Conversely, Turkey has 18 FTAs in place,[77] one of which, with Malaysia is not also in place with the EU.

[76] Albania; Algeria; Andorra; Bosnia and Herzegovina; Cameroon; CARIFORUM States; Central America; Chile; Colombia and Peru; Côte d'Ivoire; Egypt; Faroe Islands; Georgia; Iceland; Israel; Jordan; Kazakhstan; Kosovo; Lebanon; FYRoM; Madagascar, Mauritius, Seychelles and Zimbabwe; Mexico; Moldova; Montenegro; Morocco; Norway; Palestinian Authority; Papua New Guinea and Fiji; San Marino; Serbia; South Africa; South Korea; Switzerland; Tunisia; and Ukraine.

[77] Albania; Bosnia and Herzegovina; Chile; EFTA (Iceland, Liechtenstein, Norway, Switzerland); Egypt; Georgia; Israel; Jordan; FYRoM; Malaysia; Mauritius; Montenegro; Morocco; Palestine; Serbia; South

Table 7.7: Asymmetric FTAs of the EU and Turkey

FTAs in force in the EU but not Turkey	FTAs in force in Turkey but not in the EU
• Algeria • Andorra • Cameroon • CARIFORUM • Central American Integration System (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama) • Colombia • Côte d'Ivoire • Faroe Islands • Fiji and Papua New Guinea • Kazakhstan • Kosovo • Madagascar, Seychelles, Zimbabwe • Mexico • San Marino • South Africa • Ukraine	• Malaysia

Source: Compiled by the Authors based on DG Trade (http://ec.europa.eu/trade/policy/countries-and-regions/agreements/), WTO RTA database, EU Progress Reports on Turkey, Ersoy (2013)

Turkey also recently concluded trade agreements with Faroe Islands, Ghana, Kosovo, Lebanon, Moldova, and Singapore[78] – the EU has trade agreements in place with all of these. Furthermore, negotiations are ongoing between Turkey and Peru, Ukraine, Cameroon, Chad, Colombia, the Democratic Republic of Congo, Ecuador, Japan, MERCOSUR, Mexico, and Seychelles[79] – all of these countries have concluded, or are negotiating, FTAs with the EU as well. Finally, Turkey has launched initiatives to start negotiations with Algeria, Canada, the Central American Countries, India, Indonesia, South Africa, Thailand, the United States, Vietnam, and various ACP countries, all of which, again, have agreements in place with the EU or are negotiating with the EU. However, many of these are either at the exploratory stage, or have not yet proceeded beyond early rounds of negotiations.

Overall, therefore, Turkey's efforts to conclude FTAs with third countries are fully aligned with the EU commercial policy in geographical terms. Generally, Turkey has been in the past and currently is involved in several FTA negotiations in an effort to conclude parallel track agreements to those of the EU in order to comply with the common commercial policy. The launch of FTA negotiations with a third country typically occurs following the European Commission's initiation of its own negotiations with that country.

The only case where Turkey has an agreement in place, but not the EU, is Malaysia. In this case, in line with its CU obligations Turkey entered into FTA negotiations after the EU had started its own FTA negotiations with Malaysia. However, Turkey's negotiations proceeded faster than the EU's. As a result, by implementing its FTA with Malaysia on 1 August 2015, Turkey is violating key provisions of the CU, in particular the principle of alignment to the EU customs tariff.

On the other hand, several countries with which the EU is negotiating or has concluded FTAs have shown limited interest to have a similar trade agreement with Turkey. Of these, Algeria, South Africa and the United States are prominent cases. Ultimately, the willingness of the trading partners is an essential condition for Turkey to fully align its commercial policy geographically with that of the EU.

As it stands, therefore, Turkey's alignment with the EU's FTAs can be deemed to be partly successful: the conclusion of parallel FTAs was possible in a number of countries

Korea; Syria (suspended); and Tunisia. An additional 11 agreements with CEECs were repealed due to the accession of these countries to the EU.

78 All of these, with the exception of Ghana, are under ratification.

79 Negotiations with the Gulf Cooperation Council have been suspended and with Libya stopped.

but did not occur in other instances where the approached country did not reciprocate the interest in entering into a similar FTA with Turkey. This has led to the "asymmetry problem", discussed in more detail in Section 7.2.3.

Within the framework of its commitments under the CU, Turkey is also expected to align itself with the autonomous customs regime of the EU. Turkey increasingly harmonized its GSP system with the EU system in 2002 and 2006 (UNCTAD 2007). Currently, Regulation (EU) No 978/2012 now forms the basis of Turkey's GSP scheme through which it offers unilateral preferences in parallel to those of the EU; the list of beneficiary countries is aligned with those in the EU GSP.

7.2.2 Substantive Alignment between Turkey's and EU FTAs with Third Countries

Turkey's commercial policy alignment obligation under the CU mainly refers to the alignment of Turkey to the EU's preferential "customs" regime as stipulated in Decision No 1/95, without necessarily referring to the nature and substance of the trade agreements. Turkey was expected to take necessary measures and negotiate agreements with the EU FTA partners "on a mutually advantageous basis" (Article 16(1)), not necessarily emulate the scope and substance of the EU's agreements.

Furthermore, over time the EU's FTAs have become deeper and more comprehensive (DCFTA) to cover areas that go beyond tariff issues and trade in goods. Decision No 1/95 does not create an obligation for Turkey to substantively align its trade agreements with third countries in areas that are not covered under the CU.

However, for a true alignment of commercial policy, a substantive calibration of trade agreements should be taken into consideration. In this sense, Turkey's FTAs with third countries should have similar arrangements to EU FTAs to prevent trade deflection under the CU. This is also important for Turkey's changing trading interests to become more competitive in global markets.

Overall, Turkey has not been as active as the EU to negotiate new areas like services, investments and regulatory convergence with its FTA partners. The majority of Turkey's FTAs concluded until recently typically cover trade in (industrial and agricultural) goods, are often restricted to tariff liberalisation and related issues, and do not include services nor investment chapters. However, both the changes in the EU's FTA policy and other countries' inclination towards deeper integrating and more ambitious commitments have had an influence on Turkey's own FTAs. Accordingly, Turkey has adopted a new FTA strategy which involves the negotiation and thus conclusion of new generation DCFTAs that go beyond simple tariff elimination and which cover not only services and investment but also contain chapters on SPS, TBT, IP, competition, trade remedies, or dispute settlement, introducing WTO+ provisions.

The FTA with South Korea is an important example of Turkey's new FTA policy. It consists of a "Framework Agreement" and several agreements under it. Thus, the Agreement on Trade in Goods entered into force in May 2013. However, the Framework also covers chapters on IPRs, competition, trade and sustainable development. Under the Framework, two additional agreements (Agreement on Trade in Services; and Agreement on Investment) were signed in 2015 (but have not yet entered into force). This can be considered as Turkey's first DCFTA.

Other examples of Turkey's changing FTA policy are its agreements and negotiations with Malaysia, Mauritius, and EFTA countries. Turkey's FTA with Malaysia covers market access issues, but the parties also agreed to begin negotiations in areas like trade in services and investments, and give effort to enhance their cooperation in a broad number of areas like investment promotion, trade development, IP, health, energy, electronic commerce, environment, services, R&D. The FTA with Mauritius contains provisions beyond tariff issues and quantitative restrictions, extending into SPS, TBT, agriculture, IPR, taxation, and trade remedies. The purpose of the modernisation of Turkey's FTA with EFTA countries is to revise the existing chapters on goods and related areas including competition, TBT, IPR, SPS, and adding new chapters on trade in services, trade facilitation, and sustainable development. Finally, the ongoing negotiations with Japan, Mexico, Peru and Ukraine also foresee, as they stand, services and investment chapters (also see WTO, TPR Body, 2016a: 33).

More generally, during the WTO TPR meeting in March 2016, Turkey expressed its willingness and aim at including chapters on public procurement and services and investment into its FTAs that are already in force and currently do not necessarily contain the said chapters. According to Turkish officials, this incentive to conclude new generation FTAs is not only about willingness or desire but it is inevitable for all WTO Members, considering the current world trade trends and global supply chains. In this context, it should be noted that Turkey is also participating in the TISA negotiations (Republic of Turkey, 2014b).

Although these developments are a step in the right direction regarding the substantive alignment of Turkey's FTAs with the EU FTAs, more remains to be done. It should be noted that the advent of new generation FTAs in Turkey's trade strategy does not necessarily provide a strong commercial policy convergence.

Both the EU's *Global Europe Strategy* (European Commission, 2006) and Turkey's 2023 trade strategy (*Vision 2023*), as well as the Tenth Development Plan (2014-2018) (Republic of Turkey, Ministry of Development, 2014) have convergence in terms of their priorities and wording, which is not surprising as both parties look for a larger market access abroad. However, the priorities and "target markets" of Turkey and the EU vary. Turkey's interest in negotiating with larger economies started following the "EU effect", mainly with the aim of not facing the asymmetrical impact of the CU. For example, Turkey's interest in an FTA with the United States has been revived in the context of TTIP. Both Turkey and the EU emphasise that exporting high-value added/high-quality products are essential, that liberalising trade in services serves economic growth, and that access to resources (inputs) and cheap global sourcing are crucial. However, differences in their overall level of development, trade patterns, regulation of domestic policies, the degree of involvement in global supply chains, interests of domestic actors lead to differences in their understanding of trade strategies, thus making convergence in trade negotiations under bilateral and multilateral venues difficult to achieve. In this regard, an enhancement of the BPTF could help to motivate a more harmonised commercial policy.

With regard to the GSP system, the Commission's Turkey 2015 Progress Report (European Commission, 2015e: 79) notes that Turkey has taken positive steps in aligning its ROO in the context of the GSP to that of the EU, although rules on surveillance and management of tariff quotas have not yet been fully aligned.

The EU's initiatives related to the GSP+ and Everything But Arms (EBA) also cover agricultural products, which are not covered under the CU. In this context, Turkey has been offering unilateral preferences since 2001, limited to industrial products and industrial components of processed agricultural products only (Republic of Turkey, 2014f). However, as mentioned above (Section 7.1), Turkey applies additional duties, including on imports eligible under the GSP, which amounts to a non-alignment of its preferential tariff regime with the EU.

7.2.3 Consequences of Asymmetric FTAs for the CU

The EU has provided duty-free access in a large number of products to an increasing number of trading partners under its FTAs. Turkey has negotiated preferential trade agreements (generally in the form of FTAs) with many of the EU's trading partners, granting the same preferential access to its market of goods imported from these countries. The CU has been a key factor for Turkey to improve the possibility of market access for its exports, in cases where FTAs have been concluded symmetrically (i.e. where both the EU and Turkey have an FTA with the same third country).

However, problems arise with asymmetric FTAs where a third country has an FTA in place with only one of the CU parties. In practice, this asymmetry affects mostly

Turkey because the EU has 16 asymmetric trade agreements, including with some important trading partners of Turkey.[80]

Turkey has to apply the EU's CCT for imports coming from third countries in accordance with Article 13 of Decision No 1/95. Accordingly, a third country that has an FTA with the EU but not with Turkey is entitled to export an industrial product to Turkey benefitting from the concessions accruing it through the FTA with the EU. Conversely, Turkey cannot export its goods directly to the market of the EU's FTA partner at the preferential rates agreed in the agreement, unless Turkey has a similar agreement.

The asymmetric structure of the CU in terms of the FTAs was not disturbing until the mid-2000s. Triggered in part by Article 16 of Decision No 1/95, during the first decade of the CU Turkey concluded FTAs and thereby enhanced market access with many countries in the central and eastern European region, which are important trading partners for Turkey. Thanks to the CU, Turkey managed to penetrate these markets easier than it could have done without having an EU impetus. Nevertheless, the evolving nature of global economic relations made regional trade arrangements an essential venue to address many issues for the EU and to diffuse into global markets. Subsequently, the number of the countries with which the EU started deeper bilateral agreements proliferated quickly, notably following the "Global Europe" strategy (European Commission, 2006). The developments revealed that the economic implications of the EU's FTAs lead to unintended consequences for Turkey, while the EU impetus was not sufficient to push third parties to conclude similar agreements with Turkey. Some FTA partners of the EU refrain from negotiating a similar agreement with Turkey. Algeria, Mexico and South Africa are important examples of such countries with which Turkey has had sizeable trade imbalances.

Article 16(3) of Decision No 1/95 provided for a compensatory levy which Turkey could levy in the case of asymmetric FTAs, but was valid only in the initial transition period of five years granted for Turkey to align its commercial policy. Notwithstanding this, Turkey has recently been imposing an additional fiscal duty on motor vehicles originating in Mexico and being exported to the Turkish market via the EU. Turkish government officials who were interviewed for this study pointed out that this instrument is only exceptionally applied but added that Turkey might extend such measures to other products/countries in similar cases where trade diversion can possibly occur. They also stated that the measure was based on Article 58(2) of Decision No 1/95, which foresees the possibility for the parties to take measures to remedy the injury where discrepancies in the implementation of the commercial policy cause to impairment of free circulation of goods or deflection of trade. It would seem, however, that Article 58(2) would apply only in cases where "immediate action is required", and it is not clear that asymmetric FTAs constitute a case of "discrepancies between Community and Turkish legislation or differences in their implementation", to which the Article refers. Therefore, the Turkish practice would rather seem to be in violation of its CU obligations.

The World Bank (2014) also refers to the FTA asymmetry problem arguing that the implications for Turkey will grow because "there will be more and deeper agreements". Several options could be considered to mitigate the asymmetrical effect. One option could be to ask the third party to start with Turkey, parallel track negotiations; another to ask it to apply same preferential duties also to Turkish goods subject to the CU (i.e. falling under Chapters 25 to 97 of the HS), as suggested by the World Bank (2014).

7.3 Performance of the BPTF Institutional Framework

Chapter V of Decision No 1/95 sets out the institutional framework for the BPTF. This section examines how effectively this framework has functioned. In particular, it reviews the BPTF agreements to identify both the joint institutions to be established

[80] Conversely, Turkey has concluded one asymmetric FTA, with Malaysia; see Section 7.2.1 above.

under the Ankara Agreement and Decision No 1/95 and assesses the functioning of the BPTF institutions, based on a review of minutes and other documents produced by them, as well as on interviews with EU and Turkish representatives in the CUJC and other Commission and Turkish government staff involved in the implementation of the BPTF. Considering the multifaceted and close relationship between Turkey and the EU that stretches from a simple economic integration model to a candidacy for EU membership, the EEA is taken as a point of reference to reflect different angles of the bilateral relationship, and the assessment specifically compares the BPTF institutional model with the ones of the EEA.

7.3.1 EEA Council and EC-Turkey Association Council

The EEA Council was designed as a political institution, meeting at least twice a year, consisting of EC Council and Commission members and ministers in EEA EFTA governments (Article 90, EEA Agreement), with political agendas and authority to lay down "general guidelines", and evaluate "the overall functioning and the development" of the EEA. The system was designed such that the EEA Council would act similarly to how the European Council acts as the main authority to take cardinal decisions; whereas the EEA Joint Committee would be responsible for the management of the EEA Agreement, notably for making joint decisions to incorporate new EU legislation into the EEA Agreement.

The EC-Turkey Association Council, as laid down by the Ankara Agreement, was also empowered through its articles. Its tasks encompass both the administration of the relations between the Parties and decision-making regarding the operation of the CU. This includes conducting negotiations on technical barriers and procurement; setting up competition rules and disciplining state monopolies; state aid; granting derogations from the CCT, assessing Turkey's obligations related to IP rights; deciding on how and when Turkey can take part in EC committee meetings; assess the possibility for free movement of agriculture; or elimination of TDIs. The 1970 Protocol brought along some powers to the Association Council that were related to the implementation of free movement of workers, services (including transport) and establishment, the approval of restrictions on capital transfer and a wide variety of review, consultation and recommendation functions which were mainly outside the scope of application of the CU. The 1970 Protocol has seen the Association Council keeping its powers in the field of dispute settlement and expansion of the scope of association under the Ankara Agreement.

7.3.2 Joint Committees

The CU was designed to be administered by the CUJC that was similar in some respects to the EEA Joint Committee which was under the EEA Council. Similarly to the EEA Joint Committee, the CUJC was structured to consist of members of the Contracting Parties, and meet once a month as a general rule, in the belief that the CU would necessitate close cooperation and regular consultation.[81] It would be composed of national representatives, and committees or working parties could be formed. Differently from the EEA Joint Committee, the CUJC was not provided with the authority "to take decisions in the cases provided for", but could just "formulate recommendations to the Association Council and deliver opinions" to ensure the well-functioning of the CU. Notwithstanding this, the CUJC is empowered to grant an extension if Turkey is unable to adopt changes to the CCT immediately (Article 14(2)); to establish a list of goods from the EU's FTA partners upon which Turkey is entitled to charge a compensatory levy pending its adoption of parallel preferential agreements (Article 16(3)b); to amend or abolish "protection measures taken against discrepancies between Community and Turkish legislation or differences in their implementation" adopted by either Party (Article 58(2)); to find mutually acceptable solutions in cases where there is a problem for Turkey in adopting the corresponding EU legislation (Article 56(2)) or if Turkey's adoption is likely to disrupt the proper

[81] For a comparison, see Article 94 of the EEA Agreement and Article 52 of Decision No 1/95.

functioning of the CU (Article 57(4)); and to perform any IP-related tasks assigned to it by the Association Council (Annex 8 Article 9). Apart from these particular instances and the general task of overseeing the functioning of the arrangement between the Parties, the CUJC seems to have been designed to serve as a forum for consultation in certain specified cases: technical barriers, CCT changes, temporary suspension of the CCT on a particular good, processed agricultural safeguards, and competition related complaints.

The lack of concrete decision-making power bestowed on the CUJC may leave it with limited authority to solve problems, thereby contributing to slower problem solution and impacting on the functioning of the CU. With the main decision-making power resting with the Association Council, the CUJC in most instances has to refer cases to the Association Council. For example, recognising that Turkey has put into force several elements of the *acquis* for the elimination of TBTs in some products, the CUJC has recommended the full implementation of Article 9 so that trade in these products takes place accordingly. However, this is just a recommendation to the Association Council, not a decision. As the Association Council meets only twice a year, whereas the CUJC is envisaged to meet once a month,[82] this leads to delays in addressing problems. In addition, in the Association Council issues are handled in a political environment rather than at a technical level. For a rapid and efficient solution of problems and recurrent issues, the possibility of enabling the CUJC with the authority to take decisions could be explored.

7.3.3 Consultation and Information Procedures

The consultation procedures provided within the CU towards establishing legislative harmonization between the Parties have substantial similarities with the ones foreseen in the EEA and relate, among others, to the legislation on technical barriers, IP, customs and competition that are of direct relevance to the very aim of the CU, except TDIs. Differently from the EEA Agreement and due to the nature of the CU, Article 54 of Decision No 1/95 requires Turkey to also engage in legislative harmonization efforts in the fields of commercial policy including commercial agreements with third countries.

Articles 55, 56, 59 and 60 of Decision No 1/95 address the consultation mechanism in EU legislation of direct relevance to the CU. Article 55 provides that the EU should consult Turkish experts informally, send copies of the formal proposals to Turkey, and hold consultations in the CUJC during the EU’s decision-making procedure, at the request of either Party. Similarly, Turkish experts should also be consulted when draft Commission regulations are transferred to the Executive Committees to then be submitted to the Council (Article 59), and be involved in technical committees assisting the Commission (Article 60). Once legislation in an area of direct relevance to the functioning of the CU has been adopted by the EU, according to Article 56 it shall immediately inform Turkey within the CUJC to allow Turkey to adopt corresponding legislation which will ensure the proper functioning of the CU.

Article 57 of Decision No 1/95 addresses Turkey’s obligations related to consultation with the EU in the context of legal harmonization. According to this, the consultations follow a three-staged process: First, when contemplating new legislation in an area of direct relevance to the functioning of the CU, Turkey shall informally seek the views of the Commission on the proposed legislation in question so that the Turkish legislator may take his decision in full knowledge of the consequences for the functioning of the CU (Article 57(2)). Second, once legislative drafting has sufficiently advanced, consultations shall be held in the CUJC (Article 57(3)). Finally, once Turkey adopts legislation in an area of direct relevance to the functioning of the CU, it has the obligation to inform the EU within the CUJC (Article 57(4)).

[82] It should be noted that although Article 53(3) of Decision No 1/95 provides for the CUJC meetings to be held once a month, this schedule proved to be complicated due the difficulties related to the necessary preparation and procedures to be followed. Thus, the actual number of meetings does not exceed 3 to 4 per year.

In any event, Decision No 1/95 provides that both Parties shall "cooperate in good faith during the information and consultation phase with a view to facilitating, at the end of the process, the decision most appropriate for the proper functioning of the Customs Union."[83]

Representatives of the Parties do not fully agree on the extent to which these consultation and information mechanisms have been implemented in practice. Turkish officials interviewed for this study stated that consultations were not practised as projected and that the procedure and principles as laid down in the Decision towards the consultation of Turkey by the EU have not been fully respected towards meeting their legitimate expectations. Conversely, the Commission considers that consultations during the EU legislative processes are comprehensive.

It has also been stated that the CU was suffering from a "notification deficit," often making it difficult for Turkey to follow the increasingly dynamic and expanding EU *acquis*. Although Turkey completed its transposition of a majority of the legislation listed in Decision No 2/97, new developments in EU legislation relevant to the CU also need to be incorporated into Turkish legislation as part of the harmonization obligation. Turkish officials have stated that there was a lack of information and clarity on the specific harmonization requirements emanating from the CU. Regardless of whether or not this objectively the case, it shows an insufficiency in the information mechanism and should be complemented with a mechanism which would regularly update the list of EU legal instruments with which Turkey's legislation should be harmonized; this would also facilitate the monitoring of legal harmonization which currently is cumbersome and ineffective. In 2012, the European Commission developed a proposal which would have addressed this weakness. According to this proposal, Articles 8, 9 and 52 of Decision No 1/95 would be amended so that the European Commission at the beginning of each year would propose an updated list of newly adopted acts for Turkey to incorporate into its domestic legal order.[84] However, the proposal has been withdrawn.[85] Instead, the Procedural Guideline on the Implementation of Article 8 and 9 of Decision 1/95 was agreed upon in 2014 to resolve the issue, and based on this the updated list of legislation is now being communicated to Turkey on an annual basis.

In case of unsuccessful consultations, the CUJC can recommend ways to prevent any injury (Article 58(1) of Decision No. 1/95). This is different from the EEA model, under which the EEA Joint Committee has been entrusted to take actions to ensure the well-functioning of the EEA Agreement. Both Decision No 1/95 and the EEA model also provide for a special safeguard in case a troublesome legislation leads to "impairment of the free movement of goods, deflections of trade, or economic problems", in case of the CU, or a failure to amend an Annex, in case of the EEA. However, Decision 1/95 restricts the use of the safeguard measures to cases where "immediate action is required," and the Party taking the measure must notify the CUJC, which then has the authority to decide "whether to amend or abolish these measures" (Article 58(2)).

With regard to TDIs, the consultation and information requirements laid out in Articles 54ff of Decision 1/95 do not apply (Article 45); no consultation at all is foreseen in the case of TDIs applied by one Party against the other, and for TDIs against third countries the Parties "shall endeavour" to exchange information and engage in consultation, and thereby to coordinate their action to the extent that the circumstances and international obligations of both Parties allow. In practice, such consultations have indeed been very limited (also see Section 7.1.9 above).

In sum, although Decision No 1/95 entails the requirement for both Parties to inform and consult with each other while legislating, the practice does not seem to converge with the obligation weighing on the parties that is stipulated by the text. A

[83] See Article 55(4) and Article 57(2) of Decision No 1/95.
[84] *Proposal for a Council Decision on the position to be adopted on behalf of the European Union in the EU-Turkey Association Council*. COM(2012) 92 final 2012/0041 (NLE).
[85] See Withdrawal of Commission proposals, OJ C80/17, 7.3.2015.

restructuring of the consultation and information mechanisms could therefore be considered. With regard to information procedures, the Commission's 2012 proposal constituted an improvement to the current system; its adoption should therefore be reconsidered. The effectiveness of consultations foreseen under Decision 1/95 could be improved by making them compulsory and subject to dispute settlement. This would eventually require the possibility to have recourse to an operational dispute settlement or arbitration system where the Party invoking its right to be consulted can be effectively heard and its requests can be addressed (see Section 7.3.5 below).

7.3.4 Adoption of EU Case Law

In terms of Turkey's obligations to adopt and interpret EU legislation and case law in accordance with the ways in which the EU does, both the EEA model and the CU were providing for the same principles. However, Decision No 1/95 falls short of setting the ground for Turkey to make EU jurisprudence part and parcel of the Turkish legal system unlike the EEA. Decision No 1/95 obliges Turkey to adopt a list of customs, trade policy, and IP laws, as well as competition and state aid legislation and the case law related to ex-Article 90 TEC. As for the rest of the case law, there was no provision foreseen.

The objective of the EEA Agreement is to create a homogenous European Economic Area. All relevant EU legislation in the field of the Single Market is integrated into the EEA Agreement so that it applies throughout the whole of the EEA, ensuring uniform application of laws relating to the Single Market.[86] Similarly, in terms of the transposition of EU jurisprudence into national laws, the EEA Agreement included a "homogeneity procedure" whereby the EC and the EEA-EFTA member states are to examine the rulings of both the ECJ (now CJEU) and the EFTA Court. EEA law has to be interpreted in conformity with the relevant case law of the ECJ.[87] In sum, the mechanism as provided in the EEA Agreement sets up an egalitarian regime whereby all parties' courts cooperate towards the homogeneity of the EC law to be applicable across the board and intervene if necessary, before the EFTA Court or the ECJ (now CJEU). Article 66 of Decision No 1/95 stipulates that in case of a need for interpretation, the provisions of the Decisions will be clarified in accordance with CJEU rulings to the extent that "they are identical in substance to the corresponding provisions of the Treaty establishing the European Community." Despite this reference to the benchmark to be utilized while interpreting the provisions of Decision No 1/95 and unlike the EEA mechanism, no clarification is provided as to which institution is mandated with this task of interpretation (apart from the distinct powers of the Association Council) and no system was laid down for an interaction between European and Turkish courts and thus no coordination between those Courts towards homogeneity has been sought after.

7.3.5 Dispute Settlement

One of the major shortcomings of the BPTF that has been identified in previous analyses (e.g., World Bank, 2014) is the lack of well-functioning bilateral dispute settlement mechanisms. The Dispute Settlement Mechanism between the EU and Turkey is set out in Article 25(2) of the Ankara Agreement. As it requires a decision of the Association Council, i.e. the both Parties, in order to refer a matter to the European Court of Justice, it has not been applied in practice. Some specific disputes related to the functioning of the customs union could be resolved under Section II. B of Chapter IV, Section III of Chapter V and Article 66 of Chapter VI of Decision No 1/95 but they have also not been applied in practice. The fact that there are no disputes might be an indication, as discussed in the World Bank report, of their lack of practicality. For this reason, we compare the BPTF dispute settlement mechanism with the ones established in the EEA and in new generation FTAs.

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86 See Articles 105 and 106 of the EEA Agreement.
87 See Article 105(2) of the EEA Agreement.

EEA model type of dispute settlement: The Agreement on the European Economic Area (EEA) brings together the EU Member States and the three EEA EFTA States (Iceland, Liechtenstein and Norway). It allows for the participation of these three EFTA States in the Internal Market by ensuring the incorporation of relevant EU legislation into the EEA Agreement so that it applies in a uniform manner throughout the entire EEA. The EEA is not a customs union. The EEA Agreement lays down a system whereby the EEA parties can trigger a dispute and bring a case on the interpretation or application of the EEA before the EEA Joint Committee. If a dispute concerns the interpretation of provisions of the EEA Agreement, which are identical in substance to corresponding rules of the Treaty establishing the European Economic Community and the Treaty establishing the European Coal and Steel Community (now together part of the TFEU) and to acts adopted in application of these two Treaties and if the dispute has not been settled within three months after it has been brought before the EEA Joint Committee, **the Contracting Parties to the dispute** may agree to request the Court of Justice of the European Communities to give a ruling on the interpretation of the relevant rules. It is clear from this formulation that here again both parties to the dispute must agree to bring a dispute to the European Court of Justice. This could explain why no such dispute was ever brought to the court. If the EEA Joint Committee in such a dispute has not reached an agreement on a solution within six months from the date on which this procedure was initiated or if, by then, the Contracting Parties to the dispute have not decided to ask for a ruling by the Court of Justice of the European Communities, a Contracting Party may, in order to remedy possible imbalances, (i) either take a specific safeguard measure; (ii) or apply a specific procedure on approximation of legislation. If a dispute concerns the scope or duration of safeguard measures taken as above, or the proportionality of certain rebalancing measures, and if the EEA Joint Committee after three months from the date when the matter has been brought before it has not succeeded to resolve the dispute, **any Contracting Party may refer the dispute to arbitration** under special provision set out in a Protocol. No question of interpretation of the provisions of The EEA Agreement may be dealt with in such procedures. The arbitration award shall be binding on the parties to the dispute. Note that, in practice, this has never happened.

For the Parties to put a safeguard measure into place, the existence of serious economic, societal or environmental difficulties of a sectoral or regional nature can also be invoked. There are strict conditions and procedures laid down in Article 113 of the EEA Agreement for safeguard measures, including notification requirements and consultations. Moreover, Article 112(2) of the EEA Agreement requires that for a safeguard measure to be applied, due account must be given to proportionality and necessity in scope and duration of the measure so that the least trade restrictive measure is taken and once the need is no longer there, the removal of the measure is possible following consultations between the parties. The mechanism also provides the possibility for the other party to counterbalance the effect of the safeguard measure that is imposed by taking appropriate actions.

For disputes related to the interpretation of state aid and state monopolies, i.e. where the European Commission and the EFTA Surveillance Authority do not agree on the interpretation of the state aid provisions laid down in the EEA Agreement, they shall exchange views within a two week period after which, absent any commonly acceptable solution, consultations are to be held in the EEA joint Committee for three months to find a commonly acceptable solution. If no solution is found, interim safeguard measures may become definitive measures. The latter must be limited to what is strictly necessary to offset market distortions and must least disturb the functioning of the EEA.

The BPTF dispute settlement mechanisms that are foreseen under the Ankara Agreement and Decision No 1/95 have some features similar to the EEA model. All three mechanisms are based on a system whereby the disputes that are mainly related to the interpretation or application of the Agreements are made subject to a settlement by a joint committee – the Association Council in the case of the Ankara Agreement and Decision No 1/95, and the EEA Joint Committee in the EEA Agreement. In case parties fail to solve the disputes through those organs, the parties to the dispute may agree jointly to bring the dispute to the European Court of Justice. It is clear that the party complained against would not be eager to agree to bring the dispute to the European Court of Justice. This could be the reason why there have not been such disputes. Both agreements provide for arbitration in very specific limited situations but because of the specificity, those have also not been applied. For example, the Parties are doted with the right to impose safeguards in case a serious disturbance to the economy occurs. Moreover, the possibility of acting immediately and taking the necessary measures without going through the full procedure has also been provided.

Article 25 of the Ankara Agreement on potential disputes can still be employed following consultations between the Parties for disagreements related to the interpretation or application of Decision No 1/95 whereby the ECJ or other court or tribunal of the Association Council would be called upon to pronounce on the matter. The problem with the existing mechanism lies mainly within the fact that since the possibility for bringing a dispute before the CJEU is subject to the consensus of the parties forming the Association Council, this creates an inevitable deadlock since the party that may be on defendant side would block the referral to the Court. This fact could well explain the inoperability of the existing dispute settlement mechanism which could be improved by allowing any of the parties to bring the dispute directly before the Court.

Similarly to Article 111 of the EEA Agreement, Article 61 of Decision No 1/95 provides for the possibility to have recourse to arbitration in cases of emergency safeguards that can be taken in situations listed in Article 60 of the Additional Protocol, including serious economic disturbances:

> "Without prejudice to paragraphs 1 to 3 of Article 25 of the Ankara Agreement,[88] if the Association Council fails to settle a dispute relating to the scope or duration of protection measures taken in accordance with Article 58 (2),[89] safeguard measures taken in accordance with Article 63 or rebalancing measures taken in accordance with Article 64, within six months of the date on which this procedure was initiated, either Party may refer the dispute to arbitration under the procedures laid down in Article 62. The arbitration award shall be binding on the Parties to the dispute."

Moreover, brought as an addition to the simple reference to arbitration in the Ankara Agreement, the procedural mechanism for arbitration that Decision No 1/95 lays down in Article 62 is a novelty as opposed to Article 25 of the Ankara Agreement that does not regulate the procedure in which arbitration would take place. In any event, the recourse to arbitration as provided in Decision 1/95 is reserved for safeguard measures only whereby the arbitrators would have the authority to pronounce on a dispute related to the scope or duration of a safeguard or rebalancing measures.

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88 Article 25 of the Ankara Agreement states that:
1. "The Contracting Parties may submit to the Council of Association any dispute relating to the application or interpretation of this Agreement which concerns the Community, a Member State of the Community, or Turkey.
2. The Council of Association may settle the dispute by decision; it may also decide to submit the dispute to the Court of Justice of the European Communities or to any existing court or tribunal.
3. Each Party shall be required to take the measures necessary to comply with such decisions."

89 See Article 58(2) of Decision No 1/95 by virtue of its Article 61: "If discrepancies between Community and Turkish legislation or differences in their implementation in an area of direct relevance to the functioning of the Customs Union, cause of threaten to cause impairment of the free movement of goods or deflections of trade and the affected Party considers that immediate action is required, it may itself take the necessary protection measures and notify the Customs Union Joint Committee thereof; the latter may decide whether to amend or abolish these measures. Priority should be given to measures which least disturb the functioning of the Customs Union."

According to Article 39 of Decision No 1/95, the recourse to arbitration for state aid has been reserved to aids:

> "4. In relation to information supplied under paragraph 2, points (c), (e) and (f), the Community shall have the right to raise objections against an aid granted by Turkey which it would have deemed unlawful under EC law had it been granted by a Member State. If Turkey does not agree with the Community's opinion, and if the case is not resolved within 30 days, the Community and Turkey shall each have the right to refer the case to arbitration."

As such, this feature appears to be a distinct innovation that Decision No 1/95 has brought to the dispute settlement system that was laid down earlier on in the Ankara Agreement. Having said this, the novelty being foreseen only for state aids limits its impact and thus falls short of a proper dispute settlement mechanism to encompass all disputes that may arise in relation to the application or implementation of the Decision. It is obvious that the interpretation of the EU law and thus this Decision lies solely with the CJEU. However, arbitration in relation to state aid still remains to be a viable solution for the parties as arbitrators do have a certain manoeuvre capacity towards taking binding decisions. Therefore, if applied and interpreted correctly, the distinct rules on arbitration in relation to state aid could well be employed by Turkey in a way to respond to the EU's claims of Turkish state aid being unlawful. This possibility seems to be particularly sensible given the difficulties that Turkey is facing in putting into force and implementing its laws on state aid.

Nevertheless, and due to the particularity of the relationship between Turkey and the EU that is not only based on Decision No 1/95 but also evolves around a potential accession axis, the dispute settlement mechanism that was first foreseen in Article 25 of the Ankara Agreement suffered from the complications described above and what the subsequent, Article 61 of Decision No 1/95 adds to the already existing mechanism is to introduce a tool that would help to tackle the settlement of disputes relating to "the scope or duration of protection measures taken in accordance with Article 58 (2), safeguard measures taken in accordance with Article 63 or rebalancing measures taken in accordance with Article 64". In any event, given its advantages and subject to the parties' agreement, arbitration could be employed as a successful dispute resolution mechanism to tackle all matters in relation to the interpretation or application of the bilateral agreement. Once again, the compulsory and exclusive nature of the CJEU to interpret the TFEU remains to be reserved.

Dispute settlement model as employed in new generation trade agreements: This model that is one of the chapters included in the agreements is based on the model of the WTO Dispute Settlement Understanding (DSU). The main added value is that the DS mechanism is quicker than the WTO DS mechanism. The bilateral DS mechanism is also more complete as it addresses issues left open in the WTO DSU. Those issues refer to a considerably faster composition of a panel, the requirement to request a compliance panel before taking appropriate measures for non-compliance (i.e. sequencing rules) and review by the panel of compliance after appropriate measures are taken. The chapter also contains enhanced transparency provisions (for example holding opening hearings and amicus curiae submissions); special rules for energy disputes; and a detailed mediation mechanism.

The first step of the procedure is the consultation between the parties, with a view to reaching a solution. If the parties do not find an agreement, the dispute is referred to an arbitration panel. The panel is composed of three experts that are chosen by the parties, or selected by lot from a list agreed in advance.

The panel receives submissions from the parties, and will hold a hearing that will be open to the public. Interested persons or companies will be allowed to inform the panel of their views by sending amicus curiae submissions.

The panel report, delivered within 120 days after the establishment of the panel, is accepted unconditionally by the parties. After the report, the party in breach of the Agreement will have a reasonable period of time to bring itself into compliance with the Agreement. This period is agreed between the parties or decided by the panel.

By the end of the period for compliance, the party that was found in breach of the agreement must have remedied the situation. If the complaining party considers that the defending party is still in breach of the Agreement, it can refer the issue back to the panel. If the panel confirms that the defending party is still in breach of the Agreement, the complainant is entitled to impose appropriate measures. If after the imposition of appropriate measures the defending party notifies compliance and the complaining party disagrees, the dispute is referred to the panel. If the panel decided that the defending party has complied, the complaining party has to terminate the application of the appropriate measure.

All time-limits of the arbitration procedure are reduced in cases of urgency. The time-limits are reduced further and special conciliation and remedies procedures are provided for urgent energy disputes.

The Agreement also contains a mediation mechanism that the parties can use to tackle adverse effects on trade. The aim of this mechanism is not to review the legality of a measure, but rather to find a quick and effective solution.

Under the mediation mechanism, the parties will be assisted by a mediator that they have jointly agreed, or that has been selected by lot from a list agreed in advance. The mediator meets with parties and may offer advice and propose a solution within 60 days of its nomination. The advice and the proposal of the mediator are not binding: the parties are free to accept them, or use them as a basis for a solution.

The mediation mechanism does not exclude the possibility to have recourse to dispute settlement, during or after the mediation procedure.

7.4 Summary

The analysis undertaken in this chapter allows responding to the first two evaluation questions listed in the ToR. In addition this chapter has also reviewed the performance of the BPTF institutions (part of evaluation question 7).

- *Q1: To what extent has Turkey aligned its legislation with that of the EU in the areas related to the CU? How big is the time gap between adoption in the EU and alignment of respective legislation in Turkey? As for the draft technical regulations in the non-harmonised field, does Turkey fully comply with notification obligations as set out in Directive 98/34/EC? What are the consequences on trade and on competitiveness?*

With respect to the first part of the question, **regulatory convergence** has progressed at different speeds and to a different extent across various regulatory areas covered by the CU (as per Decision No 1/95):

- Regarding TBTs, after a slow start Turkey accelerated its alignment process from 2000 onwards, particularly motivated by Turkey's achieving candidate country status and pressure by the domestic export-oriented industry. Thus, the harmonisation process speeded up especially following the adoption of the Law on the Preparation and Implementation of Technical Legislation on Products (Law No 4703). A majority of the acts stipulated in Decision No 2/97 were incorporated during the peak years 2000-2002, while Turkey also started to improve its quality infrastructure by revising the institutional structure. Also, the level of transposition of standards by Turkey is high overall. In accordance with information provided by the Ministry of Economy and based on the data provided by TSE so far, Turkey has adopted over 34,000 (34,266) standards. Of these, 3,469 are ISO; 228 are IEC and 18,385 are European standards (CEN, CENELEC, and ETSI). Based on the TSE, 99% of European standards have been harmonised and accepted as Turkish standards.

In sum, although Turkey undertook major efforts of alignment with the EU legislation and subsequent implementation, some barriers still remain.

- Turkey's *customs tariffs* have been largely aligned with the EU's CCT in the post-CU era, as stipulated in Article 13(1) of Decision No 1/95. Turkey also normally makes necessary amendments to its tariffs taking into account the changes introduced by the EU either unilaterally or under bilateral and multilateral trade negotiations. Thus, for the products falling under the provisions of Decision No 1/95, Turkey applies tariffs and preferential rates to third country products largely in line with the EU. Nevertheless, recent trends point towards a substantial misalignment for many tariff lines: Owing to domestic industry pressure, increased applied tariffs, thereby causing a deviation from the CCT in violation of its CU obligations. Additional duties of up to 50% can be imposed on many products by decree, which affects imports from third countries, including the GSP beneficiaries, and goods in free circulation in the EU. This practice has become a "new protectionist" measure in Turkey during the last two years and aims to protect domestic producers of a wide range of goods. It may also be noted that from 2011 until mid-2012 and from January 2013 until 4 August 2015, Turkey suspended the duties on unwrought aluminium unilaterally. In addition, Turkey continues to apply TRQs against third countries on some industrial products including electrical machinery and equipment, sound recorders, mattresses, machinery and mechanical appliances but does not bind them in her WTO Schedule of tariff commitments.

- The CU regime requires both Parties to take responsibility for the purposes of achieving the free movement of *agricultural products*. For this purpose, while it is Turkey's responsibility to adjust its policy to developments in the CAP (Article 25(1)) and make consultations within the Association Council for the measures it intends to take in adopting the CAP, the EU is expected to be mindful of Turkey's agricultural interest (Article 25(2)). However, so far Turkey's adoption of the CAP has not been achieved and the basis for a free movement of agricultural products is therefore still lacking. However, progress has been made by Turkey with regard to the implementation of EU rules on SPS measures, an important element in the context of the adoption of the CAP. Harmonisation is mostly undertaken in the context of the accession negotiations. The relevant chapter (Chapter 12 concerning Food Safety, Veterinary and Phytosanitary Policy) was opened in 2010, and Turkey has partially aligned its legislation in this area pursuant to Law No 5996 on Veterinary Services, Plant Health, Food and Feed (2010). More than 100 regulations under Law No 5996 have also been enacted.

- Article 28 of Decision No 1/95 obligated Turkey to adopt provisions in her *customs legislation* based on the Community Customs Code. The basic Customs Law No 4458 (referred to as the "Turkish Customs Code") was enacted in October 1999. In addition, since the establishment of the CU the EU has amended its customs legislation several times (the latest and most substantial one being the adoption by the EU of the Union Customs Code, Regulation (EU) No 952/2013), which obliged Turkey to transpose these changes into its own legislation. Also, Decision No 1/96 of the Customs Cooperation Committee was adopted to implement provisions applicable to trade in goods between the EC and Turkey and with third countries, thus introducing an integrated approach for customs. That Decision was replaced by Decision No 1/2001 which was repealed by Decision No 1/2006 of the Customs Cooperation Committee (the so-called "bridging legislation"). Decision No 1/2006 consolidated in a single framework all decisions of the Committee. Turkey adopted her implementing act in 2006 (Decision No 2006/10895) accordingly.

The changes required by Article 28 of Decision No 1/95 have needed a wide-ranging reform of Turkish Customs, which was initiated in 2001 and is still ongoing today, with assistance by the EU.

- Turkey has adopted legislation on *intellectual, industrial and commercial property rights* in alignment with the *acquis* since 1995, and has established the TPI. The challenges ahead are mainly related to the enforcement of IP rights policies, as they require specific skills. Even though substantial training on IP rights related matters has been provided to a considerable number of judges, lawyers, enforcement staff, police force members, and customs officers, there is still room for capacity building. Furthermore, Turkey needs to improve the existing scheme of measures, procedures and remedies, mindful of the necessity to provide for a fair and equitable enforcement of IP rights.
- The Turkish *competition* legislation, Law No 4054, entered into force in December 1994. It was drafted mostly based on articles 85 and 86 (now Articles 101 and 102 of the TFEU) of the Treaty of Rome; and alignment of competition rules with the EU *acquis* is considered high. In terms of implementation of competition law, the Competition Board, which is the decision-making organ of the Competition Authority responsible for the enforcement of the Law, was appointed only in 1997 with a delay of 27 months. Since then, competition policy enforcement has well advanced. With regard to *state aid*, although Law No 6015, which was adopted in October 2010, is seen to be generally in conformity with the EU *acquis* on state aid, the secondary legislation including further alignment to EU state aid rules, particularly the guidelines regarding state aids and decisions by the CJEU towards implementation of the monitoring and control process have not yet entered into force. Moreover, certain state aid granted by Turkey – following the 2012 decree on the incentives package that extends its scope to sectors, such as chemicals, mining, and technology-intensive products, which now also grants additional tax incentives for large-scale, regional, or strategic projects – appears to not comply with EU legislation. As it stands, the regulation implementing the requirement to notify state aid schemes and measures are expected to enter into force on 31 December 2016 and the Commission’s practice should to be taken into account in the implementation phase. Moreover, the State Aid Authority is yet to formally lay down a comprehensive state aid inventory or adopt an action plan to align all state aid schemes with the *acquis*. Some concerns have also been raised, regarding the administrative and operational independence of the State Aids Monitoring and Supervision Board.
- As opposed to the Treaty of Rome which excludes the possibility of employing *TDIs* among the EU Member States, Decision No 1/95 does not establish a requirement for Turkey or the EU to harmonise TDIs, but it nevertheless establishes the principle of consultation and coordination. However, no active coordination takes place between the parties during investigations, and the level of harmonisation of TDI against third countries is low.
- In the area of *taxation*, Turkey’s practices in value-added tax legislation do not fully comply with the EU *acquis.* Also, Turkey’s application of higher excise duties on tobacco products and alcoholic beverages constitute discriminatory practices.

Second, the **time gap between adoption in the EU and alignment of respective legislation in Turkey** has varied considerably across areas of regulation and over time. Presently, transposition in many cases takes up to two years. However, in other cases transposition may also take substantially longer; for example in the case of pharmaceuticals, legislation has not been harmonised yet.

Third, regarding **technical regulations in the non-harmonised field**, where mutual recognition is applied to prevent domestic regulations develop into TBTs, Turkey adopted its legislation, which entered into force on 1 January 2013. This was an important step to apply the mutual recognition to trade in products for which no significant harmonisation was achieved.

Finally, the **implications of regulatory convergence on trade and competitiveness** are difficult to assess. Nevertheless, the technical standards and regulations that were put into place in Turkey in accordance with the EU regulations, the EU's intellectual and industrial property rules, as well as competition disciplines have had a positive impact on Turkey's competitiveness in international markets and thus eased the Turkish economy's integration with the global economy.

- *Q2: To what extent has Turkey aligned its commercial policy, including conclusion of the FTAs, with the EU commercial policy?*

Commercial policy alignment has been assessed both in geographical and substantive terms; in addition, the impact of asymmetric FTAs has been addressed.

- *Geographical alignment:* Overall, Turkey's efforts to conclude FTAs with third countries are fully aligned with the EU commercial policy in geographical terms. Generally, Turkey has attempted to undertake and conclude trade agreements in parallel with the EU in order to comply with the common commercial policy. The launch of FTA negotiations with a third country typically occurs following the European Commission's initiation of its own negotiations with that country. The only case where Turkey has an agreement in place, but not the EU, is Malaysia. In this case, Turkey also entered into FTA negotiations after the EU, but Turkey's negotiations proceeded faster than the EU's. As a result, by implementing its FTA with Malaysia on 1 August 2015, Turkey is violating key provisions of the CU, in particular the principle of alignment to the EU customs tariff.

  On the other hand, several countries with which the EU is negotiating or has concluded FTAs have shown limited interest to have a similar trade agreement with Turkey. Ultimately, the willingness of the trading partners is an essential condition for Turkey to fully align its commercial policy geographically with that of the EU.

  As it stands, therefore, Turkey's alignment with the EU's FTAs can be deemed to be partly successful: the conclusion of parallel FTAs was possible in a number of countries but did not occur in other instances where the approached country did not reciprocate the interest in entering into a similar FTA with Turkey. This has led to the "asymmetry problem", discussed below.

  Within the framework of its commitments under the CU, Turkey is also expected to align itself with the autonomous customs regime of the EU. Turkey increasingly harmonized its GSP system with the EU system in 2002 and 2006 (UNCTAD 2007). Currently, Regulation (EU) No 978/2012 now forms the basis of Turkey's GSP scheme through which it offers unilateral preferences in parallel to those of the EU; the list of beneficiary countries is aligned with those in the EU GSP.

- *Substantive alignment:* Turkey's commercial policy alignment obligation under the CU mainly refers to the alignment of Turkey to the EU's preferential "customs" regime as stipulated in Decision No 1/95, without necessarily referring to the nature and substance of the trade agreements. In addition, Decision No 1/95 does not create an obligation for Turkey to substantively align its trade agreements with third countries in areas that are not covered under the CU. However, for a true alignment of commercial policy, a substantive calibration of trade agreements should be taken into consideration. In this sense, Turkey's FTAs with third countries should have similar arrangements to EU FTAs to prevent trade deflection under the CU.

Overall, Turkey has not been as active as the EU to negotiate new areas like services, investments and regulatory convergence with its FTA partners. The majority of Turkey's FTAs concluded until recently typically cover trade in (industrial and agricultural) goods, are often restricted to tariff liberalisation and related issues, and do not include services nor investment chapters. However, both the changes in the EU's FTA policy and other countries' inclination towards deeper integrating and more ambitious commitments have had an influence on Turkey's own FTAs. Accordingly, Turkey has adopted a new FTA strategy which involves the negotiation and thus conclusion of new generation DCFTAs (such as the agreements with South Korea, Malaysia, Mauritius) that go beyond simple tariff elimination and which cover not only services and investment but also contain chapters on SPS, TBT, IP, competition, trade remedies, or dispute settlement, introducing WTO+ provisions. Ongoing negotiations with Japan, Mexico, Peru and Ukraine also foresee services and investment chapters.

However, the advent of new generation FTAs in Turkey's trade strategy does not necessarily provide a strong commercial policy convergence. Although the EU's and Turkey's current trade strategies converge in terms of their priorities and wording, differences in their overall level of development, trade patterns, regulation of domestic policies, the degree of involvement in global supply chains, interests of domestic actors lead to differences in their understanding of trade strategies, thus making convergence in trade negotiations under bilateral and multilateral venues difficult to achieve. In this regard, an enhancement of the BPTF could help to motivate a more harmonised commercial policy.

With regard to the GSP system, Turkey has been offering unilateral preferences since 2001, limited to industrial products and industrial components of processed agricultural products only. However, Turkey applies additional duties, including on imports eligible under the GSP, which amounts to a non-alignment of its preferential tariff regime with the EU. Also, although Turkey has taken positive steps in aligning its ROO in the context of the GSP to that of the EU, rules on surveillance and management of tariff quotas have not yet been fully aligned.

- *Impact of asymmetric FTAs:* Turkey has to apply the EU's CCT for imports coming from third countries in accordance with Article 13 of Decision No 1/95. Accordingly, a third country that has an FTA with the EU but not with Turkey is entitled to export an industrial product to Turkey benefitting from the concessions accruing it through the FTA with the EU. Conversely, Turkey cannot export its goods directly to the market of the EU's FTA partner at the preferential rates agreed in the agreement, unless Turkey has a similar agreement. Some FTA partners of the EU refrain from negotiating a similar agreement with Turkey. Algeria, Mexico and South Africa are important examples of such countries with which Turkey has had sizeable trade imbalances.

  To address this, Turkey has recently been imposing an additional fiscal duty on motor vehicles originating in Mexico and being exported to the Turkish market via the EU. Turkish government officials who were interviewed for this study pointed out that although this instrument is only exceptionally applied Turkey might extend such measures to other products/countries in similar cases. They also stated that the measure was based on Article 58(2) of Decision No 1/95, which foresees the possibility for the parties to take measures to remedy the injury where discrepancies in the implementation of the commercial policy cause to impairment of free circulation of goods or deflection of trade. It would seem, however, that Article 58(2) would apply only in cases where "immediate action is required", and it is not clear that asymmetric FTAs constitute a case of "discrepancies between Community and Turkish legislation or differences in their implementation", to which the Article refers. Therefore, the Turkish practice would rather seem to be in violation of its CU obligations.

- *Q7: To what extent has the EU-Turkey BPTF been efficient with respect to achieving its objectives?*

Part of this question refers to the performance of the BPTF institutions. In this respect, the main findings of the assessment were:

- The lack of concrete *decision-making power bestowed on the CUJC* may leave it with limited authority to solve problems, thereby contributing to slower problem solution and impacting on the functioning of the CU. With the main decision-making power resting with the Association Council, the CUJC in most instances has to refer cases to the Association Council. As the Association Council meets only twice a year, this leads to delays in addressing problems. In addition, in the Association Council issues are handled in a political environment rather than at a technical level. For a rapid and efficient solution of problems and recurrent issues, the possibility of enabling the CUJC with the authority to take decisions could be explored.

- Although Decision No 1/95 entails the requirement for both Parties to *inform and consult* with each other while legislating, the practice does not seem to converge with the obligation weighing on the parties that is stipulated by the text. A restructuring of the consultation and information mechanisms could therefore be considered. With regard to information procedures, the Commission's 2012 proposal constituted an improvement to the current system; its adoption should therefore be reconsidered. The effectiveness of consultations foreseen under Decision 1/95 could be improved by making them compulsory and subject to dispute settlement.

- The *dispute settlement* mechanism that was foreseen in Decision 1/95 was based on Article 25 of the Ankara Agreement and as it stands suffers from inoperability due to its limited and restrictive nature that require parties' consensus for any dispute to be brought before the Court and lays down a tool that will mainly regulate disputes in relation to "the scope or duration of protection measures taken in accordance with Article 58 (2), safeguard measures taken in accordance with Article 63 or rebalancing measures taken in accordance with Article 64". Given its advantages and subject to parties' agreement, a mechanism whereby consultations followed by arbitration and mediation could be employed as a successful dispute resolution mechanism to tackle all matters in relation to the interpretation or application of the bilateral agreement. Once again, the compulsory and exclusive nature of the CJEU to interpret the TFEU remains to be reserved.

8 IMPACT OF THE BPTF ON HUMAN RIGHTS

This chapter analyses the human rights impacts of the BPTF. The analysis seeks to identify whether the BPTF impact has been a force for positive outcomes (i.e., to promote human rights) or for negative outcomes (i.e., to hinder human rights), provides evidence concerning the degree of interference with the rights in question, and considers the necessity and proportionality of the interference in terms of policy options and objectives.

The normative framework for the analysis stems from the Universal Declaration of Human Rights (UDHR), the EU Charter of Fundamental Rights (CFR), the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Convention on the Elimination of All Forms of Racial Discrimination (CERD), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (UNCAT), the Convention on the Rights of Persons with Disabilities (CRPD), the International Convention on the Protection of the Rights of All Migrant Workers (ICMW), the Convention on the Rights of the Child (CRC), and the European Convention on Human Rights (ECHR).

The methodology followed while formulating the analysis is based on the following **guiding documents**: (1) the European Commission Guidelines on the Analysis of Human Rights Impacts in impact assessments for trade-related policy initiatives, (2) the Better Regulation Guidance and Toolboxes, with focus on Tools #22 *External Trade and Investment* and #24 *Fundamental Rights and Human Rights* in particular, and (3) the European Commission Operational Guidance on taking into account Fundamental Rights in Commission Impact Assessments.

Since the quantitative ex-post results, supplemented by qualitative evidence, suggest that the BPTF has had only a very marginal impact on the EU (implying an even less pronounced effect on human rights), the human rights analysis focuses on Turkey. Even for this analysis, it is important to isolate the impact, which the BPTF is likely to have had on human rights in Turkey from overall human rights developments in the country. Box 8.1 provides a brief background.

Box 8.1: Brief background on human rights in Turkey

Human rights in Turkey are protected by a variety of international law treaties, which take precedence over domestic legislation, according to Article 90 of the 1982 Constitution. The International Covenant on Civil and Political Rights was not signed by Turkey until 2000. The issue of human rights is of high importance for the negotiations with the EU. Acute human rights issues include in particular the Kurdish issue in Turkey. During the escalation of violence and counter-terrorism operations in the Southeast regarding the Kurdish issue, there were numerous allegations of human rights violations over the years. There is an ongoing debate in the country on various human rights issues including the use of torture, the protection of the right to life, the freedoms of expression, assembly and association, religion, minority rights, as well as gender equality, discrimination and child labour.[90]

A wide range of observers, ranging from international organisations to NGOs, have expressed their concern about a worsening situation of human rights in Turkey. For example, the Council of European Commissioner of Human Rights found in April 2016 that "Respect for human rights has deteriorated at an alarming speed in recent months in the context of Turkey's fight against terrorism" (Council of Europe, 2016). The European Commission's 2015 progress report (2015e: 21f) finds that despite improvements in the human rights situation in Turkey during the past decade, "major shortcomings remain", and that "there was significant backsliding in the past two years." Similarly, the European Parliament has recently issued a sharp criticism of Turkey, warning that the EU candidate country was "backsliding" on democracy, human rights and the rule of law. According to this report, "the overall pace of

90 On social rights, in particular related to employment and wages of women, also see the social impact analysis in Chapter 5 above.

reforms in Turkey has not only slowed down but in some key areas, such as freedom of expression and the independence of the judiciary, there has been a regression, which is particularly worrying" (European Parliament, 2016).

According to rights based independent NGOs, Turkey's Anti-Terror Law (TMK) has been subject to acute criticism for its overly broad definition of what comprises an offence under this law, and has brought to prosecution numerous journalists, academics, artists and writers accused of activities for or membership of a terrorist organisation with little or no evidence of links to terrorism. Students, lawyers, and activists are arrested under anti-terror laws for the legitimate exercise of their **rights to freedom of expression and freedom of peaceful assembly** (ARTICLE 19 et al., 2014). Of critical concern are provisions found under Law on Associations (Law No 5253) and the Law on Foundations (Law No 5737), and their respective regulations, which endow the authorities with broad powers to interfere and arbitrarily dissolve civil society organisations (CSOs) (CIVICUS and Helsinki Citizens Assembly, 2014). Criticised obstacles to the proper functioning of CSOs include: unwarranted bureaucratic obstacles, restrictions on fundraising activities, censorship, arbitrary prosecutions of human rights defenders, etc. (CIVICUS and Helsinki Citizens Assembly, 2014). The Civil Code (Art. 93) lays down the principles for foreign persons to establish or to become members of associations. The European Commission (2015e) and Parliament (2016) have both expressed their concern with regard to the respect to freedom of assembly and association in Turkey, finding that the overall pace of reforms in Turkey has slowed down considerably in recent years, and that there has been a regression moving increasingly away from meeting the Copenhagen criteria to which candidate countries must adhere, as regards the protection of this human right.

With regard to **freedom of expression and information**, according to NGOs, the Internet Law and the recent amendments to the law of the Communication Directorate, which provides a wider authority for restrictions without any court order, are designed to censor and silence political speech. In 2014 access to both YouTube and Twitter were banned and later reinstated by Constitutional Court Judgments based on individual applications (İnsan Hakları Ortak Platformu/Human Rights Joint Platform, 2014). In September 2016, the access to more than 113,000 web sites was restricted.[91] Both the European Commission (2015e) and the European Parliament (2016) also expressed their concern about the backsliding in Turkey regarding freedom of expression.

A Freedom House report on Media Ownership and Dependency (Freedom House, 2013) shows that the role of public tenders and privatization in maintaining government influence over media cannot be overstated. The prime minister's office controls billions of dollars in projects per year as the chair of the Privatization High Council (OİB). The PM has final say over privatization approvals, creating a clear incentive for diversified holding companies to avoid all conflict with his office.

Turkey continues to repeatedly prosecute and imprison **conscientious objectors** despite rulings by the European Court of Human Rights, which has found Turkey's refusal to recognize the right to conscientious objection a violation of Article 9 of the ECHR. Hundreds of abusive criminal prosecutions are brought every year against political activists, human rights defenders, journalists, lawyers and others under articles of the Penal Code and anti-terrorism provisions. Such cases are generally instigated against individuals who criticize the state or express opinions contrary to official positions on politically sensitive issues (Amnesty International, 2014).

As regards the **freedom of religion/belief and rights of minorities**, there is still hostility and discrimination towards religious minorities, both on a state and societal level, as well as occasional violent attacks against Alevis and Christians, particularly converts from Islam (Christian Solidarity Worldwide, 2014). Identity cards continue to undermine Turkey's anti-discrimination laws by maintaining a religion category allowing only recognised religions to be entered, and forcing unrecognised groups, such as Alevis and Baha'is, to leave their ID cards blank.[92] Unrecognised minorities are often discriminated against on a societal level. Moreover, no religious belief community has legal personality, whether Muslim, Orthodox, Catholic, Jewish, or any other. Religious or belief communities' representative bodies - such as the Ecumenical Greek Orthodox Patriarch, Armenian Patriarch or the Jewish Chief Rabbinate - also have no legal personality. The communities are therefore deprived of rights, such as the right to own or hire

[91] See engelliweb.com.

[92] This is despite a 2012 ruling by the European Court of Human Rights, which ordered Turkey to allow Alevis to state their religion on ID cards or face sanction; see ECHR judgment of *Sinan Isik v Turkey*, no 21924/05, 2.02.2010.

property (for example as a place of worship), to establish charitable organisations, to open a bank account, or to sign contracts (Christian Solidarity Worldwide, 2014). This is directly contrary to the international human rights obligations of Turkey.

Concerns on property rights, in particular of ethnic minorities, have been raised regarding large-scale investment projects resulting in evictions and inadequate compensation in Turkey. These cases are usually linked with agribusiness and hydropower, affecting mostly ethnic minority areas.[93] A new law passed in 2005 (Law No 5366) codifies and systematizes forced eviction without consultations with the affected communities.[94] Through top-down planning without consulting affected communities or consideration of the social dimensions and cultural practices, historical neighbourhoods whose residents own legal title have become subject to urban regeneration. Planners and developers impose unaffordable luxurious projects on these populations, compelling them to leave. If they do not sign a contract and become partners to the project, their properties are expropriated under law. Because inhabitants cannot pay the inflated prices of their properties and those in the development project, they cannot contract to sell to third parties and leave in order not to face expropriations. They are impoverished, further deprived and, eventually, displaced.[95] During the escalation of violence and counter-terrorism operations in the Southeast since 2015, besides continuing loss of lives, serious damages to cultural heritage buildings took place from both Christian and Islamic faiths in the Sur District of Diyarbakır. Property rights of citizens in the Southeast provinces have been largely violated; a government plan for rehabilitation is pending.

Gender equality: The rate of women's participation in the labour force in Turkey is one of the lowest in the world.[96] If unpaid women agricultural workers in rural areas, women who receive allowances for home care and women who work part-time or under flexible conditions are excluded, the rate of women employed is even lower. In this context, the 2013 Gender Equality Report of the World Economic Forum has identified that Turkey still ranks 123rd in the world with respect to women's employment. As regards the **gender gap in education**, despite progress regarding closing the gender parity at the level of primary education, according to the OECD (2016b), the difference between the genders in educational attainment in Turkey in favour of men is one of the largest observed among all participating countries. Gender-related differences in proficiency reflect the fact that, in Turkey, men tend to have higher educational attainment than women, particularly among older adults. For example, differences between men and women in educational attainment explain around one-fifth of the gender gap in numeracy among 45-65 year-olds in Turkey – around twice the impact as on average across OECD countries. The Commission also has expressed concern that gender disparity in education remains substantial, particularly as regards drop-outs due to early marriage and child labour (European Commission, 2015e: 66).

Some steps are being taken to promote gender equality on formal grounds. The National Action Plan on Gender Equality 2016-2021 and the National Action Plan on Combating Violence against Women 2016-2019 are under preparation. The "First Action Plan on Women's Employment in Turkey", developed under a joint ILO-Turkish Employment Agency (İŞKUR) project funded by the Swedish International Development Cooperation Agency was unveiled on 17 May 2016; it aims to expand women's labour force participation by developing occupational skills and promoting job orientation (Turkish Employment Agency, 2016). However, given ingrained social norms and deeply rooted structural features, it will require extraordinary political commitment

93 Habitat International Coalition, Urban Movements Istanbul, and Housing and Land Rights Network (2014). An example of the state failing to meet its human rights obligation is the Ilisu Dam project in South-Eastern Turkey. The Turkish government has pursued the Ilisu Dam construction, ignoring that armed conflict and ongoing human rights violations effectively prevent free expression and participation in consultations. Consultations were conducted in the presence of security forces, and sponsors of the project threatened to opt out if the affected communities expressed opposition to the project, and did not commit to their obligation to provide alternative resettlement sites for them. The project will severely reduce income for the local population and displace more than 78,000 people, mainly Kurds, from their homes and farms. Also, the project will lead to inundation and destruction of the ancient town of Hasankeyf. See Diakonisches Werk der EKD et al. (2010); also see CounterCurrent – GegenStrömung (2011).

94 Law No 5366, Renovating, Conserving and Actively Using Dilapidated Historical and Cultural Immovable Assets Act.

95 For example, in Istanbul Sulukule, the well-known Roma neighbourhood since Byzantine times, was demolished and evicted via Law No 5366. An expensive housing project for upper income groups now rises on the site. The court subsequently annulled the Sulukule project on grounds that lacked the acclaimed public purpose. However, the villas had been finished by then and the victims were denied their right to return. Former residents lost their property unjustly and were shunted to the fringes of the city. See Letsch (2011).

96 See Section 5.1 above, as well as İnsan Hakları Ortak Platformu / Human Rights Joint Platform (2014).

to correct the revealed strong gender bias in Turkey as reflected in its substantial lag behind OECD norms in objective statistical indicators. This includes pro-active engagement to ensure Turkey meets its obligations under international conventions such as the Convention to Eliminate Discrimination Against Women (CEDAW) and the Istanbul Convention, not only on paper but in visible progress.

The concerns regarding fundamental rights related to sexual orientation and gender identification are even more heightened. The European Commission, in addition to rights groups, has found that "Respect for the fundamental rights of lesbian, gay, bisexual, transgender and intersex (LGBTI) persons remains a matter of serious concern" (2015e: 67).

Rights based CSOs have submitted various concerns with respect to Turkey's efforts to ensure **non-discrimination of disabled people**. Research found that persons with disabilities continue to experience inequality in employment and lack of access to public buildings and transport infrastructure.

The Commission has stated that **child labour** persisted, including in its worst forms, and needs to be tackled as a matter of priority. Although the minimum legal age for work in Turkey is set to 15, the number of 6-14 year-old children working is around 300,000 according to official statistics (ILO and TurkStat, 2012). The arrival of Syrian refugees in Turkey further increased the risk of child labour in the garment and apparel factories (manufacturing). It is estimated that (at the time of writing, Feb. 2015) more than 1.5 million Syrian refugees are living in Turkey, of which only 25% live in refugee camps. Non-camp refugees have to cover their own living expenses, even though most of them do not have legal work permits. The current situation concerning refugees makes Syrian child labour an upcoming issue (Fair Wear Foundation, 2015: 20). An expert from the Centre for Middle Eastern Strategic Studies has suggested around 250,000 Syrian refugees are working illegally in the country, with a recent Human Rights Watch report claiming child labour is "rampant" (Human Rights Watch, 2015).

Table 8.1 provides a list of human rights initially considered for the purpose of the study, as well as a first identification of those rights which may have been impacted (to a potentially noticeable extent) by the BPTF, both by the legal provisions and the economic and social impacts identified in this study. Only these human rights have been further considered in the analysis below.

The following sections first review the legal text of the BPTF to define which human rights are covered (Section 8.1). Then, in Section 8.2 a structured analysis is undertaken of the implications which economic and social changes induced by the BPTF may have had on human rights, in line with the Human Rights Impact Assessment methodology developed by Walker (2009). Thirdly, Section 8.3 provides a summarised conclusion of the ex post analysis.

Table 8.1: Overview of human rights potentially affected by the BPTF

Human Right	Reference to human rights treaty	Affected according to	
		BPTF legal texts	Economic and social impact
Human dignity	Art. 1 CFR, Art. 1 UDHR		
Right to life	Art. 2 CFR, Art. 3 UDHR, Art. 6 ICCPR, Art. 10 CRPD, Art. 2 ECHR	X (D1/95, Art. 7)	
Right to the integrity of the person	Art. 3 CFR, Art. 17 CRPD		
Prohibition of torture and inhuman or degrading treatment or punishment	Art. 4 CFR, Art. 5 UDHR, Art. 7 ICCPR, UNCAT, Art. 3 ECHR		
Prohibition of slavery and forced labour	Art. 5 CFR, Art. 4 UDHR, Art. 8 ICCPR, Art. 4 ECHR		
Right to liberty and security	Art. 6 CFR, Art. 3 UDHR, Art. 9 ICCPR, Art.14 CRPD, Art. 5 CERD, Art. 5 ECHR		
Respect for private and family life	Art. 7 CFR, Art. 12 UDHR, Art. 17 ICCPR, Art. 16 CRC, Art. 22, 23 CRPD, Art. 14 ICMW, Art. 8 ECHR		
Protection of personal data	Art. 8 CFR		
Right to marry and right to found a family	Art. 9 CFR, Art. 10 ICESCR, Art. 23 ICCPR, Art. 16 UDHR, Art. 5 CERD, Art. 12 ECHR		
Freedom of thought, conscience and	Art. 10 CFR, Art. 18 ICCPR, Art. 12		

Human Right	Reference to human rights treaty	Affected according to	
		BPTF legal texts	Economic and social impact
religion	UDHR, Art. 14 CRC, Art. 12 ICMW, Art. 5 CERD, Art. 9 ECHR		
Freedom of expression and information	Art. 11 CFR, Art. 19 ICCPR, Art. 19 UDHR, Art. 21 CRPD, Art. 13 ICMW, Art. 5 CERD, Art. 10 ECHR		
Freedom of assembly and of association	Art. 12 CFR, Art. 21, 22 ICCPR, Art. 20 UDHR, Art. 5 CERD, Art. 11 ECHR		
Freedom of the arts and sciences	Art. 13 CFR, Art. 15 ICESCR, Art. 27 UDHR, Art. 30 CRC, Art. 13 CEDAW, Art. 30 CRPD, Art. 5 CERD		
Right to education	Art. 14 CFR, Art. 13 ICESCR, Art. 26 UDHR, Art. 28 CRC, Art. 10 CEDAW, Art.24 CRPD, Art. 30 ICMW, Art. 5 CERD		X
Freedom to choose an occupation and right to engage in work	Art. 15 CFR, Art. 6 ICESCR, Art. 23 UDHR, Art. 11 CEDAW, Art. 27 CRPD, Art. 5 CERD		X
Freedom to conduct business	Art. 16 CFR, Art. 11 CEDAW		
Right to property (of relevance: IP)	Art. 17 CFR, Art. 17 UDHR, Art. 14 ICMW, Art. 5 CERD, Art 15 ICESCR	X (D1/95, Art. 31.2)	
Right to asylum, rights of refugees	Art. 18 CFR, Art. 14 UDHR, Art. 22 CRC,		
Rights of the migrants	ICMW		
Rights of the indigenous peoples	ILO Convention No 169, UN declaration of the rights of indigenous peoples, Art. 27 ICCPR, Art. 30 CRC		
Protection in the event of removal, expulsion or extradition	Art. 19 CFR, Art. 13 ICCPR		
Equality before the law	Art. 20 CFR, Art. 15 CEDAW, Art. 6,7 UDHR, Art. 14 ICCPR, Art. 12 CRPD, Art. 5 CERD		
Non-discrimination	Art. 21 CFR, Art. 26 ICCPR, Art. 2 UDHR, Art. 2 ICESCR, Art. 2 ICCPR, Art. 5 CRPD, Art. 14 ECHR		
Cultural, religious and linguistic diversity	Art. 22 CFR, Art. 26, 27 ICCPR, Art. 31 ICMW Art. 29 UDHR		
Equality between women and men	Art. 23 CFR, Art. 26 ICCPR, CEDAW, Art. 3 ICESCR, Art. 3 ICCPR		X
The rights of the child	Art. 24 CFR, Art. 23, 24 ICCPR, CRC		X
The rights of the elderly	Art. 25 CFR		
Integration of persons with disabilities	Art. 26 CFR, Art. 23 CRC, CRPD		
Workers' right to information and consultation within the undertaking	Art. 27 CFR Art. 23 UDHR, Art. 27 CRPD, Art. 25 ICMW		
Right to collective bargaining and action	Art. 28 CFR, Art. 23 UDHR, Art.8 ICESCR, Art. 27 CRPD, Art. 5 CERD		X
Right of access to placement services	Art. 29 CFR, Art. 27 CRPD		X
Protection in the event of unjustified dismissal	Art. 30 CFR, Art. 23 UDHR, Art 11 CEDAW, Art. 27 CRPD		X
Fair and just working conditions	Art. 31 CFR, Art. 7 ICESCR, Art. 23 UDHR, Art. 11 CEDAW, Art. 27 CRPD, Art. 25 ICMW		X
Prohibition of child labour and protection of young people at work	Art. 32 CFR, Art. 10 ICESCR, Art. 16 CRPD, Art. 30 CRC		X
Family and professional life	Art. 33 CFR, Art. 7 ICESCR, Art. 11 CEDAW, Art. 27 CRPD		X
Social security and social assistance	Art. 34 CFR, Art. 9 ICESCR, Art. 22 UDHR, Art. 26 CRC, Art. 11 CEDAW, Art. 27 ICMW, Art. 5 CERD		X
Right to health, health care	Art. 35 CFR, Art. 12 ICESCR, Art. 25 UDHR, Art. 24 CRC, Art. 12 CEDAW, Art. 25 CRPD Art. 28 ICMW, Art. 5 CERD	X (D1/95, Art. 7)	X
Right to an adequate standard of living	Art. 11 ICESCR, Art. 27 CRC, Art. 28 CRPD, Art. 25 UDHR		X
Access to services of general economic interest	Art. 36 CFR, Art. 13 CEDAW		
Environmental protection	Art. 37 CFR, Art. 14 CEDAW, Art. 24	X (D1/95,	X

Human Right	Reference to human rights treaty	Affected according to	
		BPTF legal texts	Economic and social impact
	CRC, Art. 25 UDHR, Art. 12 ICESCR	Art. 7)	
Consumer protection	Art. 38 CFR		X
Right to take part in the conduct of public affairs	Art. 39 CFR, Art. 25 ICCPR, Art. 7 CEDAW, Art. 29 CRPD, Art. 21 UDHR, Art. 5 CERD		
Right to vote and be elected at genuine periodic elections	Art. 39, 40 CFR, Art. 25 ICCPR, Art. 7 CEDAW, Art. 29 CRPD, Art. 21 UDHR, Art. 5 CERD		
Right to good administration	Art. 41 CFR		
Right of access to documents	Art. 42 CFR		
Right to petition	Art. 44 CFR		
Freedom of movement and of residence	Art. 45 CFR, Art. 13 UDHR, Art. 5 CERD		
Diplomatic and consular protection	Art. 46 CFR		
Right to an effective remedy and to a fair trial	Art. 47 CFR, Art. 7,8, 10 UDHR, Art. 6 and 13 ECHR	X	
Presumption of innocence and right to defence	Art. 48 CFR, Art. 11 UDHR, Art. 14 ICCPR		
Principles of legality and proportionality of criminal offences and penalties	Art. 49 CFR, Art. 14 ICCPR		
Right not to be tried or punished twice in criminal proceeding or the same criminal offence	Art. 50 CFR, Art. 14 ICCPR		

8.1 Human Rights Impacts Flowing from the Legal Text of the BPTF

The legal text of the CU does not directly address human rights, so specific accomplishments or failures cannot be ascribed to specific features of the BPTF.

However, the CU legal text does touch on at least some human rights issues indirectly. In particular, Chapter IV, which specifically refers to the approximation of laws, has to be taken into consideration.

IP related human rights

According to Article 31(2) of Decision No 1/95:

> The Parties recognize that the Customs Union can function properly only if equivalent levels of effective protection of intellectual property rights are provided in both constituent parts of the Customs Union.

In addition, according to Annex 8, Article 1, Turkey undertook to implement the TRIPS Agreement.

Accordingly, the human rights element of protection of IP is a relevant consideration for evaluation of the human rights impacts of the BPTF; specifically, the principal human right to be considered is the right to property. Of relevance to the BPTF however remain only IP rights; the right to individual property, although having been identified in Box 8.1 as poorly protected in Turkey, cannot be considered to be impacted by the BPTF.

Following Annex 8, Turkey has made commitments to accede to the following treaties:

- Paris Act (1971) of the Bern Convention for the protection of literary and artistic works;
- Rome Convention (1961) for the protection of performers, producers of phonograms and broadcasting organizations;
- Stockholm Act (1967) of the Paris Convention for the protection of industrial property (as amended in 1979);

- Nice Agreement concerning the international classification of goods and services for the purposes of the registration of marks (Geneva Act, 1977, as amended in 1979); and
- Patent Cooperation Treaty (PCT, 1970, as amended in 1979 and modified in 1984).

Turkey has aligned its domestic law with the EU requirements in a number of areas of IP law. It has also implemented to varying extents EU legislation in the area of copyright and neighbouring rights, patent legislation, trade and service marks legislation, industrial designs legislation, protection of geographical indications, and legislation on border enforcement against IP rights infringements. These secondary pieces of legislation are in conformity with international procedures of protecting the right to IP (World Bank, 2014: 48). According to the Commission, Turkey has a relatively good level of preparation in this area and has enforced most EU secondary legislation (European Commission, 2015d: 40), even though counterfeiting and piracy remain issues of major concern.

Importantly, after decades of delay, on April 6, 2016, Turkey is moving on patent law with the submission of the final draft of the "Law on Industrial Property" to the Turkish Parliament. The draft law was prepared in accordance with EU law and practice as Turkey works to comply with EU requirements, leading the way for substantial change to Turkey's IP rights practice for patents, utility models, trademarks, industrial designs and geographical indications (Güner and Aktaş, 2016).

The patent legislation provides for rules on compulsory licensing; and patentability of all inventions, other than pharmaceutical products and processes for human and animal health, but including agrochemical products and processes.

More generally, IP, conceptualized as a universal human right, differs in fundamental ways from its treatment as an economic interest under IP law; in contrast to the individualism of IP law, a human-rights approach also recognizes that an author, artist, inventor, or creator can be a group or a community, as well as an individual. A human-rights orientation acknowledges that intellectual products have an intrinsic value as an expression of human dignity and creativity.

Overall, the alignment of Turkey’s laws with the EU *acquis* implies that the balancing considerations that have been built into the EU system on the basis of extensive analysis and consultation work to safeguard a reasonable balance in the Turkish measures. Accordingly, while the BPTF cannot be assigned a specific role of fostering observance of the human rights dimension of IP law through the approximation of laws commitments under the BPTF, given the stiff headwinds to improved IP protection that clearly prevail in Turkey (as the long delay in introducing the new legislation attests), some credit must be given to the BPTF in this regard.

Right to a fair trial

A central feature of Decision No 1/95 was Turkey’s obligation to enact legislation mirroring EU disciplines in the areas covered by the CU. Both Parties agreed to common competition and state aid rules and the mechanisms to operate these, based on alignment with EU rules.

There is recent debate between EU scholars and human rights advocates that the Commission/National Competition Authority (NCA) powers of imposing fines on cartels and on companies that abuse their market power should offer the same safeguards as criminal law proceedings.[97] Most importantly, to meet the terms of Article 6 ECHR, antitrust sanctions have to be imposed by an independent court and not by the Commission/NCA. Moreover, the European Court of Justice and the Commission have

[97] See, for example, Bronckers and Vallery (2012: 283) and Slater et al. (2008: 2).

long recognized that antitrust proceedings must meet the requirements of Article 6 ECHR.[98]

Accordingly, the BPTF worked to safeguard the right to a fair trial in competition law matters through the institutional mechanisms that emerged as a result.

Rights to life, health and clean environment

The legal text of the BPTF touches on several basic human rights-related issues in Section II, Article 7:

> "The provisions of Articles 5 and 6 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between the Parties."

In this clause, it is mentioned that the trade measures cannot interfere with human life (right to life), health (right to health), and conservation of plants (which may be construed as touching on the right to a clean environment/environmental protection). While this falls short of a positive affirmation of these rights, the statement does strengthen the normative presumption in favour of these rights.

Other human rights

The alignment process does directly address HR issues and there have been many areas where a lack of progress has been identified (freedom of expression, gender issues, and child labour), which directly reflect a lack of progress on alignment. It is possible that a still stronger economic impact from the BPTF might have provided greater impetus for progress.

8.2 Indirect Impacts on Human Rights Flowing from the BPTF

Since the BPTF led to general changes in the Turkish economy and society, and since human rights are interconnected and intertwined with many spheres of life, the impact might be very broad and cover some human rights that may not be directly related to the legal text of the BPTF. While it is not possible to isolate the pure BPTF effect from other factors, we review the economic impacts of the BPTF through a human rights lens.

Increased resources for the realisation of all human rights

Under the CU, Turkey applies the EU's CCT for most industrial products, has eliminated all customs duties, quantitative restrictions and charges with equivalent effect on imports of goods in free circulation. Consequently, since the entry into force of the CU on 31 December, 1995 Turkey's average tariff for industrial products has fallen significantly, to an average of about 4.8%, and has remained low due to the 'anchor' provided by the CCT. However, for those sectors not covered by the CU, Turkey's applied MFN tariffs have in more cases increased since the formation of the CU and sometimes significantly so. Reductions in Turkey's import tariffs have led to corresponding reductions in revenues derived from them (World Bank, 2014). However, these have been more than offset by a widening of the tax base especially for VAT, which took place in anticipation of the CU.

This means that the total amount of potential resources for realisation of human rights since the BPTF came into force has gone up. In other words, the Turkish government

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[98] See, e.g., the Judgement of the European Court (1998) in Case C-185/95 P, Baustahlgewebe GmbH v Commission of the European Communities [1988] ECR I-08417.

has had more funds available that could have been allocated to healthcare, education, social programmes for vulnerable population groups like the persons with disabilities, children, women, and refugees (this affects several groups of human rights simultaneously, the right to health, right to education, rights of disabled, rights of women, children rights, rights of refugees, rights of migrants).

Despite an increase in the available funds to the Turkish government, this does not mean that the political choices were made to spend it on those elements that affect human rights in Turkey. However, the BPTF was an enabling factor for improved human rights outcomes through this mechanism.

Right to decent standard of living (and other rights impacted by income gains)

As described in Section 5.1 above, Turkey's exports to the EU contribute the most to employment creation in Turkey, increases in average wages and growth in productivity. This suggests that the effect of the BPTF has resulted in increase of disposable income on average for all groups of the population.

Overall, the ex post CGE-based analysis of the BPTF suggests an increase in real wages at the economy-wide level. Since the CGE modelling protocol assumes that all the additional labour demand induced by the BPTF flows into wages, and none into additional jobs, the simulations do not provide a direct read-out on the likely scale on wages vs. jobs. However, it can be inferred from the simulations that some combination of wage and job gains on the order of close to 1% can be attributed to the BPTF, with the split depending on assumptions and/or additional analysis.

This has an indirect positive impact on such human rights as the right to adequate standard of living, the right to health (people can access better health care), and the right to education.

Furthermore, the BPTF impacted Turkey's producing sectors in different ways, depending on the combination of EU and Turkish liberalization. The BPTF increased the sum of domestic output and total imports of agricultural and food products by EUR 1.4 billion. Accordingly, the BPTF clearly enhanced the availability of food in Turkey and thus contributed positively to the achievement of human rights related to the right to food.

More generally, the expansion of trade, through the wider access to quality and variety of goods, contributed to the right to a decent standard of living. Given the well-understood issue of potential differential impacts of trade on different groups within society, the BPTF likely worked to compromise the access to a decent standard of living for at least some individuals. However, the increased wealth generated by the BPTF provided the wherewithal for governments to use the additional revenues to offset any harms.

Right to work

Based on the social impact analysis derived from the CGE model, the BPTF has had limited effects on employment both in the EU and in Turkey (Chapter 5). At a society wide-level (overall employment), the CGE analysis does not shed light on whether the right to work was affected since it assumes there was no change in total employment. To the extent that the sectoral employment allocation impacts involved job switches between sectors (and possibly also between regions) for Turkish workers, and that this may have induced some frictional unemployment, the right to work may have been affected.

Work-related rights, including child labour

Certain issues related to labour rights and working conditions have been analysed in Sections 5.3 and 5.5 above. These have shown that the BPTF has had a minor impact on rights related to job quality and social dialogue.

With regard to child labour, according to the ILO, the trend of migration to major metropolises, together with the disintegration or non-availability of familiar social support network, means the phenomenon of working children is becoming more apparent in Turkey. In particular, this refers to children working in marginal sectors and on the streets in order to help support family income levels. The BPTF could have contributed to this trend both positively and negatively: negatively, if employment of unskilled labour and/or in low-wage sectors in urban areas increased (thereby likely to increase child labour), and positively by increasing families' incomes (reducing the need for children to support family income).

As Table 8.2 shows, the total number of child labourers in Turkey has remained almost constant over the period 2006 to 2012, at almost 900,000. However, the distribution across sectors has changed significantly: whereas the number of working children in agriculture increased substantially, from 326,000 to 399,000, it decreased in industry and services. A particularly worrying trend is the increase in labour by the youngest cohort, i.e., children up to 14 years of age.

Table 8.2: Children engaged in economic activities by age group, sex and branch of economic activity, Turkey, 2006-2012 ('000)

			Branch of economic activity					
	Total		Agriculture		Industry		Services	
Age group and sex	2006 (Oct.-Nov-Dec.)	2012 (Oct.-Nov-Dec.)	2006 (Oct.-Nov-Dec.)	2012 (Oct.-Nov-Dec.)	2006 (Oct.-Nov-Dec.)	2012 (Oct.-Nov-Dec.)	2006 (Oct.-Nov-Dec.)	2012 (Oct.-Nov-Dec.)
TURKEY								
Total	**890**	**893**	**326**	**399**	**275**	**217**	**289**	**277**
6-14	285	292	152	200	50	40	83	52
15-17	605	601	174	198	225	178	206	225
Male	**601**	**614**	**172**	**236**	**189**	**168**	**240**	**210**
6-14	190	185	89	117	31	30	71	37
15-17	411	430	84	118	158	138	169	173
Female	**289**	**279**	**154**	**163**	**85**	**49**	**50**	**67**
6-14	95	108	63	83	19	9	12	15
15-17	194	171	90	80	66	40	37	52
URBAN								
Total	**490**	**400**	**32**	**31**	**232**	**162**	**226**	**208**
6-14	120	79	17	11	44	30	58	38
15-17	370	322	14	20	188	132	168	170
Male	**362**	**302**	**14**	**19**	**159**	**127**	**188**	**156**
6-14	88	57	11	8	28	23	49	26
15-17	274	246	3	12	132	104	139	130
Female	**128**	**98**	**17**	**11**	**73**	**35**	**38**	**51**
6-14	32	22	6	3	17	7	9	12
15-17	96	76	11	8	56	28	29	40
RURAL								
Total	**400**	**493**	**294**	**368**	**43**	**56**	**63**	**69**
6-14	165	214	134	189	6	10	25	15
15-17	235	279	160	179	37	46	38	55
Male	**239**	**312**	**158**	**216**	**30**	**42**	**51**	**54**
6-14	103	128	78	109	3	7	22	11
15-17	137	184	80	107	27	34	30	43
Female	**161**	**181**	**136**	**152**	**13**	**14**	**12**	**15**
6-14	63	86	57	80	3	2	3	3
15-17	98	95	79	72	10	11	9	12

Source: TurkStat, Child Labour Force Statistics, 2006-2012
Sample size is too small for reliable estimates for figures less than 4 thousand persons in each cell.

According to the model simulations, the BPTF caused both agricultural output and employment to reduce. Therefore, the overall increase in child labour in the sector cannot directly be attributed to the BPTF. However, it cannot be discarded that child labour increased in certain agricultural sub-sectors. For example, a well documented sector where child labour takes place is the hazelnut industry (Box 8.2). Nevertheless, it is unclear whether the BPTF has caused an increase in hazelnut exports to the EU or investments in the Turkish hazelnut sector, given the low margin of preference which the BPTF has granted to EU hazelnut imports from Turkey.[99] In addition, as described in Box 8.2, some large EU firms have taken action to ensure that child labour is not used. Moreover, as part of the EU-Turkey relationship (and Turkey's potential accession to the EU), the EU has funded various projects in order to eliminate child labour.[100] In sum, therefore, any potential increases in child labour could hardly be attributed to the BPTF.

Box 8.2: Child labour in the Turkish hazelnut sector

The Turkish hazelnut industry, an important exporter to the EU, is one of the most prominent sectors which involve child labour. Although precise data on the scope and extent are not available, the existence of child labour in the sector is well documented (see, e.g. FNV Bondgenoten/Stop Kinderarbeid, 2011; Fair Labor Association, 2012).

Multinational and EU firms purchasing from the Turkish hazelnut industry, such as Ferrero, Mars Netherlands, Unilever, and Koninklijke Wessanen, also acknowledge that child labour exists during the harvesting period (see Help Kinderen, 2011). Even though, according to CSR obligations, Ferrero's contractual clauses ask for the abolishment of child labour, no specific monitoring exists. However other multinationals, such as Tony Chocolonely, have decided, for the time being, not to use Turkish hazelnuts any more, due to the existence of child labour. Additionally, some multinationals, such as Koniklijke Wessanen, have implemented a monitoring Supply Chain Audit Protocol (SCAP), through which supplier audits are performed, to find out, inter alia, whether child labour has been used during the harvesting of hazelnuts.

The ILO has concluded in 2014 that Turkey has made moderate progress in combating child labour in the hazelnut sector, although it still remains a serious area of concern.

Source: Prepared by the authors based on ILO (2014) and sources cited.

Right to a clean environment

As the environmental impact analysis shows (Chapter 6), the Effects of the BPTF on Turkey's environment are generally negative, but the scope of the impact is considered as negligible, especially when compared to other sources of environmental damage, including those derived from Turkish environmental policies and legislative protection. Therefore, it can be concluded that the right to a clean environment has not been impacted upon by the BPTF.

8.3 Summary

The *ex-post* analysis has identified that the BPTF indirectly impacts on the following human rights: the right to an adequate standard of living, the right to enjoy just and fair working conditions, and the right to health (clean environment). Further, direct impacts have been identified on the right to have IP protected, the right to fair trial and the right to health (clean environment).

The analysis thus concludes that the BPTF has impacted mostly social and economic rights due to its welfare implications.

However, the BPTF has not directly influenced those human rights which are the most problematic for Turkey, i.e., freedom of expression, the right to peaceful demonstrations, gender equality (apart from the effects flowing from the economic impact as analysed in Chapter 5), prohibition of discrimination on the basis of religion, disability, sexual orientation or identity, and prohibition of torture.

[99] Decision 1/98 of the Association Council established an ad valorem duty of 3.0% on hazelnuts imported from Turkey, compared to an MFN applied duty in 1999 of 3.4%; a very limited tariff preference. Since then, most of the EU's bilateral trade agreements with other countries, as well as the GSP, have included hazelnuts, thereby offering duty-free import into the EU for those countries.

[100] See, e.g., Delegation of the European Union to Turkey (2007).

9 SPILLOVER EFFECTS ON THIRD COUNTRIES

The BPTF's spillover effects on third parties are generated mainly by its preferential aspect, which results in trade and investment diversion and by the pro-competitive effect on Turkey from the BPTF's contribution to alignment with the EU *acquis*. We comment on these impacts for LDCs and ODCs separately.

Overall, the largest impact in terms of trade diversion in EU imports is felt by LDCs and China, each of which are estimated to have exports to the EU of EUR 330 million less than they otherwise would have as a result of the BPTF. ODCs have not been materially impacted in their trade with the EU.

In terms of Turkey's global import sourcing, the biggest impact is on the United States, which has EUR 1.4 billion lower exports to Turkey as a result of the BPTF. China (EUR 711 million) and Russia (EUR 408 million) also have materially lower exports to Turkey as a result of the BPTF. LDCs, however, which experience preference erosion in the EU, have obtained new preferences in Turkey under the BPTF and have thus enjoyed exports to Turkey of EUR 1.1 billion greater than they otherwise would have. As for the EU, ODCs have not been materially impacted in their trade with Turkey.

At the macroeconomic level, the spillovers on third parties are small. For LDCs, the additional exports to Turkey from GSP extension come close to fully offsetting the welfare impacts of trade diversion from the CU and AFTR. For ODCs, the real GDP and welfare effects are negligible from all feature of the BPTF.

The sectoral implications of the BPTF for LDCs and ODCs are set out in the tables below. Sectoral impacts can be especially important for smaller developing countries that are highly dependent on a small range of exports.

Table 9.1: Sectoral Impacts of removing the BPTF on LDCs, EUR millions unless otherwise indicated

	Exports to EU	Imports from EU	Exports to Turkey	Imports from Turkey	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	Value added share %	value-added %	Unskilled Labour %	Skilled Labour %
Rice	-1	0	1	0	1	0	-0.05	0.37	3.05	0.00	0.00	0.00
Cereals (wheat, coarse grain)	0	2	0	0	2	0	-0.32	0.22	1.64	0.00	0.00	0.00
Vegetables, fruits	3	0	-1	2	1	1	0.25	0.48	4.24	0.00	0.00	0.00
Oil seeds, vegetable oils	-2	3	8	2	10	2	0.70	0.60	1.31	0.02	0.02	0.02
Sugar	0	0	0	0	0	0	-0.10	0.12	0.87	0.00	0.00	0.00
Other primary agricultural products	2	0	-1	1	2	1	0.01	0.63	3.16	0.00	0.00	0.00
Dairy products	0	1	0	3	0	2	0.12	0.32	3.65	0.00	0.00	0.00
Beef, sheep, and other bovine meat	0	1	27	0	28	0	39.80	0.69	0.18	0.15	0.18	0.19
Other meat products	0	2	0	2	0	1	-0.42	0.47	0.08	-0.01	-0.02	-0.02
Other processed food	-1	-1	1	13	-1	5	0.00	0.39	1.20	-0.01	-0.02	-0.01
Other primary animal products	0	0	4	0	3	0	2.21	0.23	1.54	0.01	0.01	0.02
Beverages and tobacco	0	0	2	0	2	0	1.26	0.04	0.70	0.00	-0.01	0.00
Fishing (including aquaculture)	0	0	0	0	0	0	0.10	0.08	1.17	0.00	0.00	0.00
Other primary products	0	4	0	1	6	10	0.01	0.04	2.16	0.01	0.01	0.01
Energy	35	0	-566	6	-332	-103	-1.60	0.10	5.99	-0.03	-0.06	-0.06
Coal and Steel	-4	10	2	6	3	2	-0.08	0.27	1.09	0.02	0.01	0.01
Chemicals, rubber, and plastics	7	10	-58	9	-18	-1	-0.38	0.13	1.72	0.00	-0.01	-0.01
Textiles, clothing, and footwear	259	-1	-277	10	27	-1	-0.04	0.41	2.10	0.01	0.01	0.02
Other Industrial Goods	36	63	-133	70	17	50	-0.30	0.21	6.84	0.02	0.02	0.02
Water	0	0	0	0	0	0	-0.13	0.24	0.32	0.00	-0.01	0.00
Construction	0	2	0	2	0	3	-0.03	0.12	7.34	0.02	0.02	0.03
Trade (retail, wholesale, import/export)	-1	2	-1	1	1	0	-0.07	0.09	13.33	0.00	-0.01	0.00
Transport nec	-4	0	-1	5	-9	2	-0.12	0.16	6.21	0.00	-0.01	0.00
Water transport	-1	1	0	1	-3	1	-0.08	0.04	0.75	-0.03	-0.04	-0.03
Air transport	-1	0	-1	2	-2	1	-0.10	0.04	0.33	-0.01	-0.03	-0.02
Communication	-1	0	-1	1	-1	0	-0.06	0.10	1.60	0.00	-0.01	-0.01
Financial services nec	-1	1	-1	2	-2	0	-0.09	0.09	4.28	0.00	-0.01	-0.01
Insurance	0	1	-2	1	-2	0	-0.20	0.08	0.95	0.00	-0.02	-0.01
Business services nec	-7	14	-2	1	11	7	-0.03	0.06	5.37	0.01	0.00	0.01
Recreational and other services	-1	1	0	2	-2	1	-0.14	0.17	0.98	-0.01	-0.02	-0.01
Public Administration, Defence, Education, Health, and Dwellings	-1	2	-3	1	-2	0	-0.18	0.12	15.86	0.00	-0.01	0.00

Source: Simulations by the study team. Note: Bilateral exports in this table refer to LDC exports to the EU and Turkey combined; bilateral imports refer to LDC imports from the EU and Turkey combined.

Table 9.2: Sectoral Impacts of removing the BPTF on ODCs, EUR millions unless otherwise indicated

	Exports to EU	Imports from EU	Exports to Turkey	Imports from Turkey	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	Value added share %	value-added %	Unskilled Labour %	Skilled Labour %
Rice	0	0	0	0	0	1	-0.22	0.38	1.19	0.00	0.00	0.00
Cereals (wheat, coarse grain)	0	3	0	0	1	1	-0.36	0.33	2.51	0.01	0.01	0.01
Vegetables, fruits	8	0	0	1	7	0	0.33	0.52	6.73	0.01	0.01	0.01
Oil seeds, vegetable oils	0	2	2	0	2	1	0.94	0.43	1.46	0.00	0.00	0.01
Sugar	-1	0	0	0	0	0	-0.09	0.13	0.41	0.00	-0.01	0.00
Other primary agricultural products	1	1	-2	1	-2	1	-0.02	0.34	1.58	-0.01	-0.02	-0.01
Dairy products	0	2	0	0	0	1	0.10	0.18	0.38	0.00	-0.01	-0.01
Beef, sheep, and other bovine meat	-1	1	8	0	8	0	6.66	0.75	1.29	0.02	0.02	0.02
Other meat products	0	2	0	0	0	0	-0.39	0.48	0.34	0.01	0.00	0.00
Other processed food	-1	1	-3	4	-5	3	-0.12	0.20	1.51	-0.01	-0.03	-0.02
Other primary animal products	0	0	4	0	4	0	2.29	0.24	1.48	0.03	0.03	0.03
Beverages and tobacco	0	1	0	0	1	1	0.03	0.04	1.08	0.00	-0.01	-0.01
Fishing (including aquaculture)	0	0	0	0	0	0	0.11	0.06	0.76	0.00	0.00	0.00
Other primary products	1	1	0	0	4	1	0.01	0.03	1.90	0.00	0.00	0.00
Energy	2	2	-7	3	9	3	-0.02	0.09	9.44	0.00	-0.01	-0.01
Coal and Steel	-7	3	7	3	5	3	0.00	0.30	1.25	0.01	-0.01	0.00
Chemicals, rubber, and plastics	1	9	-11	5	-2	6	-0.25	0.12	2.43	0.00	-0.02	-0.02
Textiles, clothing, and footwear	11	0	-4	6	10	4	0.35	0.43	1.26	0.02	0.02	0.03
Other Industrial Goods	18	44	-45	36	5	46	-0.13	0.19	8.24	0.01	0.00	0.00
Water	0	0	0	0	0	0	-0.18	0.25	0.35	0.00	-0.01	0.00
Construction	0	0	0	0	0	1	-0.08	0.15	4.68	0.03	0.03	0.04
Trade (retail, wholesale, import/export)	-1	2	-1	1	-1	2	-0.10	0.10	12.09	0.01	0.00	0.01
Transport nec	-6	0	-1	6	-11	2	-0.13	0.18	2.98	-0.01	-0.04	-0.03
Water transport	-1	0	0	1	-2	0	-0.08	0.08	0.24	-0.03	-0.06	-0.05
Air transport	-2	0	-1	2	-3	1	-0.08	0.06	0.44	-0.02	-0.05	-0.04
Communication	-1	0	0	1	-1	1	-0.08	0.09	2.39	0.00	-0.02	-0.01
Financial services nec	-1	0	-1	2	-2	1	-0.11	0.17	2.86	0.00	-0.01	-0.01
Insurance	0	1	-1	1	-1	1	-0.14	0.08	2.69	0.00	-0.01	-0.01
Business services nec	-1	4	-1	1	-1	4	-0.06	0.08	6.25	0.00	-0.01	0.00
Recreational and other services	-3	0	-1	3	-6	1	-0.16	0.19	2.96	-0.01	-0.02	-0.01
Public Administration, Defence, Education, Health, and Dwellings	-1	2	-2	2	-3	2	-0.15	0.14	16.83	0.00	-0.01	0.00

Source: Simulations by the study team. Note: Bilateral exports in this table refer to ODC exports to the EU and Turkey combined; bilateral imports refer to ODC imports from the EU and Turkey combined.

10 SUMMARY AND CONCLUSIONS CONCERNING THE BPTF

This chapter summarizes the analysis of the BPTF as it has functioned to date, including the factual assessment of the impacts of the BPTF in the various dimensions studied; the assessment of the extent to which the BPTF was not fully implemented and the consequences of such incomplete implementation; the assessment of the spillover effects of the BPTF on sectors that were not covered; and the conclusions flowing from the ex post analysis as to the areas where the BPTF could be enhanced and how.

10.1 Trade and Investment

The BPTF had its primary impact on bilateral trade between the EU and Turkey, with a secondary impact on Turkey's liberalization vis-à-vis the rest of the world due to the requirement under the CU to have a common tariff policy with the EU, which drove Turkey's liberalization vis-à-vis the EU's FTA partners through the conclusion of specific FTAs and GSP beneficiaries, and by both Parties' liberalization on an MFN basis pursuant to the Uruguay Round commitments.

- Overall trade grew very strongly during the BPTF period. For the EU, Turkey gained in importance as a trading partner, and in particular as a destination for EU exports: the share of EU exports going to Turkey rose from about 3% at the beginning of the BPTF period to about 5% in recent years. The share of EU imports from Turkey rose from about 2% to 3% over the period. For Turkey, trade with the EU surged, but the commitment to an open trading regime mandated by the BPTF resulted in trade with third parties surging even more. Thus, the EU's share in Turkey's two-way trade was, in relative terms, at its high point at about the time of the entry into force of the BPTF and tended to decline thereafter.
- Trade in goods that were subject to the BPTF outperformed trade in goods that were not subject to the BPTF.
- The counterfactual CGE analysis suggests that, currently, the EU's exports to Turkey are about EUR 8.7 billion, or 9.1%, higher than they would have been without the BPTF being in place, and Turkey's exports to the EU are about EUR 6.0 billion, or 6.5%, higher than without the BPTF, notwithstanding the preference erosion.
- For both Parties, trade creation dominated trade diversion and both Parties become more open economies as a result of the BPTF. The share of Turkey's trade accounted for the EU's FTA partners increased over the BPTF period, notwithstanding the steep rise in the share accounted for by China, which captured market share globally. This resulted in a modest increase in Turkey's overall openness to trade over and above the increase in bilateral trade.
- The asymmetrical nature of the BPTF and implementation issues resulted in the emergence a number of trade frictions including tariffs and TRQs, import and export restrictions on certain items, some issues with regard to IP protection, subsidies and import surveillance, as well as market access issues for alcoholic beverages and management of SPS problems.

Services trade was not covered by the BPTF. The trend analysis shows that Turkey's services sector developed well during the BPTF period, growing from below-average as a share of GDP for its income class to about average. Turkey also became a prominent services exporter in several categories, including insurance, construction, and tourism. There was one major exception, however, namely business and professional services, where Turkey's export performance lagged badly the performance in comparator countries. One potential unintended consequence of the BPTF is that, by committing Turkey to unilateral liberalization in goods without liberalizing services, it might have deepened Turkey’s comparative advantage in trade in goods and, thus, worked to the disadvantage of services exports. However, the strong performance in the above-mentioned services sectors is not consistent with that hypothesis. The ex post gravity modelling analysis concluded that the BPTF did not have a significant impact on Turkey’s business and professional services exports. Notably, The BPTF period is almost exactly contemporaneous with the period following the implementation of the GATS and it is noteworthy that the sectors in which Turkey recorded strong performance were those subject to GATS commitments, while the sectors in which it lagged were those that were not subject to commitments. The overall conclusion therefore is that Turkey’s reluctance to liberalize was the cause of the weak performance in this important services sector.

Bilateral investment flows, which were also not directly subject to the BPTF, rose steeply during the BPTF period, but fell off after 2007, and have not fully recovered. This outcome is broadly in line with West Asian inward FDI experience in general and reflective of the difficult “neighbourhood” effect of conflict in the Middle East. However, However, domestic economic and political developments also contributed to a reduction in investment attractiveness in recent years. This has been reflected in a compositional shift in capital inflows away from FDI, which in turn has reduced the quality of external financing resulting in increased vulnerability to rising global interest rates. Since the policy reforms of 2012, which led to a marked improvement in external perceptions of Turkey’s competitiveness (including credit risk upgrades by Moody’s and Standards & Poor’s), there has been a tailing off in perceptions of Turkey’s competitiveness, with a steepening decline in 2015/16 amidst rising investor concern about Turkey’s political stability. While recent events have heightened the perceptions of rising risk, evaluations of Turkey’s country risk point to trends dating back to 2011, related to a slowdown of progressive reforms and/or non-implementation. The gravity modelling suggests that EU-Turkey bilateral investment positions are substantially greater than can be accounted for by conventional gravity model variables (size, distance, factors affecting transactions costs). Given the complementarity between goods trade and investment, the BPTF goods trade liberalization provided at least some impetus to deepened bilateral investment linkages; the impetus that the CU requirements for approximation of laws also will have worked in that direction. Accordingly, there is a reasonable case that the BPTF worked indirectly to boost bilateral EU-Turkey FDI.

Cross-border government procurement has developed only to a modest degree and the analysis suggests there is much potential for increased cross-border procurement.

10.2 Output and Welfare

Economic theory and a large body of empirical evidence indicates that expanding trade links generates increased output and welfare through a variety of linkages, including gains from specialization, gains from variety and quality of goods available on the domestic market, and firm-level gains in productivity through reallocation of market shares to more productive firms and knowledge spillovers from trade linkages. There is less robustness in the relationship between FDI and growth and welfare; however, there are linkages between inward FDI and growth through technology upgrading and knowledge spillovers, both horizontal across sectors, and vertically between suppliers and customers.

Driven by the trade gains, the counterfactual analysis indicates that the BPTF has impacted positively real output and economic welfare in both Parties (Table 10.1). The gains are substantially greater for Turkey in both percentage and value terms, reflecting the much greater impact of the BPTF on it compared to the impact of the BPTF on the EU.

Table 10.1: GDP and Welfare Impacts of the BPTF on EU and Turkey

	EU	Turkey
Real GDP (%)	0.008	0.722
Household Income (EUR billions)	1.6	7.5
Of which:		
From the CU	*1.5*	*5.6*
From the AFTR/CSA	*0.4*	*1.6*
From Turkey's liberalization with EU FTA partners	*-0.1*	*0.4*
From Turkey's extension of the GSP to EU GSP beneficiaries	*-0.1*	*0.0*

Source: Simulations by the study team.

The main source of gains is from the reduction of trade costs under the CU from the lapsing of the requirements associated with compliance with ROOs. For Turkey, the EU's relatively deep liberalization under the AFTR adds a further solid gain to welfare.

Further, the entry into force of the CU reduced uncertainty about future market access; given that uncertainty acts as an NTB to goods trade, this further reduced the barriers to bilateral trade. Similarly, measures in the BPTF for greater approximation of laws may have had a further cost-reducing effect for trading firms serving both the EU and Turkish markets. These latter effects are not explicitly factored into the calculations, but do support a strong CU cost-reducing effect.

10.3 Sectoral Impacts

Consistent with the primary role of reduced costs under the CU, the main sectors benefiting from the BPTF are the industrial goods sectors in both the EU and Turkey.

In the EU, the chemicals, rubber, and plastics group, and coal and steel also benefit particularly from the BPTF. In the agricultural area, the oilseeds sector benefited in particular from the BPTF.

In Turkey, benefits accrue across a wide range of sectors, with most services sectors making significant gains driven by income effects of the BPTF. Industrial goods, textiles, clothing and footwear, processed food, and fruits and vegetables benefit particularly.

Within the industrial goods sector, the reduction of trade costs through the lapsing of ROOs requirements disproportionately benefited SME-dominated sectors, since the fixed-cost component of ROOs falls more heavily on SMEs, as well as sectors which feature deeper integration of value chains across the EU-Turkey border, such as automotive production, since the CU negated the build-up of ROOs-related costs within the value chain as inputs cross the border multiple times (e.g., first as raw materials, then as finished intermediate inputs, then as part of the final assembled product).

10.4 Economic development

The analysis suggests that the Turkey's progress up the technology ladder during the BPTF period was concentrated on medium-technology production, while higher-technology production failed to take off. Turkey was already a middle-income economy by the time the BPTF came into force. The subsequent transformation of the Turkish economy towards the profile of a high-income economy was thus relatively limited and essentially stalled midway during the period, as shown by the trend analysis.

The product composition of Turkey's exports to the EU remained stable over the BPTF period, with two notable exceptions: textiles and clothing lost ground, while motor vehicles increased their share. The period did witness the emergence of more deeply integrated production networks between Turkish and European firms, but Turkey's progress in terms of export of sophisticated technological products was modest and, for the most part, limited to a brief window between the reforms initiated to address its 2001 balance of payments crisis and the global financial and economic crisis of 2008-09.

While Turkey's cross-border services exports lagged, as a share of GDP, the service sector did grow from below average to average over the BPTF period. Moreover, some services sectors' exports did grow strongly (e.g., tourism, construction, and insurance), in line with the global norm during this period. Accordingly, Turkey's development in services sector does not appear to have been materially hindered by the exclusion of this sector from the BPTF. As noted above, the under-performance on business and professional services is more closely linked to the limited commitments Turkey made in these sectors under the GATS, compared to the more liberal commitments it made in services sectors which flourished in the GATS/BPTF era (insurance, transport and tourism).

The counterfactual CGE analysis confirms that the BPTF favoured industrial production, including in the traditional textiles, clothing and footwear area, but does not have the granularity to expose whether the BPTF favoured or disfavoured higher-technology goods production. Whether the failure to break through into higher-technology production could be attributed to the comparative advantage effects of the BPTF which favoured EU high technology exports, or whether it reflected structural factors in the Turkish economy (e.g., weakness in the innovation system, weak SME performance, and the under-development of its professional business services) is not laid bare by the counterfactual. The analysis does, nonetheless, suggest that Turkey's global competitiveness and growth prospects was improved as a result of the lowered cost of trade in industrial products with the EU, as well as through greater alignment of rules, which worked to improve Turkey's ability to make stronger undertakings in its recent FTAs with third parties.

10.5 Consumer Impacts

Consumers benefit considerably from the BPTF with the main sources of benefits coming from increased incomes. There is some evidence for the improvement of Turkey's quality infrastructure from the BPTF impetus for approximation of laws and the enticement of improved market access, which resulted in decline in notifications on sub-standard and potentially hazardous goods in more recent years, after an increase in the earlier years of the BPTF and particularly after Bulgaria's access to the EU (which may reflect sui generis features of Bulgaria's trade with Turkey). Consumers in both economies benefit from greater variety, with the greater benefits accruing to Turkish consumers due to the substantially greater impetus for opening not only to the EU but to EU FTA partners from the BPTF. We do not identify any unintended consequence from the BPTF.

10.6 Social Impacts

The social impact of the BPTF is assessed to be small and for the most part positive, although there are some areas where negative impacts appear to have emerged.

- The CGE-based quantitative analysis conducted in this study assumes full employment and the modelling protocol assumes no net job creation or loss. Accordingly, the quantitative modelling sheds no light on the BPTF's impact on total employment levels, or on potential differential impacts on skilled versus unskilled labour, apart from sectoral reallocation of labour. At the sector level, the BPTF has impacted on employment both in the EU and in Turkey by changing the sectoral composition. In the EU, the sector effects were small: the BPTF has led to small increases in employment in the oil seeds and vegetable oils and coal and steel sectors. Sectors that may have experienced relative job losses are textiles, clothing and footwear, and vegetables and fruits. In Turkey, based on the foregone employment from removing the BPTF, it favoured employment gains in construction (1.9%), textiles, clothing and footwear (1.4%) and the fishery sector (0.9%). The most significant contractions in employment in major sectors in relative terms were in coal and steel (2.6%), insurance (2.4%), the oil seeds sector (2%) and the chemicals, rubber and plastics complex (1.8%). The BPTF impact on women's employment appears to have been slightly positive; its impact on youth employment cannot be determined from the available information.

- Based on the CGE analysis, household **incomes** (welfare) were impacted positively both in the EU and Turkey and the impact of exporting to the EU had a relatively significant impact in Turkey in terms of boosting wages relative to non-exporting firms.

- The impact of the BPTF on **poverty** in Turkey is considered to have been positive: not only did the BPTF contribute to increasing incomes overall, but it also appears to have had a positive impact on income distribution across sectors.

- Regarding **job quality** and related issues, such as occupational health and safety, an effect of the BPTF cannot clearly be established.

- In terms of **social protection**, the BPTF appears to have contributed to a strengthening overall. Social spending increased over time, and although there is no proof that this increase can be attributed to the BPTF, given the findings of the CGE analysis, which show an overall positive impact on Turkey's economy, it is plausible to assume that the BPTF contributed to the increase in social security spending. This was mostly concentrated in pensions and health, whereas family and unemployment benefits were not positively affected by the BPTF, nor were, as a consequence, women, who would have been the primary beneficiaries of spending on family benefits.

- Finally, the effect of the BPTF on **social dialogue** in Turkey seems to have been limited to those firms and sectors, which have witnessed increased investment from the EU; increased trade between Turkey and the EU does not seem to have had any noticeable impact on social dialogue.

A general weakness in the current BPTF framework is that social implications are not addressed explicitly in the legal documents. Therefore, any social benefits that have been achieved under the BPTF have "trickled down" from the economic impact. While this has worked reasonably well for employment, wages and income, at an aggregate level, specific benefits for women and youth, as well as progress in labour standards have been more limited. Although these have been pushed in the context of the bilateral policy and civil society dialogue, a stronger legal basis for this would have been desirable.

10.7 Environmental Impacts

The effects of the BPTF on environmental outcomes are mostly negligible. When expressed in monetary terms, the BPTF has led to a social cost of carbon that ranges from EUR 3.0 million to 15.1 million in the EU (2015 rates) and from EUR 0.7 million to 3.5 million for Turkey.

On the qualitative side, the main impacts were on waste production and land use impacts on ecosystems and biodiversity, but the impact of the BPTF is limited compared to other sources of damages, which are mostly derived from weak Turkish environmental policies and legislative protection.

10.8 Regulatory and Institutional Impacts

Regulatory convergence by Turkey as required by the CU has overall advanced well, although it is not possible to attribute this to the CU, because the same areas are also covered by the accession process. Only in selected areas, such as state aid, customs tariffs, and taxation, alignment has been slow (or there has even been reversal).

Enforcement and implementation of new and revised laws has been less than complete, due to the often high level of technical experience required, which is still in the process of being built, including with EU assistance; further capacity building support will undoubtedly be required.

The impact of the BPTF on commercial policy convergence has been mixed. On the positive side, to a large extent bilateral trade agreements are aligned to a large extent regarding partner countries. However, in a number of cases, Turkey has not been able to conclude FTAs with the EU's FTA partners, which has resulted in an asymmetry problem for Turkey (since it de facto has to unilaterally liberalize vis-à-vis such countries). In addition, the scope of Turkey's FTAs is mostly still shallow, with services and investment issues only being included in the most recent agreements, and some provisions, such as anti-fraud rules, not at all. Finally, no harmonisation has taken place with regard to the use of TDIs.

10.9 Human Rights Impacts

The legal text of the CU does not directly address human rights, so specific accomplishments or failures cannot be ascribed to specific features of the BPTF. However, the approximation of laws requirement under the CU has contributed to progress in human rights observance by Turkey in a number of areas, including:

- **IP**, where Turkey has made significant strides in alignment with the EU regulatory acquis in a wide range of IP areas, and has recently introduced long-delayed legislation dealing with patents.
- **Rights to a fair trial** in competition law matters.
- **Rights to life, health and clean environment,** where the CU strengthened the normative presumption in favour of these rights.

For other human rights, where a lack of progress has been identified (freedom of expression, gender issues, and child labour), a still stronger economic impact from the BPTF might have provided greater impetus for progress.

Since the BPTF led to general changes in the Turkish economy and society, and since human rights are interconnected and intertwined with many spheres of life, the impact might be very broad and cover some human rights that may not be directly related to the legal text of the BPTF. While it is not possible to isolate the pure BPTF effect from other factors, it may have supported progress in human rights observances through the following channels:

- Increased resources for the realisation of human rights due to the positive effects of the BPTF on government revenue.
- Right to decent standard of living due to the positive impact of the BPTF on household incomes.
- Trade-related impacts on improved access to goods and services, including food.

10.10 Spillover Effects

The BPTF generally had minor spillover effects on third parties. For LDCs and ODCs, the effects were negligible as there were some offsets to trade diversion from Turkey's extension of GSP preferences.

10.11 Potential improvements

While the BPTF generated significant benefits for both the EU and Turkey, it could have been still more beneficial:

- First, the commercial policy that Turkey adopted during the BPTF period because of the CU requirements was not tailored to its needs and, thus, was sub-optimal from its perspective. While unilateral liberalization vis-à-vis the

EU's FTA partners is analysed as a positive factor for Turkey's overall development and its economic welfare, obtaining reciprocal concessions and recognition of goods originating in Turkey for diagonal cumulation in the EU's FTAs would have been still better. From a political economy perspective, formal mechanisms to take Turkey's sensitivities into account in the EU's commercial policy formulation would also have smoothed commercial relations.

- Second, the unbalanced liberalization under the BPTF, which favoured goods trade, was accompanied by underperformance of Turkey's services sector's exports, particularly of professional and business services. The analysis in this study found no link between the BTPF and Turkey's under-performance on services; at the same time, circumstantial evidence points to Turkey's reluctance to make commitments in this sector in the GATS negotiations as a likely key factor, given that Turkey performed well in areas where it did make strong commitments. Upgrading the BPTF to a more balanced framework that incorporates services would remove this bias against the development of a dynamic export-oriented services sector in Turkey.
- Third, Turkey's retention of higher and more extensive protection of primary agriculture under the BPTF resulted in commensurately reduced structural adjustment towards a more efficient economy, and thus smaller gains that otherwise would have been possible.
- Fourth, a range of frictions that militated against the full realization of the potential benefits of the CU emerged or were laid bare by the expansion of bilateral trade during the BPTF period, including: new NTBs erected by Turkey that frustrated EU goods sector export interests; and the lack of a services component to the BPTF to facilitate the functioning of the cross-border value chains and production networks that emerged under the BPTF.
- Finally, the BPTF institutional framework was revealed to be inadequate to satisfactorily address the frictions that emerged under the deep integration fostered by the CU, including as regards dispute settlement and ensuring coordination in the development of commercial regulations.

Accordingly, confirming previous analyses of the BPTF, this study's evaluation of the BPTF on an ex post basis suggests that modernization and upgrading of the commercial policy governing the EU-Turkey relationship is needed, with particular emphasis on removing the imbalances in terms of sectoral coverage (services and primary agriculture) and in the negotiation of commercial treaties with third parties; addressing a range of NTBs to goods trade that emerged or became important as integration deepened under the CU; and improving the institutional framework for managing bilateral commercial relations.

PART II: EX ANTE ANALYSIS OF POTENTIAL ENHANCEMENTS OF THE EU-TURKEY BPTF

Building on the review in Part I of this study of the BPTF as it has functioned, this Part undertakes a comprehensive analysis of potential enhancements to the bilateral framework. Two specific options are considered: an ECF that builds on the existing CU; and a DCFTA that replaces the CU. In terms of structure, Part II mirrors Part I, addressing sequentially the economic, social, environmental, regulatory and institutional, and human rights impacts, as well as spillovers on third parties.

Chapter 11 analyses the ECF and DCFTA options on the basis of CGE simulations. Social implications of these two options are addressed in Chapter 12, environmental implications in Chapter 13, regulatory and institutional implications in Chapter 14, human rights implications in Chapter 15, and potential spillover effects on third parties, with a focus on LDCs and ODCs, in Chapter 16. Chapter 17 draws conclusions concerning the potential impacts of the ECF and DCFTA scenarios.

11 ECONOMIC EFFECTS OF ALTERNATIVE ENHANCEMENT OPTIONS

This chapter deploys the CGE modelling framework used to analyse the BPTF in Part I to simulate the impacts of implementing the ECF and DCFTA. For a description of the modelling framework and the methodological issues raised in CGE analysis, see Annex C. In this chapter, we describe the assumptions underlying the construction of the policy shocks to simulate the new alternative options, describe the modelling results, and discuss the implications for consumers, SMEs, and fiscal revenues.

11.1 The Policy Scenarios

The ECF is conceived as a CU with the scope unchanged (industrial products only), the CSA, plus an FTA covering trade in agriculture and fishery products (thus subsuming the AFTR and fully liberalizing the areas not liberalized by the AFTR), services and establishment, NTBs, and public procurement. Specifically, this scenario assumes:

- Full elimination of the remaining tariffs on bilateral goods trade currently maintained by both Parties. In practical terms this scenario eliminates all bilateral protection in the latest GTAP dataset aggregated to the study sectors.
- An improvement by Turkey of its border regime for goods trade to EU best practice norms. In practical terms, the extent of improvement is assessed by comparing Turkey's scores on the OECD's Trade Facilitation Indicator's (TFI) index to the highest score of an EU Member State. The difference represents a percentage change in the overall level of Turkey's border regime as reflected in the TFI subject matter covered. In turn this is related to published estimates of the value of a TFI score improvement on trade costs. This approach identifies a feasible reduction of goods trade costs of 4.7%.
- A high quality level of improvement in services trade bindings and market access, broadly consistent with recent ambitious EU trade agreements, such as the Canada-EU CETA.[101] In practical terms, the average level of protection of services in Turkey (in terms of a trade cost equivalent or TCE) is calculated from published estimates; 50% of the barriers that generate these costs are assumed to be actionable; and 75% of the actionable barriers are assumed to be eliminated under the ECF. Bottom-up analysis of Turkey's services trade restrictiveness under the OECD's STRI is conducted to validate that this level of TCE reduction would be feasible pursuant to a high quality trade agreement. However, so as not to pre-judge the specific outcome of a negotiation, the scenario adopts the expedient of the simple numerical estimate described above. For Turkey, this results in a 7% cut in estimated services trade costs; for the EU, an assumed 3% reduction in services trade costs is assumed to reflect the improvement in services market access bindings under a high quality agreement (this follows the practice adopted in the study of the EU-Singapore FTA).
- A high quality level of commitments on investment, broadly consistent with recent ambitious EU trade agreements. The degree of improvement in investment conditions is identified by scoring the improvement in Turkey's investment regime that would be implied by the adoption of CETA-level investment disciplines. This improvement is based on the change in Turkey's score on an elaborated version of the OECD's Foreign Direct Investment Restrictiveness (FDIR) index. For the EU the estimate is based on the improvement in bound market access conditions for investment. The policy shock is implemented in the CGE model adopted for the study by reducing the

[101] It should be noted that the EU and Turkey are currently negotiating the Trade in Services Agreement, which once concluded might change and limit the scope for additional commitments in the context of a bilateral deal.

restrictiveness level in the model that explains the level of FDI in the EU by 10% and in Turkey by 25%. As in the case of the services shock, to avoid pre-judging the specific outcome of a negotiation, the reduction in restrictiveness is applied as a simple across-the-the board reduction applying to all sectors equally.

The DCFTA replaces the CU and establishes an FTA that covers all goods trade, including industrial, agriculture, and fishery products, plus services, NTBs, establishment, and public procurement. While the scope of the DCFTA is the same as the ECF, it involves a less ambitious scenario in terms of depth of liberalization in terms of tariff reductions for sensitive sectors, goods NTBs, services cost reductions, and FDI barriers.

- For goods, liberalization of sensitive sectors in the EU and Turkey is more limited.
- For goods NTBs, the level of trade cost reduction of border costs is reduced by 75% compared to the ECF. In addition, however, the key element in this scenario is that the removal of the CU involves a new cost for industrial goods trade. Consistent with the assumption made for the BPTF analysis, this cost increment for new ROOs is set at 2% for bilateral goods trade in both directions. This results in a net trade cost reduction of goods entering Turkey of 1.525% (4.7% times .75 = 3.525%, minus 2% = 1.525%) and a trade cost increase for goods entering the EU of 2% (since the EU does not realize cost reductions from trade facilitating measures under the DCFTA, but does experience the cost increase implied by the application of ROOs for industrialized goods trade).
- For services, a simple assumption of a symmetric 3% trade cost reduction by both Parties based on improved binding of existing market access is assumed.
- For FDI, the same 10% assumption is adopted for the EU; for Turkey a less ambitious 15% is assumed.

11.2 Results: The ECF Scenario

11.2.1 Trade Impacts

The bilateral liberalization under the ECF generates a very strong bilateral export gain for the EU of EUR 28.5 billion, which is much larger than the bilateral export gain of EUR 5 billion made by Turkey. At the same time, the EU’s bilateral export gains generate a considerable amount of trade deflection, with trade being reoriented from domestic markets and third parties towards Turkey. Similarly, the EU’s imports from third parties rise strongly, reflecting not only the replacement of EU production previously destined for EU domestic markets but also the general increase in income in the EU, which expands demand generally.

For Turkey, much of the EU’s bilateral export gains displace imports from third parties; Turkey’s overall imports accordingly rise by less than half the amount of the expansion of bilateral imports from the EU. At the same time, the positive impacts of the ECF on Turkey’s competitiveness drive export gains to third parties.

The result is a significant gain in total trade for both Parties, and a much more balanced outcome on total trade than implied by the highly unbalanced bilateral trade impacts, which reflect the larger liberalization shock assumed for Turkey under the ECF.

The ECF impact on third parties’ trade is to shift exports from Turkey towards the EU. On balance, there is some erosion of net exports for third parties, but the overall impact is much less severe than implied by the trade diversion/deflection observed in the EU’s and Turkey’s third party trade. For example, while Turkey’s imports from

LDCs fall by EUR 1.3 billion, the EU's imports from this group rise by EUR 0.7 billion, reducing the net reduction of exports to the EUR 620 million range.

Table 11.1: Trade Impacts of the ECF by Region, EUR millions

	EU		Turkey	
	Exports	Imports	Exports	Imports
EU28	-	-	4,960	28,474
Turkey	27,062	5,233	-	-
EFTA	-682	559	87	-704
EP	-541	383	324	-922
SP	-1,834	948	1,176	-2,303
Russia	-1,239	1,069	259	-1,924
US	-1,672	1,426	179	-2,737
Canada	-282	233	32	-254
Mexico	-176	96	9	-102
CSA	-662	597	88	-722
China	-1,692	2,382	83	-3,471
Japan	-389	292	16	-372
Korea	-430	285	23	-789
ASEAN7	-663	613	52	-779
LDC	-877	676	171	-1,296
ODC	-591	328	68	-469
ROW	-674	499	201	-1,153
Total	14,657	15,619	7,728	10,475

Source: Simulations by the study team. All figures are for 2026, baseline minus counterfactual. Note: the data show exports by the EU and Turkey to, and imports from, the regions in the first column.

11.2.2 Real GDP and Welfare Impacts

The impact of the ECF on the combined EU-Turkey region is a gain in real GDP of about 0.02%, with a corresponding welfare gain for the EU and Turkey combined of about EUR 17.9 billion.

Table 11.2: Real GDP and Welfare Impacts of the ECF by Region

	Real GDP (% Change)	Welfare (EUR millions)
EU28	0.007	5,388
Turkey	1.438	12,522
EFTA	-0.010	-242
EP	-0.004	-476
SP	-0.013	-2,187
Russia	-0.006	-222
US	-0.002	-271
Canada	-0.004	-764
Mexico	-0.018	-1,020
CSA	-0.007	-142
China	-0.007	-243
Japan	-0.003	-13
Korea	-0.010	-500
ASEAN7	-0.010	-340
LDC	-0.014	-821
ODC	-0.012	-279
ROW	-0.006	-325
Total	0.013	10,064
Memo: EU-Turkey	0.018	17,910

Source: Simulations by the study team. All figures are for 2026, baseline minus counterfactual.

The real GDP and welfare gains are heavily weighted towards Turkey. For Turkey, real GDP rises by 1.4%, and economic welfare by EUR 12.5 billion. For the EU, the ECF is estimated to generate a change in real GDP of a little less than 0.01%. Economic welfare increases by EUR 5.4 billion largely due to positive terms of trade effects.

The skewing of impacts towards Turkey is consistent with the deeper liberalization commitments the ECF elicits from Turkey, particularly on goods NTBs, and the much larger impact that trade with the EU has on Turkey, compared to the impact that trade with Turkey has on the EU. Cost reductions have powerful impacts on global competitiveness. Thus, although the direct impact of the ECF on Turkey is a surge in imports from the EU, the lowered cost of imports drive welfare gains and lowered production costs that percolate through the economy, increasing capacity for production for domestic markets (hence displacing third party imports), and also increasing competitiveness in third markets, resulting in an expansion of exports to third parties.

The impacts of the ECF on third parties are uniformly negative but relatively small, given there are no positive spillovers to offset trade diversion effects (positive spillovers for third parties exporting to both the EU and Turkey do, of course, arise from the alignment of Turkey's standards under the accession process and the approximation of laws required under the CU, but these are not attributed to the ECF).

11.2.3 Macroeconomic Impacts on the EU and Turkey

This section reports the results of the ECF for the EU and Turkey in more detail. Table 11.3 sets out the impacts on the major macroeconomic variables.

Table 11.3: ECF Macroeconomic Impacts on the EU and Turkey

	EU	Turkey
Economic Welfare (EUR millions)	5,388	12,522
Economic Welfare (% change)	0.032	1.25
GDP Value Change (EUR millions)	1,383	15,606
GDP Volume (% change)	0.007	1.44
Consumption (% change)	0.037	1.27
Government Expenditure (% change)	0.018	0.59
Investment (% change)	0.017	2.46
Total Exports of Goods and Services (% change)	0.054	3.20
Total Imports of Goods and Services (% change)	0.107	3.02
Trade Balance (EUR millions)	-363	-2,739
Capital Stock (% change)	0.005	1.29
Terms of Trade (% change)	0.053	-0.53
CPI (% change)	0.068	-0.45

Source: Simulations by the study team. All figures are for 2026, baseline minus counterfactual.

As can be seen, both real imports and exports of goods and services rise faster than real GDP for both economies, implying an increase in the overall openness of the EU and of Turkey. The real GDP gains are about 9% of the gains in two-way trade for the EU but about 46% for Turkey. This reflects two fundamental features of the ECF scenario: for the EU, the trade impact is much smaller relative to the size of the economy and thus has much less leverage in terms of generating cost reductions; for Turkey, the gains are disproportionately gained through cost reductions, which are more powerful in driving real output gains than are tariff cuts.

The overall trade balance declines marginally in value terms for the EU, reflecting the stronger increase in real imports compared to real exports; the increased import flows stem from the positive income effect on the EU relative to the rest of the world, and the net capital inflows into the EU due to the increase in FDI inflows, which raise the capital account surplus and, thus, work to reduce the current account balance. The impact is partially offset by improved terms of trade.

Turkey's overall trade balance declines in value terms by about EUR 2.7 billion, reflecting a combination of the increased growth in Turkey relative to the world and a relatively steep decline in the terms of trade due to the lowering of costs in the Turkish economy due to the NTB reductions.

11.2.4 Sources of the Impacts of the ECF

The major source of welfare gain for both the EU and Turkey comes from the reduction of goods sector NTBs. Turkey also makes relatively significant gains from services sector NTBs, while the EU benefits in welfare terms more from tariff liberalization. FDI liberalization adds little to the mix.

Real GDP impacts are structured somewhat differently. For both Parties, goods NTB reductions drive the largest gains in real GDP, lesser gains from services liberalization and negligible gains from FDI liberalization. However, whereas Turkey experiences welfare reduction from the tariff cuts due to adverse terms of trade effects, it makes real GDP gains as a result of the same strong terms of trade effects. Meanwhile, the EU, which makes welfare gains from the tariff reductions, achieves little real GDP gain from this source.

For third parties, the scale of the impacts of the ECF follow the same pattern: goods NTB reductions drive the largest impacts on real GDP; lesser impacts are felt from services liberalization and negligible impacts come from FDI liberalization.

Table 11.4: Sources of Impact by ECF Component

	Real GDP %Change				Economic Welfare (EUR millions)			
	Tariffs and ROOs	Goods NTBs	Services NTBs	FDI NTBs	Tariffs	Goods NTBs	Services NTBs	FDI NTBs
EU28	0.0001	0.0046	0.0026	0.0000	1,049	3,824	515	0
Turkey	0.106	1.209	0.122	0.001	275	10,766	1,470	10
EFTA	-0.002	-0.007	-0.001	0.000	-36	-187	-20	0
EP	0.004	-0.004	-0.004	0.000	-57	-325	-95	0
SP	0.000	-0.011	-0.002	0.000	676	-2,320	-548	5
Russia	0.003	-0.007	-0.002	0.000	8	-192	-37	0
US	0.000	-0.001	0.000	0.000	-88	-151	-32	1
Canada	0.000	-0.003	0.000	0.000	-75	-612	-77	0
Mexico	-0.001	-0.015	-0.002	0.000	-36	-881	-106	3
CSA	-0.001	-0.005	-0.001	0.000	-37	-96	-10	0
China	-0.001	-0.006	0.000	0.000	-37	-192	-14	0
Japan	0.000	-0.002	0.000	0.000	2	-13	-2	0
Korea	0.000	-0.010	-0.001	0.000	30	-510	-20	0
ASEAN7	-0.001	-0.008	-0.001	0.000	-36	-262	-42	0
LDC	-0.001	-0.011	-0.001	0.000	-113	-661	-46	0
ODC	0.000	-0.010	-0.001	0.000	-2	-245	-32	0
ROW	0.000	-0.005	-0.001	0.000	-14	-279	-33	1
Total	0.001	0.011	0.001	0.000	1,509	7,663	871	21
Memo: EU-TR	0.001	0.015	0.002	0.000	1,324	14,590	1,985	10

Source: Simulations by the study team.

11.2.5 Sectoral Impacts of the ECF

For the EU, lower trade costs in Turkey for industrial goods, together with demand pull from higher Turkish GDP, drive very strong gains for industrial exports. The "other industrial" sector exports expand by EUR 10.8 billion, followed by the chemicals sector (EUR 3.4 billion), energy (EUR 2.4 billion) and coal and steel (EUR 1.8 billion).

Removal of remaining tariff barriers under the ECF results in significant boosts to EU cereals, dairy and oilseed sector exports. The beef sector gains in this simulation are sensitive to the base level of exports. In 2011, the base year for the GTAP V9 dataset, the EU had unusually large exports of beef to Turkey due to the prolonged drought from 2007 on. While these exports have since evaporated, the reduction of Turkey's market access restrictions would likely result in a solid gain for the EU, as shown.

The EU's services sectors make only modest gains in bilateral exports, a reflection of the low initial levels and experience reductions of real output as productive resources are redistributed within the EU economy to the industrial sectors.

For Turkey, bilateral export gains are well distributed. Industrial goods and textiles and clothing and footwear make the largest gains; for the latter sectors, this translates in significant real output gains of 2.28%. The largest negative impacts fall on the cereals and dairy sectors, which experience reductions in output of 12.65% and 6.32% respectively as competitive EU exports displace Turkish production. Processed foods however, see an improvement in real output due to the lower cost of inputs. Turkey's services sectors generally do well under the ECF, reflecting both the improved market access conditions from the EU in terms of reduced uncertainty and from the general income effects generated by the ECF.

A striking feature of the sectoral outcomes is the consistent reduction of real output in the services sectors in response to the ECF shock. This counter-intuitive outcome of the simulations stems from a combination of four factors impacting on the results; these are discussed in Box 11.1.

Box 11.1: The Services Sector Impacts under the ECF and DCFTA

The modelling results for services in the ECF and DCFTA scenarios are counter-intuitive. The EU has global revealed comparative advantage in services and faces a relatively highly protected services market in Turkey. There are legitimate expectations that a significant reduction of barriers to services imports in Turkey would result in large gains for EU services exporters and expanded real output in the EU's services sectors. The modelling results do not show this; rather, they suggest that the EU would make modest gains in the value of services exports to Turkey (albeit double-digit percentage gains), but would also see a decline in real output in its services sectors as a result of these scenarios.

Four technical factors combine to generate these results in a modelling environment that reflects the principle of comparative advantage: (a) the initial low levels of EU exports to Turkey due to high levels of protection in the Turkish market; (b) the absence of services sector price differentials in Turkey versus the EU due to the protection levels; (c) the assumption of binding real productive resource constraints on the EU economy; and (d) the lack of a "Single Market" effect in the model for the aggregated EU economy. We discuss the role of these factors in turn.

First, according to Eurostat, the EU imported EUR 15.7 billion worth of services from Turkey in 2014 and exported EUR 11 billion, resulting in a trade deficit of EUR 4.7 billion. This pattern is consistent with Turkey's global services trade performance: in 2015, Turkey registered EUR 42.1 billion of services exports, EUR 20.5 billion in services imports, and a services trade surplus of EUR 21.6 billion. In the GTAP data, which reflect only Mode 1 services, the bilateral trade levels are smaller and the EU's deficit is larger: in the 2026 projection, the EU has baseline bilateral services exports of EUR 5.56 billion and bilateral imports of EUR 17.9 billion. The EU thus has a steep revealed comparative disadvantage in services trade with Turkey. In reality the EU's services trade deficit is the result of the higher protection in the Turkish market (this is known technically as the "endogeneity bias" where high protection results in low trade flows). In a modelling environment, liberalization results in reallocation of resources towards areas of comparative advantage; in the EU's case, this means away from services and towards industrial products.

Second, in the GTAP dataset used for the simulations, there is no nominal protection included for services, unlike in the case of goods. For goods, the domestic price is equal to the world price plus a margin that reflects the height of tariffs. Highly protected goods sectors thus have higher domestic prices and, given the assumption of zero profits under perfect competition, higher domestic costs of production. Trade liberalization exposes the higher cost sectors to import competition. Prices and costs in the protected sector fall while they necessarily rise elsewhere as equilibrium is restored. In services, all sectors operate at the world price, as there is no protection wedge between domestic and import prices. Services liberalization is implemented as a reduction in the trade cost of selling the service across borders. Starting from a position of symmetric prices, the lowering of costs in one flow necessarily lowers the still-symmetric equilibrium costs and prices globally. Turkey, which faces the steeper reduction in import costs under the ECF plus a strong cut on a much greater bilateral export flow gets the benefit of the greatest production quantity boost; its services sectors almost uniformly make solid gains in value-added, while the EU's services sectors uniformly experience reductions in production quantity declines.

Third, general equilibrium model simulations assume full utilization of factors of production. There is no unemployment and no excess capacity. The only gains in production potential arise from reallocation of resources across sectors; this is the familiar comparative advantage effect where shifting production to the sector with a comparative cost advantage enables overall greater production. Modern heterogeneous firms trade theory and the associated empirical literature firmly establishes that a major source of productivity gains in response to trade liberalization is reallocation of production within sectors from lower- to higher-productivity firms. While some CGE models have been designed to capture this effect, the state of the art is at an early stage and this effect could not formally be incorporated in the simulations reported in the present study. In response to the positive demand shock generated by the ECF policy package, the competition for scarce factors of production bids up wages and returns to capital. This is reflected in higher prices. Note that this is not inflation: global price levels remain unchanged. However, the relative prices in the liberalizing countries rise and all other countries face an exactly offsetting decline in relative prices (that is, the terms of trade globally are unchanged). As part of the equilibrium dynamics, the rising factor prices in the liberalising economies reduce their competitiveness globally, generating trade diversion. Thus, in the simulations, the EU experiences large increases in imports from third parties that are substantially larger than the gain in exports to Turkey. The strong terms of trade effect derives from the goods sector, where the EU has comparative advantage in its trade with Turkey.

Fourth, the trade diversion effects in the EU are exaggerated by the fact that the aggregated EU economy is not treated like a single market in the model. The internal Single Market trade account remains in place and the substitution across sources of imports includes substitution away from Single Market trade. Here it is important to note that the GTAP modelling framework is based on the "Armington" hypothesis that goods (and services) are differentiated by country of origin and are imperfect substitutes. Two elasticities of substitution come into play: one between domestic goods and services and imports; and a second between alternative sources of imports. The second elasticity is by convention twice the size of the first. This has the effect that consumers are twice as prepared to substitute between competing sources of imports as they are to switch from domestic goods and services to imports. This stylized assumption reflects the well-known effect of "home bias". In a single market like, for example, the United States, the model assumes that a New York consumer treats California produce as if it were local New York produce and is less prepared to switch to Mexican produce if tariffs on the Mexican product were reduced. But in the EU Single Market, a German consumer would treat Portuguese produce with exactly the same degree of attachment as Turkish – or Moroccan or South African – produce. There is no allowance for an EU preference. This exaggerates to some extent the degree of trade diversion the model reports for the EU.

Do these issues undermine the main conclusions reached by the study?

No. The main conclusions of the likely strong benefits of the ECF to the parties rests on the economic welfare calculation, which takes into account both terms of trade and quantity impacts, and is thus much less sensitive to the breakdown between these effects. These concerns do however compromise the value of the modelling results in informing on the breakdown between quantity and price effects – and thus on real GDP – and also on the sectoral distribution of the impacts, which in this case are clearly skewed.

Why were adjustments not made to directly address these concerns?

There are several reasons. In the first instance, the simulations follow strict modelling protocols that were adopted to avoid the risk of over-stating the gains from agreements. These strict protocols are relaxed in the sensitivity analysis. There the results show that the estimated gains improve for the EU; taking into account the endogeneity bias raises the services gains estimates sufficiently that some EU services sectors make gains (although not uniformly). However, there is little guidance at this point to calibrate the effects. The conservative approach adopted therefore was to follow the standard modelling protocol and to address the issues through sensitivity analysis to identify the direction of the bias.

Table 11.5: ECF Sectoral Impacts in the EU, EUR million and percentage change

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	Value-added %	Value Added Share	Unskilled Labour %	Skilled Labour %
Rice	166	9	158	51	417.28	193.93	1.69	0.02	2.12	2.13
Cereals (wheat, coarse grain)	2,486	8	2,096	256	786.93	23.89	2.39	0.26	2.72	2.73
Vegetables, fruits	229	185	181	254	213.82	9.11	-0.15	0.32	-0.09	-0.09
Oil seeds, vegetable oils	702	39	580	278	123.61	21.73	0.40	0.18	0.55	0.56
Sugar	117	7	100	38	2005.65	115.90	0.34	0.11	0.45	0.46
Other primary agricultural products	418	11	307	291	96.83	3.38	-0.01	0.33	0.07	0.07
Dairy products	1,315	94	1,114	135	1979.01	364.62	0.34	0.67	0.51	0.52
Beef, sheep, and other bovine meat	531	21	466	94	70.54	48.41	0.36	0.13	0.50	0.52
Other meat products	117	15	-33	97	389.24	28.96	-0.12	0.34	-0.18	-0.15
Other processed food	64	159	-160	336	6.41	5.66	-0.06	1.35	-0.11	-0.08
Other primary animal products	606	3	556	40	58.07	5.36	0.32	0.36	0.43	0.44
Beverages and tobacco	38	6	-6	27	4.89	3.11	-0.01	0.72	-0.04	-0.01
Fishing (including aquaculture)	3	-3	2	7	64.69	-1.93	0.01	0.10	0.02	0.02
Other primary products	30	-3	-8	34	3.48	-0.26	-0.04	0.52	-0.05	-0.05
Energy	2,430	25	1,773	1,653	46.28	1.93	0.01	2.45	0.01	0.02
Coal and Steel	1,781	101	1,395	476	15.70	2.72	0.21	0.83	0.27	0.29
Chemicals, rubber, and plastics	3,434	309	1,808	1,506	15.91	3.33	0.02	3.19	0.00	0.03
Textiles, clothing, and footwear	853	1,109	462	1,147	28.80	3.69	-0.14	1.06	-0.21	-0.19
Other Industrial Goods	10,843	1,606	4,675	6,106	19.94	2.67	-0.04	13.13	-0.06	-0.04
Water	2	4	-1	7	32.23	13.26	0.01	0.28	0.00	0.03
Construction	4	7	-104	82	22.49	8.14	0.01	7.49	-0.01	0.02
Trade (retail, wholesale, import/export)	66	61	-157	305	18.18	7.66	0.00	7.56	-0.02	0.01
Transport nec	70	579	-66	522	17.81	8.28	-0.04	2.91	-0.08	-0.05
Water transport	4	78	-27	73	19.69	8.56	-0.02	0.46	-0.06	-0.03
Air transport	170	349	32	275	15.12	8.77	-0.11	0.37	-0.17	-0.14
Communication	43	58	-5	128	14.73	8.50	-0.02	2.40	-0.05	-0.03
Financial services nec	112	102	-17	255	16.73	7.56	-0.03	3.57	-0.06	-0.04
Insurance	96	23	-6	66	15.20	7.95	-0.01	0.96	-0.03	0.00
Business services nec	159	31	-359	629	12.78	8.35	-0.03	14.69	-0.06	-0.04
Recreational and other services	54	214	-53	274	17.28	8.60	-0.03	3.69	-0.05	-0.02
Public Administration, etc.	119	25	-43	175	18.82	6.67	0.01	29.53	0.00	0.02

Source: Simulations by the study team.

Table 11.6: ECF Sectoral Impacts in Turkey, EUR million and percentage change

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	Value-added %	Value Added Share	Unskilled Labour %	Skilled Labour %
Rice	8	166	14	61	193.54	417.28	-5.62	0.04	-6.81	-6.93
Cereals (wheat, coarse grain)	8	2,486	11	1,201	23.70	786.93	-12.65	0.70	-13.81	-13.87
Vegetables, fruits	162	229	174	90	9.07	213.82	0.89	3.10	0.52	0.44
Oil seeds, vegetable oils	34	702	124	198	21.57	123.61	0.05	0.43	-0.42	-0.57
Sugar	7	117	10	92	115.89	2005.65	-1.51	0.23	-2.26	-2.44
Other primary agricultural products	11	418	24	103	3.34	96.83	-0.39	0.33	-0.84	-0.92
Dairy products	94	1,315	118	1,227	364.61	1979.01	-6.32	1.26	-7.67	-7.85
Beef, sheep, and other bovine meat	21	531	31	327	48.41	70.54	-0.85	0.28	-2.21	-2.53
Other meat products	15	117	81	34	28.92	389.24	2.05	0.15	0.95	0.61
Other processed food	141	64	380	-4	5.49	6.41	1.92	1.50	1.08	0.74
Other primary animal products	3	606	12	302	5.28	58.07	-2.88	0.63	-3.47	-3.55
Beverages and tobacco	6	38	12	27	3.02	4.89	0.85	0.42	-0.19	-0.52
Fishing (including aquaculture)	-2	3	-3	3	-1.57	64.69	0.25	0.20	0.55	0.49
Other primary products	-1	30	-13	10	-0.16	3.48	0.00	1.81	-0.11	-0.17
Energy	24	2,430	93	365	1.92	46.28	0.43	2.29	0.14	-0.03
Coal and Steel	91	1,781	372	298	2.68	15.70	0.10	1.25	-0.69	-0.97
Chemicals, rubber, and plastics	280	3,434	647	942	3.28	15.91	-0.14	2.48	-0.95	-1.32
Textiles, clothing, and footwear	1,034	853	1,534	333	3.65	28.80	2.28	3.72	2.56	2.17
Other Industrial Goods	1,494	10,843	2,674	3,884	2.65	19.94	0.22	9.92	-0.69	-1.05
Water	4	2	3	1	13.26	32.23	1.11	0.63	0.29	-0.09
Construction	7	4	-4	8	8.14	22.49	2.30	5.60	2.00	1.58
Trade (retail, wholesale, import/export)	61	66	49	49	7.66	18.18	1.02	14.69	0.36	-0.14
Transport nec	579	70	554	42	8.28	17.81	1.26	6.55	-0.06	-0.56
Water transport	78	4	78	3	8.56	19.69	1.14	2.22	-0.35	-0.84
Air transport	349	170	364	72	8.77	15.12	1.93	0.41	1.07	0.57
Communication	58	43	56	25	8.50	14.73	1.08	1.89	-0.13	-0.50
Financial services nec	102	112	81	75	7.56	16.73	1.05	15.15	0.31	-0.06
Insurance	23	96	12	42	7.95	15.20	-0.18	0.40	-0.93	-1.30
Business services nec	31	159	28	99	8.35	12.78	0.70	4.01	-0.01	-0.38
Recreational and other services	214	54	209	33	8.60	17.28	1.37	5.53	0.55	0.17
Public Administration, etc.	25	119	2	92	6.67	18.82	0.47	12.19	0.53	0.16

Source: Simulations by the study team.

11.3 Results: The DCFTA Scenario

The DCFTA shock involves a relatively modest amount of new liberalization for goods not covered by the AFTR, coupled with a lower level of ambition for goods NTBs, and services and investment liberalization. The positive impact of this liberalization shock is offset by the negative impact of replacing relatively low-cost CU trading arrangements with a higher-cost FTA framework for industrial goods. The net result varies across economies and economic indicators.

11.3.1 Trade Impacts

Bilateral trade gains under the DCFTA are more modest than under the ECF. The EU realizes a gain of just under EUR 8 billion, but Turkey sees a decline in bilateral exports to the EU of about EUR 4.3 billion.

The DCFTA, as modelled, generates strong terms of trade effects that work to reduce the EU's exports to the rest of the world and to increase imports from the rest of world; and the reverse for Turkey. The bottom line in this simulation is that the terms of trade effects transform a bilateral trade surplus gain of about EUR 12.7 billion into a global increase in the trade deficit of about EUR 110 million. This reflects in part the higher cost of Turkish inputs into EU production. For Turkey, which achieves a modest reduction in net trade cots despite the changeover from a CU to an FTA for industrial goods, the reduced cost of EU imports meanwhile drives a competitiveness gain that results in domestic production displacing third party imports; Turkey winds up with a modest improvement in its global trade balance of EUR 470 million.

Table 11.7: Aggregate Trade Impacts of the DCFTA by Region, EUR millions

	EU		Turkey	
	Exports	Imports	Exports	Imports
EU28	-	-	-4,342	8,440
Turkey	7,978	-4,677	-	-
EFTA	-294	369	149	-326
EP	-393	195	520	-428
SP	-1,053	433	1,781	-626
Russia	-743	264	556	-823
United States	-625	818	356	-1,438
Canada	-103	160	62	-92
Mexico	-63	70	19	-53
CSA	-266	333	156	-493
China	-614	2,453	308	-1,728
Japan	-142	219	35	-168
Korea	-166	227	82	-358
ASEAN7	-241	512	135	-432
LDCs	-337	740	266	-628
ODCs	-245	161	117	-228
ROW	-280	262	356	-532
Total	3,202	3,313	555	87

Source: Simulations by the study team. All figures are for 2026, baseline minus counterfactual.

11.3.2 Real GDP and Welfare Impacts

The overall impact of the DCFTA on real GDP and economic welfare for the EU and Turkey taken together is close to nil. For the EU, the real GDP effect is marginally negative, and welfare is marginally positive. The main conclusion flowing from this analysis is that the DCFTA leaves the EU essentially neutral. For Turkey, the real GDP impact is more significant – an increase of about 0.26%, but the terms of trade losses result in a modest decline in welfare of about EUR 144 million. Overall, there is no clear gain or loss at the macroeconomic level for either the EU or Turkey.

For third parties, the impacts are nil at the second decimal point for real GDP percentage changes and no more than a few hundred million EUR in welfare gains or losses. Simply put, the rest of the world would not experience material impacts.

Table 11.8: Real GDP and Welfare Impacts of the DCFTA by Region

	Real GDP % Change	Welfare (EUR millions)
EU28	**-0.005**	**1,150**
Turkey	**0.264**	**-144**
EFTA	-0.003	-80
EP	0.010	139
SP	0.003	1,579
Russia	0.003	15
US	-0.001	-100
Canada	0.000	16
Mexico	-0.001	15
CSA	-0.001	-38
China	0.000	86
Japan	0.000	6
Korea	-0.001	47
ASEAN7	-0.001	-8
LDC	0.000	25
ODC	-0.001	-26
ROW	0.000	3
Total	0.002	2,686
Memo: EU-Turkey	0.002	1,006

Source: Simulations by the study team. All figures are for 2026, baseline minus counterfactual.

11.3.3 Sources of the Impacts of the DCFTA

Table 11.9 breaks down the sources of impact of the DCFTA by policy measure.

Table 11.9: Sources of Impact by DCFTA Component

	Real GDP %Change				Economic Welfare (EUR millions)			
	Tariffs and ROOs	Goods NTBs	Services NTBs	FDI NTBs	Tariffs and ROOs	Goods NTBs	Services NTBs	FDI NTBs
EU28	-0.0098	0.0021	0.0023	0.0000	-1,254	2,014	386	3
Turkey	-0.474	0.639	0.098	0.001	-6,794	5,364	1,278	8
EFTA	0.001	-0.004	-0.001	0.000	40	-105	-16	0
EP	0.015	-0.001	-0.004	0.000	239	-1	-98	0
SP	0.011	-0.005	-0.002	0.000	2,604	-475	-551	1
Russia	0.008	-0.003	-0.002	0.000	113	-61	-36	0
US	0.000	-0.001	0.000	0.000	-11	-67	-22	0
Canada	0.002	-0.001	0.000	0.000	261	-178	-69	2
Mexico	0.008	-0.008	-0.002	0.000	543	-436	-95	3
CSA	0.002	-0.002	-0.001	0.000	11	-40	-9	0
China	0.004	-0.004	0.000	0.000	230	-134	-9	0
Japan	0.002	-0.001	0.000	0.000	18	-11	-1	0
Korea	0.007	-0.007	-0.001	0.000	476	-414	-16	0
ASEAN7	0.005	-0.005	-0.001	0.000	178	-152	-35	0
LDC	0.007	-0.006	-0.001	0.000	426	-367	-35	1
ODC	0.006	-0.006	-0.001	0.000	128	-125	-29	0
ROW	0.004	-0.003	-0.001	0.000	157	-124	-30	0
Total	-0.005	0.006	0.001	0.000	-2,632	4,687	612	19
Memo: EU-TR	-0.008	0.008	0.002	0.000	-8,047	7,378	1,664	11

Source: Simulations by the study team.

Both Parties make net welfare losses from the combination of tariff reductions and the switchover to an FTA, which implies a ROOs shock. Both Parties make welfare gains from the other elements of the DCFTA. For the EU, the cumulative impact of these gains is more than enough to offset the welfare loss from the tariff/ROOs shock, but not enough to offset the negative impact on real GDP. For Turkey, the opposite is true: the gains offset the impact on real GDP but are not large enough to offset the negative impact on welfare.

For third parties, the impacts are cumulatively too small to allow any significance to be read into the data.

11.3.4 Macroeconomic Impacts on the EU and Turkey

The small net effect of the DCFTA results in most major macroeconomic indicators registering an impact close to zero. Terms of trade impacts dictate whether the EU and Turkey make welfare gains.

Table 11.10: Macroeconomic Impacts on the EU and Turkey

	EU28	Turkey
Economic Welfare (EUR millions)	1,150	-144
Economic Welfare (% change)	0.007	-0.014
GDP value change (USD millions)	-1,020	2,863
GDP volume (% change)	-0.005	0.26
Consumption (% change)	0.008	-0.01
Government Expenditure (% change)	0.005	-0.07
Investment (% change)	-0.002	0.01
Total Exports of Goods and Services (% change)	0.004	0.94
Total Imports of Goods and Services (% change)	0.031	-0.06
Trade balance (USD millions)	-41	470
Capital Stock (% change)	0.000	0.17
Terms of Trade (% change)	0.028	-0.80
CPI (% change)	0.041	-0.92

Source: Calculations by the study team.

The overall impact of the DCFTA on the Turkish economy is complex due to the significant wage/price effects that emerge under different assumptions about the response of the Turkish economy to the policy shock. The main conclusion for Turkey is that replacing the lower-cost trading arrangement under the CU with a higher-cost trading arrangement under an FTA with its major trading partner results in some welfare costs, especially if the level of ambition in the replacement FTA is relatively modest.

11.3.5 Sectoral Impacts of the DCFTA

For the EU, the main bilateral export gains are in the agricultural sectors where Turkey liberalizes the most. The largest gains are in the cereals sector. Sensitive sectors, such as dairy and beef, make smaller gains than under the ECF, which assumes full liberalization. Industrial goods exports also improve due to the net cost reduction of trade from the NTB cuts in Turkey, which dominate the increased costs from ROOs. The EU’s services sectors make modest bilateral export gains but face rising costs within the EU due to the stronger gains in industrial products; accordingly, the services sector experience a modest reduction of output in real terms.

For Turkey, the marginal gains in agriculture and processed foods are not enough to offset the reduction in exports to the EU of industrial goods. Overall, the sectoral picture for Turkey is the mirror image of the impact in the EU: cereals and the industrial goods sectors decline. Services sectors experience mixed impacts. However, note the limitations in the model which distort the simulation outcomes at the expense of results for the services sector, as discussed in Section 11.2.5 above.

Table 11.11: DCFTA Sectoral Impacts in the EU (EUR millions, except where noted)

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	value-added %	Value-added share	Unskilled Labour %	Skilled Labour %
Rice	141	9	135	42	354.85	196.12	1.46	0.02	1.84	1.85
Cereals (wheat, coarse grain)	2,312	8	1,980	218	731.86	24.35	2.25	0.26	2.56	2.56
Vegetables, fruits	100	213	58	207	93.00	10.46	-0.25	0.32	-0.22	-0.22
Oil seeds, vegetable oils	508	41	424	195	89.42	22.63	0.29	0.18	0.41	0.42
Sugar	105	7	94	26	1800.10	121.29	0.33	0.11	0.42	0.43
Other primary agricultural products	254	18	181	190	58.72	5.30	-0.04	0.33	0.02	0.02
Dairy products	60	49	-23	63	90.28	188.41	-0.06	0.67	-0.02	-0.01
Beef, sheep and other bovine meat	113	53	80	83	14.99	120.85	-0.06	0.13	-0.09	-0.07
Other meat products	35	60	-57	103	115.83	114.67	-0.12	0.34	-0.18	-0.17
Other processed food	298	452	148	458	30.01	16.08	-0.06	1.35	-0.09	-0.07
Other primary animal products	566	3	532	26	54.32	5.79	0.24	0.36	0.33	0.33
Beverages and tobacco	18	7	0	16	2.32	3.44	-0.01	0.72	-0.03	-0.02
Fishing (including aquaculture)	3	0	2	2	50.88	0.09	-0.01	0.10	-0.01	-0.01
Other primary products	-3	4	-7	9	-0.37	0.38	-0.02	0.52	-0.03	-0.02
Energy	-2	28	-134	130	-0.04	2.18	-0.04	2.45	-0.06	-0.06
Coal and Steel	-81	71	-171	109	-0.71	1.92	-0.08	0.83	-0.12	-0.11
Chemicals, rubber, and plastics	765	-661	100	113	3.54	-7.13	0.01	3.19	0.01	0.02
Textiles, clothing, and footwear	149	-1,911	-203	-402	5.02	-6.36	0.07	1.06	0.08	0.09
Other Industrial Goods	2,358	-5,034	-398	-837	4.34	-8.38	0.01	13.13	0.01	0.02
Water	0	6	-1	5	10.14	18.56	0.00	0.28	-0.01	0.01
Construction	1	10	-43	36	6.52	10.95	-0.01	7.49	-0.02	0.00
Trade (retail, wholesale, import/export)	19	89	-50	158	5.16	11.20	0.00	7.56	-0.02	0.00
Transport nec	25	704	-43	464	6.27	10.06	-0.05	2.91	-0.09	-0.07
Water transport	1	92	-14	52	6.89	10.19	-0.03	0.46	-0.07	-0.04
Air transport	62	388	9	227	5.49	9.74	-0.10	0.37	-0.15	-0.13
Communication	13	75	-5	81	4.37	10.97	-0.02	2.40	-0.04	-0.02
Financial services nec	32	150	-15	152	4.82	11.09	-0.02	3.57	-0.04	-0.03
Insurance	32	30	-3	39	5.04	10.54	-0.01	0.96	-0.02	-0.01
Business services nec	44	41	-102	252	3.53	11.12	-0.01	14.69	-0.03	-0.02
Recreational and other services	16	281	-38	234	5.30	11.26	-0.03	3.69	-0.05	-0.03
Public Administration, etc.	34	41	-23	85	5.43	11.05	0.00	29.53	-0.01	0.01

Source: Simulations by the study team.

Table 11.12: DCFTA Sectoral Impacts in Turkey (EUR millions, except where noted)

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Bilateral Exports %	Bilateral Imports %	value-added %	Value-added share	Unskilled Labour %	Skilled Labour %
Rice	8	137	15	21	195.67	314.78	-3.51	0.04	-4.04	-4.08
Cereals (wheat, coarse grain)	8	2,291	12	961	24.14	681.71	-10.27	0.70	-11.04	-11.06
Vegetables, fruits	184	88	236	-142	10.33	73.82	1.26	3.10	1.19	1.16
Oil seeds, vegetable oils	35	450	151	-220	22.44	71.94	1.06	0.43	1.19	1.14
Sugar	7	105	12	75	121.29	1593.33	-1.54	0.23	-1.73	-1.79
Other primary agricultural products	16	222	44	-224	5.24	47.83	0.71	0.33	0.61	0.58
Dairy products	49	56	69	29	188.41	80.04	0.28	1.26	0.19	0.13
Beef, sheep and other bovine meat	53	90	62	-54	120.85	11.54	0.66	0.28	0.70	0.61
Other meat products	58	33	149	-4	114.58	103.40	1.98	0.15	2.14	2.04
Other processed food	407	214	684	-25	15.86	19.84	1.76	1.50	2.07	1.97
Other primary animal products	3	527	14	210	5.69	48.74	-1.40	0.63	-1.64	-1.66
Beverages and tobacco	6	-33	15	-52	3.32	-3.97	0.36	0.42	0.43	0.33
Fishing (including aquaculture)	0	1	0	-17	0.07	12.49	0.10	0.20	0.29	0.27
Other primary products	2	-158	13	-465	0.24	-15.68	0.08	1.81	0.15	0.13
Energy	28	-260	116	-3,064	2.17	-4.72	0.69	2.29	0.86	0.81
Coal and Steel	64	-822	299	-2,585	1.88	-6.80	0.94	1.25	1.24	1.15
Chemicals, rubber, and plastics	-613	-569	-167	-3,650	-7.18	-2.48	-0.08	2.48	0.20	0.09
Textiles, clothing, and footwear	-1,814	-32	-982	-1,480	-6.41	-1.01	-0.21	3.72	-0.18	-0.28
Other Industrial Goods	-4,750	28	-2,633	-5,598	-8.42	0.05	-0.64	9.92	-0.69	-0.80
Water	6	0	7	0	18.56	10.14	0.14	0.63	0.13	0.02
Construction	10	1	43	-3	10.95	6.52	0.07	5.60	-0.03	-0.15
Trade (retail, wholesale, import/export)	89	19	113	-11	11.20	5.16	0.07	14.69	0.03	-0.12
Transport nec	704	25	870	-1	10.06	6.27	0.69	6.55	0.88	0.73
Water transport	92	1	114	-1	10.19	6.89	0.61	2.22	0.79	0.64
Air transport	388	62	457	0	9.74	5.49	2.38	0.41	3.34	3.18
Communication	75	13	91	-2	10.97	4.37	0.33	1.89	0.38	0.27
Financial services nec	150	32	193	-9	11.09	4.82	0.15	15.15	0.14	0.03
Insurance	30	32	55	-7	10.54	5.04	1.00	0.40	1.35	1.24
Business services nec	41	44	59	1	11.12	3.53	0.10	4.01	0.15	0.04
Recreational and other services	281	16	379	-7	11.26	5.30	0.54	5.53	0.57	0.46
Public Administration, etc.	41	34	65	-24	11.05	5.43	-0.04	12.19	0.00	-0.11

Source: Simulations by the study team.

11.4 Government Procurement

The ECF and DCFTA scenarios envisage an ambitious government procurement chapter. While this cannot be directly incorporated in the quantitative estimates generated by the modelling exercise, an estimate of the value to EU Member States of liberalization of Turkey's restrictions that favour domestic firms can be derived by applying the share of procurement calculated by Kutlina-Dimitrova and Lakatos (2014) to observed procurement levels (Table 11.13). This yields a value of EUR 2 billion for EU Member States. Comparing this to current average value of EUR 437 million, there is an estimated incremental EUR 1.6 billion in public procurement opportunity for the EU under an open procurement regime.

Table 11.13: Calculation of EU Member State Incremental Volume

	Average Value (EUR million) 2012-2014	EU share*	EU share (EUR million) 2012-2014
Central	21,929	8.80%	1,930
Province	1,621	1.20%	19
Local	10,473	1.30%	136
Total	34,024		2,085
Current Average EU Share 2012-2014			437
Potential Increment in EU Share			1,649

*Shares based on calculations by Kutlina-Dimitrova and Lakatos (2014: Table 4). ECB annual average exchange rates TRY/EUR: 2012 - 0.43, 2013 - 0.40, 2014 - 0.34
Source: Kamu İhale Kurumu (2012-2014).

11.5 Impacts on Consumers

The potential enhancements to the current EU-Turkey commercial framework impact on consumers in various ways, including in terms of income, prices, safety, quality, and choice. The ECF would likely have material if modest impacts on consumers; the DCFTA would have minimal impacts. We focus on the ECF and comment briefly on the DCFTA.

In terms of overall household income, the impacts of the ECF are relatively larger in Turkey than in the EU. For the average Turkish household (4.11 persons), the ECF would generate about EUR 730 per annum; for the average household in the EU (2.4 persons), only about EUR 36. Consumption would increase in real terms by 1.3% in Turkey and marginally by 0.04% in the EU.

In terms of prices, the CGE simulations suggest that the ECF would raise prices marginally in the EU, by about 0.07%, reflecting increased demand for productive resources and thus higher wages. For Turkey, the reduction in trade costs works to lower costs through the economy, resulting in a decline in prices of about -0.45%.

The CGE simulations do not bring out the change in the variety and quality of imports. Based on some estimates of varietal effects from the literature, for the EU, the expansion of varieties of imports from Turkey and third parties would expand the welfare gain from the ECF based on expansion of trade alone; however, the scale of the gain is uncertain. The most relevant study (Mohler and Seitz, 2012) finds that the largest EU economies do not benefit from additional variety, while the smaller economies do. Aggregating their figures, we find a negligible implied impact of the ECF on EU consumer welfare due to expansion of import varieties. For Turkey there is no dedicated study; drawing on estimates for the United States, we find an implied welfare boost from EUR 543 to 1,347 million (Table 11.14).

Table 11.14: Estimated Welfare Gains from Varietal Increase due to the ECF

	EU	Turkey
Total Import Increase (EUR millions) in 2026	15,619	10,035
GDP (EUR millions) 2026	19,047,420	1,085,098
Share of import increase in GDP	0.08%	0.92%
Varietal Welfare Gain, % of GDP (Broda and Weinstein ratio)		0.0012
Varietal Welfare Gain EUR 2026 (Broda and Weinstein		1,347
Varietal Welfare Gain, % of GDP (Mohler ratio)		0.0005
Varietal Welfare Gain EUR 2026 (Mohler ratio)		543
Varietal Welfare Gain % of GDP (Mohler and Seitz ratio)	0.0002	
Varietal Welfare Gain EUR 2026 (Mohler and Seitz ratio)	3	

Source: Calculations by the study team, based on Broda and Weinstein (2006) and Mohler (2012) estimates for the United States; and Mohler and Seitz (2012) estimates for the EU.

Some improvement in the quality of EU imports from Turkey would likely be seen; this is premised on the strong expansion of two-way trade for Turkey under the ECF, which would predictably lead to a strong dynamic of reallocation of market share from weaker to stronger firms, according to modern heterogeneous firms trade theory (e.g., Melitz, 2003). However, much of the increase in EU imports would come from third parties driven by price-competition effects from the terms of trade gains made by the EU. This would have an uncertain effect on overall quality of imports, given the broad provenance of price-competing imports.

For Turkey, the quality effects from the ECF would likely be substantially stronger and represent an important premium to the measured gains in terms of consumer welfare. The impacts would be felt across industries due to the general trade cost reductions, but the main impacts would likely come in the relatively highly protected primary sectors. Access to higher quality EU goods along with the reallocation of market share within Turkey towards more competitive firms would drive a strong quality improvement in production for both export and domestic markets.

The DCFTA would have a small welfare effect on households as measured by the CGE simulations. EU households would make a small gain that would be imperceptible at the individual household level, and Turkish households would experience a small welfare loss, also effectively below the threshold of sensibility.

Given the small trade impacts, the non-measured effects from varieties would also be negligible for both the EU and Turkey. Total trade gains for the EU are about 16% of the level under the ECF, which is estimated to generate an almost nil varietal effect. Turkey's total imports under the DCFTA are almost unchanged, suggesting no palpable effect from varieties.

The broadly neutral impact of the DCFTA on trade translates into minimal structural change within the economies of the EU and Turkey, providing no basis for inference of significant quality effects.

There would be some compositional effects: costs rise for some products and fall on net terms for others. Depending upon household consumption patterns, some households might nonetheless find modest consumer benefits, while others might experience modest losses.

11.6 SME Impacts

The ECF and DCFTA have differing general implications for SMEs. The ECF features relatively deep across-the-board lowering of barriers to goods and services imports in Turkey, with especially large reductions from tariff elimination in primary agriculture, and more modest liberalization by the EU in primary agriculture and services. The DCFTA, meanwhile, raises costs for industrial imports into the EU because of the ROOs and features a lesser reduction of trade costs in Turkey (where goods sector facilitation measures are assumed to more than offset the higher costs from the implementation of a ROOs regime for industrial goods imports).

While the ECF and DCFTA scenarios do not make presumptions about the specific nature of the goods trade cost reductions, some insight into SME impacts can be gained by considering the areas where Turkey lags EU best practices and which EU SME export promotion programs target. These are the areas that negotiations would likely target and where the gains are likely to be most achievable.

Of particular importance in these regards would be provisions that speed up and simplify customs procedures and paperwork, meaning less cost and red tape, which can disproportionately impact small exporters. Areas where Turkey could advance in terms of converging to EU best practice include obligations to adopt or maintain simplified customs procedures to facilitate the immediate release of goods, including expedited procedures for express shipments; provide for electronic submission of customs information before a good's arrival, enter into exchange programmes at the international level, and allow exporters to obtain binding advance rulings on matters such as tariff classification, and whether a good qualifies for preferential tariff treatment.

Also, non-transparent foreign regulations can be a costly barrier for small businesses seeking to export their products. Areas where an upgraded bilateral relationship could improve matters would be in transparency obligations, with commitments that the national government will, to the extent possible, publish proposed regulations in advance, allow a reasonable opportunity to comment, address significant comments received, publish procedures of border agencies, publish final regulations in an official journal of national circulation, and provide sufficient time between publication and implementation of the final regulation to allow stakeholders to adjust. In all these areas, there are aspects of Turkey's border regime, de jure or de facto, that lag EU best practices and that EU SME export promotion programs for SME tend to single out for particular attention, which reflects SME consultations and input.

While the DCFTA assumes a lower level of ambition in these areas, the general nature of the improvements would likely be similar to those under the ECF.

The sectoral impacts in the simulations also allow some qualified inferences concerning the impacts on SMEs in the EU and Turkey.

11.6.1 Food and Beverages

SMEs contribute significantly to EU food and beverage exports, including manufactured food and drink products.

Under the ECF, the **dairy** liberalization in Turkey, which generates a large gain in bilateral exports, is particularly important for EU SMEs. **Processed foods and beverages** also make significant gains under the ECF, although more so from domestic EU income effects than from bilateral exports, which expand but only relatively modestly. **Fruit and vegetable** producers obtain important new market access in Turkey but also face additional competition from Turkish exporters; accordingly, for SMEs in this sector the challenge would be navigate shifting market opportunities.

Under the DCFTA, the structure of impacts is different. The **dairy** sector makes some gains but much smaller ones than under the ECF as this is one of Turkey's sensitive sectors. The relative improvement in market access is thus greater for EU producers in **processed foods** which see larger bilateral export gains but also larger bilateral import competition from Turkey. Similarly, **fruit and vegetable** producers face a generally smaller improvement in market access under the DCFTA as trade costs into Turkey fall by less, while the changed structure channels Turkey's competitive advantage into this sector.

For Turkey, the picture for SMEs is largely the mirror image of that for EU SMEs in the food and drink sectors. Under the ECF, Turkey's **dairy** sector faces major restructuring in the face of highly competitive EU imports. **Processed food** producers, however, make significant export gains both bilaterally to the EU and to third parties, driving off lower input costs. **Fruit and vegetable** producers also fare well under the ECF, although the EU's additional liberalization under the ECF is relatively modest.

The sectoral structure under the DCFTA in Turkey is also sharply different than under the ECF. **Dairy**, not faced with full liberalization, feels only modest impacts. **Processed foods** and **fruit and vegetable** producers, however, improve export performance, both due to the increased competitive pressure in their domestic market but also from the reduced costs of inputs (in the case of processed foods) and some improvement in market access (for fruits and vegetables in particular).

11.6.2 Textiles, Clothing and Footwear

SMEs generate over half of EU exports of **textiles, clothing** and leather and related products, which include **footwear**. This SME-dominated sector features a strong expansion of bilateral two-way trade under the ECF. However notwithstanding the strong growth in exports to Turkey, total output by the EU in this sector declines under the ECF, which reflects the improvement in Turkey's competitiveness in this sector in third markets.

Textiles, clothing and footwear is Turkey's most important SME sector and it does well under the ECF with bilateral exports to the EU increasing by more than bilateral imports and Turkey's exports to third parties also receiving a solid boost due to the reduced costs of inputs.

Further the strong two-way trade growth suggests that firm-level productivity effects that are not included in the modelling framework would also add to the dynamic and strengthen Turkey's gains in third party export markets and also improve the productivity and competitiveness of EU SMEs in this sector.

Under the DCFTA, there are significant reversals in this sector. For EU SMEs, the imposition of ROOs alleviates the import competition in their domestic market and Turkey's lesser gain in competitiveness eases export competition in third markets. Accordingly, this SME-rich sector fares better under the DCFTA than under the ECF. Turkey's export gains to the EU are blunted by the imposition of ROOs and to third parties by the lesser reduction of trade costs. Thus, there is a reversal of fortunes under the DCFTA (a decline in total output) versus under the ECF (a rise in total output). Accordingly, Turkey's SMEs in this sector would face a greater challenge of increasing competitiveness to offset the imposition of a higher trade cost regime for exports to the EU.

11.6.3 Chemicals, rubber and plastics

SMEs figure prominently in the EU's export of chemicals, rubber and plastics, accounting for about 30% of chemicals exports, including about 25% of basic pharmaceuticals exports. The EU plastics sector also features a large number of SMEs. While the simulations do not provide insight into this sector at this level of disaggregation, EU producers already have a commanding market share of Turkey's imports of **pharmaceuticals** and would have to contend with Turkey's industrial policy decision to reduce imports and increase local production in the pharmaceutical industry.[102] Accordingly, they would have less room to expand than producers of basic **chemicals** and of **plastics** products who have a strong market position in Turkey but in this case also have considerable head room to grow further based on lower costs under the ECF. Since these products tend to be intermediate products, it is also possible to infer that the ECF would promote value chain integration of EU SMEs.

[102] "Turkish pharma grows by 15.6%; MENA trends and challenges for 2016," The Pharma Letter, 10 June 2016.

Turkey has some SME presence in exports in the chemicals, rubber and plastics sector: about 16% of Turkey's **chemical** sector SMEs export. Turkey's **pharmaceutical** production is growing rapidly, but this appears to largely reflect foreign investment attracted by the size of the Turkish pharmaceutical market. Accordingly, while this sector would face challenges in Turkey under the ECF, it would not appear to be a major issue for the SMEs overall.

Under the DCFTA, a similar pattern emerges, but with less pronounced impacts. For Turkey, the modest export gains to the EU are reversed due to the imposition of ROOs, although the SME implications are relatively minor.

11.6.4 Other Industrial products

Within the other industrial products aggregate, the EU stands to make significant gains in automotive exports, machinery and equipment and electrical equipment, which constitute three of the major export categories for the EU to Turkey. SMEs in the supply chain in the **auto sector**, and export-oriented **electrical equipment** manufacturers, which contribute substantially to exports in this sector (about one-quarter of the EU's global exports in this sector are accounted for by SMEs and a large majority of exporters are SMEs). SMEs figure prominently in other **niche manufacturing** sectors where export gains are also likely to emerge from the lowering of trade costs into Turkey.

Given the large gain by EU suppliers in the Turkish market, Turkish industrial goods manufacturers would face challenges of shifting their targets to third markets, building on the lowered cost base from the reduced trade costs under the ECF.

Under the DCFTA, a generally similar pattern of impacts emerges, but scaled down.

11.6.5 Services

The EU stands to make some bilateral export gains in the **business and professional services** sectors, which feature many SMEs – over half of EU global exports of professional, technical and scientific services are accounted for by SMEs, who also comprise the large majority of exporting firms. Even more important for this sector than the bilateral exports is the increase in demand within Europe from the income effects.

Trade (retail, wholesale and import/export) and **construction** services also experience significant gains in total output, mainly due to income effects rather than bilateral exports. Again, these sectors feature many SMES.

On the Turkish side, the main gains in services sector output are in **trade**, **financial services, construction, transport**, and **recreational and other services.** These gains would come mainly from domestic market income effects, which plays to the strength of Turkey's services providers which do not stand out as strong cross-border traders.

Under the DCFTA, given the importance of domestic income effects on total output, the scaled down economic impacts reduce the sectoral impacts and leave few clearcut inferences to be drawn for SMEs.

11.7 Impact on the EU Budget

The impact of the ECF and DCFTA on the EU budget in terms of foregone tariff revenue is small. Based on the pattern of EU imports from Turkey in 2026 and the average tariff rates applying to the study sectors, we estimate foregone revenue of EUR 123 million (at 2016 price levels) from the tariff elimination under the ECF and DCFTA.[103] The actual impact on the EU budget would however also include indirect

[103] Note: the reduction in the level of ambition of liberalization of sensitive sectors would likely be accomplished through tariff rate quotas. For revenue calculation purposes, it is assumed that there

impacts in terms of changes in tariffs on imports from third parties, and in VAT-linked and GNI-linked resources. These would likely work to raise the EU's overall revenues.

11.8 Summary

The simulation of the alternative options for modifying the BPTF suggest that an ambitious agreement holds significant potential for economic benefits for both Parties. At the same time, a high level of ambition would also imply some disruptive change for at least some highly protected sectors in Turkey. A less ambitious agreement comparable to modern DCFTAs being negotiated by the EU, which replaces the CU and thus provides Turkey with new found freedom of setting its international commercial policy, is assessed as leaving the parties essentially neutral, although there would be a mix of pluses and minuses.

However, several specific issues were identified in the course of the analysis that bear importantly on the qualitative and quantitative assessment of the ECF and DCFTA options: the model-generated splits between price and quantity impacts, between wages and productivity, between trade creation and trade diversion, and between the EU's sectoral gains in its area of comparative advantage (services) versus industrial goods generally fall outside of historically validated bounds. These issues emerge from the initial conditions and from the modelling protocols. Sensitivity analysis, which addresses these issues, is included in Annex D to this study.

With these caveats:

- The ECF scenario demonstrates that there is considerable economic gain from deepening the bilateral commercial relationship. While most of the liberalization would be undertaken by Turkey, the effect of its reducing its costs of imports is to improve its competitiveness, which is manifest in trade gains vis-à-vis the rest of the world.
- The DCFTA scenario demonstrates that reshuffling the nature of the bilateral commercial relationship leaves the overall benefits largely unchanged but with different structural implications. For the EU, it results in some additional preferential gains in the Turkish market but also higher administrative costs of goods trade with Turkey. On balance, this drives up EU costs (through the higher cost of imported intermediate goods) and thus results in a generally higher cost economy.

would be zero above-quota imports and thus no difference in the total revenue impact of the ECF vs. the DCFTA.

12 SOCIAL IMPACTS OF ALTERNATIVE ENHANCEMENT OPTIONS

This chapter assesses the social impacts of the potential enhancement of the BPTF under the ECF and the DCFTA developed in the preceding chapter. The analysis applies a two-pronged approach. The first line of analysis is based on the finding of the ex post analysis that the lack of addressing social and labour issues in the BPTF legal documents has prevented the BPTF from having more beneficial social effects other than those "trickling down" from improved economic performance. An enhanced EU-Turkey economic relationship should thus provide for a specific treatment of social and labour issues in the legal texts, regardless of the scenario to be implemented (Section 12.1). Although the social provisions to be included in the new or revised legal texts would depend on the negotiations, the EU's recent FTAs with third countries have included "trade and sustainable development" (TSD) and related chapters, and therefore some precedence has been developed. The first strand of analysis therefore reviews the TSD chapters in selected recent FTAs and derives the likely implications, which they would have in the context of an enhanced EU-Turkey commercial framework.

Second, applying the same methodology as used for the ex post assessment in Chapter 5, this chapter derives selected dimensions of social impact – in particular employment and wage/income effects – from the overall and sector effects calculated by the CGE model simulations. This analysis is undertaken by scenario – ECF (Section 12.2) and DCFTA (Section 12.3).

12.1 Social Issues and Labour Rights in the Legal Texts

All recent FTAs, which the EU has negotiated or concluded, include TSD chapters that lay down certain principles, objectives, mechanisms, and institutional frameworks dealing with sustainable development issues, in particular environment and labour issues.[104] These chapters, inter alia, do the following:

- Confirm that trade should promote social development and acknowledge that decent work and labour rights have beneficial effects on the economy and promote policy coherence (EU-Korea: 13.6; CETA: 22.3);
- Reaffirm the parties' commitments to multilateral agreements on trade and sustainable development (EU-Korea: 13.1; CETA: 22.1; EU-Singapore: 13.1);
- Specifically refer to the obligations deriving from ILO membership and the ILO Declaration on Fundamental Principles and Rights at Work and its follow-up, and include the Decent Work Agenda as agreed at the ILO. Specifically, the FTAs refer to freedom of association and the right to collective bargaining, the elimination of all forms of forced or compulsory labour, the abolition of child labour, and the elimination of discrimination in respect of employment and occupation (EU-Korea: 13.4; CETA: 23.3; EU-Singapore: 13.3);
- Within the context of the international obligations, recognise each party's right to regulate its own levels of (labour) protection, while striving to encourage high levels of protection (EU-Korea: 13.3; CETA: 23.2; EU-Singapore: 13.2), and not to lower standards in order to increase trade (EU-Korea: 13.7; CETA: 23.4; EU-Singapore: 13.12). CETA furthermore establishes rules for each party's domestic procedures, administrative proceedings, and the review of administrative action by the Parties for ensuring compliance with and enforcement of labour law (CETA: 23.5);

[104] For the purpose of this section, i.e. to provide an overview over the type of issues and provisions included in TSD chapters of recent FTAs, the following FTAs have been reviewed: EU-South Korea FTA ("EU-Korea"), OJ L 127/6, 14.05.2011; Comprehensive Economic and Trade Agreement between Canada and the EU ("CETA"), consolidated text, available at http://trade.ec.europa.eu/doclib/html/152806.htm; and EU-Singapore FTA ("EU-Singapore"), authentic text as of May 2015, available at http://trade.ec.europa.eu/doclib/press/index.cfm?id=961.

- Establish the principle of transparency to be applied by the parties when developing, introducing, and implementing measures falling under TSD (EU-Korea: 13.9; CETA: 22.2 and 23.6; EU-Singapore: 13.13);
- Establish institutional mechanisms for the cooperation of the parties on TSD, including at the domestic level (Domestic Advisory Groups) and typically also for civil society dialogue (EU-Korea: 13.11-13.13; CETA: 22.3-22.5 and 23.7-23.8; EU-Singapore: 13.4 and 13.15);
- Establish mechanisms for the monitoring and review of the respective agreement's impact on sustainable development (EU-Korea: 13.10; CETA: 22.3; EU-Singapore: 13.14); and
- Establish a framework for dispute resolution on TSD issues separate from the overall dispute settlement provisions in the agreement (EU-Korea: 13.14-13.16; CETA: 23.9-23.11; EU-Singapore: 13.16-13.17), which typically is based on resolution of disputes by consensus, with the potential support by a Panel of Experts.

At present, as described in Chapter 7, the BPTF lacks legal provisions along the lines outlined above. Not enhancing the BPTF legal framework would mean that social and labour issues would continue to be addressed in bilateral consultations and through civil society dialogue, but lack a firm legal basis in the commercial framework. Largely, discussions would take place as part of (and be dependent on) the accession process but not be addressed in an enhanced CU context. This would not necessarily result in a deterioration of social inclusion or labour rights in Turkey, as the experience under the BPTF has shown, but neither would it ensure that the benefits of the EU-Turkey commercial framework for social inclusion and labour rights would be reaped to the full potential. Conversely, inclusion of a TSD chapter (and specifically a section on labour issues) in an ECF or DCFTA would provide a solid legal basis for deeper cooperation between the EU and Turkey on the further enhancement of labour rights and social protection in the bilateral commercial framework than is the case under the status quo, and independent of progress in the accession process; such inclusion of a TSD chapter is beneficial irrespective of the scenario to be implemented.

12.2 Social Impacts of the ECF

12.2.1 Employment and Unemployment

The CGE analysis assumes full employment and the modelling protocol assumes no net job creation or loss. Accordingly, the quantitative modelling sheds no light on total employment impacts, including on potential differential impacts on the number of skilled versus unskilled jobs. The modelling does provide some insight into the relative demand for skilled versus unskilled labour through the sectoral reallocation of jobs towards expanding sectors and away from declining sectors.

At the **sector level, employment effects** of the ECF follow the output effects (Table 12.1). In the EU, the ECF would expand employment in the cereals (+2.7%) and rice (+2.1%) sectors, followed by oil seeds and vegetable oils, beef and sheep meat, dairy products, sugar, and other primary animal products (+0.4-0.6% each). These employment gains would be met by reallocating jobs away from textiles, clothing and footwear (-0.2%), air transport, and "other meat products" (-0.16% each). In Turkey, sectoral employment effects would be prospectively larger, as the major labour-intensive sectors expand employment, creating demand for labour that is met by drawing employment away from a range of smaller sectors. Within the agricultural sector, the key fruit and vegetables sector, which accounts for 3.1% of Turkey's overall value-added in the baseline, expands employment by 0.9%, as does the processed food sector (1.5% value-added share and a 1.9% increase in employment). Meanwhile, dairy (1.26% value added share) and cereals (0.7% value added share) see large outflows of labour (-13.8% and -7.7%, respectively). Given the initial high differentials in protection across agricultural sectors in Turkey, a strong sectoral restructuring is to be expected with a move to free trade with the EU. Other relatively small agricultural sectors seeing labour outflows include other primary animal products (-3.5%), beef and sheep meet (-2.4%), and sugar (-2.4%). In the industrial sector, employment in labour-intensive textiles, clothing and footwear (+2.4%) draws in labour from other sector, as does construction (+1.8%) in the services sector.

Given the magnitude of sectoral employment reallocation (and probably also regional employment changes), some frictional unemployment is to be expected during the transition, as workers move between sectors; on the other hand, due to the fact that the sectoral employment impacts evolve over the 10-year horizon of the analysis, changes take place slowly, allowing sufficient time for the job market to adjust. While the expected extent of job churn in agriculture is quite high over the whole period, the annual change would be substantially smaller than the normal job churn within Turkey's economy. Turkey's economy is dominated by SMEs and the turnover rate of SMEs is high, resulting in high annual job turnover in the whole economy.[105]

As regards demand for **skilled and unskilled labour**,[106] in Turkey's case, the ECF drives strong job gains in the labour-intensive construction and textiles, clothing and footwear sectors, which are met by drawing labour away from most other sectors. The distribution across sectors can have significant impacts in terms of job quality – e.g., construction and tourism feature very high rates of job turnover and thus less stability than manufacturing. The sectoral reallocation of jobs results in differences emerging in the impacts on skilled versus unskilled jobs in some sectors. Also, the increase in jobs in labour-intensive sectors drives some sectors such as business services to meet output growth demand by increased capital intensity and higher productivity while working with less labour input. Overall, the employment gains in both skilled and unskilled labour in construction and the textiles, clothing and footwear sectors may be less positive for Turkey from a dynamic perspective, given the likelihood of less knowledge spillover gains in these less R&D and knowledge-intensive industrial settings.

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[105] Systematic data on job turnover in Turkey do not appear to be available. However, it can reliably be inferred as being high. First, gross job turnover (entrants plus exits divided by the number of incumbents) flows range from about 25% of total employment on average in the OECD countries to about 30% in Latin America and the transition economies (Haltiwanger et al., 2014). Second, job . is closely related to firm turnover. A study for Turkey covering the period 2006-2010, found the gross turnover rate of firms, measured as the number of firms entering plus the number of firms exiting divided by the share of incumbents, was consistently above 30% (Grun et al., 2013). A sector specific study for the tourism sector found a job turnover rate of 46.5% (Kaya et al., 2015). Accordingly, the extent of inter-sectoral job reallocation indicated by the ECF modelling results is very small by comparison.

[106] Note that the total number of unskilled jobs and the number of skilled jobs is not changed by the ECF, given the modelling protocol of fixed labour supply; the differences in the number of sectors registering higher levels of jobs and those registering lower levels is entirely due to the relative weight of the sectors involved. For example, in the extreme, strong gains in one large employment sector would necessarily result in lower job totals in all other sectors.

Table 12.1: ECF employment effects by sector, Turkey and EU

	Turkey			EU		
Sector	Value added %	Unskilled Labour %	Skilled Labour %	Value added %	Unskilled Labour %	Skilled Labour %
Rice	-5.62	-6.81	-6.93	1.69	2.12	2.13
Cereals (wheat, coarse grain)	-12.65	-13.81	-13.87	2.39	2.72	2.73
Vegetables, fruits	0.89	0.52	0.44	-0.15	-0.09	-0.09
Oil seeds, vegetable oils	0.05	-0.42	-0.57	0.40	0.55	0.56
Sugar	-1.51	-2.26	-2.44	0.34	0.45	0.46
Other primary agricultural products	-0.39	-0.84	-0.92	-0.01	0.07	0.07
Dairy products	-6.32	-7.67	-7.85	0.34	0.51	0.52
Beef, sheep & other bovine meat	-0.85	-2.21	-2.53	0.36	0.50	0.52
Other meat products	2.05	0.95	0.61	-0.12	-0.18	-0.15
Other processed food	1.92	1.08	0.74	-0.06	-0.11	-0.08
Other primary animal products	-2.88	-3.47	-3.55	0.32	0.43	0.44
Beverages and tobacco	0.85	-0.19	-0.52	-0.01	-0.04	-0.01
Fishing (including aquaculture)	0.25	0.55	0.49	0.01	0.02	0.02
Other primary products	0.00	-0.11	-0.17	-0.04	-0.05	-0.05
Energy	0.43	0.14	-0.03	0.01	0.01	0.02
Coal and Steel	0.10	-0.69	-0.97	0.21	0.27	0.29
Chemicals, rubber & plastics	-0.14	-0.95	-1.32	0.02	0.00	0.03
Textiles, clothing & footwear	2.28	2.56	2.17	-0.14	-0.21	-0.19
Other Industrial Goods	0.22	-0.69	-1.05	-0.04	-0.06	-0.04
Water	1.11	0.29	-0.09	0.01	0.00	0.03
Construction	2.30	2.00	1.58	0.01	-0.01	0.02
Trade (retail, wholesale, import/export)	1.02	0.36	-0.14	0.00	-0.02	0.01
Transport nec	1.26	-0.06	-0.56	-0.04	-0.08	-0.05
Water transport	1.14	-0.35	-0.84	-0.02	-0.06	-0.03
Air transport	1.93	1.07	0.57	-0.11	-0.17	-0.14
Communication	1.08	-0.13	-0.50	-0.02	-0.05	-0.03
Financial services nec	1.05	0.31	-0.06	-0.03	-0.06	-0.04
Insurance	-0.18	-0.93	-1.30	-0.01	-0.03	0.00
Business services nec	0.70	-0.01	-0.38	-0.03	-0.06	-0.04
Recreational and other services	1.37	0.55	0.17	-0.03	-0.05	-0.02
Public Administration, Defence, Education, Health & Dwellings	0.47	0.53	0.16	0.01	0.00	0.02

Source: Simulations by the study team.

The estimated effects of the ECF on sectors with relatively high **female employment** (as identified in Chapter 5) in Turkey are as follows: health, social, and education, as well as tourism and recreational services are expected to expand employment (0.53% unskilled/0.16% skilled and 0.55%/0.17%, respectively), whereas financial services and agricultural sectors would see lower employment than otherwise would have been realized. Within the financial sector, employment in insurance would be lower (-0.93% unskilled/-1.30% skilled) and in other financial services somewhat stronger (+0.31%/-0.06%) than in the baseline. In agriculture, employment would be lower in all subsectors except vegetables and fruits (0.52%/0.44%), other meat products (0.95%/0.61%), other processed food (1.08%/+0.74%), and fishing (0.55%/0.49%). Overall, the ECF effects on employment in a sector and female employment in that sector are not correlated, if the two outliers – agriculture and construction – are excluded. We therefore conclude that the overall effect of the ECF on female employment will be very limited.

For **youth employment**, the estimated effect is slightly positive, as the ECF will contribute to employment growth in several sectors with high youth employment (as per Chapter 5): tourism and recreational services, construction, social services, and trade. Only the communication sector is expected to contract.

12.2.2 Household Income, Wages and Poverty

The ECF is estimated to have negligible effects on household incomes in the EU and limited positive effects in Turkey: in the EU, overall household income is projected to expand by EUR 5.4 billion, or 0.03% compared to the baseline, and in Turkey by EUR 12.5 billion, or 1.25% (Table 11.3 above).

The sectoral reallocation of skilled and unskilled labour will have some impacts in terms of income distribution and job quality. Real wages are bid up more strongly for skilled than for unskilled labour in Turkey under the ECF, implying widening income distribution and less income equality.

12.3 Social Impacts of the DCFTA

12.3.1 Employment and Unemployment

Sectoral employment effects of the DCFTA in the EU are expected to be similar to those under the ECF, except for few sectors (Table 12.2). The highest increase in employment caused by the DCFTA is expected in cereals (+2.6%) and rice (+1.8%), followed by sugar, oil seeds and vegetable oils, and other primary animal products (+0.3% to 0.4% each). Employment effects in most other sectors in the EU will be very limited. Sectors which are expected to experience job losses are vegetables and fruits, and "other meat products" (-0.2% each).

Table 12.2: DCFTA employment effects by sector, Turkey and EU

	Turkey			EU		
Sector	Value added %	Unskilled Labour %	Skilled Labour %	Value added %	Unskilled Labour %	Skilled Labour %
Rice	-3.51	-4.04	-4.08	1.46	1.84	1.85
Cereals (wheat, coarse grain)	-10.27	-11.04	-11.06	2.25	2.56	2.56
Vegetables, fruits	1.26	1.19	1.16	-0.25	-0.22	-0.22
Oil seeds, vegetable oils	1.06	1.19	1.14	0.29	0.41	0.42
Sugar	-1.54	-1.73	-1.79	0.33	0.42	0.43
Other primary agricultural products	0.71	0.61	0.58	-0.04	0.02	0.02
Dairy products	0.28	0.19	0.13	-0.06	-0.02	-0.01
Beef, sheep & other bovine meat	0.66	0.70	0.61	-0.06	-0.09	-0.07
Other meat products	1.98	2.14	2.04	-0.12	-0.18	-0.17
Other processed food	1.76	2.07	1.97	-0.06	-0.09	-0.07
Other primary animal products	-1.40	-1.64	-1.66	0.24	0.33	0.33
Beverages and tobacco	0.36	0.43	0.33	-0.01	-0.03	-0.02
Fishing (including aquaculture)	0.10	0.29	0.27	-0.01	-0.01	-0.01
Other primary products	0.08	0.15	0.13	-0.02	-0.03	-0.02
Energy	0.69	0.86	0.81	-0.04	-0.06	-0.06
Coal and Steel	0.94	1.24	1.15	-0.08	-0.12	-0.11
Chemicals, rubber & plastics	-0.08	0.20	0.09	0.01	0.01	0.02
Textiles, clothing & footwear	-0.21	-0.18	-0.28	0.07	0.08	0.09
Other Industrial Goods	-0.64	-0.69	-0.80	0.01	0.01	0.02
Water	0.14	0.13	0.02	0.00	-0.01	0.01
Construction	0.07	-0.03	-0.15	-0.01	-0.02	0.00
Trade (retail, wholesale, import/export)	0.07	0.03	-0.12	0.00	-0.02	0.00
Transport nec	0.69	0.88	0.73	-0.05	-0.09	-0.07
Water transport	0.61	0.79	0.64	-0.03	-0.07	-0.04
Air transport	2.38	3.34	3.18	-0.10	-0.15	-0.13
Communication	0.33	0.38	0.27	-0.02	-0.04	-0.02
Financial services nec	0.15	0.14	0.03	-0.02	-0.04	-0.03
Insurance	1.00	1.35	1.24	-0.01	-0.02	-0.01
Business services nec	0.10	0.15	0.04	-0.01	-0.03	-0.02
Recreational and other services	0.54	0.57	0.46	-0.03	-0.05	-0.03
Public Administration, Defence, Education, Health & Dwellings	-0.04	0.00	-0.11	0.00	-0.01	0.01

Source: Simulations by the study team.

In Turkey, sectoral employment effects are comparable in size to the ECF but generally more positive (or less negative): The largest contractions in employment in relative terms are expected for the cereals (-11.1%), rice (-4.1%), sugar (-1.8%) and other primary animal products (-1.7%). However, a majority of sectors is expected to register modest growth in employment, in particular air transport (3.3% – a contracting sector under the ECF), other meat products, and other processed food (about 2.1% each). Interestingly, employment in textiles, clothing and footwear (the lead beneficiary under the ECF) is expected to fall.

As for the ECF, given the magnitude of sectoral employment changes (and probably also regional employment changes), frictional unemployment is to be expected.

The estimated effects of the DCFTA on **female and youth employment** in Turkey are likely to be very limited. Women's employment in sectors with a relatively high share of jobs held by women (as identified in Chapter 5) is affected slightly positively overall: tourism and recreational services, financial services (in particular insurance services) and most agricultural sectors are expected to expand employment; whereas some other agricultural sub-sectors and textiles will lose employment. Employment in sectors with high youth employment (as per Chapter 5) is hardly affected by the DCFTA: tourism and recreational services and communication are predicted to grow slightly (by 0.5% and 0.3%, respectively), whereas construction, social services, and trade are expected to stagnate.

12.3.2 Household Income, Wages and Poverty

The DCFTA is estimated to have negligible effects on household incomes in the EU and limited negative ones in Turkey: in the EU, overall household income is projected to expand by EUR 1.2 billion, or 0.007% compared to the baseline, and in Turkey to decrease by EUR 144 million or -0.014% (Table 11.10 above).

As a result of this, the DCFTA is expected to have no overall effect on income and poverty in the EU, and only a very limited – although slightly negative – effect in Turkey.

12.4 Summary

Table 12.3 provides a tabular summary of the anticipated impacts of the two scenarios on employment and wages in the EU and Turkey. It shows that no scenario is expected to have an unambiguously positive impact but that, on balance, the ECF is expected to have the most favourable effect on employment and incomes, flowing from the economic impact.

Regarding issues of social protection, social dialogue and quality of work (including child labour), the present BPTF lacks legal provisions. Not enhancing the BPTF legal framework would mean that social and labour issues would continue to be addressed in bilateral consultations and through civil society dialogue, but lack a firm legal basis in the commercial framework. Largely, discussions would take place as part of (and be dependent on) the accession process but not be addressed in an enhanced CU context. This would not necessarily result in a deterioration of social inclusion or labour rights in Turkey, as the experience under the BPTF has shown, but neither would it ensure that the benefits of the EU-Turkey commercial framework for social inclusion and labour rights would be reaped to the full potential. Conversely, inclusion of a TSD chapter (and specifically a section on labour issues) in an ECF or DCFTA would provide a solid legal basis for deeper cooperation between the EU and Turkey on the further enhancement of labour rights and social protection in the bilateral commercial framework than is the case under the status quo, and independent of progress in the accession process; inclusion of a TSD chapter is beneficial irrespective of the scenario to be implemented.

Table 12.3: Comparison of social impacts estimated for ECF and DCFTA

	ECF	DCFTA
Employment and unemployment		
EU	• Overall effect: impossible to establish • Sector-level effects: significant in some sectors • Effect on female and youth employment: negligible	• Overall: negligible; • Sector-level effects: significant in some sectors • Effect on female and youth employment: negligible
Turkey	• Overall: impossible to establish • Sector-level effects: significant in some sectors • Female employment: negligible • Youth employment: slightly positive	• Overall: impossible to establish • Sector-level effects: significant in some sectors • Effect on female and youth employment: negligible
Household income, wages, poverty		
EU	• Positive but limited impact on incomes and poverty	• Negligible impact on incomes and poverty
Turkey	• Positive impact on incomes and poverty	• Negative but small impact on incomes and poverty
Job conditions, social protection and social dialogue		
EU and Turkey	Inclusion of a TSD chapter (and specifically a section on labour issues) would provide a solid legal basis for deeper cooperation between the EU and Turkey on the further enhancement of labour rights and protection than is the case under the status quo; such inclusion of a TSD chapter is beneficial irrespective of the scenario to be implemented.	

13 ENVIRONMENTAL IMPACTS OF ALTERNATIVE ENHANCEMENT OPTIONS

This chapter assesses the potential environmental impacts of the enhancements to the BPTF. In particular, it provides quantitative impacts for greenhouse gases (GHGs) and other pollutants based on the CGE-model-based sectoral impacts and emissions information, including in monetary terms by converting all GHG emissions into CO_2 equivalents and multiplying the changes in total GHG emissions by an estimate of the social cost of carbon (SCC). Further, based on the analysis of the BPTF, it draws implications for environmental outcomes from the structural and scale effects of the potential enhancements.

Since the CGE simulations do not break out environmental goods as a separate sector, we use a screening and scoping approach that establishes links between the CGE model outcomes and the environmental indicators in the baseline analysis. As such, this exercise provides a basis for drawing inferences concerning the likely impact of the ECF or a DCFTA on the EU's and Turkey's environmental performance under these alternative policy scenarios. However, further analysis will also need to take into account the outcome of ongoing negotiations on a plurilateral Environmental Goods Agreement, which aims to further liberalise trade in environmental goods and in which both the EU and Turkey participate.

13.1 ECF Environmental Impact

13.1.1 Quantitative Analysis

The expansion in economic activity and the difference in production patterns caused by the ECF lead to an expected small increase in the emissions of CO_2. Turkey's emissions would increase by 2.1 million metric tonnes (+0.74%), the EU's by 303,000 metric tonnes (0.01%; Table 13.1); these increases would go against the Paris Agreement, which in particular calls for absolute emission *reductions* of developed countries.[107] Nevertheless, the increase in emissions in Turkey and the EU are almost balanced out by a decrease in emissions in the rest of the world, expected at 1.7 million metric tonnes (-0.01%), mostly due to the decreased emissions in China and the United States.

When expressed in monetary terms, this would lead to a social cost of carbon that ranges from EUR 3.3 million to almost EUR 17 million for the EU (2015 rates) and from EUR 23 million to 119 million for Turkey, depending on which of the two social costs of CO_2 estimates are used, i.e. the average SC-CO_2 at 5% or at 2.5% (EPA, 2016). Elsewhere in the world, the reduction of CO_2 would result in a social gain between EUR 18 million and 93 million.

Table 13.1: CO_2 Emission Changes, Quantity and Value, under the ECF

	Change in emissions '000 MT CO_2 equivalent	% increase compared to baseline	% GDP variation	Social Cost of CO_2, 2015-2050 5% Average (EUR M)	Social Cost of CO_2, 2015-2050 2.5% Average (EUR M)
EU	302.54	0.01%	0.008	3.3	16.9
Turkey	2,122.29	0.74%	1.459	23.3	118.8
ROW	-1,652.56	-0.01%	0.000	-18.2	-92.5
Total	**772.27**	**0.00%**	**0.013**	**8.5**	**43.2**

Source: CGE simulations and calculations by the study team.

Overall, the scale effects of the ECF are lower than the ones incurred due to the BPTF. Composition effects are presented in Table 13.2. These only consider the production effects but not consumption effects. Changes in economic activity and emissions are positively correlated. In Turkey, the relative increase in CO_2 emissions is half the

[107] See Article 4 of the Paris Agreement, UNFCCC /CP/2015/L.9/Rev.1, 12 December 2015.

increase in GDP (in percent), meaning that the ECF decreases the carbon intensity of Turkey's economy. GDP variations for the EU and ROW are marginal, yet positively correlated with emissions.

Table 13.2: Composition Effects of the ECF on CO_2 Emissions

	Baseline			ECF (MT '000)			ECF (% change)		
Polluting Sector	EU28	Turkey	World	EU28	Turkey	World	EU28	Turkey	World
Least polluting	381,711	28,943	2,003,411	241.0	31.1	273.2	0.06	0.11	0.01
Moderately	462,661	42,812	3,565,728	-229.7	484.6	161.5	-0.05	1.13	0.00
Most polluting	2,165,434	158,477	19,344,751	36.2	887.2	-326.0	0.00	0.56	0.00
Total	3,009,806	230,232	24,913,890	47.4	1402.9	108.7	0.00	0.61	0.00

Source: CGE simulations and calculations by the study team.

For Turkey, the highest increase in CO_2 emissions is in the most polluting sectors. More specifically, the increased emissions in the energy sector are driving the growing share of the more polluting sectors in Turkey, leading to a relatively large increase in nitrogen oxide and sulphur oxide emissions. The transport and the construction sectors are pushing upwards the emission of the moderately polluting sectors, while the impact on the least polluting sectors can be considered negligible. It is however important to note that the decreased production in agricultural sectors in Turkey is compensated by the increased production in the EU.

Concerning the EU28, there is no significant variation in the most polluting sectors; the overall small increase is due to the energy sector. On the other hand, the increase in pollution in the least polluting sectors is compensated by the decreased pollution in the moderately polluting sectors, mostly due to sectors like air transportation, textile and other industrial goods that see an equivalent increase in Turkey.

In the rest of the world, low and moderately polluting sectors have a marginal variation of CO_2 emission while the most polluting sector faces a decrease in emissions, mostly due to the energy, coal and steel, and petrochemical sectors; the pollution impact in the rest of the world can be considered negligible.

13.1.2 Qualitative Analysis

As in the ex post analysis, this section presents a brief qualitative analysis of the impacts of the six identified environmental sectors. The nature of the correlation has been explained in Chapter 6. In general terms, the pressure on each environmental sector is expected to increase as a consequence of strong GDP growth expected in Turkey (approximately 1.5%); conversely, given that the relative effect of the ECF on GDP (as well as on CO_2 emissions, in relative terms) in the EU is small, the analysis in this section is limited to effects in Turkey.

Air Pollution

Air pollution is expected to increase. Most of the sectors that affect both nitrogen dioxide and particulate matter (energy production and distribution, electricity generation, oil refining production of solid fuels, extraction and distribution, together with all sectors related to energy consumption, industrial process and all transport sectors and waste production) are expected to increase, therefore also increasing emissions. Also, the construction sector and commercial and households emissions are expected to increase.

Safeguards measure should be taken into consideration to ensure that damages from the ECF are taken into consideration and can be controlled.

The intended nationally determined contribution of Turkey into the Paris Agreement appears to be rather weak and will need to be strictly applied (UNFCCC, 2015). The Turkish National Strategy on Industry may be a good starting point to include safeguards measures.

Water

In terms of water pollution, the projections of the CGE model show a decrease of the main pollution sources like agriculture (through its organic compounds and nutrients), and partly industry (through organic compounds and iron). On the other hand, textile production is expected to increase therefore compensating the effect of decreasing water pollution from the agricultural and the chemical sector.

The overall effect of the ECF is present but can be considered negligible. Remaining challenges include the need to further increase wastewater treatment to reduce the high level of non-revenue water hovering by around 50% and to expand access to adequate sanitation in rural areas.

Waste

In terms of waste production and hazardous waste, a small increase is expected in line with the predicted increased economic activity. Nevertheless, all sectors that directly affect waste production (dairy, food production, other processed food, petrochemical, plastic industry, and construction) do not show a significant increase in production in the simulation.

The impact of the ECF on waste production is hard to assess, but no particular risks could be identified.

Climate Change

As mentioned above, the impact of the ECF on climate change through an increase in CO_2 emissions is expected to be marginal. Most of the net increase in emissions will be concentrated in Turkey, which would see an increase of 2.1 million metric tons of CO_2 equivalent. The CGE results indicate an increase of 0.74% compared to the baseline.

The EU Delegation in Turkey is about to launch a climate action capacity building project with the objective of disseminating climate change mitigation policies in the Turkish legislation (European Commission, 2013). This intervention may contribute to the limitation of increased GHG emissions.

Ecosystems and Biodiversity

Intensity of land use is expected to decrease in the modelled scenarios. This could lead to a reduction in the pressure on habitats due to land conversion for agriculture. On the other hand, the construction and fishery sectors are expected to expand, which may affect marine biodiversity.

The results reported above do not show a specific increase of the variables affecting ecosystems and biodiversity. The net effect of the ECF on biodiversity thus appears to be weak, although it is difficult to assess in detail.

Green Economy

The composition effect of emissions per polluting sector does not show that the Turkish economy becomes greener as a result of the ECF. The most polluting sectors are expected to increase emissions more than the least and moderately polluting sectors, which show a limited increase in pollution.

On the other hand, when assessing the economic data per sector one can observe a shift from industrial and fossil fuelled activities towards the services sectors.

The total impact can thus be regarded as mixed. However, the results of the quantitative assessment do not take into account potential intra-industry improvements in resource efficiency. Based on the increase of exports from Turkish to the EU it can be assumed that especially the marketing possibilities for sustainably produced and organic products have improved, which may affect a more environmentally friendly consumption of product.

It is also important to note that the EUD is about to launch a long-term programme with the objective of improving the integration of a low carbon production system into Turkish economy.

Summary

Table 13.3 summarises the results of the qualitative analysis of the ECF's environmental impact.

Table 13.3: Summary of ECF environmental effects in Turkey (qualitative analysis)

Environmental aspect	Current EPI ranking	Correlation with ECF	Impact
Air Pollution	151th/180	Yes – Related to industrial production, energy production and construction sectors	Marginally negative
Water	75th/180	Yes – Related to industrial production (mainly textile)	Negligible
Waste	Not Ranked	No - Dairy, food production, other processed food, petrochemical, plastic industry and construction	Mixed, limited
Climate change	Not Ranked	Yes –Increased CO_2 emissions	Marginally negative
Ecosystems and Biodiversity	177th /180	Indirect - Land use, agriculture, construction, land and water pollution	Negligible
Green Economy	Not Ranked	Yes – Shift in sectors and higher standards	Mixed

13.2 DCFTA Environmental Impact

13.2.1 Quantitative Analysis

The DCFTA leads to minimal changes in CO_2 emissions (Table 13.4): Turkey's emissions would increase by 0.41% (about 1.2 million tons of CO_2). However, this small increase will be more than compensated by reduced emissions in the EU28 and in the rest of the world, leading to an overall decrease in global emissions of 436,000 tons of CO_2 equivalent. The overall scale effects of the DCFTA are thus positive (in the sense that CO_2 emissions drop) but much lower in magnitude than in the ECF scenario.

The correlation between economic activity and variation in emissions is positive, as in the case of the ECF. However, contrary to the ECF, the increase in Turkey's economic activity leads to a percentage increase in emissions which is twice as high, indicating that the DCFTA actually makes the Turkish economy more carbon intensive. The impact of the DCFTA on carbon efficiency in the EU28 and ROW is marginal.

When expressed in monetary terms, the reduction in emissions would lead to a social gain of carbon that ranges from EUR 4.8 million to 24.4 million globally. For Turkey, the social costs of the increase in CO_2 emissions would amount to between EUR 13 million and 66 million, whereas the EU and the ROW would register gains.

Table 13.4: CO_2 Emission Changes, Quantity and Value, under the DCFTA

	Change in emissions '000 MT CO_2 equivalent	% increase compared to baseline	% GDP variation	Social Cost of CO_2, 2015-2050 5% Average (EUR M)	Social Cost of CO_2, 2015-2050 2.5% Average (EUR M)
EU	-864.70	-0.02%	-0.005	-9.5	-48.4
Turkey	1,179.37	0.41%	0.273	13.0	66.0
ROW	-751.03	0.00%	0.000	-8.3	-42.1
Total	**-436.35**	**0.00%**	**0.002**	**-4.8**	**-24.4**

Source: CGE simulations and calculations by the study team.

An analysis of composition effects in Turkey (Table 13.5) shows that all polluting sectors will increase their emissions, with greater emphasis on the most polluting sector (90% of total new Turkish emissions), demonstrating that the DCFTA will hardly contribute to a greening of Turkey's economy (when measured by CO_2 emissions).

Table 13.5: Composition Effects of the DCFTA on CO_2 Emissions

	Baseline (MT '000)			DCFTA (MT '000)			DCFTA (% change)		
Polluting Sector	**EU28**	**Turkey**	**World**	**EU28**	**Turkey**	**World**	**EU28**	**Turkey**	**World**
Least polluting	381,711	28,943	2,003,411	189.4	50.9	96.5	0.05	0.18	0.00
Moderately	462,661	42,812	3,565,728	-168.8	74.4	-145.0	-0.04	0.17	0.00
Most polluting	2,165,434	158,477	19,344,751	-940.6	1050.6	-479.9	-0.04	0.66	0.00
Total	3,009,806	230,232	24,913,890	-920.0	1176.0	-528.4	-0.03	0.51	0.00

Source: CGE simulations and calculations by the study team.

It is interesting to point out an equivalent shift of emission from the EU28 most polluting sector into Turkey. This switch is mostly due to the energy and the transport sector.

Concerning the least polluting sectors, figures show a very small increase for Turkey, the EU and the rest of the world, with greater importance for the EU and the rest of the world. Nevertheless, the overall increase in emissions by the least polluting sectors will remain negligible.

Overall, the DCFTA contributes to decreasing the emissions of the EU28 and of the rest of the world by decreasing the emissions in the most polluting sectors compared to the moderate and least polluting sector. This can be considered an example of carbon leaking since Turkey will pollute on the behalf of the EU and the rest of the world.

13.2.2 Qualitative Analysis

This section presents the qualitative analysis for the impacts of each environmental sector; the nature of the correlation has been explained above for the BPTF (Chapter 6). In general terms, one can expect the pressure on each environmental sector to increase in a minor way only, as a consequence of the limited expected impact of the DCFTA on GDP growth in Turkey (approximately +0.26%). As for the ECF, the qualitative analysis is limited to Turkey, given the small impact of the DCFTA on the EU.

Air Pollution

Air pollution is expected to increase, although to a smaller extent than under the ECF. Most of the sectors that affect both nitrogen dioxide and particulate matter (energy production and distribution, electricity generation, oil refining production of solid fuels, extraction and distribution, together with all sectors related to energy consumption, industrial process and all transport sectors and waste production) are expected to increase, therefore also increasing emissions. The transport sector is also expected to expand strongly, therefore increasing PM 2.5 and PM 10. On the other hand, the construction sector, industrial goods and commercial and household emissions combined are expected to decrease.

Overall, therefore, the impact of the DCFTA on particulate matter is expected to be marginally negative, as is the impact on nitrogen dioxide although to a smaller extent.

In order to counter the increase in air pollution under the DCFTA stemming from transport and energy, flanking measures could be taken. In transport, reducing the share of road transport and increasing the share of maritime and rail transport would ensure a more balanced utilization of freight and passenger and thereby reduce air pollution. Concerning energy, increasing capacity of production of electricity from solar power to 10 GW, and from wind power to 16 GW by 2030 would easily offset the increase in pollution caused by the DCFTA.

Water

The main water polluting sectors – agriculture, textiles, and construction – are expected to contract under the DCFTA, thus decreasing the environmental pressure on water quality. The overall effect of the DCFTA is therefore positive.

Waste

In terms of waste production and hazardous waste, a small increase is expected in line with the increased economic activity. Nevertheless, all sectors that directly affect waste production (dairy, food production, other processed food, petrochemical, plastic industry, and construction) are expected to show a significant decrease in output. The impact of the DCFTA on the waste production is therefore considered to be positive, i.e., reduced production of all kinds of waste.

Climate Change

As mentioned above, the DCFTA would result in an increase in GHG emissions of Turkey. Nevertheless, the expected increase of Turkey's emissions is lower than under the ECF scenario, with an increase by 1.2 million metric tons of CO_2 equivalent (0.41%) compared to 2.1 million (0.74%) under the ECF.

Yet, it is important to take into consideration the overall picture since under the DCFTA scenario the emissions in the EU and in the rest of the world are expected to decrease more than the specific increase in Turkey. Therefore, the overall impact of the DCFTA on climate change can be considered marginally positive.

Ecosystems and Biodiversity

The intensity of land use is expected to decrease under the DCFTA scenario. This could lead to a reduction in the pressure on habitats resulting from land conversion for agriculture. Furthermore, output of the construction, and chemical and plastics sectors (which tend to be harmful on ecosystems and biodiversity) is expected to decrease under the DCFTA. The net effect of the DCFTA on biodiversity therefore appears to be positive, although the direct impact remains limited and hard to assess.

Green Economy

The decomposition of emissions per polluting sectors does not show that the Turkish economy is becoming greener as a result of the DCFTA. The most polluting sectors are strongly increasing emissions, whereas emissions of the least and moderately polluting sectors decline marginally. The overall impact of the DCFTA on greening the economy can thus be regarded as marginally negative.

Summary

Table 13.6 summarises the results of the qualitative analysis of the DCFTA's environmental impact.

Table 13.6: Summary of DCFTA environmental effects in Turkey (qualitative analysis)

Environmental aspect	Current EPI ranking	Correlation with DCFTA	Impact
Air Pollution	151th/180	Yes – Higher impact on particulate matter than on nitrogen dioxide	Marginally negative
Water	75th/180	Yes – Decreased production in agriculture, textile, industrial and construction sector	Positive
Waste	Not Ranked	Yes – Decreased production of dairy, food production, other processed food, petrochemical, plastics industry and construction	Positive
Climate change	Not Ranked	Yes –Increased CO_2 emissions	Marginally positive
Ecosystems and Biodiversity	177th /180	Indirect - land use, agriculture, construction, land and water pollution	Marginally positive
Green Economy	Not Ranked	Yes – Shift towards more polluting sectors	Marginally negative

13.3 Summary

Table 13.7 provides a tabular summary of the anticipated impacts of the two scenarios on the environment. It shows that in Turkey, both scenarios will lead to an increase in GHG emissions, as well as to air pollution. GHG emission effects of the ECF in Turkey are about twice as high as in the DCFTA scenario. The qualitative analysis for Turkey also shows that the effects of the ECF on the environmental sectors considered are, on balance, marginally negative – mostly resulting from increased economic activity caused by the ECF. Due to the much lower effect of the DCFTA on the level of economic activity, the impact on Turkey is much more limited and can even be considered positive in terms of waste and water pollution.

The GHG emission effects on the rest of the world are unambiguously positive in both scenarios, but vastly different in the EU: the DCFTA is expected to lead to a reduction in emissions in the EU; the ECF has very limited effects on emissions.

Table 13.7: Comparison of environmental impacts estimated for ECF and DCFTA

	ECF	DCFTA
Quantitative Analysis (change in emissions '000 MT CO_2 equivalent)		
Turkey	+2,080.9	+1,186.7
EU	+269.8	-865,0
ROW	-1,646.6	-752.2
Total	**+704.1**	**-430.5**
Qualitative Analysis for Turkey		
Air Pollution	Marginally negative	Marginally negative
Water	Negligible	Positive
Waste	Mixed, limited	Positive
Climate change	Marginally negative	Marginally positive
Ecosystems and Biodiversity	Negligible	Marginally positive
Green Economy	Mixed	Marginally negative

Source: Calculations by the study team.

The analysis in this chapter has addressed a number of safeguards and policy measures that could be taken to limit any the marginally negative environmental effects of the enhanced EU-Turkey commercial framework (in any of the scenarios). In this context, the inclusion of environmental provisions in the enhanced legal framework, as part of a TSD chapter – already a common practice in recent FTAs negotiated by the EU – would establish a legal basis for the development, implementation and monitoring of such measures.

14 REGULATORY AND INSTITUTIONAL IMPACTS OF ALTERNATIVE ENHANCEMENT OPTIONS

This chapter assesses the regulatory and institutional implications of the alternative enhancements to the BPTF. Based on the ex post analysis of the functioning of the BPTF institutional framework, and taking into account the demands of complying with the enhanced disciplines to be adopted under the ECF and DCFTA scenarios it draws conclusions for regulatory harmonization and institutional issues. As much of the regulatory and institutional impact of the ECF/DCFTA will depend on the modalities to be negotiated between the Parties, the following consideration by necessity remain general.

Regulatory and commercial policy alignment

Similarly to trade agreements that the EU is entering into with third countries, regulatory convergence is likely to be one of the most critical and sensitive matters to be dealt with – both for the CU enhancement (ECF scenario) and the DCFTA (with the exception of harmonisation of tariffs and commercial policy alignment, which do not apply to the DCFTA). Under both scenarios, given the difference in size of the Parties, Turkey will be expected to continue aligning its laws and regulations with those of the EU, as it has been doing in the existing BPTF, as well as under the accession process.

Due to the fact that Turkey has already been working towards alignment of its regulations as part of the accession process in areas to be covered by the ECF or DCFTA, regulatory alignment in these areas should not pose a problem.

Nevertheless, mindful of the ever evolving nature of the EU *acquis* and in order to achieve a more integrated and aligned market structure to be composed by both Parties, a healthy communication, diligent notification and thus more institutional cooperation are needed to be fostered in the next stage of the partnership. This kind of strengthened partnership is also a natural duty for the Parties that stems from the relevant provisions of Decision No 1/95. In this context, the following observations can shed light on the modernisation of the BPTF:

- Article 52(1) of Decision No 1/95 stipulates that the CUJC shall carry out exchanges of views, formulate recommendations, and deliver opinions. However, the Committee is not empowered to take decisions. The functioning of the Committee could be revamped to allow it to take decisions beyond the stipulated exceptional cases to further facilitate the functioning of the CU. Meetings of the CUJC, which should be held at least once a month as per the Decision (Article 53(3)), in practice are not held regularly. More regular meetings of the CUJC could provide for a better functioning of the CU: they could help accelerate and enhance the monitoring of the alignment of Turkish legislation and ascertain that Turkey has effectively put into force the necessary instruments for the elimination of TBTs.

- A wide range of EU legislation is related to issues pertinent to the CU. Although Turkey’s capacity to align its legislation has improved, delays still cause trade frictions. In order to facilitate Turkey’s alignment with EU legislation in areas of direct relevance to the operation of the CU, as provided in Article 54 of Decision No 1/95, and especially with respect to TBTs (since 2016) the Commission informs Turkey on an annual basis of all relevant new legislation.. Turkey is to submit its corresponding draft legislation for assessment by the Commission. Turkey could be expected to provide, equally on an annual basis, a corresponding up-to-date list indicating the steps it has taken and intends to take. This is to help reduce the “notification deficit” observed by the World Bank (2014), and mitigate Turkey’s often repeated claims that they have not been informed properly in accordance with Article 56(1) of Decision No 1/95.

- Strengthened implementation of Article 57(2) and 57(3) requiring Turkey to seek the views of the Commission in cases where it contemplates new legislation in the area of direct relevance for the CU, and consultations to be made in the CUJC could help mitigating problems to a certain extent and help the smooth functioning of the CU.
- A reinforced mechanism providing stronger coordination between the EU and Turkey could be designed to help Turkey to take necessary measures and negotiate agreements with FTA partners of the EU so that it better aligns its commercial regime. In this respect, a subcommittee (in accordance with Article 53(4)) could be established under the CUJC to better evaluate the differences between Turkey's and the EU's preferential regimes in terms of their substantive alignment, and to provide a functioning communication mechanism.
- It could be considered to provide a mechanism for sharing information on the ongoing FTA negotiations with third countries. Ways for implementation of the reciprocity principle for Turkish access to the EU's new FTA markets could be analysed to eliminate the asymmetries.
- Possibilities to expand the dispute settlement system under the CU into areas beyond safeguard issues stipulated in Article 61 of Decision No 1/95 could be considered.

Enforcement of rules and administrative capacity

Regardless of whether future commercial partnership between the EU and Turkey will take the form of an ECF or DCFTA, Turkey will continue to have to implement the requirements arising from further regulatory convergence. Experience under the BPTF has shown that implementation of transposed regulations in Turkey is not always optimal. This may call for an improved monitoring mechanism for the implementation of harmonization obligations. In addition, technical assistance and capacity building for Turkish administration will continue to be required.

Institutional mechanism for the ECF or DCFTA

In order to increase the effectiveness of the enhanced commercial framework, relations between the Parties may well need an improvement and a revamped institutional and administrative cooperation may be employed.

Various studies highlight the need to establish an institutional mechanism where the Parties could better coordinate their actions through a decision-making procedure where they could reciprocally inform each other and equally contribute to shaping the common commercial policy of the CU. This would imply that the Parties also respect and exercise diligence about their notification duties towards each other for their respective regulatory plans/changes, as well as their ongoing and potential trade relations/negotiations with third countries. As a matter of fact, both Parties' past practices to enter into FTAs with third countries, without necessarily including and informing its CU partner, run the risk of giving rise to trade diversion and tensions between the Parties. Therefore, the revamped partnership would need to address those concerns by ideally agreeing on a revisited decision-making procedure that is acceptable and operationalized by both Parties.

Another point that may be of considerable importance is the way in which the negotiations targeted at the enhancement of the CU from one side and the process that governs Turkey's accession talks from the other side will be tackled. Given both Parties' sensitivities, it would be advisable to approach the revision of the existing CU as a way to strengthen the commercial cooperation between the Parties; and present and develop a complementary track to Turkey's full membership aspiration. To the extent that the enhancement of the CU could eventually factor in Turkey's preparations for potential accession to the EU, there would be less room for disagreement and conflict of interest and thus a better climate for mutual understanding could be put in place.

15 HUMAN RIGHTS IMPACTS OF ALTERNATIVE ENHANCEMENT OPTIONS

The European Parliament acknowledges that Turkey is a key strategic partner for the EU and that active and credible negotiations would provide a suitable framework for exploiting the full potential of EU-Turkey relations; thus, it calls for the CU to be upgraded and for its scope to be expanded to cover new sectors, including agricultural products, services and public procurement.[108] Since human rights is an issue of concern to the European Parliament, "exploiting the full potential of EU-Turkey relations" thus can be read to encompass advancing the observance of human rights.

Furthermore, in view of the EU goals of making Europe a safer place, of reinforcing peace, stability and of improving the quality of people's lives, and in view of exploiting the full potential of the EU-Turkey relations, the European Commission has called on Turkey to uphold constitutional order with its checks and balances and ensure that the rule of law and fundamental freedoms prevail.[109] The very serious developments in Turkey and the surrounding region renders enhanced EU-Turkey cooperation, including on human rights and including in the context of the commercial relationship, even more crucial.

This chapter considers the human rights implications of the ECF and DCFTA scenarios. These scenarios are analysed against a baseline scenario, i.e., what would be the likely human rights developments if the BPTF continued in its current form,[110] in order to determine whether they could have a positive or negative impact with reference to the baseline, as well as compared with one another.

The ex ante assessment of the ECF's and DCFTA's impact on human rights follows the same overall approach and normative framework as the ex post assessment (Chapter 8). It analyses whether the impacts of the various policy options on the identified human rights are beneficial (promotion of human rights) or negative (limitation of human rights). In case of a negative impact, potential safeguards are identified and considered in order to ensure that the negative impact will not amount to a violation of the human right.[111]

Key aspects of the current human rights situation in Turkey have been summarised in the ex post analysis (Chapter 8 above), which thus constitutes the baseline for the further development of human rights under the two scenarios: under the baseline, the current BPTF would remain in place unchanged. This has highlighted the pre-existing conditions of vulnerability of certain groups: women, children, disabled persons, and religious and ethnic minorities. Moreover, work-related rights, such as the right to form or become member of an association, and rights of a societal function, such as the right to assembly and peaceful protest and freedom of expression, are areas of concern for Turkey. While explaining the effects of the baseline scenario, potential opportunity costs are taken into consideration (European Commission, Directorate-General for Trade, 2015); e.g. if neither the ECF nor the DCFTA would be implemented, would Turkey have the option of expanding activities with other economic partners which obey less stringent codes of conduct than the EU?

As for the ex post analysis, we distinguish between direct effects stemming from the legal texts and indirect effects which are resulting from the various scenarios'

[108] European Parliament resolution of 21 September 2010 on trade and economic relations with Turkey (OJ C 50E , 21.2.2012, p. 15).

[109] Joint statement by High Representative/Vice-President Federica Mogherini and Commissioner for European Neighbourhood Policy and Enlargement Negotiations Johannes Hahn on the situation in Turkey, Brussels, 16 July 2016, available at < http://europa.eu/rapid/press-release_STATEMENT-16-2555_en.htm>

[110] This is in line with the approach suggested in European Commission, Directorate-General for Trade (2015).

[111] European Commission, *Operational Guidance in taking account of Fundamental Rights in Commission Impact Assessments*, Brussels, 6.5.2011, SEC(2011) 567 final

economic, social and environmental impacts. As stated previously, the analysis does not take into account the events in Turkey of 15 July 2016 and its potential implications as the study was largely completed at that juncture.

15.1 Human Rights in the Legal Texts

In accordance with the Strategic Framework on Human Rights and Democracy (Council of the EU, 2012), the EU is devoted to promote respect for human rights, democracy and the rule of law worldwide. Thus, the EU's trade policy is also equipped towards promoting free and fair openness to trade in the global market place (European Commission, Directorate-General for Trade, 2015). In combination with other instruments, it can contribute to the improvement of the current human rights situation in Turkey.

Reference to recent EU FTAs and Association Agreements gives some perspective on what might be included in an FTA (or ECF) text regarding human rights, while at the same time establishing that there is no set template as yet in EU FTAs regarding the interface between trade and investment agreements and human rights:

- The EU-Singapore FTA reaffirms the parties' commitment to the Charter of the United Nations and makes specific reference to the principles articulated in The Universal Declaration of Human Rights adopted by the General Assembly of the United Nations on 10 December 1948.
- The EU-Canada Comprehensive Economic and Trade Agreement (CETA) goes substantially further:
    - It reaffirms the Universal Declaration of Human Rights;
    - It recognises the importance of human rights for the development of international trade and economic cooperation; and
    - It clarifies that measures that are "related to the maintenance of international peace and security" include the protection of human rights.
- The EU-Korea FTA introduces language related to privacy as a human right:
    - It reaffirms the Universal Declaration of Human Rights;
    - In Article 7.43(b), it incorporates an explicit commitment to protect fundamental rights and freedom of individuals, including adequate safeguards to the protection of privacy, in particular with regard to the transfer of personal data, and adds a footnote that elaborates on this commitment as follows: "For greater certainty, this commitment indicates the rights and freedoms set out in the Universal Declaration of Human Rights, the Guidelines for the Regulation of Computerised Personal Data Files (adopted by the United General Assembly Resolution 45/95 of 14 December 1990), and the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (adopted by the OECD Council on 23 September 1980)."
- The EU-Kosovo Association Agreement introduces language that elaborates the commitment to human rights, including:
    - adds to the reference to the United Nations Universal Declaration of Human Rights of 1948 an additional reference to the Convention for the Protection of Human Rights and Fundamental Freedoms of 1950, in the Helsinki Final Act and the Charter of Paris for a New Europe;
    - the rights of persons belonging to minorities and vulnerable groups;
    - to the protection of the "property of refugees and internally displaced persons and other related human rights."

- The EU-Algeria Association Agreement incorporates an additional reference to promoting respect for human rights in "in the socio-professional context."
- The EU-Chile FTA references human rights in the context of provisions establishing a formal basis for political dialogue and cooperation.

Aaronson and Chauffour (2011) survey the inclusion of human rights references in trade agreements as including privacy rights, political participation, due process, access to information provisions, cultural rights, indigenous rights, and access to affordable medicines. At the same time, they emphasize that the language is usually in the preamble and is non-binding. That being said, numerous commentators have pointed out the norm-setting value of such texts.

The enhancement of the bilateral EU-Turkey commercial relationship that is signalled in the initiation of discussion of an ECF or DCFTA relates primarily to the expansion of the number of areas addressed by an upgraded agreement. For example, new chapters would cover issues, such as e-commerce and services. Therefore, reference to the respect for human rights relevant to the chapter could be specified, and their protection could thus be directly reinforced. The services chapter might accordingly address data localization and thus the related human-rights issue of privacy, already raised in the EU-Korea FTA.

15.2 ECF Potential Impact on Human Rights

Stakeholders and the literature have identified a number of potential issues which might impact on the effect of the ECF on human rights.

With regard to Turkey, the European Parliament – while acknowledging that Turkey is a key strategic partner for the EU and calling for the CU to be upgraded and for its scope to be expanded to cover new sectors, including agricultural products, services and public procurement[112] – recalls that Turkey's extraordinary economic growth over the past decade has led to an unprecedented boom in housing and infrastructure, often at the expense of environmental and conservation concerns.[113] This study has shown that CO_2 emissions are estimated to increase for all polluting sectors, which might impact negatively on the right to a clean environment.

However, as concluded by the economic analysis, a welfare gain of almost EUR 14 billion and a real GDP increase of 1.44% is expected, which provides the underpinning for improvement of human rights outcomes in areas contingent on good economic performance.

An expansion of the CU to cover trade in services also potentially enhances human rights: the more efficient supply of services in any sector can promote economic growth and development, and therefore could provide the economic means needed to promote human rights. The WTO notes that services liberalization can promote economic performance, provide a means for countries to capitalize on competitive strengths, offer lower prices to consumers in areas, such as telecoms, promote faster innovations, and encourage technology transfer (WTO, 2001: 16).

An agreement covering FDI could also potentially positively impact human rights, due to indirect and direct incentives on Turkish companies to adhere to norms recognized as the Corporate Social Responsibility (CSR) of the companies. EU companies often have a human rights approach in their codes of conduct, which rely on CSR. Thus, FDI could potentially not only bring welfare gains, as shown by the economic assessment (Section 11.2), but also improve working conditions and contribute to the reduction in discrimination on grounds of disability and gender at the workplace. This could also include the diffusion of above-average due diligence practices from the EU investors

[112] European Parliament resolution of 21 September 2010 on trade and economic relations with Turkey (OJ C 50E , 21.2.2012, p. 15).
[113] Ibid.

and companies, thereby ensuring that land for investment is made available through legal means.

The potential impact of the ECF on gender-related human rights on a de jure basis cannot be evaluated on an ex ante basis where a negotiated text is not available. That being said, gender is not generally referenced broadly in trade agreements – there is, for example, only one reference to gender in the CETA text (in the in article addressing "Treatment of Investors and of Covered Investments"). As the present exercise does not pre-judge the legal content of an ECF, it draws no conclusions on this basis. An evaluation of potential impact on a de facto basis has been undertaken in Chapter 12 and concluded that the economic implications of the ECF will have a very limited impact on female employment and incomes.

As regards the EU, the effect of the ECF scenario on human rights is likely to be negligible. As concluded by the economic analysis, a welfare gain of EUR 5.4 billion and a real GDP increase of 0.007% is expected. This provides a modest underpinning for improvement of human rights outcomes in the EU in areas contingent on good economic performance.

The overall effects of the ECF on human rights are thus expected to be positive but minor, mainly due to economic and welfare benefits.

The specific human rights which might potentially be impacted on by the ECF, and the potential impacts on them, have been identified as follows:[114]

Right to an adequate standard of living

The ECF scenario eliminates all tariff- and non-tariff-based restrictions in agricultural products, including in primary agriculture. Agriculture is a key-sector of the Turkish economy, currently amounting to about 10% of GDP and one quarter of employment. Turkish agriculture is dominated by small-scale family farms. Also, the agricultural sector is one of the sectors in which most women find employment.

Overall, increased market access under the ECF, including in the area of primary agriculture, is estimated to lead to welfare gains for Turkey of approximately EUR 12.5 billion. Real GDP in Turkey is also estimated to rise by 1.44%. On average, consumer prices for agricultural products fall because Turkish markets will be opened to increased competition. Thus, the ECF scenario will potentially have a positive effect on the promotion of the right to an adequate standard of living. Welfare gains and the rise of GDP, coupled with the decrease in wholesale and retail prices, envisage improvements in the overall standard of living in Turkey.

This improvement in the overall living standard may also imply a lowering in the total number of child workers, i.e., a lowering of the number of families who are currently dependent on the child's work income.

However, increased market access in the area of primary agriculture will likely negatively affect the standard of living and the traditional lifestyle of small farmers, who, as stated above, dominate the Turkish agricultural sector. As shown in Table 12.1 above, the ECF implies somewhat reduced demand for both skilled and unskilled labour in the agricultural sector, especially in the rice and cereal sub-sectors.

To offset these negative effects, measures to improve productivity in Turkish agriculture should be considered. Productivity growth is a key component of rising per worker income gains in well performing agricultural sectors. When productivity gains are widespread among farmers, improved productivity can also contribute significantly to reduced poverty in rural areas.

Consequently, the overall standard of living is expected to increase due to the envisaged increased market access under the ECF scenario. However, adverse impacts

[114] On social rights, in particular related to employment and wages of women, also see the social impact analysis in Chapter 12 above.

on rural employment are likely, thus potentially reducing the standard of living of small-scale farmers.

For the EU, according to the CGE model simulations the ECF will increase welfare by EUR 5.4 billion and GDP by 0.007% compared to the baseline. Thus, the overall standard of living is expected to improve, albeit very modestly.

Right to work

In terms of structural effects, it is expected that the ECF will drive strong investment increases in Turkey, leading to job gains. Moreover, total exports from Turkey will be on the rise compared to the baseline scenario (see Table 11.1 above). It is also expected that the productivity of firms exporting to the EU will rise due to the ECF scenario. The net effect of the ECF is expected to be a slightly positive for overall employment opportunities in Turkey. However, as indicated above, rural employment will potentially suffer adverse effects due to the envisaged increase in market access. Small-scale farms might not have the resources to adapt without assistance.

As regards the EU, overall effects of the ECF on employment or unemployment are considered to be small. At a sectoral level, as indicated by the social analysis, the ECF will mostly facilitate employment in the agricultural sector. Sectors which are expected to experience minor job losses are textiles, clothing and footwear, but these will result over a long period of time. Overall, the ECF is therefore not expected to affect the right to work in the EU.

Work-related rights

The existence of FDI derived from the ECF scenario could improve the observance and adherence to work-related rights. Apart from positive benefits on welfare, Multinational Companies (MNCs) positively affect CSR practices in Turkey. The MNCs put positive pressure on their local branches and their suppliers, and this process set trends for Turkish companies. For example, supply-chain issues especially in textile industry have a positive effect on the application of international labour standards in Turkey. This was concluded by a report on CSR, coordinated by UNDP in collaboration with the European Commission.[115] Thus, Turkish companies will have further incentives to implement and enforce ethical labour conditions for vulnerable groups.

Moreover, FDI-induced CSR could also reduce child labour, which is especially prominent in the manufacturing sector, as shown in the baseline examination. Apart from welfare implications which may have an indirect positive impact on reducing the number of minor workers, CSR rules directly intended towards eradicating child labour could have a positive influence in Turkey. An FTA covering FDI could thus contribute to the furthering of CSR practices in Turkey.

As regards the EU, the ECF is not considered to impact on work related rights.

Right to a clean environment

The environmental analysis (Section 13) has shown that, compared to the baseline, the ECF scenario will potentially increase CO_2 emissions by 0.74% in Turkey.

According to General Comment No 14, which interprets the obligations imposed by Article 12 ICESCR, the State is obliged to “prevent and reduce the population’s exposure to detrimental environmental conditions that directly or indirectly impact upon human health” (Office of the High Commissioner for Human Rights, 2000).

Consequently, the ECF scenario, in absence of measures to mitigate the envisaged environmental impact, might have a negative impact on the right to a clean environment of the Turkish peoples.

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[115] UNDP (2008); also see Section 5.3 above.

The European Parliament has already expressed its concerns with regard to the current situation. Currently, Turkey's urban development has been made at the detriment of the environment. Thus, the Parliament urgently appeals to the government to operate with environmental and social impact assessments and to duly involve the local population in project designs so that long-term negative effects of environmental degradation can be avoided to the extent possible.[116]

The environmental impact in the EU is close to zero (Chapter 13). Thus, the right to health and to a clean environment will not be impacted in the EU.

Rights to health (access to adequate food) and education

Increased market access in the area of primary agriculture can promote the availability and accessibility of food (World Bank, 2013), by offering consumers a wider range of choice and similar prices for a larger category of products.

The ECF will potentially contribute to enhancing the right to access adequate food. Consumer prices for agricultural products fall because Turkish markets will be opened to increased competition. In addition, the food stemming from the EU is, in principle, safe and wholesome food of the highest standard (European Commission, 2016b), due to EU's commitment through soft law[117] and binding law[118] to ensure a high level of protection for human health.

Furthermore, cross-border supply of health (telemedicine) or educational services via the Internet offers an important means of promoting access to education and health care. Reducing barriers to the trans-border movement of service suppliers offers significant opportunities, in particular to service suppliers in developing countries (such as Turkey) in the areas of health, transport, construction and distribution. This could allow for much greater movement of the workforce in Turkey, as well as from Turkey to the EU. Increased mobility for service suppliers allows greater exchange of knowledge and experience that can improve service provision, particularly if the service suppliers return to the home country. While working overseas, service suppliers benefit from higher wages and better conditions of work, and the home country can also benefit if the service provider sends remittances and money transfers.

The baseline analysis has shown that gender disparity in education is a problem in Turkey. Thus, the inclusion of trade in services under the ECF is likely to enhance the right to education and the right to health of all Turkish citizens.

For the EU, findings have shown that the ECF will not influence the rights analysed in this subsection.

Property-related rights

It is a well recognised rule in international law that the property (of nationals and aliens alike) cannot be taken, whether for public purposes or otherwise, without adequate compensation. The baseline analysis presented in Chapter 8 above identified concerns on property rights and related aspects such as the right to adequate compensation in cases of lawful expropriation. As identified above, the ECF is expected to drive strong investment increases in Turkey; thus, the right to property is of particular relevance for the investment provisions of the ECF.

The property rights of EU investors are currently guaranteed by the Bilateral Investment Treaties between EU Member States and Turkey, which cover all Member States except Ireland and Cyprus and include provisions on expropriation.

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[116] European Parliament resolution of 21 September 2010 on trade and economic relations with Turkey (OJ C 50E , 21.2.2012, p. 15).

[117] See, for example: European Commission (2000).

[118] Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1).

15.3 DCFTA Potential Impact on Human Rights

The DCFTA scenario replaces the CU with an FTA for goods. Agricultural and fishery products are fully liberalized, except for a limited number of sensitive products. This scenario implies the introduction of ROOs. As analysed above, the ability to certify origin often requires the use of accounting procedures that may be advanced and expensive for small firms in Turkey.

As the economic effects of the DCFTA in the EU are very limited, both overall and at sector level, it can be concluded that the impact on human rights in the EU will also be negligible.

The specific human rights which might potentially be impacted on by the DCFTA, and the potential impacts on them, have been identified as follows:

Right to an adequate standard of living and right to work

The quantitative DCFTA analysis based on the CGE model shows a mixed effect on the right to an adequate standard of living in Turkey. This is due to the fact that welfare losses (of about EUR 144 million) but an increase in GDP (of 0.26% in volume terms) are expected. Some job losses are expected for both unskilled and skilled labour across a number of sectors (Section 12.3).

For the EU, the real GDP effect is marginally negative, and welfare is marginally positive. Given the overall size of the EU economy, these figures are so close to zero and dependent on offsetting effects that small changes in assumptions could change the sign of the impact. The main conclusion flowing from this analysis is that the DCFTA leaves the EU essentially neutral.

Work related rights

Like the ECF, the DCFTA also poses potential welfare gains due to increased FDI liberalization. Further, based on the same considerations as for the ECF scenario, the CSR norms imposed on Turkish companies may contribute to the fight against child labour.

Right to a clean environment

The environmental impact analysis has shown that the environment in Turkey and the EU will be marginally affected by the DCFTA. Hence, no impact on the right to a clean environment is anticipated for either of the two Parties.

Rights to health (access to adequate food) and education

The DCFTA is expected to lead to a reduction of the sum of domestic output and total imports of agricultural and food products in Turkey by EUR 3.7 billion. However, food imports from the EU are estimated to increase by EUR 4.2 billion, which may have, as described for the ECF above, positively impact on the access to adequate food. The overall impact of the DCFTA on this right is unclear.

Regarding the rights to health and education, as presented above for the ECF scenario, an agreement in the area of trade in services may enhance respect for these human rights. As the DCFTA scenario includes services trade, and based on the same considerations presented above for the ECF scenario, the DCFTA will also potentially enhance these human rights in Turkey.

Property related rights

Based on the same considerations as presented above for the ECF scenario, the investment provisions of the DCFTA may potentially enhance the protection of property rights and related aspects such as the right to adequate compensation in cases of lawful expropriation.

15.4 Summary

In terms of alignment and promotion of human rights, much of the impact will depend on the legal text to be agreed in the negotiations between the EU and Turkey, and the scope and depth to which they will address human rights issues.

Since the quantitative ex-ante results, supplemented by qualitative evidence, suggest that the scenarios have only a rather marginal impact on the EU (implying an even less pronounced effect on human rights), the human rights analysis focuses on Turkey.

Direct effects on human rights could flow from the legal text to be negotiated; the first section of this chapter has shown that trade and investment agreements to which the EU is party often contain references towards the respect for fundamental rights and freedoms. There is no standard specific form and content for these provisions. Thus, potential direct effects on human rights highly depend on the foreseen negotiations and cannot yet be assessed.

The baseline analysis has shown that there are recurring grounds of concern regarding the non-discrimination of vulnerable groups (women, disabled persons, religious minorities). The policy scenarios have the potential to close some of the existing gaps between the members of the Turkish society.

In addition, the baseline analysis has also shown that collective rights, such as the right to organize, the right to peacefully protest, or the right to hold and express personal opinions, are currently endangered by strict national laws and harsh police actions. The policy scenarios may indirectly have a positive influence on the development of these rights. By encouraging FDI, ethical labour standards which include collective worker rights could be ensured.

Indirect effects on human rights mostly flow from the economic and social effects of the various scenarios. In this regard, the ECF scenario yields the most positive impact overall, compared to the baseline and the DCFTA. The effects on human rights are mostly a consequence of the ECF's impact on welfare, which in turn has positive implications for social and economic rights, such as the right to an adequate standard of living, the right to education, or the right to work, due to the welfare implications of the ECF. The ECF also has the potential of lessening the gender gap in employment and education, as it creates overall employment opportunities in Turkey, as well as raises the overall standard of living.

The DCFTA overall impact on the Turkish economy results in some welfare costs, which imply a less positive development of social and economic rights when compared to those presented by the ECF scenario. The overall human rights effects are however still considered positive.

The ECF and DCFTA scenarios could also have beneficial effects related to child labour. Considering that both scenarios involve increased FDI liberalization, Turkish companies could receive indirect incentives (through CSR) of ensuring ethical and equal working standards for their employees.

Table 15.1 presents a summary of the anticipated impacts of the two scenarios on the human rights situation in Turkey and the EU.

Table 15.1: Comparison of human rights impacts estimated for the ECF and DCFTA

	ECF		DCFTA	
	Right to an adequate standard of living			
Turkey	• The ECF scenario predicts welfare gains of EUR 12.5 billion, an increase of GDP of 1.44%, and a decrease in CPI – potential positive effect on the right to an adequate standard of living. • Improvements in the overall living	+	• Welfare losses of EUR 144 million but increase in GDP of 0.26% – mixed effect for the right to an adequate standard of living	?

	ECF		DCFTA	
	standard could imply a lowering number of households who rely on the income of child workers.			
EU	• The ECF predicts a welfare increase of EUR 5.4 billion and a GDP increase of 0.007% compared to the baseline. Thus, the overall standard of living is likely to improve modestly.	+	• The real GDP effect is marginally negative, and welfare is marginally positive. • The main conclusion flowing from this analysis is that the DCFTA leaves the EU essentially neutral.	?
	Right to work			
Turkey	• The ECF will drive strong investment increases in Turkey – slightly positive effects for overall employment opportunities; however, rural employment may be affected.	?	• The economic analysis predicted job losses in the agricultural sector, in which most women (31%) find employment – potentially marginal negative effect on the right to work	_
EU	• Overall effects of the ECF on employment or unemployment are considered to be small. At a sectoral level the ECF will mostly facilitate employment in the agricultural sector. Sectors which are expected to experience minor job losses are textiles, clothing and footwear. • Overall, employment and unemployment generated by the ECF are negligible.	?	• The real GDP effect is marginally negative, and welfare is marginally positive. The main conclusion flowing from this analysis is that the DCFTA leaves the EU essentially neutral.	?
	Work-related rights and child labour			
Turkey	• The ECF chapter on FDI is predicted to bring positive welfare effects. Moreover, MNCs put positive pressure on local branches and suppliers to adhere to CSR norms – potentially positive effects on worker rights, including disadvantaged groups; potentially positive effects on child labour	+	• The DCFTA chapter on FDI may contribute to increasing working standards, including for women and disadvantaged groups, and may also contribute to lowering the number of child labourers (based on the same considerations as the ECF chapter on FDI)	+
EU	• No impact on work related rights and child labour is expected.	Nil	• No impact on work related rights and child labour is expected.	Nil
	Right to a clean environment			
Turkey	• The ECF could increase CO_2 emissions by 0.74% - marginal negative effect on the right to a clean environment	-	• The DCFTA could increase CO_2 emissions by 0.42% - marginal negative impact	-
EU	• The ECF could increase CO_2 emissions by 0.01% - no impact on the right to a clean environment is envisaged.	-	• The DCFTA could decrease CO_2 emissions by -0.02% - no impact is envisaged.	-
	Right to health (access to adequate food)			
Turkey	• Consumer prices decrease under the ECF, due to increased competition; food imported from the EU is in principle healthy due to EU's commitment to ensure a high level of protection for human health – potentially positive effect on access to adequate food	+	• Potential reduction of availability of agricultural and food products may affect access to food; however, as in the ECF, food imports from EU will increase, potentially expanding access of adequate food – overall effect unclear	?
EU	• No impact is expected.	Nil	• No impact is expected.	Nil
	Right to education			
Turkey	• The ECF contains a chapter on services liberalization. Cross-border supply of educational services via the internet could imply a positive effect on education and greater movement of the workforce, both in Turkey and from Turkey to the EU.	+	• The DCFTA contains a chapter on services liberalization. Based on the same considerations as those presented for the ECF scenario – potentially positive effect on the right to education	+
EU	• No impact is expected.	Nil	• No impact is expected.	Nil
	Property-related rights			
Turkey and EU	The impact assessment would depend on the specific content of an agreement in terms of ISDS; this cannot be determined on an ex ante basis without a negotiated text	?	The impact assessment would depend on the specific content of an agreement in terms of ISDS; this cannot be determined on an ex ante basis without a negotiated text	?

16 SPILLOVER EFFECTS ON DEVELOPING COUNTRIES OF ALTERNATIVE ENHANCEMENT OPTIONS

Spillover effects from the possible enhancements to the EU-Turkey bilateral relationship on third parties are inevitable given the preferential aspects of ECF and DCFTA options, which result in trade and investment diversion. These are amplified by the pro-competitive effect on Turkey from the higher disciplines that Turkey would assume in services and investment, particularly under the ECF.

16.1 Trade Impacts

The ECF's impact on LDCs and ODCs is quite muted in net trade terms.

Under the ECF, LDCs' exports to the EU increase by EUR 644 million, but fall to Turkey by EUR 1.2 billion; their combined exports to the EU-Turkey region thus fall by EUR 582 million. Similarly, imports from the EU fall by EUR 877 million, but from Turkey rise by EUR 171 million, resulting a combined fall of EUR 706 million. Total exports to the world fall by less as LDC exports displaced by intensified trade between the EU and Turkey seek out other destination; however, imports from the world fall by more, reflecting the compounding effect of income declines in LDCs on overall import demand. For ODCs, the impacts follow the same pattern, with exports rising to the EU but falling to Turkey; and imports from the EU falling but rising from Turkey; however, in terms of scale, the impacts are generally more muted.

Under the DCFTA, the impacts generally follow a similar pattern but are smaller than in the ECF, with the exception that LDC and ODC imports from Turkey rise by more and LDC exports to the EU and Turkey combined rise marginally rather than falling. The overall increased imports of LDCs and ODCs from Turkey reflect the improved relative competitiveness of Turkey vis-à-vis the EU under the DCFTA due to the reduction in its trade costs for industrial goods while the EU experiences a rise in trade costs for industrial goods. This relative cost shift flows through the input-output structure of both economies to give Turkey an improvement in competitiveness in third markets, which results in its displacing EU exports to those markets; the effect is quite modest, however. Total trade with the world is minimally impacted for both LDCs and ODCs.

Table 16.1: Spillover Impacts on LDCs and ODCs Trade, EUR millions

	Exports to the EU	Imports from the EU	Exports to Turkey	Imports from Turkey	Exports to EU-TR Region	Imports from EU-TR Region	Exports to the World	Imports from the World
ECF								
LDC	644	-877	-1,226	171	-582	-706	-478	-941
ODC	310	-591	-456	68	-146	-523	-257	-363
DCFTA								
LDC	701	-357	-590	292	111	-64	-67	4
ODC	153	-259	-221	128	-68	-131	-63	-52

Source: Simulations by the study team. All figures are for 2026, baseline minus counterfactual.

16.2 Macroeconomic Impacts

Real GDP in the LDCs and ODCs falls by a little over 0.01% under the ECF, and is not materially affected by the DCFTA (Table 16.2).

The welfare impacts of the ECF are marginally negative for both LDCs (EUR -1.6 billion) and ODCs (EUR -279 million); under the DCFTA, the impacts remain negative in sign but fall to negligible amounts.

Table 16.2: Spillover Impacts on LDCs and ODCs: Macroeconomic Indicators

	ECF		DCFTA	
	LDCs	ODCs	LDCs	ODCs
Economic Welfare (EUR millions)	-1,707	-504	25	-26
Economic Welfare (% change)	-0.02	-0.02	0.00	0.00
GDP volume (% change)	-0.01	-0.01	0.00	0.00
Consumption (% change)	-0.01	-0.01	0.00	0.00
Government Expenditure (% change)	-0.02	-0.01	0.00	0.00
Investment (% change)	-0.05	-0.06	0.00	0.00
Total Exports of Goods and Services (% change)	0.00	-0.02	-0.01	-0.01
Total Imports of Goods and Services (% change)	-0.05	-0.06	0.00	-0.01
Trade balance (EUR millions)	510	121	-69	-10
Capital Stock (% change)	-0.03	-0.03	0.00	0.00
Terms of Trade (% change)	-0.02	-0.02	0.00	0.00
CPI (% change)	-0.04	-0.03	0.00	0.00

Source: Calculations by the study team.

16.3 Sectoral Impacts

The DCFTA has minimal implications for LDCs and ODCs at the sectoral level. Generally, the impacts are small across the board in terms of value-added by sector and jobs. Oilseeds and vegetable oils, and processed foods, and beef in the LDCs, absorb the largest negative impacts, although in no case are the labour impacts greater than -0.05%. Industrial sectors are not particularly negatively impacted – indeed some sectors make gains. In terms of the value of bilateral exports to the EU and Turkey, the major negative impacts are on beef and other meat products.

The scale of the impact rises from the DCFTA to the ECF. In the LDCs, the beef sector absorbs the largest negative impact among the primary sectors, followed by oilseeds and vegetable oils and processed foods. Notable negatives also show up in industrial sectors, particularly the important textiles and apparel sector, where the employment impact rises to -0.05%. In the ODCs, industrial goods, coal and steel, and the textiles and apparel sectors also feel a modest negative impact with employment falling by about -0.02%.

16.4 Other Spillovers

The relatively muted trade and macroeconomic effects of the various scenarios result in limited impacts on other structural factors for LDCs and ODCs. Government revenues are minimally impacted, implying that the capacity to investment in development and pro-poor policy programs is not materially compromised.

16.5 Impact of Enhancements to the BPTF on LDCs and ODCs

The alternative scenarios show that the contemplated enhancements to the EU-Turkey bilateral economic relationship have only a minor impact on LDCs and ODCs. LDC and ODC exports to the EU and Turkey fall, but there are very limited impacts from a development perspective; the DCFTA has negligible impacts.

Table 16.3: Sectoral Impacts on the LDCs

	ECF				DCFTA			
	Exports to EU and TR %	Value Added %	Unskilled Labour %	Skilled Labour %	Exports to EU and TR %	Value Added %	Unskilled Labour %	Skilled Labour %
Rice	-0.92	-0.01	-0.01	-0.02	-0.99	-0.01	-0.01	-0.01
Cereals (wheat, coarse grain)	0.72	0.01	0.01	0.01	0.20	0.00	-0.01	-0.01
Vegetables, fruits	-0.70	-0.01	-0.01	-0.02	-0.64	-0.01	-0.01	-0.01
Oil seeds, vegetable oils	-1.57	-0.02	-0.02	-0.03	-1.27	-0.03	-0.05	-0.05
Sugar	0.04	0.00	0.00	-0.01	-0.30	0.00	-0.01	-0.01
Other primary ag	0.60	0.00	0.00	0.00	0.21	0.00	0.00	0.00
Dairy products	0.36	0.00	0.00	-0.01	0.13	0.01	0.00	0.00
Beef, sheep, and other bovine meat	-13.85	-0.04	-0.03	-0.05	-7.87	-0.03	-0.03	-0.04
Other meat products	-6.27	0.02	0.05	0.04	-2.17	0.00	0.00	0.00
Other processed food	0.18	-0.01	0.00	-0.01	-0.36	-0.03	-0.03	-0.03
Other primary animal products	-1.86	-0.01	-0.02	-0.02	-1.86	0.00	-0.01	-0.01
Beverages and tobacco	-1.00	-0.01	0.02	0.00	-0.59	0.00	0.00	0.00
Fishing (incl. aquaculture)	0.32	-0.01	-0.01	-0.01	-0.02	0.00	0.00	0.00
Other primary products	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	-0.43	-0.01	0.00	-0.01	0.01	0.00	-0.01	-0.01
Coal and Steel	-0.18	-0.03	-0.01	-0.02	-0.03	-0.01	-0.02	-0.02
Chemicals, rubber, and plastics	-0.82	-0.03	0.00	-0.01	-0.31	-0.01	-0.01	-0.02
Textiles, clothing, and footwear	-0.23	-0.04	-0.04	-0.06	0.36	0.04	0.06	0.05
Other Industrial Goods	-0.36	-0.01	0.02	0.00	-0.01	0.00	0.01	0.00
Water	0.27	-0.01	0.01	0.00	-0.08	0.00	0.00	0.00
Construction	0.29	-0.04	-0.03	-0.05	0.09	0.00	0.01	0.00
Trade (retail, wholesale, import/export)	0.27	-0.02	0.02	0.00	0.05	0.00	0.01	0.00
Transport nec	-0.08	-0.01	0.01	0.00	-0.30	0.00	0.00	-0.01
Water transport	0.02	0.04	0.08	0.06	-0.16	-0.01	-0.01	-0.01
Air transport	-0.23	0.00	0.03	0.01	-0.33	-0.02	-0.03	-0.04
Communication	0.14	0.00	0.04	0.03	-0.03	0.00	0.00	0.00
Financial services nec	0.12	-0.01	0.03	0.01	-0.07	0.00	0.00	0.00
Insurance	-0.20	0.00	0.04	0.02	-0.26	-0.01	-0.01	-0.01
Business services nec	0.24	0.04	0.07	0.06	0.07	0.01	0.02	0.01
Recreational and other services	0.12	-0.01	0.01	-0.01	-0.15	0.00	0.00	-0.01
Public Administration, etc.	0.22	-0.02	0.01	-0.01	-0.07	0.00	0.00	0.00

Source: Calculations by the study team.

Table 16.4: Sectoral Impacts on the ODCs

	ECF				DCFTA			
	Exports to EU and TR %	Value Added %	Unskilled Labour %	Skilled Labour %	Exports to EU and TR %	Value Added %	Unskilled Labour %	Skilled Labour %
Rice	1.36	-0.01	-0.01	-0.01	0.98	-0.01	-0.01	-0.01
Cereals (wheat, coarse grain)	1.39	-0.02	-0.02	-0.02	0.88	-0.02	-0.02	-0.02
Vegetables, fruits	0.26	0.00	0.00	0.00	-0.12	0.00	-0.01	-0.01
Oil seeds, vegetable oils	-2.21	-0.01	-0.01	-0.01	-1.72	-0.02	-0.02	-0.02
Sugar	0.76	0.05	0.06	0.06	0.46	0.03	0.03	0.03
Other primary ag	0.13	0.01	0.01	0.01	-0.03	-0.01	-0.01	-0.01
Dairy products	0.34	0.05	0.07	0.07	0.17	0.02	0.02	0.02
Beef, sheep, and other bovine meat	-0.11	-0.01	0.01	0.00	-0.32	0.00	0.00	0.00
Other meat products	-1.63	0.00	0.02	0.01	-0.42	0.00	0.01	0.00
Other processed food	0.28	0.00	0.03	0.02	-0.10	-0.02	-0.02	-0.03
Other primary animal products	-1.84	-0.02	-0.02	-0.02	-1.81	-0.01	-0.01	-0.01
Beverages and tobacco	0.19	0.00	0.04	0.03	0.08	0.00	0.01	0.01
Fishing (incl. aquaculture)	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other primary products	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.09	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
Coal and Steel	0.05	-0.03	-0.02	-0.02	0.01	-0.01	-0.01	-0.01
Chemicals, rubber, and plastics	-0.02	0.01	0.04	0.04	0.07	0.01	0.02	0.02
Textiles, clothing, and footwear	-0.11	-0.02	-0.01	-0.02	0.60	0.02	0.03	0.02
Other Industrial Goods	-0.68	-0.04	-0.02	-0.02	-0.15	0.00	0.01	0.01
Water	0.25	-0.01	0.01	0.00	-0.06	0.00	0.00	0.00
Construction	0.29	-0.05	-0.04	-0.05	0.09	0.00	0.00	0.00
Trade (retail, wholesale, import/export)	0.26	-0.01	0.01	0.00	0.06	0.00	0.01	0.00
Transport nec	-0.09	0.00	0.02	0.01	-0.28	-0.02	-0.02	-0.02
Water transport	-0.02	0.02	0.07	0.05	-0.16	-0.02	-0.02	-0.02
Air transport	-0.19	-0.01	0.01	0.00	-0.29	-0.04	-0.05	-0.06
Communication	0.14	-0.01	0.03	0.02	-0.02	0.00	0.01	0.00
Financial services nec	0.13	-0.01	0.02	0.01	-0.04	0.00	0.00	0.00
Insurance	0.05	-0.01	0.02	0.01	-0.09	0.00	0.00	0.00
Business services nec	0.18	0.00	0.03	0.02	0.05	0.00	0.01	0.01
Recreational and other services	0.10	0.00	0.01	0.00	-0.14	-0.01	0.00	-0.01
Public Administration, etc.	0.23	-0.01	0.01	0.00	0.00	0.00	0.00	0.00

Source: Calculations by the study team.

17 CONCLUSIONS OF THE EX-ANTE ASSESSMENT

This chapter provides a comparative summary of the various anticipated impacts identified in this study for the ECF and DCFTA scenario – which are defined as follows:

(a) The Enhanced Commercial Framework (ECF) represents a continued (and institutionally enhanced) CU with the scope unchanged (industrial products only), the CSA, plus an FTA covering trade in agriculture and fishery products (thus, subsuming the AFTR), services and establishment, NTBs, and public procurement.

(b) The DCFTA replaces the CU and establishes an FTA that covers all goods trade, including industrial, agriculture, and fishery products, plus services, NTBs, establishment, and public procurement. While the scope of the DCFTA is the same as the ECF, it involves a less ambitious scenario in terms of depth of liberalization in the goods and services sectors. This scenario takes into consideration ROOs effects from replacing the CU with an FTA framework for industrial goods trade.

The results of the modelling suggest that there remain significant economic gains from upgrading the bilateral commercial relationship on the basis of the current structure (i.e., through the ECF scenario); the replacement of the BPTF with a DCFTA would leave the parties essentially neutral in economic terms, while gaining for Turkey independence of its commercial policy.

- The ECF generates economic gains for both parties. For the EU, the gains are relatively smaller but still substantial. For example, welfare is expected to increase by EUR 5.4 billion – small in relation to the overall economy but nevertheless sizeable in absolute terms; EU exports to Turkey would particularly benefit (EUR 27.1 billion higher than without the ECF). For Turkey, the real GDP gain is sizeable at 1.46% above baseline, with commensurately large gains in economic welfare (EUR 12.5 billion) despite only a relatively small gain in direct exports to the EU (EUR 5.0 billion) – an outcome which reflects the dominant effect of cost-reducing measures in the ECF, which drive Turkey's global competitiveness. The sectoral impacts in the sensitive sectors are relatively strong for Turkey (a decline in total output of about EUR 2.2 billion for the sheep meat/beef and dairy sectors combined); the poultry sector is not significantly impacted. For the EU, the rise in bilateral imports in the vegetables and fruit sector does not generate issues as the sector's total output rises on income effects, despite market share gains by Turkey.

- The DCFTA has a limited impact on the EU; indeed, the impact is so close to neutral that some indicators are marginally positive and others are marginally negative. For practical purposes, the DCFTA can be considered to have a neutral impact on the EU. For Turkey, the DCFTA risks causing net negative impacts depending on the extent of the increase in trading costs in switching from a CU to an FTA for industrial goods trade: while the less ambitious tariff liberalization erodes the export gains to the EU on that score only marginally compared to the ECF, the increase in trade costs for exports to the EU for industrial products drives a much larger decline in exports, which the services and FDI liberalization do not fully offset. Nonetheless, the cost reduction generated by the DCFTA results in a modest real GDP gain. Accordingly, obtaining international commercial policy autonomy by abandoning the CU would come at a welfare price for Turkey, but not in terms of real GDP. The sensitive sectors for Turkey continue to be marginally negatively affected under a DCFTA, not because of a surge in imports from the EU, but because of the negative income effect from the DCFTA overall; the impact is, however, about half as great as under the ECF. The main negative impact is on the industrial goods sector, which faces higher trading costs with its major market.

Based on the economic impacts, the social, environmental, regulatory, institutional, and human rights outcomes are likely to also vary across scenarios, but will generally be felt palpably only in Turkey and generally more powerfully under the ECF than under the DCFTA. Thus, the environmental impacts are stronger under the ECF than under the DCFTA, since the economic impact is substantially stronger.

Spillovers on third parties of the alternative scenarios also vary. Under the ECF, the strong bilateral trade gains between the EU and Turkey drive additional trade diversion impacts on third parties; LDCs and ODCs experience a minor reduction in GDP of about 0.01% each. Under the DCFTA, however, third parties, including LDCs and ODCs, are hardly affected.

Table 17.1 provides a summary of the relevant considerations concerning the two scenarios described above.

Table 17.1: Comparative summary of the ECF and DCFTA impacts

ECF	DCFTA
ECONOMIC IMPACT	
The EU makes a significant bilateral export gain on the order of EUR 27.7 billion, which drives a welfare gain of EUR 5.4 billion and a real GDP increase of 0.007%. The main source of gains would come from the reduction in bilateral trade costs from goods trade facilitation, and services sector liberalization. Tariff reductions and FDI liberalization contribute only marginally. The EU's sectoral gains are concentrated in industrial exports. In agriculture, dairy and the oilseed sector also make notable gains. In services gains are modest in terms of bilateral exports but the sectors do well in total output driven by income gains, with the public sector, trade, business services and construction leading the way. **Turkey** makes comparatively small bilateral exports gains (about EUR 5.0 billion) and sees a significant surge of imports from the EU; however, the lower cost of imports across the board due to trade cost reductions with its biggest trading partner drives an improvement in Turkey's global competitiveness, which sees it make market share gains both in exports to third parties and in import-competing domestic markets. Real GDP gains amount to 1.4% and welfare gains total EUR 12.5 billion. Sectoral impacts are generally positive but diffused due to the role of general trade cost reductions; the largest negative impacts fall on the cereals and dairy sectors, which experience reductions in total output of EUR 1.6 billion each.	**The EU** makes a modest bilateral export gain on the order of EUR 8.0 billion, which drives a welfare gain of EUR 1.2 billion but results in a small decline in real GDP of -0.005%, which is mainly due to the increased costs of industrial imports from Turkey. These cost increases flow through the EU production system to raise the cost of production. The main source of welfare gains come from the reduction in tariffs; the main source of real GDP gains come from services liberalization. The EU's sectoral gains are concentrated in industrial exports. In agriculture, cereals also make notable gains. In services, gains are modest and accrue mainly to the public sector, trade, business services and construction. **Turkey** experiences a reduction of exports to the EU and an increase in imports; however, as in the ECF scenario, the lower cost of imports across the board due to trade cost reductions drives an improvement in Turkey's global competitiveness, which sees it make market share gains both in exports to third parties and in import-competing domestic markets. Real GDP gains amount to 0.26% but the terms of trade losses lead to a welfare decline of EUR 144 million. Sectoral impacts are mixed. Notable gains come in processed foods and fruits and vegetables, but cereals experience a big decline. Notable negative impacts are felt by industrial products and textiles and apparel, which face higher costs of market access in the EU. Services generally do well across the board, reflecting higher real GDP.
SOCIAL IMPACT	
While the overall impact on **employment** is difficult to establish, it might be slightly positive both in the EU and Turkey. Employment effects in some sectors are significant, therefore some transitional unemployment is to be expected. In terms of distributional effects, unskilled and youth employment is expected to benefit relatively more, whereas the impact on female employment is expected to be negligible. The ECF effect on **incomes and poverty** in Turkey is expected to be positive, and negligible in the EU.	The overall impact of the DCFTA on **employment** is expected to be negligible in the EU, and is impossible to establish for Turkey. Sectoral employment effects are significant in some sectors and mostly similar to the ECF scenario. Distributional employment effects are as follows: There is no differential effect on unskilled and skilled labour, no notable effect on youth and female employment. A DCFTA effect on **incomes and poverty** expected only in Turkey, and might be negative but small.
Effects on **job conditions, social protection and social dialogue** will depend on negotiation outcomes. Inclusion of a TSD chapter (and specifically a section on labour issues) would provide a solid legal basis for deeper cooperation between the EU and Turkey on the further enhancement of labour rights and protection than is the case under the status quo; such inclusion of a TSD chapter is beneficial irrespective of the scenario to be implemented.	

<table>
<tr><th>ECF</th><th>DCFTA</th></tr>
<tr><td colspan="2">ENVIRONMENTAL IMPACT</td></tr>
<tr><td>GHG emissions in Turkey are expected to increase by 2.1 million MT CO_2 equivalent, but increase only marginally in the EU, and decrease in the rest of the world, leading to a marginal increase globally. Other environmental effects in Turkey are expected to be mostly marginal, with some negative (air, biodiversity) and others mixed (waste, green economy).</td><td>GHG emissions in Turkey are expected to increase by 1.2 million MT CO_2 equivalent and decrease both in the EU and the rest of the world, leading to a marginal decrease globally. Other environmental effects in Turkey are expected to be marginally positive in some sectors (water, waste, biodiversity), but marginally negative for others (e.g., air pollution) and for greening of the economy.</td></tr>
<tr><td colspan="2">REGULATORY AND INSTITUTIONAL IMPACT</td></tr>
<tr><td colspan="2">The regulatory and institutional impacts will depend on negotiation outcomes. Therefore an assessment of anticipated impact is not possible at this stage. In terms of institutional and regulatory changes, the DCFTA would require more changes in this area primarily due to the necessary introduction of a ROO regime.
Based on the ex post assessment, a strengthening of bilateral consultations and notifications, as well as of the dispute settlement mechanism, is desirable.</td></tr>
<tr><td colspan="2">HUMAN RIGHTS IMPACT</td></tr>
<tr><td colspan="2">No impact on human rights in the EU is anticipated under any of the scenarios. In Turkey, human rights effects stemming directly from the legal texts will depend on negotiation outcomes and cannot be assessed at present. The more specific human rights provisions are in the legal texts, the higher might be the (positive) impact. In addition, potential indirect human rights effects in Turkey resulting from economic, social and/or environmental changes induced by the scenarios are:</td></tr>
<tr><td>Overall effects on economic and social human rights (adequate standard of living, right to work, social protection, etc.) as well as other rights derived from welfare gains (health, education) are expected to be positive, although certain population groups (e.g. smallholder farmers) might be negatively affected.
Potential positive effects for labour rights might stem from increased FDI; the effect on other labour rights will depend on the legal texts.
In line with the findings of the environmental analysis, the right to a clean environment might be affected negatively.</td><td>Due to the overall employment and income effects, economic and social human rights and other rights derived from welfare gains might be affected slightly negatively.
For labour rights, the effect is identical to the ECF.</td></tr>
</table>

PART III: OVERALL CONCLUSIONS

This study has assessed the functioning of the Bilateral Preferential Trade Framework (BPTF) between the EU and Turkey and considers how it might be improved.

Evaluation of the BPTF

The historical assessment faces the challenge of teasing out the relatively subtle changes in the EU-Turkey bilateral relationship due to the BPTF from the much more dramatic changes that influenced the data describing the relationship over the life of the agreement. The BPTF entered into effective force at the beginning of 1996, a year after the conclusion of the Uruguay Round, which introduced the WTO and initiated a wave of global trade liberalization and the 1995 enlargement of the EU. Major changes that impacted the relationship subsequently included the emerging market crises that started in 1997 and embroiled Turkey in a balance of payments crisis in 2001; the events of 9/11 which set of a chain of events that left Turkey's region embroiled in conflict, with profound impacts on the direction of trade for all parties; China's accession to the WTO, which helped power the BRICS phenomenon of the 2000s and impacted pervasively on global trade relations; Turkey's reforms in the wake of the BOP crisis which had a profound transformative effect on its economy, with a significant opening up to investment; the EU's eastward enlargement in 2004 and 2007, which generated new competitive pressures on the bilateral EU-Turkey commercial relationship; and the 2008-2009 global financial crisis and the era of stag-deflation which that ushered in.

The study approaches the challenge through trend analysis, econometric gravity-model-based analysis, and a counterfactual simulation using CGE modelling. From the trend analysis, a positive effect of the BPTF is suggested by the comparison of the performance of goods subject to the BPTF (CU, CSA, and AFTR) and those not subject to the BPTF: bilateral trade in goods that were covered by the BPTF grew far more strongly than goods not covered by the BPTF. The gravity model is unable to definitively identify the BPTF impacts: for goods trade, the analysis finds asymmetric effects; for services, reasonable specifications of the model find negligible effects for business and professional services, which stand out as under-performing during the BPTF era; for investment, the preliminary results need to be revisited. The counter-factual CGE analysis finds a modestly positive impact, broadly in line with expectations given the scale of the changes directly flowing from the BPTF: in 2016, the EU's exports to Turkey are assessed as being about 9% higher than they would have been without the BPTF being in place, and Turkey's exports to the EU are about 7% higher than without the BPTF, notwithstanding the preference erosion that the EU experienced. Driven by the trade gains, the BPTF is found to have impacted positively on both the EU and Turkey, both in terms of increasing real output and in terms of expanding economic welfare. The gains are substantially greater for Turkey in both percentage and value terms, reflecting the much greater impact of the BPTF on it compared to the impact of the BPTF on the EU.

At the same time, the overall sense of the analysis is that there were significant headwinds facing bilateral trade during the latter part of the BPTF period, with, in a sense, a growing distance between Turkey and EU due to non-economic factors but also the centripetal forces of globalization. The BPTF worked as a powerful counterforce and kept the relationship much larger and deeper than it otherwise would have been, especially during the middle part of the BPTF period, when there was a strong momentum from bilateral trade integration; in the post-crisis period, this momentum in the relationship ebbed.

The analysis also suggests that the Turkey's progress up the technology ladder during the BPTF period was concentrated on medium-technology production, while higher-technology production failed to take off. Turkey was already a middle-income economy by the time the BPTF came into force. The subsequent transformation of the Turkish economy towards the profile of a high-income economy was thus relatively limited and essentially stalled midway during the period, as shown by the trend analysis. The counterfactual CGE analysis confirms that the BPTF favoured industrial production, including in the traditional textiles, clothing and footwear area, but does not have the granularity to expose whether the BPTF favoured or disfavoured higher-technology goods production. Whether the failure to break through into higher-technology production could be attributed to the comparative advantage effects of the BPTF which favoured EU high technology exports, or whether it reflected structural factors in the Turkish economy (e.g., weakness in the innovation system, weak SME performance, and the under-development of its professional business services) is not laid bare by the counterfactual. The analysis does, nonetheless, suggest that Turkey's global competitiveness and growth prospects was improved as a result of the lowered cost of trade in industrial products with the EU, as well as through greater alignment of rules, which worked to improve Turkey's ability to make stronger undertakings in its recent FTAs with third parties.

Based on these economic impacts, the present study evaluates the impacts of the BPTF on social, environmental, regulatory, institutional, and human rights outcomes. The focus in these latter regards is on Turkey, where the BPTF required changes. The study finds that the impacts of the BPTF were generally small; a key issue is disentangling the effects of the BPTF from the contemporaneous process of alignment of Turkey's regulatory framework with the EU *acquis* as part of the accession process.

Spillovers on third parties of the BPTF were also relatively modest. Based on the counterfactual CGE analysis, the trade diversion effects of the CU generated losses for third parties that cumulatively were about half the size of the total gains made by the EU and Turkey. The BPTF thus contributed positively to global economic welfare. For LDCs and ODCs, the trade diversion effects were relatively muted.

While the BPTF generated significant benefits for both the EU and Turkey, it could have been still more beneficial:

- First, the commercial policy that Turkey adopted during the BPTF period because of the CU requirements was not tailored to its needs and, thus, was sub-optimal from its perspective. While unilateral liberalization vis-à-vis the EU's FTA partners is analysed as a positive factor for Turkey's overall development and its economic welfare, obtaining reciprocal concessions and recognition of goods originating in Turkey for diagonal cumulation in the EU's FTAs would have been still better. This was incorporated in FTAs concluded between Turkey and trade partners of the EU, such as South Korea, Serbia, and Chile to name but a few. From a political economy perspective, although Turkey is informed by the Commission in the context of the EU's FTA negotiations with third countries, formal mechanisms to take Turkey's sensitivities into account in the EU's commercial policy formulation would also have smoothed commercial relations.

- Second, the unbalanced liberalization under the BPTF, which favoured goods trade, was accompanied by underperformance of Turkey's services sector's exports, particularly of professional and business services. The analysis in this study found no link between the BTPF and Turkey's under-performance on services; at the same time, circumstantial evidence points to Turkey's reluctance to make commitments in this sector in the GATS negotiations as a likely key factor, given that Turkey performed well in areas where it did make strong commitments. Upgrading the BPTF to a more balanced framework that incorporates services would remove this bias against the development of a dynamic export-oriented services sector in Turkey.

- Third, Turkey's retention of higher and more extensive protection of primary agriculture under the BPTF resulted in commensurately reduced structural adjustment towards a more efficient economy and, thus, smaller gains that otherwise would have been possible.

- Fourth, a range of frictions that militated against the full realization of the potential benefits of the CU emerged or were laid bare by the expansion of bilateral trade during the BPTF period, including new NTBs erected by Turkey that frustrated EU goods sector export interests and the lack of a services component to the BPTF to facilitate the functioning of the cross-border value chains and production networks that emerged under the BPTF.
- Finally, the BPTF's institutional framework was revealed to be inadequate to satisfactorily address the frictions that emerged under the deep integration fostered by the CU, including as regards dispute settlement and ensuring coordination in the development of commercial regulations.

Accordingly, confirming previous analyses of the BPTF, this study's evaluation of the BPTF on an ex post basis suggests that modernization and upgrading of the commercial policy governing the EU-Turkey relationship is needed, with particular emphasis on removing the imbalances in terms of sectoral coverage (services and primary agriculture) and in the negotiation of commercial treaties with third parties; addressing a range of NTBs to goods trade that emerged or became important as integration deepened under the CU; and improving the institutional framework for managing bilateral commercial relations.

Options for Upgrading the Bilateral Commercial Relationship

In light of the review of the BPTF's performance, this study considers options for moving forward on the EU-Turkey commercial relationship. Two alternative scenarios are evaluated:

(a) The ECF, conceived as a CU with the scope unchanged (industrial products only), the CSA, plus an FTA covering trade in agriculture and fishery products (thus, subsuming the AFTR), services and establishment, NTBs, and public procurement.

(b) A DCFTA to replace the CU and establish an FTA that covers all goods trade, including industrial, agriculture, and fishery products, plus services, NTBs, establishment, and public procurement. While the scope of the DCFTA is the same as the ECF, it involves a less ambitious scenario in terms of depth of liberalization in the goods and services sectors. This scenario takes into consideration ROOs effects from replacing the CU with an FTA framework for industrial goods trade.

The major impacts of the two scenarios are set out in the panel below. The results of the modelling suggest that that there remain solid economic gains from upgrading the bilateral commercial relationship.

- The ECF generates economic gains for both parties. For the EU, the gains are relatively smaller but still substantial. For example, welfare is expected to increase by EUR 5.4 billion – small in relation to the overall economy but nevertheless sizeable in absolute terms; EU exports to Turkey would particularly benefit (EUR 27.1 billion higher than without the ECF). For Turkey, the real GDP gain is sizeable at 1.46% above baseline, with commensurately large gains in economic welfare (EUR 12.5 billion) despite only a relatively small gain in direct exports to the EU (EUR 5.0 billion) – an outcome which reflects the dominant effect of cost-reducing measures in the ECF, which drive Turkey's global competitiveness. The sectoral impacts in the sensitive sectors are relatively strong for Turkey (a decline in total output of about EUR 2.2 billion for the sheep meat/beef and dairy sectors combined); the poultry sector is not significantly impacted. For the EU, the rise in bilateral imports in the vegetables and fruit sector does not generate issues as the sector's total output rises on income effects, despite market share gains by Turkey.
- The DCFTA has a limited impact on the EU; indeed, the impact is so close to neutral that some indicators are marginally positive and others are marginally

negative. For practical purposes, the DCFTA can be considered to have a neutral impact on the EU. For Turkey, the DCFTA risks causing net negative impacts depending on the extent of the increase in trading costs in switching from a CU to an FTA for industrial goods trade: while the less ambitious tariff liberalization erodes the export gains to the EU on that score only marginally compared to the ECF, the increase in trade costs for exports to the EU for industrial products drives a much larger decline in exports, which the services and FDI liberalization do not fully offset. Nonetheless, the cost reduction generated by the DCFTA results in a modest real GDP gain. Accordingly, obtaining international commercial policy autonomy by abandoning the CU would come at a welfare price for Turkey, but not in terms of real GDP. The sensitive sectors for Turkey continue to be marginally negatively affected under a DCFTA, not because of a surge in imports from the EU, but because of the negative income effect from the DCFTA overall; the impact is, however, about half as great as under the ECF. The main negative impact is on the industrial goods sector, which faces higher trading costs with its major market.

Based on the economic impacts, the social, environmental, regulatory, institutional, and human rights outcomes are likely to also vary across scenarios, but will generally be felt palpably only in Turkey and generally more powerfully under the ECF than under the DCFTA. Thus, the environmental impacts are stronger under the ECF than under the DCFTA, since the economic impact is substantially stronger.

Spillovers on third parties of the alternative scenarios vary. Under the ECF, the strong bilateral trade gains between the EU and Turkey drive additional trade diversion impacts on third parties; LDCs and ODCs experience a minor reduction in GDP of about 0.01% each. Under the DCFTA, however, third parties, including LDCs and ODCs, are hardly affected.

Overall Summary

The study generally confirms the sense of previous analysis that the BPTF has been a positive factor for the EU and Turkey, but has room for improvement. An ambitious option for improving the relationship could generate significant benefits for both parties; it would, however, require an upgraded institutional framework to address the frictions that emerged over the course of the BPTF period. An alternative approach, which replaces the CU with a more conventional trade agreement provides Turkey independent control of its commercial policy and thereby addresses the most problematic asymmetry in the BPTF, leaves both parties more or less as well as at present.

REFERENCES

Aaronson, Susan Ariel and Jean Pierre Chauffour. 2011. "The Wedding of Trade and Human Rights: Marriage of Convenience or Permanent Match?" *WTO*. <https://www.wto.org/english/res_e/publications_e/wtr11_forum_e/wtr11_15feb11_e.htm>.

Abowd, John M., Francis Kramarz and David N. Margolis. 1999. "High Wage Workers and High Wage Firms," *Econometrica*, 67(2), 251-333.

Açikalin, Mehmet Mustafa. 2010. "Devlet Yardımlarının İzlenmesi ve Denetlenmesi Hakkında Kanun Tasarısı"na İlişkin TÜSİAD Görüşü ("Monitoring and Supervision of the Draft Law on State Aid" in Related TUSIAD Opinion). <http://tusiad.org/tr/tum/item/2332-devlet-yardimlarinin-izlenmesi-ve-denetlenmesi-hakkinda-kanun-tasarisina-iliskin-tusiad-gorusu>.

Adam and Moutos. 2008. "The Trade Effects of the EU-Turkey Customs Union." *The World Economy* 31(5): 685-700.

Agartan, Kaan. 2010. "Turkey's Accession to the EU and the Turkish Labor Movement." *European Journal of Turkish Studies* 11.

Akan, H. D. Mumcu and B. Engin Balin. 2016. "The European Union-Turkey Trade Relations under the Influence of Customs Union." *Journal of Economics, Business and Management* 4(2): 155-160.

Akkemik, A. 2011. "Customs Union and Competitiveness of Turkish Exports in the EU Market: A Dynamic Shift-Share Analysis." *Global Journal of Emerging Market Economies* 3(2): 247-274.

Akman, M. Sait, Simon J. Evenett, and Patrick Low (eds). 2015. *Catalyst? TTIP's Impact on the Rest.* London: CEPR and TEPAV.

Akman, Mehmet Sait. 2010. "The European Union's Trade Strategy and Its Reflections on Turkey: an Evaluation from the Perspective of Free Trade Agreements." *Sosyal Bilimler Enstitüsü Dergisi (Journal of the Institute of Social Sciences)* 12(2): 17-45.

Aldan, Altan and Olcay Yücel Çulha. 2013. "The Role of the Extensive Margin in Exports of Turkey: A Comparative Analysis." Central Bank of Turkey Working Paper 3/32.

Amnesty International. 2014. "Turkey: Amnesty International Submission for the UN Universal Periodic Review – 21st Session of the UPR Working Group, January-February 2015." *Universal Periodic Review*. <http://www.upr-info.org/sites/default/files/document/turkey/session_21_-_january_2015/ai_upr21_tur_e_main_rev.pdf>.

Amnesty International. n.d. "Commission Assessment of Candidature Countries: Amnesty Says Systematic Torture Continues in Turkey." *Press Releases*. <http://www.amnesty.eu/en/news/press-releases/eu/human-rights-in-the-eu/foreign-policy/balkans-turkey/commission-assessment-of-candidature-countries-amnesty-says-systematic-torture-continues-in-tur-0103/#.V3_h1ZN95TI>.

Anadolu Agency. 2014. "Business Sector Urges Solution Within EU on Customs Union." Hürriyet Daily News. 08 April 2014. <http://www.hurriyetdailynews.com/business-sector -urges -solution -within EU on Customs Union," http://www.hurriyetdailynews.com/Default.aspx?pageID=238&nID=64743&NewsCatID=345 -eu-on-customs-union.aspx?pageID=238&nid=64743>.

Anderson, James E. 2010. "The Gravity Model." NBER Working Paper 16576.

Anderson, James E. and Eric van Wincoop. 2003. "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review* 93: 170-192.

Anderson, James E., Ingo Borchert, Aaditya Mattoo, and Yoto V. Yotov, 2015. "Dark Costs, Missing Data: Shedding Some Light on Services Trade." NBER Working Paper 21546.

Antonucci, Daniele and Stefano Manzocchi. 2006. "Does Turkey Have a Special Trade Relation With the EU? A Gravity Model Approach." *Economic Systems* 30(2): 157-169.

Arkolakis, Costas, Arnaud Costinot, and Andréz Rodríguez-Clare. 2012. "New Trade Models, Same Old Gains?" *American Economic Review* 102(1): 94–130.

Armington, Paul S. 1969. "A Theory of Demand for Products Distinguished by Place of Production." *International Monetary Fund Staff Papers* 16(1): 170–201.

ARTICLE 19, the Committee to Protect Journalists, English PEN, Freedom House, P24, and PEN International. 2014. "Joint Submission to the UN Universal Periodic Review of Turkey – For consideration at the 21st session of the UN working group in January/February 2015." *Universal Periodic Review* JS06. <http://www.upr-info.org/sites/default/files/document/turkey/session_21_-_january_2015/js6_upr21_tur_e_main.pdf>.

Arvis, Jean-François, Yann Duval, Ben Shepherd, and Chorthip Utoktham. 2013. "Trade costs in the developing world: 1995-2010." World Bank Policy Research Working Paper Series 6309.

Association between the European Community and Turkey. 2015. "53rd meeting of the EU-Turkey Association Council." UE-TR 4806/15. Brussels: European Commission.

Aydin, Ufuk. 2015. "Postponement of Legal Strikes in Turkish Labour Law." Turkey: Anadolu University.

Aytug, Huseyin, Merve Mavus Kutuk, Arif Oduncu, and Subidey Togan. 2015. "Do countries really benefit from customs unions? a nonparametric approach." *European Trade Study Group*.

Baba, A. and G. Tayfur. 2011. "Groundwater contamination and its effect on health in Turkey." *Environmental Monitor Assessment* 183(1-4): 77-94.

Baier, Scott L., Jeffrey H. Bergstrand, and Matthew W. Clance. 2015. "Heterogeneous Economic Integration Agreement Effects." Working Paper.

Balistreri, Edward J. and Thomas F. Rutherford. 2013. "Computing general equilibrium theories of monopolistic competition and heterogeneous firms." In *Handbook of Computable General Equilibrium Modeling*, edited by Peter B. Dixon and Dale W. Jorgenson, 1513-1570. Amsterdam: Elsevier.

Behrens, Kristian, Giordano Mion, Yasusada Murata, and Jens Südekum. "Trade, Wages, and Productivity," IZA Discussion Paper 3682, September 2008.

Bergstrand, Jeffrey H. and Peter Egger. 2011. "Gravity equations and economic frictions in the world economy." In *Palgrave Handbook of International Trade*, edited by Daniel Bernhofen, Rod Falvey, David Greenaway, and Udo Kreickemeier, 532-570. London: Palgrave Macmillan Publishing.

Bernard, Andrew B. and J Bradford Jensen. 1995. "Exporters, Jobs, and Wages in U.S. Manufacturing: 1976-1987," *Brookings Papers on Economic Activity: Microeconomics*, 67-112.

Bevan, Alan A. and Saul Estrin. 2004. "The determinants of foreign direct investment into European transition economies." *Journal of Comparative Economics* 32: 775-787.

Bilici, Özgül, Erkan Erdil, And I. Hakan Yetkiner. 2008. "The Determining Role of EU in Turkey's Trade Flows: A Gravity Model Approach." Izmir University of Economics Working Paper 08/06.

Blonigen, Bruce A. and Wesley W. Wilson. 1999. "Explaining Armington: what determines substitutability between home and foreign goods?" *Canadian Journal of Economics* 32(1): 1-21.

Brenton, Paul, Francesca Di Mauro, and Matthias Lücke, 1999. "Economic Integration and FDI: An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe." *Empirica* 26(2): 95-121.

British Embassy Ankara and Turkish Industry and Business Association (TÜSİAD). 2015. *A New Era For the Customs Union & the Business World*. Instanbul: TÜSİAD.

Broda, Christian and David E. Weinstein. 2006. "Globalization and the Gains from Variety." *The Quarterly Journal of Economics* 121(2): 541-585.

Bronckers, Marco and Anne Vallery. 2012. "Fair and effective competition policy in the EU: which role for authorities and which role for the Courts after Menarini?" *European Competition Journal* 8(2): 283-299.

Buch, C. M., R. M. Kokta, D. Piazolo. 2003. "Foreign Direct Investment in Europe: Is there Redirection form the South to the East?" *Journal of Comparative Economics* 31(1): 94-109.

BUSINESSEUROPE. 2016. "Views on modernisation of the EU-Turkey Customs Union agreement." *BusinessEurope Headlines* 2016-21.

Çakmak, E. and H. Kasnakoğlu. 2003. "The impact of EU membership on agriculture in Turkey." Presented at Conference Femise, Marseille, France, December.

Cardamone, Paola. 2009. "A survey of the assessments of the effectiveness of Preferential Trade Agreements using gravity models." TRADEAG Working Paper 07/09.

Carrere, Céline. 2006. "Revisiting the Effect of Regional Trade Agreements on Trade Flows with Proper Specification of the Gravity Model." *European Economic Review* 50: 223-247.

Cebeci, Tolga. 2014. "Impact of Export Destinations on Firm Performance." World Bank Policy Research Working Papers 6743.

Central Bank of the Republic of Turkey, Statistics Department. n.d. "Data." *Balance of Payments Statistics*. <http://www.tcmb.gov.tr/wps/wcm/connect/TCMB+EN/TCMB+EN/Main+Menu/STATISTICS/Balance+of+Payments+and+Related+Statistics/Balance+of+Payments+Statisticss/Data>.

Christian Solidarity Worldwide. 2014. "Universal Periodic Review – 21st Session CSW – Stakeholder Submission: Turkey." *Universal Periodic Review*. <http://www.upr-info.org/sites/default/files/document/turkey/session_21_-_january_2015/csw_upr21_tur_e_main.pdf>.

Ciuriak, Dan and Derk Bienen. 2014. "Overcoming Low Preference Utilization in PTAs: Presumption of Origin for Small Shipments." Presented at the Workshop of the ESIL Interest Group on International Economic Law, Vienna, Austria, 3 September.

Ciuriak, Dan and Dmitry Lysenko. 2016. "The Effect of Binding Commitments on Services Trade." Working Paper.

Ciuriak, Dan and Jingliang Xiao. 2014. "The Trans-Pacific Partnership: Evaluating the "Landing Zone" for Negotiations." Working Paper (21 September).

Ciuriak, Dan and Shenjie Chen. 2008. "Preliminary Assessment of the Economic Impacts of a Canada-Korea Free Trade Agreement." In *Trade Policy Research 2007*, edited by Dan Ciuriak, 187-234. Ottawa: Department of Foreign Affairs and International Trade.

Ciuriak, Dan, Hanne Melin, and Derk Bienen. 2015. "Improving Market Access for Small Enterprise: Design Principles for the Mega Regionals." Published as "Como melhorar o acesso a mercado de pequenas empresas nos acordos megarregionais?" *Pontes* 11(1): 10-14.

CIVICUS and Helsinki Citizens Assembly. 2014. "The Republic of Turkey: Joint NGO Submission to the UN Universal Periodic Review – 21st Session of the UPR Working Group." *Universal Periodic Review* JS11. <http://www.upr-info.org/sites/default/files/document/turkey/session_21_-_january_2015/js11_upr21_tur_e_main.pdf>.

Commission of European Communities. 1997. "Communication from the Commission on the Management of Preferential Tariff Arrangements." COM(97) 402 final. Brussels: European Commission.

Commission of the European Communities. 2005. *Communication from the Commission to the Council, the European Parliament, and the European Economic and Social Committee: The rules of origin in preferential trade arrangements: Orientation for the future*. COM(2005) 100 final.

Costinot, Arnaud and Andrés Rodríguez-Clare. 2013. "Trade Theory with Numbers: Quantifying the Consequences of Globalization." In *Handbook of International Economics*, Vol. 4, edited by Gita Gopinath, Elhanan Helpman, and Kenneth Rogoff, 197-262. Amsterdam: Elsevier and North-Holland.

Council of Europe. 2016. "Turkey: security trumping human rights, free expression under threat." <http://www.coe.int/en/web/commissioner/-/turkey-security-trumping-human-rights-free-expression-under-threat?inheritRedirect=true&redirect=%2Fen%2Fweb%2Fcommissioner%2Fcountry-report%2Fturkey>.

Council of the European Union. 2012. "EU Strategic Framework and Action Plan on Human Rights and Democracy." 11855/12. Luxembourg: EU.

CounterCurrent – GegenStrömung. 2011. "Dam construction in Turkey and its impact on economic, cultural and social rights: Parallel report in response to the Initial Report by the Republic of Turkey on the Implementation of the International Covenant on Economic, Social and Cultural Rights." Geneva: OHCHR.

De Benedictis, Luca and Claudio Vicarelli. 2005. "Trade Potentials in Gravity Panel Data Models." *The B.E. Journal of Economic Analysis & Policy* 5(1): 1-33.

Delegation of the European Union to Turkey. 2007. *Eradicating the worst forms of child labour*. Brussels: European Union.

Demirci, Nedret and Levent Aydın. 2011. "Long-Run Effects of Customs Union between European Union and Turkey: Is It Zero-Sum Game?" *Modern Economy* 2: 132-141.

Diakonisches Werk der EKD, FIAN Deutschland, Gegenströmung, Deutsche Kommission Justitia et Pax, Misereor, Nürnberger Menschenrechtszentrum, and urgewald. 2010. "Extraterritorial State Obligations: List of Issues in response to the 5th Periodic Report of the Federal Republic of Germany on the Implementation of the International Covenant on Economic, Social and Cultural Rights." Köln: FIAN Deutschland e.V.

Dixon, Peter B. 2006. "Evidence-based Trade Policy Decision Making in Australia and the Development of Computable General Equilibrium Modelling." Australia: Centre of Policy Studies, Monash University.

Dixon, Peter B. and Maureen T. Rimmer. 2002. "Dynamic General Equilibrium Modelling for Forecasting and Policy: A Practical Guide and Documentation of MONASH." *Contributions to Economic Analysis* 256.

Dixon, Peter. B., Michael Jerie, and Maureen T. Rimmer. 2013. "Deriving the Armington, Krugman and Melitz models of trade." Paper presented at the 23rd Pacific Conference of the Regional Science Association International (RSAI), Bandung, Indonesia, 2-4 July.

Egger, Hartmut and Udo Kreickemeier. 2009: "Firm Heterogeneity and the Labor Market Effects of Trade Liberalization," *International Economic Review*, 50(1), 187–216.

Egger, Peter and Michael Pfaffermayr. 2004a. "Distance, trade and FDI: a Hausman-Taylor SUR approach." *Journal of Applied Econometrics* 19(2): 227-246.

Egger, Peter and Michael Pfaffermayr. 2004b. "The impact of bilateral investment treaties on foreign direct investment." *Journal of Comparative Economics* 32(4): 788-804.

Egger, Peter, Mario Larch, Kevin E. Staub, and Rainer Winkelmann. 2011. "The Trade Effects of Endogenous Preferential Trade Agreements." *American Economic Journal: Economic Policy* 3(3): 113-43.

Ekonomi Bakanlığı, Anlaşmalar Genel Müdürlüğü (Ministry of Economy, General Directorate of Agreements). 2015. *Pazara Giriş Engelleri 2015 Raporu* (Market Entry Barriers 2015 Report). Ankara: Government of Turkey.

Environmental Protection Agency (EPA). 2016. "The Social Cost of Carbon." *EPA*. <https://www3.epa.gov/climatechange/EPAactivities/economics/scc.html>.

Eruygur, H. Ozan and Erol H. Çakmak. 2005. "Trade implications of extending the Turkey-EU customs union to agricultural products." *MPRA Paper* 12428.

Erzan, Refik and Alpay Filiztekin. 1997. "Competitiveness of Turkish SMSEs in the Customs Union." *European Economic Review* 41(3-5): 881-892.

Erzan, Refik, Alpay Filiztekin, and Unal Zenginobuz. 2002. "Turkey's Customs Union with the European Union: A Framework for Evaluating the Impact of Economic Integration." *MPRA Paper* 382.

EUROCHAMBERS and TOBB. 2013. *EU-Turkey Relations: Perspectives from the European Business Community*. Belgium: Morris and Chapman.

EUROCHAMBERS and TOBB. 2014. "EU-Turkey Relations: Wake up Call for the Business Community." Brussels: EUROCHAMBERS and TOBB.

European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs. 2016. *Public Procurement Indicators 2014*. Brussels: European Commission.

European Commission, Directorate-General for Trade. 2015. "Guidelines on the Analysis of Human Rights Impacts in impact assessments for trade-related policy initiatives." Brussels: European Commission.

European Commission. 2000. *White Paper on Food Safety*. COM (1999) 719 final. Brussels: European Commission.

European Commission. 2006. *Global Europe Strategy: competing in the world*. Brussels: European Commission.

European Commission. 2013. "Capacity Building in the Field of Climate Change in Turkey." Project Number 05, IPA /2013/ 023-651. Brussels: European Commission.

European Commission. 2014. *Turkey Progress Report*. Brussels: European Commission.

European Commission. 2015a. "Inception Impact Assessment: Enhancement of EU-Turkey bilateral trade relations and modernisation of the EU-Turkey Customs Union." Brussels: European Commission.

European Commission. 2015b. "Commission Staff Working Document Accompanying the document." *Report from the Commission to the European Parliament: Overview of Third Country Trade Defence Actions against the European Union for the Year 2014*. 12th Report. {COM(2015) 359 final}, SWD(2015) 145 final. Brussels: European Commission.

European Commission. 2015c. "EU and Turkey announce modernisation of Custom Union." *News Archive* (12 May). <http://trade.ec.europa.eu/doclib/press/index.cfm?id=1307>.

European Commission. 2015d. *Trade for All: Towards a More Responsible Trade and Investment Policy*. Brussels: European Commission.

European Commission. 2015e. *Turkey: 2015 Report*. SWD(2015) 216 final. Brussels: European Commission.

European Commission. 2016a. "Cases." *Trade.* <http://trade.ec.europa.eu/actions-against-eu-exporters/cases/>.

European Commission. 2016b. "Food Law General Principles." *Food*. <http://ec.europa.eu/food/safety/general_food_law/principles/index_en.htm>.

European Commission. 2016c. "Investigations." *Trade.* <http://trade.ec.europa.eu/tdi/completed.cfm>.

European Commission. 2016d. "Investigations: Case AS623 - Sea bass and gilthead sea bream (european)." *Trade.* <http://trade.ec.europa.eu/tdi/case_details.cfm?ref=ong&id=2136&sta=21&en=40&page=2&c_order=date&c_order_dir=Down>.

European Commission. 2016e. "Joint statement by High Representative/Vice-President Federica Mogherini and Commissioner for European Neighbourhood Policy and Enlargement Negotiations Johannes Hahn on the situation in Turkey." *Press Release* STATEMENT/16/2555. <http://europa.eu/rapid/press-release_STATEMENT-16-2555_en.htm>.

European Commission. 2016f. "New Legislative Framework." *Growth: Internal Market, Industry, Entrepreneurship and SMEs.* <http://ec.europa.eu/growth/single-market/goods/new-legislative-framework/index_en.htm>.

European Commission. 2016g. *Overview of Third Country Trade Defence Actions Against the European Union*. COM(2016) 392 Final. Brussels: European Commission.

European Commission. 2016h. "Short Term Outlook for EU arable crops, dairy and meat markets." *Agriculture and Rural Development*. <http://ec.europa.eu/agriculture/markets-and-prices/short-term-outlook/index_en.htm>.

European Commission. 2016i. "Statistics and reports: Rapid Alert System 2015 results." *Consumers*. <http://ec.europa.eu/consumers/consumers_safety/safety_products/rapex/reports/index_en.htm>.

European Commission. 2016j. "Turkey." *Trade Market Access Database*. 22 June. <http://madb.europa.eu/madb//barriers_result.htm?sectors=none&countries=TR&measures=none>.

European Commission. August 2015. "Enhancement of EU-Turkey bilateral trade relations and modernisation of the EU-Turkey Customs Union" *Inception Impact Assessment*. Brussels: European Commission.

European Commission. n.d.a. *A User's Handbook to the Rules of Preferential Origin used in trade between the European Community, other European Countries and the countries participating to the Euro-Mediterranean Partnership*. Brussels: European Commission.

European Commission. n.d.b. "Notified Bodies Nando." *Growth*. <http://ec.europa.eu/growth/tools-databases/nando/index.cfm?fuseaction=country.notifiedbody&cou_id=792>.

European Court of Human Rights. 2010. "Case of Sinan Isik v Turkey." 21924/05. Strasbourg: ECoHR.

European Court. 1998. *Baustahlgewebe GmbH v Commission of the European Communities*. Case C-185/95 P. ECR I-08417. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A61995CJ0185>.

European Environmental Agency. 2013. *Municipal Waste Management in Turkey*. Copenhagen: EEA.

European Environmental Agency. 2014. *Air Pollution Fact Sheet 2014: Turkey*. Copenhagen: EEA.

European Environmental Agency. 2015. "Nitrogen oxides (NOx) emissions." *Indicators*. <http://www.eea.europa.eu/data-and-maps/indicators/eea-32-nitrogen-oxides-nox-emissions-1/#how-do-different-sectors-and-processes-contribute-to-emissions-o>.

European Free Trade Association (EFTA). n.d. "6. Who is responsible for the management of the EEA?" *The Basic Features of the EEA Agreement*. <http://www.efta.int/eea/eea-agreement/eea-basic-features#6>.

European Parliament, Committee on Industry, Research and Energy. 1998. Resolution on the Commission communication on the management of preferential tariff arrangements. COM(97)0402 C4-0447/97.

European Parliament, Committee on International Trade. 2010. *Report on Trade and Economic Relations with Turkey*. (2009/2200(INI)), A7-0238/2010. Brussels: European Parliament.

European Parliament. 2016. *European Parliament resolution of 14 April 2016 on the 2015 report on Turkey (2015/2898(RSP))*. (Texts adopted, P8_TA-PROV (2016) 0133). Brussels: European Parliament.

Fair Labor Association. 2012. "Assessment of the Hazelnut Supply Chain and Hazelnut Harvest in Turkey." March 2012. <http://www.fairlabor.org/sites/default/files/documents/reports/nestle_hazelnut_report.pdf>.

Fair Wear Foundation. 2015. *Turkey country study 2015*. Amsterdam: Fair Wear Foundation.

Felbermayr, Gabriel, Julien Prat, and Hans-Jörg Schmerer. 2008. "Globalization and Labor Market Outcomes: Wage Bargaining, Search Frictions, and Firm Heterogeneity," IZA Discussion Paper No. 3363, February 2008.

Feyrer, James. 2009. "Trade and Income – Exploiting Time Series in Geography." NBER Working Paper Series 14910.

FNV Bondgenoten and Stop Kinderarbeid. 2011. "Child Labour and the Harvesting of Hazelnuts in Turkey. Report of a fact finding mission to Turkey, 5th - 9th September 2011" < http://www.iuf.org/sites/cms.iuf.org/files/Report.delegation.Turkey.Hazelnut.sept_.2011..pdf >.

Foreign Trade Association. 2015. "The EU-Turkey Customs Union: Is it Working?" Free Trade Association Position Paper.

Fouré, Jean, Agnès Bénassy-Quéré, and Lionel Fontagné. 2012. "The Great Shift: Macroeconomic projections for the world economy at the 2050 horizon." CEPII Working Papers 2012-03.

Francois, Joseph F., Hans van Meijl, and Frank van Tongeren. 2005. "Trade Liberalization in the Doha Development Round." *CEPR Discussion Paper* 4032.

Francois, Joseph, Miriam Manchin, Hanna Norberg, Olga Pindyuk, and Patrick Tomberger. 2013. "Reducing Trans-Atlantic Barriers to Trade and Investment: An Economic Assessment: Final Project Report for the European Commission." Washington, D.C.: CEPR.

Freedom House. 2013. *Democracy in Crisis: Corruption, Media, and Power in Turkey*. Washington, D.C.: Freedom House.

Freund, Caroline and Emanuel Ornelas. 2010. "Regional trade agreements: blessing or burden?" *CentrePiece* 2010: 16-19

Gaulier, Guillaume, Daria Taglioni, and Soledad Zignago. 2013. "Export Performance in the Wake of the Global Crisis: Evidence from a New Database." Mimeo.

Geloso Grosso, Massimo, Frédéric Gonzales, Sébastien Miroudot, Hildegunn K. Nordås, Dorothée Rouzet, and Asako Ueno. 2015. "Services Trade Restrictiveness Index (STRI): Scoring and Weighting Methodology." *OECD Trade Policy Papers* 177.

Golovko, Anna, Mustafa Kiziltan, and Ahmet Burcin Yereli. 2015. "A Gravity Model Analysis of Turkey-EU Trade Relations for the Period of 2004-2014." Paper presented at the 1st International Annual Meeting of Sosyoekonomi Society, Munich, Germany, 29-30 October.

Grethe, Harald. 2003. "Effects of Including Agricultural Products in the Customs Union between Turkey and the EU: A partial Equilibrium Analysis for Turkey." Göttingen: Peter Lang.

Grun, Rebekka, Cristobal Ridao-Cano, Herwig Immervoll, Sinem Çapar, Victoria Levin, Meltem Aran, Carola Gruen, Levent Yener and Tolga Cebeci. 2013. "Good Jobs in Turkey," Report No: 83818-TR, The World Bank.

Güner, Mine and Canan Aktaş. 2016. "Turkey enters a new era for protection of intellectual property rights." *Baker & McKenzie Legal Alert* (April).

Güneş, Didem, Merve Mavuş, and Arif Oduncu. 2013. "AB-ABD Serbest Ticaret Anlaşması ve Türkiye Üzerine Etkileri" (The EU-US Free Trade Agreement and Its Impact on Turkey). *CBT Research Notes in Economics* 13/30.

Habitat International Coalition, Urban Movements Istanbul, and Housing and Land Rights Network. 2014. "The UM/HIC and HIC-HLRN Universal Periodic Review Stakeholder Submission: Turkey-2014." *Universal Periodic Review* JS10. <http://www.upr-info.org/sites/default/files/document/turkey/session_21_-_january_2015/js10_upr21_tur_e_main.pdf>.

Haltiwanger, John, Stefano Scarpetta, and Helena Schweiger. 2014. "Cross country differences in job reallocation: The role of industry, firm size and regulations," Labour Economics 26 (2014) 11–25

Harrison, Glenn W., David Tarr, and Thomas F. Rutherford. 1995. "Quantifying the Outcome of the Uruguay Round." *Finance and Development* 32(4): 38-41.

Harrison, Glenn W., Thomas F. Rutherford, and David G. Tarr. 1996. "Economic Implications For Turkey Of A Customs Union With The European Union: A Quantitative Based Policy Analysis." World Bank Policy Research Working Paper 1599.

Hausmann, Ricardo, Jason Hwang, and Dani Rodrik. 2007. "What you export matters." *Journal of Economic Growth* 12(1): 1-25.

Help Kinderen. 2011. *Press Release* <http://helpkinderen.com/projects-english/press-release/>.

Helpman, Elhanan, Marc J. Melitz, and Stephen R. Yeaple. 2004. "Export Versus FDI with Heterogeneous Firms." *American Economic Review* 94(1): 300-316.

Helpman, Elhanan, Marc Melitz, and Yona Rubinstein. 2008. "Estimating trade flows: trading partners and trading volumes." *Quarterly Journal of Economics* 123(2): 441-487.

Helpman, Elhanan, Oleg Itskhoki and Stephen Redding. 2008. "Wages, Unemployment and Inequality with Heterogeneous Firms and Workers," NBER Working Paper 14122.

Hertel, T. (ed.). 1997. *Global Trade Analysis: Modeling and Applications*. Cambridge, UK: Cambridge University Press.

Hsu, A., J. Emerson, M. Levy, A. de Sherbinin, L. Johnson, O. Malik, J. Schwartz, and M. Jaiteh. 2014. *The 2014 Environmental Performance Index*. New Haven, CT: Yale Center for Environmental Law and Policy.

Human Rights Watch. 2015. "Legal Standards." *Barriers to Education for Syrian Refugee Children in Turkey*. <https://www.hrw.org/node/282910/#64023c>.

Hurriyet. 2015. "Türkiye'den AB'ye vize resti (EU visa picture from Turkey)." *World*. <http://www.hurriyet.com.tr/turkiyeden-abye-vize-resti-29067256>.

Hurriyet. 29 March 2013. "AB'nin adım atması şart (EU must take a step)." *Economy*. <http://www.hurriyet.com.tr/ab-nin-adim-atmasi-sart-22921777>.

Ianchovichina, Elena and Terrie Walmsley (eds). 2012. *GDyn Book: Dynamic Modeling and Applications in Global Economic Analysis*. Cambridge, UK: Cambridge University Press.

Independent Commission on Turkey. 2009. *Turkey in Europe: Breaking the vicious circle*. New York: Open Society Foundation and British Council.

İnsan Hakları Ortak Platformu / Human Rights Joint Platform. 2014. "REPUBLIC OF TURKEY: Submission to the United Nations Universal Periodic Review – 21st Session of the Working Group on the UPR United Nations Human Rights Council [January – February 2015] UPR Stakeholders Report." *Universal Periodic Review* JS07. <http://www.upr-info.org/sites/default/files/document/turkey/session_21_-_january_2015/js7_upr21_tur_e_main.pdf>.

International Labour Organization (ILO) and the European Union. 2012. *Decent Work Indicators: Concepts and definitions – ILO Manual, First Version*. Geneva: ILO.

International Labour Organization (ILO) and TurkStat. 2012. *Çalişan Çocuklar: Working Child 2012*. Ankara: TurkStat.

International Labour Organization (ILO). 2010. *LABORSTA*. <http://laborsta.ilo.org/>.

International Labour Organization (ILO). 2014. *Observation concerning Worst Forms of Child Labor Convention, 1999 (No. 182) Turkey (ratification: 2001)*. Geneva: ILO.

International Labour Organization (ILO). 2016. *Decent Work*. <http://www.ilo.org/global/topics/decent-work/lang--en/index.htm>.

International Monetary Fund (IMF), Statistics Department. 2006. *Direction of Trade Statistics – Database and Browser*. Washington, D.C.: IMF.

International Monetary Fund (IMF). 2014. Turkey: *2014 Article IV Consultation – Staff Report; Press Release; and Statement by the Executive Director for Turkey*. Washington, D.C.: IMF.

International Monetary Fund (IMF). April 2016. *World Economic Outlook*. <http://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>.

International Trade Centre (ITC). 2015b. *Market Access Map*. <http://www.macmap.org/>.

International Trade Centre (ITC). 2015c. *Trade Map*. <http://www.trademap.org/Index.aspx>.

Itakura, Ken and Kazuhiko Oyamada. 2013. "Incorporating firm heterogeneity into the GTAP Model." Paper presented at the 16th Annual Conference on Global Economic Analysis, Shanghai, China, 12-14 June.

Justice and Development Party (AK Party). 2012. *Political Vision of AK Parti (Justice and Development Party) 2023: Politics, Society and the World*. Ankara: AK Parti.

Kamu İhale Kurumu. 2004. *Kamu Alimlari İzleme Raporu 2003*. Ankara: Kurumsal Gelişim Ve Araştirma Dairesi Başkanliği.

Kamu İhale Kurumu. 2005. *Kamu Alimlari İzleme Raporu 2004*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2006. *Kamu Alimlari İzleme Raporu 2005*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2007. *Kamu Alimlari İzleme Raporu 2006*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2008. *Kamu Alimlari İzleme Raporu 2007*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2009. *Kamu Alimlari İzleme Raporu 2008*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2010. *Kamu Alimlari İzleme Raporu 2009*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2011. *Kamu Alimlari İzleme Raporu 2010*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2011. *Kamu Alimlari İzleme Raporu 2011*. Ankara: Kamu Alimlarini İzleme Ve Bilgi Hizmetleri Dairesi Başkanliği.

Kamu İhale Kurumu. 2013. *Kamu Alimlari İzleme Raporu 2012*. Ankara: Kurumsal Gelişim Ve Araştirma Dairesi Başkanliği.

Kamu İhale Kurumu. 2014. *Kamu Alimlari İzleme Raporu 2013*. Ankara: Kurumsal Gelişim Ve Araştirma Dairesi Başkanliği.

Kamu İhale Kurumu. 2015. *Kamu Alimlari İzleme Raporu 2014*. Ankara: Kurumsal Gelişim Ve Araştirma Dairesi Başkanliği.

Kandogan, Yener. 2005. "How Much Restructuring did the Transition Countries Experience? Evidence from Quality of their Exports." *Comparative Economic Studies* 47(3): 543-560.

Kaya, İsmet, Muammer Bezirgan, and Bayram Alamur. 2015. "Minimum Turnover Analysis in Turkish Tourism Sector," Procedia - Social and Behavioral Sciences 207: 404-413.

Ketenci, Natalya. 2014. "The Effect of the European Union Customs Union on the Balance of Trade in Turkey." *MPRA Paper* 54662.

Kick, Christopher. 2011. "How is 100% Renewable Energy Possible for Turkey by 2020?" *GENI.* <www.geni.org/globalenergy/research/renewable-energy-potential-of-turkey/100-re-for-turkey-2020.pdf>.

Kirisci, Kemal. 2005. "Turkey and the European Union: The Domestic Politics of Negotiating Pre-Accession." *Macalester International* 15(Article 10): 44-80.

Kirisci, Kemal. 2013. "Turkey and the Transatlantic Trade and Investment Partnership: Boosting the Model Partnership with the United States." *Brookings Center on the United States and Europe Turkey Project Policy Paper* 2.

Kirisci, Kemal. 2015. "Turkey Papers: TTIP's Enlargement and the Case of Turkey." Washington, D.C.: Istanbul Policy Center and Wilson Center.

Korkmaz, E. E. 2015. "Unexpected Wave of Strikes in Turkish Automotive Industry, Turkey Analyses." Istanbul: Friedrich Ebert Stiftung.

Kudrle, Robert T. and Lorraine Eden. 2003. "The Campaign Against Tax Havens: Will It Last? Will it Work?" *Stanford Journal of Law, Business, and Finance* 9: 37-68.

Kumar, A. and K. Zajc. 2003. "Foreign Direct Investment and Changing Trade Patterns: The Case of Slovenia." *Economic and Business Review for Central and South-Eastern Europe* 5(3): 201-219.

Kutlina-Dimitrova, Zornitsa and Csilla Lakatos. 2014. "Determinants of direct cross-border public procurement in EU Member States," *DG TRADE Chief Economist Notes* 2014-2.

Lada, Katarzyna and Grzegorz Tchorek. 2008. "Przepływy bezpośrednich inwestycji zagranicznych a utworzenie strefy euro" (Flows of foreign direct investment and the creation of the euro area).

Lall, Sanjaya. 2000. "The Technological Structure and Performance of Developing Country Manufactured Exports 1985 – 1998." University of Oxford QEH Working Paper Series QEHWPS44.

Letsch, Constanze. 2011. "Turkish Roma Make way for Property Developers in Historic Istanbul District." *The Guardian*, 2 November. <http://www.theguardian.com/world/2011/nov/09/sulukule-roma-housing-row-istanbul>.

Magee, C. S. 2008. "New measures of trade creation and trade diversion." *Journal of International Economics* 75(2): 349-362.

Magee, Christopher S. P. 2016. "Trade creation, trade diversion, and the general equilibrium effects of regional trade agreements: aA study of the European Community– – Turkey customs union,"." *Review of the World EconomyEconomics* 152:(2): 383–-399.

Meager, Nigel and Stefan Speckesser. 2011. "Wages, productivity and employment: A review of theory and international data," European Employment Observatory, Thematic expert ad-hoc paper, May 2011.

Melitz, Marc J. 2003. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica* 71(6): 1695-1725.

Mercenier J. and E. Yeldan. 1997. "On Turkey's trade policy: Is a customs union with Europe enough?" *European Economic Review* 41: 871-880.

Mihaljek, Dubravko and Sweta Saxena. 2010. "Wages, productivity and "structural" inflation in emerging market economies," BIS papers, 49, 53–75.

Milner, C., G. Reed, and P. Talernsgri. 2004. "Foreign Direct Investment and Vertical Integration of Production by Japanese Multinationals in Thailand." *Journal of Comparative Economics* 32(4): 805-821.

Miroudot, Sébastien and Kätlin Pertel. 2015. "Water in the GATS: Methodology and Results." *OECD Trade Policy Papers* 185.

Misrahi, Frédéric. 2010. "What Prospects for the Lifting of Technical Trade Barriers in the Mediterranean? Insights from the Turkish Case." *Mediterranean Politics* 15(2): 189-209.

MoEU. 2012. "Information received during the Eionet consultation of the paper." E-mail of 14 November 2012 from Arzu Nuray, Turkish Ministry of Environment and Urbanisation.

Mohler, Lukas and Michael Seitz. 2012. "The Gains from Variety in the European Union." *Review of World Economics* 148(3): 475-500.

Mohler, Lukas. 2012. "Variety Gains and the Extensive Margin of Trade." *WWZ Discussion Paper* 2012/16.

Narayanan, Badri, Dan Ciuriak, and Harsha Vardhana Singh. 2015. "Quantifying the Mega-regional Trade Agreements: A Review of the Models." *International Institute for Sustainable Development Discussion Paper*.

Neyapti, B., F. Taskin, and M. Ungor. 2007. "Has European Customs Union Agreement Really Affected Turkey's Trade?" *Applied Economics* 39: 2121-2132.

Nowak-Lehmann, Felicitas, Dierk Herzer, Inmaculada Martinez-Zarzoso, and Sebastian Vollmer. 2007. "The Impact of a Customs Union between Turkey and the EU on Turkey's Exports to the EU." *Journal of Common Market Studies* 43(3): 719-743.

OECD. 2008. "Environmental Performance Reviews: Turkey (2008)." *Environmental Country reviews.* <http://www.oecd.org/env/country-reviews/environmentalperformancereviewsturkey2008.htm>.

OECD. 2010. *Tax Co-operation 2010: Towards a Level Playing Field Assessment by the Global Forum on Transparency and Exchange of Information*. Paris: OECD.

OECD. 2011. *State-Owned Enterprise Governance Reform: An Inventory of Recent Change*. Paris: OECD.

OECD. 2016a. *Annual Report On Competition Policy Development In Turkey: 2015.* DAF/COMP/AR(2016)9. Paris: OECD.

OECD. 2016b. *Skills Matter: Further Results from the Survey of Adult Skills: Turkey*. Paris: OECD.

OECD. n.d. *OECD.Stat*. Paris: OECD.

Office of the High Commissioner for Human Rights. 2000. "CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12)." Adopted at the Twenty-second Session of the Committee on Economic, Social and Cultural Rights, 11 August. E/C.12/2000/4.

Olivero, María Pía, and Yoto V. Yotov. 2012. "Dynamic gravity: endogenous country size and asset accumulation." *Canadian Journal of Economics* 45(1): 64-92.

Osnago, Alberto, Roberta Piermartini, and Nadia Rocha. 2015. "Trade policy uncertainty as barrier to trade." WTO Working Paper ERSD-2015-05 (26 May).

Ossa, Ralph. 2012. "Why Trade Matters After All." NBER Working Paper 18113.

Ottaviano, Gianmarco, Joao Paulo Pessoa, Thomas Sampson, and John Van Reenen. 2014. "The Costs and Benefits of Leaving the EU." Center for Financial Studies Working Paper 472.

Oyamada, Kazuhiko. 2013. "Parameterization of Applied General Equilibrium Models with Flexible Trade Specifications Based on the Armington, Krugman, and Melitz Models." *Institute of Developing Economies Discussion Paper* 380.

Portes, R. and H. Rey. 2005. "The Determinants of Cross-Border Equity Flows." *Journal of International Economics* 65(2): 269-296.

Reis, José Guilherme and Thomas Farole. 2012. "Trade Competitiveness Diagnostic Toolkit." *World Bank Staff Report* 67362.

Republic of Turkey, Ministry for Development, Southeastern Anatolia Project (GAP). 2016. "Regional Development Administration." Ankara: Government of Turkey.

Republic of Turkey, Ministry for EU Affairs. 2008. *Turkey's Programme for Alignment with the Acquis (2007-2013)*. <http://www.ab.gov.tr/?p=6&l=2>.

Republic of Turkey, Ministry for EU Affairs. 2013. "2013 Progress Report prepared by Turkey." Ankara: Ministry for EU Affairs.

Republic of Turkey, Ministry for EU Affairs. 2015. "National Programmes for the Adoption of the *Acquis* (NPAA)." <http://www.ab.gov.tr/?p=194&l=2>.

Republic of Turkey, Ministry of Customs and Trade. 2015. "EU Funded Projects." <http://english.gtb.gov.tr/external-relations/european-union/eu-funded-projects>.

Republic of Turkey, Ministry of Development. 2014. *Tenth Development Plan 2014-2018*. Ankara: Government of Turkey.

Republic of Turkey, Ministry of Environment and Forestry. 2007. *EU Integrated Environmental Approximation Strategy*. Ankara: Government of Turkey.

Republic of Turkey, Prime Ministry Privatization Administration. 2016. "Distribution of the Companies in the Privatizations Portfolio." <http://www.oib.gov.tr/portfoy/portfoy_eng.htm>.

Republic of Turkey, Undersecretariat of Treasury. n.d.a. "About Us." *State Owned Enterprises.* <http://www.treasury.gov.tr/en-US/Pages/About-Us-State-Owned-Enterprises-and-Businesses?nm=828>.

Republic of Turkey, Undersecretariat of Treasury. n.d.b "Legislation." *State-Owned Enterprises and Business.* <https://www.hazine.gov.tr/tr-TR/Mevzuat-Sunum-Sayfasi?mid=351&cid=33&nm=298#>.

Republic of Turkey. 2014a. "4703 Law and Implementing Regulations." *Compliance with EU technical legislation.* <http://www.ekonomi.gov.tr/portal/faces/home/urun-guvenligi/ab-teknik-mevzuat-uyumu/_4703-sayili-kanun?_afrLoop=1693554815306638&_afrWindowMode=0&_afrWindowId=rr3n27o4d_260#!%40%40%3F_afrWindowId%3Drr3n27o4d_260%26_afrLoop%3D1693554815306638%26_afrWindowMode%3D0%26_adf.ctrl-state%3Drr3n27o4d_314>.

Republic of Turkey. 2014b. "Agreement on Trade in Services (TISA) Negotiations." <http://www.ekonomi.gov.tr/portal/faces/oracle/webcenter/portalapp/pages/content/htmlViewer.jspx?contentId=UCM%23dDocName%3AEK-215200&parentPage=hizmet&_afrLoop=1708889892250095&_afrWindowMode=0&_afrWindowId=rkrygwnxx_236#!%40%40%3F_afrWindowId%3Drkrygwnxx_236%26_afrLoop%3D1708889892250095%26contentId%3DUCM%2523dDocName%253AEK-215200%26parentPage%3Dhizmet%26_afrWindowMode%3D0%26_adf.ctrl-state%3Drkrygwnxx_260>.

Republic of Turkey. 2014c. "General Rules and Procedures on Technical Regulations and Standarts (sic)." <http://www.economy.gov.tr/portal/faces/oracle/webcenter/portalapp/pages/content/htmlViewer.jspx?contentId=UCM%23dDocName%3AEK-175590&parentPage=urun&contentTitle=General%20Rules%20and%20Procedures%20on%20Technical%20Regulations%20and%20Standarts&countryName=&_afrLoop=1612609660871655&_afrWindowMode=0&_afrWindowId=1c8vqkwlk2_423#!%40%40%3FcountryName%3D%26_afrWindowId%3D1c8vqkwlk2_423%26_afrLoop%3D1612609660871655%26contentId%3DUCM%2523dDocName%253AEK-175590%26parentPage%3Durun%26contentTitle%3DGeneral%2BRules%2Band%2BProcedures%2Bon%2BTechnical%2BRegulations%2Band%2BStandarts%26_afrWindowMode%3D0%26_adf.ctrl-state%3D1c8vqkwlk2_477>.

Republic of Turkey. 2014d. "Negotiation Process Ongoing FTAs." *Free Trade Agreements*. <http://www.ekonomi.gov.tr/portal/faces/home/disIliskiler/SerbestTic/SerbestTic-MuzakereSureciDevamEdenSTAlar?_afrLoop=1705107651346369&_afrWindowMode=0&_afrWindowId=94y2jjk33_154#!%40%40%3F_afrWindowId%3D94y2jjk33_154%26_afrLoop%3D1705107651346369%26_afrWindowMode%3D0%26_adf.ctrl-state%3D94y2jjk33_208>.

Republic of Turkey. 2014e. "Not Regulated Areas." *Compliance with EU technical legislation*. <http://www.ekonomi.gov.tr/portal/faces/home/urun-guvenligi/ab-teknik-mevzuat-uyumu/duzenlenmemis-alan?_afrLoop=1693685399522950&_afrWindowMode=0&_afrWindowId=rr3n27o4d_311#!%40%40%3F_afrWindowId%3Drr3n27o4d_311%26_afrLoop%3D1693685399522950%26_afrWindowMode%3D0%26_adf.ctrl-state%3Drr3n27o4d_365>.

Republic of Turkey. 2014f. "Regional Relations" <http://www.ekonomi.gov.tr/portal/faces/home/disIliskiler/cokTarafliBolgeselIliski/bolgeselIliski?_afrLoop=1708794778095729&_afrWindowMode=0&_afrWindowId=rkrygwnxx_1#!%40

%40%3F_afrWindowId%3Drkrygwnxx_1%26_afrLoop%3D1708794778095729%26_afrWindowMode%3D0%26_adf.ctrl-state%3Drkrygwnxx_55>.

Republic of Turkey. n.d. "Turkey-EU Associations Relationship, Customs Union and Accession Process." <http://www.ekonomi.gov.tr/portal/content/conn/UCM/path/Contribution%20Folders/web_en/Regions%20Informations/Europe/EU27/Turkey-EU%20Association%20Relationship,%20Customs%20Union%20%20And%20Accession%20Process/Turkey-EU_Association_Relationship,_Customs_Union__And_Accession_Process_.html>.

Roberto, B. 2004. "Acquisition Versus Greenfield Investments: the Location of Foreign Manufactures in Italy." *Regional Science and Urban Economics* 34(1): 3-39.

Roson, Roberto and Kazuhiko Oyamada. 2014. "Introducing Melitz-Style Firm Heterogeneity in CGE Models: Technical Aspects and Implications." Department of Economics, Ca' Foscari, University of Venice Working Paper 04/WP/2014.

Roson, Roberto. 2006. "Introducing Imperfect Competition in CGE Models: Technical Aspects and Implications." Fondazione Eni Enrico Mattei, Nota Di Lavoro 3.2006.

Santos Silva, Joao M.C. and Silvana Tenreyro. 2006. "The Log of Gravity." The Review of Economics and Statistics 88(4): 641-658.

Santos Silva, Joao M. C. and Silvana Tenreyro. 2015. "Log of Gravity." London School of Economics. <http://personal.lse.ac.uk/tenreyro/LGW.html>.

Sekercioglu, Çagan H., Sean S. Anderson, Erol Akcay, and Nuzhet Dalfes. 2011. "Turkey's globally important biodiversity in crisis." *Biological Conservation* 144: 2752-2769.

Slater, D., S. Thomas, and D. Waelbroeck. 2008. "Competition law proceedings before the European Commission and the right to a fair trial: no need for reform?" *The Global Competition Law Centre Working Papers Series* 04/08.

Songün Demirezen, Sevim. 2013. "Campaign asks gov't to cancel environment bill." *Hurriyet Daily News* (25 February). <http://www.hurriyetdailynews.com/campaign-asks-govt-to-cancel-environment-bill.aspx?pageID=238&nID=41785&NewsCatID=340>.

Stewart-Brown, Ronald. 2001. "Free trade across the European Continent." *Global Britain Briefing Note* 11.

Sur, M. 2016. "The Union Density Issue in Turkey – Causes and Effects." Prepared for the Conference on Barriers to Union Organizing, Lucca, Italy, 11-12 March.

Szczepkowska, A. and L. Wojciechowski. 2002. "Możliwości wykorzystania modelu grawitacji do analizy bezpośrednich inwestycji zagranicznych w Polsce." In *Przemiany i perspektywy polskiej gospodarki w procesie integracji z gospodarką wiatową*, edited by K. Piech and G. Szczodrowski, 267-282. Warsaw: Instytut Wiedzy.

Tabiat Kanunu İzleme Girişimi (Natural Law Monitoring Initiative). 2013. "English." <https://tabiatkanunu.wordpress.com/english/>.

The Economist Intelligence Unit. 2016. *The Economist Intelligence Unit*. <www.eiu.com>.

The Ministry of Family and Social Policies General Directorate on the Status of Women. 2014. *Analysis of Women's Labor Force Profile and Statistics in Turkey*. Ankara: Government of Turkey.

The Union of Chambers and Commodity Exchanges of Turkey. 2014. "Hisarcıklıoğlu urges the EU and Customs Union to prevent unfair competition." *TOBB*. <http://tobb.org.tr/Sayfalar/Eng/Detay.php?rid=19366&lst=MansetListesi>.

Togan, Sübidey. 1995. "Trade Policy Review of the Republic of Turkey." *The World Economy Global Trade Policy*: 107-120.

Togan, Sübidey. 2010. "Turkey: Trade Policy Review, 2007." *The World Economy* 33(11): 1339-1389.

Togan, Sübidey. 2012. "The EU-Turkey Customs Union: A Model for Future Euro-Med Integration." *MEDPRO Technical Report* 9.

Togan, Sübidey. 2016. *The Liberalization of Transportation Services in the EU and Turkey.* Oxford, UK: Oxford University Press.

Türk Standardlari Enstitüsü (TSE). n.d. *Stratejik Plan 2013-2017 (Strategic Plan 2013-2017)*. Ankara: TSE.

Turkish Competition Authority. 2013a. "Communiqués." <http://www.rekabet.gov.tr/en-US/Communique-List/Communiqu-List>.

Turkish Competition Authority. 2013b. "Guidelines." <http://www.rekabet.gov.tr/en-US/Guide-List>.

Turkish Competition Authority. n.d. "Active Cooperation/Leniency Regulation." <http://www.rekabet.gov.tr/File/?path=ROOT%2f1%2fDocuments%2fRegulation%2fyonetmelik10.pdf>.

Turkish Patent Institute. 2014a. *National Strategy Intellectual Property, 2015-18*. Ankara: TPI.

Turkish Patent Institute. 2014b. *National Strategy Paper on Geographical Indications, 2015-18*. Ankara: TPI.

TurkStat. 2010. "Survey on Problems and Expectations of Disabled People." <http://www.turkstat.gov.tr/Kitap.do?metod=KitapDetayandKT_ID=1andKITAP_ID=244>.

TurkStat. 2015. "External Trade by Enterprise Characteristics, 2014." *Press Release.* <http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=18587>.

TurkStat. n.d.a. "Income and Living Conditions Survey, 2006-2014." <http://www.turkstat.gov.tr/PreTablo.do?alt_id=1011>.

TurkStat. n.d.b. "Labour Force Statistics." <http://www.turkstat.gov.tr/PreTablo.do?alt_id=1007>.

Ülgen, S. and Y. Zahariadis. 2004. "The Future of Turkish-EU Trade Relations: Deepening vs Widening." *CEPS EU-Turkey Policy Paper* 5-2004.

UN Committee on Economic, Social and Cultural Rights. 2009. *Implementation of the International Covenant on Economic, Social and Cultural Rights: Initial Reports Submitted by States Parties under Articles 16 and 17 of the Covenant: Turkey*. E/C.12/TUR/1. Geneva: UNCESCR.

UN Comtrade. 2014. *UN Comtrade Database*. Geneva: UN.

UNCTAD. 2013. *Database on Trade in Services*. Geneva: UNCTAD.

UNCTAD. 2015. *World Investment Report 2015: Reforming International Investment Governance*. Geneva: UNCTAD.

UNCTAD. 2016. *World Investment Report 2016: Investor Nationality: Policy Challenges*. Geneva: UNCTAD.

UNCTADSTAT. n.d. "Services (BPM5): Exports and imports by service-category, value, shares and growth, annual, 1980-2013." *Data Center*. <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=17629>.

UNDP. 2008. *Turkey Corporate Responsibility: Baseline Report*. New York: UNDP.

UNDP. 2016. "Women Empowerment and Gender Equality." *Our Work*. < http://www.tr.undp.org/content/turkey/en/home/ourwork/democraticgovernance/in_depth/WomenEmpowermentandGenderEquality.html>.

UNFCCC. 2015. *Republic of Turkey: Intended Nationally Determined Contribution*. New York: UNFCCC.

Vutha, H. and H. Jalilian. 2008. "Environmental impacts of the ASEAN-China Free Trade Agreement on the Greater Mekong Sub-region." Winnipeg: International Institute for Sustainable Development.

Walker, Simon Mark. 2009. "The Future of Human Rights Impact Assessments of Trade Agreements." Dissertation, Utrecht University, School Of Human Rights Research Series, Volume 35.

World Economic Forum. 2013. *Enabling Trade: Valuing Growth Opportunities*. Geneva: WEF.

World Bank. 2006. "Turkey Labor Market Study." Report 33254-TR. Washington, D.C.: The World Bank.

World Bank. 2011. "Improving Conditions for SME Growth, Finance and Innovation." *Private and Financial Sector Development Europe and Central Asia Region* 54961-TR.

World Bank. 2013. *Human Rights Impact Assessments: A Review of the Literature, Differences with other forms of Assessments and Relevance for Development*. Washington, D.C.: The World Bank.

World Bank. 2014. "Evaluation of the EU-Turkey Customs Union." Report 85830-TR. Washington, D.C.: The World Bank.

World Bank. 2015. *World Development Indicators*. <http://data.worldbank.org/data-catalog/world-development-indicators>.

World Bank. 2016a. *Doing Business 2016: Measuring Regulatory Quality and Efficiency*. Washington, D.C.: The World Bank.

World Bank. 2016b. "World – Exporter Dynamics Database 1997-2014." *Data*. <http://microdata.worldbank.org/index.php/catalog/2545>.

World Health Organization (WHO). 2016. "WHO Global Urban Ambient Air Pollution Database." *Public health, environmental and social determinants of health (PHE)*. <http://www.who.int/phe/health_topics/outdoorair/databases/cities/en/>.

World Intellectual Property Organization (WIPO). n.d. *WIPO Lex*. <http://www.wipo.int/wipolex/en>.

World Trade Organization (WTO), Trade Policy Review Body. 1998. *Report by the secretariat: Turkey*. WT/TPR/S/192/44. Geneva: WTO.

World Trade Organization (WTO), Trade Policy Review Body. 2003. *Report by the secretariat: Turkey*. WT/TPR/S/125. Geneva: WTO.

World Trade Organization (WTO), Trade Policy Review Body. 2008. *Report by the secretariat: Turkey*. WT/TPR/S/192/Rev.1. Geneva: WTO.

World Trade Organization (WTO), Trade Policy Review Body. 2012a. *Report by the secretariat: Turkey*. WT/TPR/S/259. Geneva: WTO.

World Trade Organization (WTO), Trade Policy Review Body. 2012b. *Report by the secretariat: Turkey: Revision*. WT/TPR/S/259/Rev.1 (7 March). Geneva: WTO.

World Trade Organization (WTO), Trade Policy Review Body. 2016a. Trade Policy Review, Report by the Secretariat: Turkey. WT/TPR/S/331. Geneva: WTO.

World Trade Organization (WTO), Trade Policy Review Body. 2016b. *Trade Policy Review: Turkey: Minutes Of The Meeting, Addendum*. WT/TPR/M/331/Add.1. Geneva: WTO.

World Trade Organization (WTO). 1998. "Turkey's trade agreement with the EU leads to improved business environment for all foreign investors and traders." *Press Release* PRESS/TPRB/83. <https://www.wto.org/english/tratop_e/tpr_e/tp83_e.htm>.

World Trade Organization (WTO). 2001. *GATS: Fact and Fiction*. Geneva: WTO.

World Trade Organization (WTO). 2015. *I-TIP Services Statistics*. <http://i-tip.wto.org/services/(S(h2ejnlxd34owxmb0mpfbv1vt))/Search.aspx>.

World Trade Organization (WTO). 2016. "Regional trade agreements." *WTO*. <https://www.wto.org/english/tratop_e/region_e/region_e.htm>.

Yucel, Gulcin Elif. 2014. "The Effects of EU Customs Union Integration on Turkish Intra-Industry Trade." *Emerging Markets Journal* 4(1): 17-32.

Zhai, Fan. 2008. "Armington meets Melitz: Introducing firm heterogeneity in a global CGE model of trade." *Journal of Economic Integration* 23(3): 575-604.

Treaties and Agreements:

Agreement between the European Coal and Steel Community and the Republic of Turkey on trade in products covered by the Treaty establishing the European Coal and Steel Community (OJ L 227, 7.9.1996)

Agreement establishing an Association between the European Economic Community and Turkey (OJ L 217, 29.12.1964) ("Ankara Agreement")

Agreement establishing an Association between the European Union and Algeria (OJ L 265/2, 10.10.2005)

Agreement establishing an Association between the European Union and Chile (OJ L 352, 30.12.2002)

Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 (WTO Anti-Dumping Agreement)

Charter of Fundamental Rights of the European Union (CFR) (OJ C 364/1, 18.12.2000)

Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union

Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (UNCAT)

Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)

Convention on the Rights of Persons with Disabilities (CRPD)

Convention on the Rights of the Child (CRC)

European Convention on Human Rights (ECHR)

Free Trade Agreement Between the European Union and Singapore

Free trade Agreement between the European Union and the Republic of Korea (OJ L 127, 14.05.2011)

International Convention on the Elimination of All Forms of Racial Discrimination (CERD)

International Convention on the Protection of the Rights of All Migrant Workers (ICMW)

International Covenant on Civil and Political Rights (ICCPR)

International Covenant on Economic, Social and Cultural Rights (ICESCR)

Republic of Korea-Turkey Free Trade Agreement (01.05.2013)

Stabilisation and Association Agreement between the European Union and the European Atomic Energy Community and Kosovo (OJ L 71, 16.3.2016)

Treaty establishing the European Economic Community (01.01.1958) ("Treaty of Rome")

Treaty on the Functioning of the European Union (Consolidated version 2016) (OJ C 202, 07.06.2016)

Universal Declaration of Human Rights (UDHR)

Decrees, Decisions, Directives, Regulations, and Communications:

Additional Protocol and Financial Protocol signed on 23 November 1970, annexed to the Agreement establishing the Association between the European Economic Community and Turkey and on measures to be taken for their entry into force - Final Act – Declarations (OJ L 293, 29.12.1972) (Additional Protocol)

Agreement between the European Coal and Steel Community and the Republic of Turkey on products within the province of the European Coal and Steel Community - Final Act – Declarations (OJ L 293, 29.12.1972)

Commission Implementing Regulation (EU) No 1001/2013 of 4 October 2013 amending Annex I to Council Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff (OJ L 290, 31.10.2013)

Commission Implementing Regulation (EU) No 543/2011 of 7 June 2011 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 in respect of the fruit and vegetables and processed fruit and vegetables sectors (OJ L 157, 15.6.2011)

Commission Regulation (EC) No 264/2008 of 19 March 2008 fixing the export refunds on poultrymeat (OJ L 81, 20.3.2008)

Commission Regulation (EC) No 265/2008 of 19 March 2008 fixing the export refunds on eggs (OJ L 81, 20.3.2008)

Commission Regulation (EEC) No 2454/93 of 2 July 1993 laying down provisions for the implementation of Council Regulation (EEC) No 2913/92 establishing the Community Customs Code (OJ L 253, 11.10.1993)

Council Decision of 22 July 1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonization directives (93/465/EEC) (OJ L 220, 30.8.1993)

Council Decision of 26 March 2012 on the conclusion of the Regional Convention on pan-Euro-Mediterranean preferential rules of origin (2013/94/EU) (OJ L 54, 26.2.2013)

Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999)

Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs (OJ L 122, 17.5.1991)

Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (OJ L 346, 27.11.1992)

Council Directive 93/98/EEC of 29 October 1993 harmonizing the term of protection of copyright and certain related rights (OJ L 290, 24.11.1993)

Council Regulation (EC) No 1383/2003 of 22 July 2003 concerning customs action against goods suspected of infringing certain intellectual property rights and the measures to be taken against goods found to have infringed such rights (OJ L 196, 2.8.2003)

Council Regulation (EC) No 1506/98 of 13 July 1998 establishing a concession in the form of a Community tariff quota for Turkey in 1998 in respect of hazelnuts and suspending certain concessions (OJ L 200, 16.7.1998)

Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code (OJ L 302, 19.10.1992)

Council Regulation (EEC) No 3842/86 of 1 December 1986 laying down measures to prohibit the release for free circulation of counterfeit goods (OJ L 357, 18.12.1986)

Council Regulation (EEC) No 616/78 of 20 March 1978 on proof of origin for certain textile products falling within Chapter 51 or Chapters 53 to 62 of the Common Customs Tariff and imported into the Community, and on the conditions for the acceptance of such proof (OJ L 84, 31.3.1978)

Council Regulation (EEC) No 918/83 of 28 March 1983 setting up a Community system of reliefs from customs duty (OJ L 105, 23.4.1983)

Decision No 1/2000 of the EC-Turkey Customs Cooperation Committee of 25 July 2000 on the acceptance, as proof of Community or Turkish origin, of movement certificates EUR.1 or invoice declarations issued by certain countries that have signed a preferential agreement with the Community or Turkey (OJ L 211, 22.8.2000)

Decision No 1/2001 of the EC-Turkey Customs Cooperation Committee of 28 March 2001 amending Decision No 1/96 laying down detailed rules for the application of Decision No 1/95 of the EC-Turkey Association Council (2001/283/EC) (OJ L 98, 7.4.2001)

Decision No 1/2003 of the EC-Turkey Customs Cooperation Committee of 30 January 2003 amending Decision No 1/2001 amending Decision No 1/96 laying down detailed rules for the application of Decision No 1/95 of the EC-Turkey Association Council (2003/75/EC) (OJ L 28, 4.2.2003)

Decision No 1/2006 of the EC-Turkey Association Council of 15 May 2006 on the implementation of Article 9 of Decision No 1/95 of the EC-Turkey Association Council on implementing the final phase of the Customs Union (2006/654/EC) (OJ L 271, 30.9.2006)

Decision No 1/2006 of the EC-Turkey Customs Cooperation Committee of 26 September 2006 laying down detailed rules for the application of Decision No 1/95 of the EC-Turkey Association Council (2006/646/EC) (OJ L 265, 26.9.2006)

Decision No 1/2007 of the EC-Turkey Association Council of 25 June 2007 amending the trade concessions for processed agricultural products covered by Decision No 1/95 of the EC-Turkey Association Council on implementing the final phase of the Customs Union and by Decision No 1/97 on the arrangements applicable to certain processed agricultural products and repealing Decision No 1/97 (2008/625/EC) (OJ L 202, 31.7.2008)

Decision No 1/2009 of the Joint Committee established under the Agreement between the European Coal and Steel Community and the Republic of Turkey on trade in products covered by the Treaty establishing the European Coal and Steel Community of 24 February 2009 amending Protocol 1 to the Agreement (2009/403/EC) (OJ L 143, 6.6.2009)

Decision No 1/95 of the EC-Turkey Association Council of 22 December 1995 on implementing the final phase of the Customs Union (96/142/EC) (OJ L 35, 13.2.1996) ("CU Decision")

Decision No 1/98 of the EC-Turkey Association Council of 25 February 1998 on the trade regime for agricultural products - Protocol 1 concerning the preferential regime applicable to the importation into the Community of agricultural products originating in Turkey - Protocol 2 concerning the preferential regime applicable to the importation into Turkey of agricultural products originating in the Community - Protocol 3 on rules of origin - Joint declaration concerning the Republic of San Marino - Joint Declaration (OJ L 86, 20.3.1998)

Decision No 2/2006 of the EC-Turkey Association Council of 17 October 2006 amending Protocols 1 and 2 to Decision No 1/98 on the trade regime for agricultural products (2006/999/EC) (OJ L 367, 22.12.2006)

Decision No 2/97 of the EC-Turkey Association Council of 4 June 1997 establishing the list of Community instruments relating to the removal of technical barriers to trade and the conditions and arrangements governing their implementation by Turkey (OJ L 191, 21.7.1997)

Decision No 624/2007/EC of the European Parliament and of the Council of 23 May 2007 establishing an action programme for customs in the Community (Customs 2013) (OJ L 154, 14.6.2007)

Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC (Text with EEA relevance) (OJ L 218, 13.8.2008)

Decree Law No 223 on State Economic Enterprises (OG 18435, 18.06.1984)

Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (Text with EEA relevance) (OJ L 241, 17.9.2015)

Directive 2001/14/EC of the European Parliament and of the Council of 26 February 2001 on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (OJ L 75, 15.3.2001)

Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance (OJ L 94, 28.3.2014)

Ministerial Decree on the Regime of Technical Regulations and Standardization for Foreign Trade

Ministerial Decree No 2012/3169 on Regulation on Mutual Recognition on the Non-harmonized Area

Proposal for a Council Decision on the position to be adopted on behalf of the European Union in the EU-Turkey Association Council COM/2012/092 final, 2012/0041 (NLE)

Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002)

Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (Modernised Customs Code) (OJ L 145, 4.6.2008)

Regulation (EC) No 764/2008 of the European Parliament and of the Council of 9 July 2008 laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State and repealing Decision No 3052/95/EC (Text with EEA relevance) (OJ L 218, 13.8.2008)

Regulation (EU) No 608/2013 of the European Parliament and of the Council of 12 June 2013 concerning customs enforcement of intellectual property rights and repealing Council Regulation (EC) No 1383/2003 (OJ L 181, 29.6.2013)

Regulation (EU) No 978/2012 of the European Parliament and of the Council of 25 October 2012 applying a scheme of generalised tariff preferences and repealing Council Regulation (EC) No 732/2008 (OJ L 303, 31.10.2012)

Regulation No 2001/3529 on the Exchange of Information on Technical Legislation on Goods and Standards between Turkey and the European Union (OG 24715, 17.01.2002)

Laws:

24 July 2014 (trademark), 15 May 2015 (trademark) and 2 June 2015 (trademark).

Act No 4054 on the Protection of Competition (OG 22140, 13.12.1994)

Amending Law of Patent, Design, Geographical Indications and Trade Mark Decree (1428)

Directive on the Landfill of Waste (OG 27533, 26.03.2010)

Law No 3154 on the Energy and Natural Resources Ministry of the Organization and Duties of the Decree No. 186 Decree on Changing Certain Provisions of the Law on the Adoption of the Amendment Decree (OG 18681, 01.03.1985)

Law No 4458 on Customs (OG 23866, 04.11.1999) ("Turkish Customs Code")

Law No 4646 on Natural Gas Market (Amendment of the Electricity Market Law and the Law on Natural Gas Market) (OG 24390, 02.05.2001)

Law No 4703 on Preparation and Implementation of Technical Legislation on Products (OG 24459, 11.07.2001)

Law No 4817 on Work Permits of Foreigner (OG 25040, 06.03.2003)

Law No 5015 on the Petroleum Market (OG 25322, 20.12.2003)

Law No 5194 on the Amendment Decree Law on the Protection of Patent Rights, Protection of Industrial Design, Protection of Geographical Indications, decree laws on the protection of Trademarks (OG 25504, 26.06.2004)

Law No 5366, Renovating, Conserving and Actively Using Dilapidated Historical and Cultural Immovable Assets Act (OG 25866, 16.06.2005).

Law No 5846 on Intellectual Property (OG 7981, 13.12.1951)

Law No 5977 on Biosafety (OG 27533, 26.03.2010)

Law No 5996 on Veterinary Services, Plant Health, Food and Feed (OG 27610, 13.06.2010)

Law No 6015 on State Aid Monitoring and Supervision (OG 27738, 23.10.2010)

Law No 6183 on Collection Procedure of Public Receivables (OG 8469, 28.07.1953)

Law No 6461 on the Liberalization of Railway Transport (OG 28634, 01.05.2013)

Law No 6518 (OG 28918, 19.02. 2014)

National Geographical Indication Strategy Document and Action Plan (2015-2018) and 2015/17 dated 18.06.2015 with the High Planning Council Decision (OG SC 29406, 04.07.2015)

Regulation Amending the Regulation on Genetically Modified Organisms and Products (OG 29014, 29.05.2014)

Regulation on Control of Packaging Waste (OG 28035, 24.08.2011)

Regulation on the General Principles of Waste Management (OG 26927, 05.07.2008)

Communiqués:

Communiqué No 1998/2 on the Amendment of the Article 4 of Communiqué 1997/1 on the Mergers and Acquisitions Subject to the Authorization of the Competition Board (OJ 23298, 26.03.1998)

Communiqué No 1998/3 Block Exemption Communiqué on Motor Vehicle Distribution and Servicing Agreements (OJ 23304, 01.04.1998)

Communiqué No 1998/4 on the Procedures and Principles to be followed for Pre-notifications and Applications for Authorization Made to the Competition Authority in order for the Permits to be Valid (OJ 23461, 12.09.1998)

Communiqué No 1998/5 on the Amendment of the Communiqué on the Procedures and Principles to be followed for Pre-notifications and Applications for Authorization Made to the Competition Authority in order for the Permits to be Valid (OJ 23527, 18.11.1998)

Communiqué No 1998/6 on the Amendment in the Communiqué on Obtaining Permission from the Competition authority on the Mergers and Acquisitions (OJ 23527, 18.11.1998)

Communiqué No 1998/7 Block Exemption Communiqué Regarding Franchise Agreements (OJ 23555, 16.12.1998)

Communiqué No 2002/2 Block Exemption Communiqué on Vertical Agreements, Amended by the Competition Board Communiqués No 2003/3 and 2007/2

Communiqué No 2012/2 on the Application Procedure for Infringements of Competition (OG 28390, 23.08.2012)

Communiqué No 2013/2 on the Procedures and Principles to be Pursued in Pre-notifications and Authorization Applications to be Filed with the Competition Authority in Order for Acquisitions via Privatization to Become Legally Valid (OG 28622, 18.04.2013)

Communiqué No 2013/3 Block Exemption Communiqué on Specialization Agreements (OG 28719, 26.07.2013)

Communiqué No 2015/1 Concerning the Increase of the Minimum Administrative Fines Specified in Paragraph 1 of Article 16 of the Act No 4054 on the Protection of Competition, to be Valid until 31.12.2015

Communiqué No 2016/1 on the Increase of the Lower Threshold for Administrative Fines Specified In Paragraph 1, Article 16 of the Act No 4054 on the Protection of Competition

Guidelines:

Guidelines on Horizontal Cooperation Agreements (2013)

Guidelines on Horizontal Mergers (2013)

Guidelines on Leniency Process (2013)

Guidelines on Non-Horizontal Mergers (2013)

Guidelines on Remedies that are Acceptable by the TCA in Merger/Acquisition Transactions (2011)

Guidelines on the Assessment of Exclusionary Abusive Conduct by Dominant Undertakings (2014)

Guidelines on the concept of 'Control' (2013)

Guidelines on the General Principles of Exemption (2013)

Guidelines on Undertakings Concerned, Turnover and Ancillary Restraints in Mergers and Acquisitions (2011)

ANNEXES

Annex A: Responses to Evaluation Questions

This annex summarises the findings of the analyses undertaken in the main study and organising them in the form of the ten evaluation questions posed in the ToR. The questions address the effectiveness (questions 1 to 6); efficiency (question 7), coherence (questions 8 and 9) and relevance (question 10) of the BPTF. EU added value is not addressed because trade policy is an area under exclusive competence of the EU (Art. 207 TFEU).

LEGISLATIVE ALIGNMENT

Q1: To what extent has Turkey aligned its legislation with that of the EU in the areas related to the CU? How big is the time gap between adoption in the EU and alignment of respective legislation in Turkey? As for the draft technical regulations in the non-harmonised field, does Turkey fully comply with notification obligations as set out in Directive 98/34/EC? What are the consequences on trade and on competitiveness?

With respect to the first part of the question, **alignment of legislation** has progressed at different speeds and to a different extent across various regulatory areas covered by the CU (as per Decision No 1/95):

- Regarding TBTs, after a slow start Turkey accelerated its alignment process from 2000 onwards, particularly motivated by Turkey's achieving candidate country status and pressure by the domestic export-oriented industry. Thus, the harmonisation process speeded up especially following the adoption of the Law on the Preparation and Implementation of Technical Legislation on Products (Law No 4703). A majority of the acts stipulated in Decision No 2/97 were incorporated during the peak years 2000-2002, while Turkey also started to improve its quality infrastructure by revising the institutional structure. Also, the level of transposition of standards by Turkey is high overall. In accordance with information provided by the Ministry of Economy and based on the data provided by TSE so far, Turkey has adopted over 34,000 (34,266) standards. Of these, 3,469 are ISO; 228 are IEC and 18,385 are European standards (CEN, CENELEC, and ETSI). Based on the TSE, 99% of European standards have been harmonised and accepted as Turkish standards.

  In sum, although Turkey undertook major efforts of alignment with the EU legislation and subsequent implementation, some barriers still remain.

- Turkey's *customs tariffs* have been largely aligned with the EU's CCT in the post-CU era, as stipulated in Article 13(1) of Decision No 1/95. Turkey also normally makes necessary amendments to its tariffs taking into account the changes introduced by the EU either unilaterally or under bilateral and multilateral trade negotiations. Thus, for the products falling under the provisions of Decision No 1/95, Turkey applies tariffs and preferential rates to third country products largely in line with the EU. Nevertheless, recent trends point towards a substantial misalignment for many tariff lines: Owing to domestic industry pressure, increased applied tariffs, thereby causing a deviation from the CCT in violation of its CU obligations. Additional duties of up to 50% can be imposed on many products by decree, which affects imports from third countries, including the GSP beneficiaries, and goods in free circulation in the EU. This practice has become a "new protectionist" measure in Turkey during the last two years and aims to protect domestic producers of a wide range of goods. It may also be noted that from 2011 until mid-2012 and from January 2013 until 4 August 2015, Turkey suspended the duties on unwrought aluminium unilaterally. In addition, Turkey continues to apply TRQs against third countries on some industrial products including electrical machinery and equipment, sound recorders, mattresses, machinery and mechanical appliances but does not bind them in her WTO Schedule of tariff commitments.

- The CU regime requires both Parties to take responsibility for the purposes of achieving the free movement of *agricultural products*. For this purpose, while it is Turkey's responsibility to adjust its policy to developments in the CAP (Article 25(1)) and make consultations within the Association Council for the measures it intends to take in adopting the CAP, the EU is expected to be mindful of Turkey's agricultural interest (Article 25(2)). However, so far Turkey's adoption of the CAP has not been achieved and the basis for a free movement of agricultural products is therefore still lacking. However, progress has been made by Turkey with regard to the implementation of EU rules on SPS measures, an important element in the context of the adoption of the CAP. Harmonisation is mostly undertaken in the context of the accession negotiations. The relevant chapter (Chapter 12 concerning Food Safety, Veterinary and Phytosanitary Policy) was opened in 2010, and Turkey has partially aligned its legislation in this area pursuant to Law No 5996 on Veterinary Services, Plant Health, Food and Feed (2010). More than 100 regulations under Law No 5996 have also been enacted.

- Article 28 of Decision No 1/95 obligated Turkey to adopt provisions in her *customs legislation* based on the Community Customs Code. The basic Customs Law No 4458 (referred to as the "Turkish Customs Code") was enacted in October 1999. In addition, since the establishment of the CU the EU has amended its customs legislation several times (the latest and most substantial one being the adoption by the EU of the Union Customs Code, Regulation (EU) No 952/2013), which obliged Turkey to transpose these changes into its own legislation. Also, Decision No 1/96 of the Customs Cooperation Committee was adopted to implement provisions applicable to trade in goods between the EC and Turkey and with third countries, thus introducing an integrated approach for customs. That Decision was replaced by Decision No 1/2001 which was repealed by Decision No 1/2006 of the Customs Cooperation Committee (the so-called "bridging legislation"). Decision No 1/2006 consolidated in a single framework all decisions of the Committee. Turkey adopted her implementing act in 2006 (Decision No 2006/10895) accordingly.

  The changes required by Article 28 of Decision No 1/95 have needed a wide-ranging reform of Turkish Customs, which was initiated in 2001 and is still ongoing today, with assistance by the EU.

- Turkey has adopted legislation on *intellectual, industrial and commercial property rights* in alignment with the *acquis* since 1995, and has established the TPI. The challenges ahead are mainly related to the enforcement of IP rights policies, as they require specific skills. Even though substantial training on IP rights related matters has been provided to a considerable number of judges, lawyers, enforcement staff, police force members, and customs officers, there is still room for capacity building. Furthermore, Turkey needs to improve the existing scheme of measures, procedures and remedies, mindful of the necessity to provide for a fair and equitable enforcement of IP rights.

- The Turkish *competition* legislation, Law No 4054, entered into force in December 1994. It was drafted mostly based on articles 85 and 86 (now Articles 101 and 102 of the TFEU) of the Treaty of Rome; and alignment of competition rules with the EU *acquis* is considered high. In terms of implementation of competition law, the Competition Board, which is the decision-making organ of the Competition Authority responsible for the enforcement of the Law, was appointed only in 1997 with a delay of 27 months. Since then, competition policy enforcement has well advanced. With regard to *state aid*, although Law No 6015, which was adopted in October 2010, is seen to be generally in conformity with the EU *acquis* on state aid, the secondary legislation including further alignment to EU state aid rules, particularly the guidelines regarding state aids and decisions by the CJEU towards implementation of the monitoring and control process have not yet entered into force. Moreover, certain state aid granted by Turkey – following the 2012 decree on the incentives package that extends its scope to sectors, such as chemicals, mining, and technology-intensive products, which now also grants additional tax incentives for large-scale, regional, or strategic projects – appears to not comply with EU legislation. As it stands, the regulation implementing the requirement to notify state aid schemes and measures are expected to enter into force on 31 December 2016 and the Commission's practice should to be taken into account in the implementation phase. Moreover, the State Aid Authority is yet to formally lay down a comprehensive state aid inventory or adopt an action plan to align all state aid schemes with the *acquis*. Some concerns have also been raised, regarding the administrative and operational independence of the State Aids Monitoring and Supervision Board.

- As opposed to the Treaty of Rome which excludes the possibility of employing *TDIs* among the EU Member States, Decision No 1/95 does not establish a requirement for Turkey or the EU to harmonise TDIs, but it nevertheless establishes the principle of consultation and coordination. However, no active coordination takes place between the parties during investigations, and the level of harmonisation of TDI against third countries is low.
- In the area of *taxation*, Turkey's practices in value-added tax legislation do not fully comply with the EU *acquis.* Also, Turkey's application of higher excise duties on tobacco products and alcoholic beverages constitute discriminatory practices.

Second, the **time gap between adoption in the EU and alignment of respective legislation in Turkey** has varied considerably across areas of regulation and over time. Presently, transposition in many cases takes up to two years. However, in other cases transposition may also take substantially longer; for example in the case of pharmaceuticals, legislation has not been harmonised yet.

Third, regarding **technical regulations in the non-harmonised field**, where mutual recognition is applied to prevent domestic regulations develop into TBTs, Turkey adopted its legislation, which entered into force on 1 January 2013. This was an important step to apply the mutual recognition to trade in products for which no significant harmonisation was achieved.

Finally, the **implications of regulatory convergence on trade and competitiveness** are difficult to assess. Nevertheless, the technical standards and regulations that were put into place in Turkey in accordance with the EU regulations, the EU's intellectual and industrial property rules, as well as competition disciplines have had a positive impact on Turkey's competitiveness in international markets and thus eased the Turkish economy's integration with the global economy.

Further details are analysed in Section 7.1 of the study.

COMMERCIAL POLICY ALIGNMENT

Q2: To what extent has Turkey aligned its commercial policy, including conclusion of the FTAs, with the EU commercial policy?

Commercial policy alignment has been assessed both in geographical and substantive terms; in addition, the impact of asymmetric FTAs has been addressed.

- *Geographical alignment:* Overall, Turkey's efforts to conclude FTAs with third countries are fully aligned with the EU commercial policy in geographical terms. Generally, Turkey has attempted to undertake and conclude trade agreements in parallel with the EU in order to comply with the common commercial policy. The launch of FTA negotiations with a third country typically occurs following the European Commission's initiation of its own negotiations with that country. The only case where Turkey has an agreement in place, but not the EU, is Malaysia. In this case, Turkey also entered into FTA negotiations after the EU, but Turkey's negotiations proceeded faster than the EU's. As a result, by implementing its FTA with Malaysia on 1 August 2015, Turkey is violating key provisions of the CU, in particular the principle of alignment to the EU customs tariff.

  On the other hand, several countries with which the EU is negotiating or has concluded FTAs have shown limited interest to have a similar trade agreement with Turkey. Ultimately, the willingness of the trading partners is an essential condition for Turkey to fully align its commercial policy geographically with that of the EU.

  As it stands, therefore, Turkey's alignment with the EU's FTAs can be deemed to be partly successful: the conclusion of parallel FTAs was possible in a number of countries but did not occur in other instances where the approached country did not reciprocate the interest in entering into a similar FTA with Turkey. This has led to the "asymmetry problem", discussed below.

  Within the framework of its commitments under the CU, Turkey is also expected to align itself with the autonomous customs regime of the EU. Turkey increasingly harmonized its GSP system with the EU system in 2002 and 2006 (UNCTAD 2007). Currently, Regulation (EU) No 978/2012 now forms the basis of Turkey's GSP scheme through which it offers unilateral preferences in parallel to those of the EU; the list of beneficiary countries is aligned with those in the EU GSP.

- *Substantive alignment:* Turkey's commercial policy alignment obligation under the CU mainly refers to the alignment of Turkey to the EU's preferential "customs" regime as stipulated in Decision No 1/95, without necessarily referring to the nature and substance of the trade agreements. In addition, Decision No 1/95 does not create an obligation for Turkey to substantively align its trade agreements with third countries in areas that are not covered under the CU. However, for a true alignment of commercial policy, a substantive calibration of trade agreements should be taken into consideration. In this sense, Turkey's FTAs with third countries should have similar arrangements to EU FTAs to prevent trade deflection under the CU.

  Overall, Turkey has not been as active as the EU to negotiate new areas like services, investments and regulatory convergence with its FTA partners. The majority of Turkey's FTAs concluded until recently typically cover trade in (industrial and agricultural) goods, are often restricted to tariff liberalisation and related issues, and do not include services nor investment chapters. However, both the changes in the EU's FTA policy and other countries' inclination towards deeper integrating and more ambitious commitments have had an influence on Turkey's own FTAs. Accordingly, Turkey has adopted a new FTA strategy which involves the negotiation and thus conclusion of new generation DCFTAs (such as the agreements with South Korea, Malaysia, Mauritius) that go beyond simple tariff elimination and which cover not only services and investment but also contain chapters on SPS, TBT, IP, competition, trade remedies, or dispute settlement, introducing WTO+ provisions. Ongoing negotiations with Japan, Mexico, Peru and Ukraine also foresee services and investment chapters.

  However, the advent of new generation FTAs in Turkey's trade strategy does not necessarily provide a strong commercial policy convergence. Although the EU's and Turkey's current trade strategies converge in terms of their priorities and wording, differences in their overall level of development, trade patterns, regulation of domestic policies, the degree of involvement in global supply chains, interests of domestic actors lead to differences in their understanding of trade strategies, thus making convergence in trade negotiations under bilateral and multilateral venues difficult to achieve. In this regard, an enhancement of the BPTF could help to motivate a more harmonised commercial policy.

With regard to the GSP system, Turkey has been offering unilateral preferences since 2001, limited to industrial products and industrial components of processed agricultural products only. However, Turkey applies additional duties, including on imports eligible under the GSP, which amounts to a non-alignment of its preferential tariff regime with the EU. Also, although Turkey has taken positive steps in aligning its ROO in the context of the GSP to that of the EU, rules on surveillance and management of tariff quotas have not yet been fully aligned.

- *Impact of asymmetric FTAs:* Turkey has to apply the EU's CCT for imports coming from third countries in accordance with Article 13 of Decision No 1/95. Accordingly, a third country that has an FTA with the EU but not with Turkey is entitled to export an industrial product to Turkey benefitting from the concessions accruing it through the FTA with the EU. Conversely, Turkey cannot export its goods directly to the market of the EU's FTA partner at the preferential rates agreed in the agreement, unless Turkey has a similar agreement. Some FTA partners of the EU refrain from negotiating a similar agreement with Turkey. Algeria, Mexico and South Africa are important examples of such countries with which Turkey has had sizeable trade imbalances.

  To address this, Turkey has recently been imposing an additional fiscal duty on motor vehicles originating in Mexico and being exported to the Turkish market via the EU. Turkish government officials who were interviewed for this study pointed out that although this instrument is only exceptionally applied Turkey might extend such measures to other products/countries in similar cases. They also stated that the measure was based on Article 58(2) of Decision No 1/95, which foresees the possibility for the parties to take measures to remedy the injury where discrepancies in the implementation of the commercial policy cause to impairment of free circulation of goods or deflection of trade. It would seem, however, that Article 58(2) would apply only in cases where "immediate action is required", and it is not clear that asymmetric FTAs constitute a case of "discrepancies between Community and Turkish legislation or differences in their implementation", to which the Article refers. Therefore, the Turkish practice would rather seem to be in violation of its CU obligations.

More details are provided in Section 7.2 of the study.

LIBERALISATION OF TRADE IN AGRICULTURAL AND FISHERY PRODUCTS

Q3: To what extent has the liberalisation of trade in agricultural and fishery products progressed?

Despite the fact that the agricultural sector remained outside the CU, preferential trade arrangements improved market access conditions in bilateral agricultural trade. On the EU side, most tariffs were eliminated, although some elements of trade protection were retained, including: specific duties for agricultural products, such as cereals, sugar, and olive oil; entry price system and seasonal ad valorem tariffs for fruit and vegetables; and high out of quota tariffs on TRQs. Turkey, on the other hand retained high tariff protection limiting the access to its market of EU agricultural exports. The simple average of Turkey's applied MFN rates is 104.3% for animal and products thereof; 125.1% for dairy products; 36.4% for fruits and vegetables; 37.4% for cereals; 84.5% for sugar and confectionary; 46.5% for spirits and tobacco. Turkey applies almost 40 TRQs for agricultural imports from the EU, and in most of the products the quotas are usually filled and exceeded by the EU exporters despite high above-quota tariffs. Therefore, trade preferences that were subject to quota limitations since 1998 would need to be expanded to provide larger market access.

Despite the continued presence of market access barriers, the counterfactual analysis suggests that agricultural and fishery trade was boosted by the BPTF, notwithstanding the partial nature of this liberalization, with the main impact being on EU oilseed sector exports and Turkey's fruit and vegetable sector exports.

Nonetheless, as the ECF and DCFTA scenarios show, there remains considerable room for additional trade from further liberalization.

More details are provided in Chapters 0 and 3 and 4 of the study.

PROMOTION OF EU-TURKEY TRADE AND ECONOMIC INTEGRATION

Q4: To what extent has the CU contributed to strengthening trade and economic relations between the EU and Turkey, and deepened the industrial, trade and economic integration between the parties?

The counterfactual analysis shows that the BPTF boosted bilateral trade between the parties, with the EU's exports to Turkey being about 10% higher than they otherwise would have been and Turkey's exports to the EU about 7% higher than they otherwise would have been, notwithstanding the preference erosion due to liberalization vis-à-vis third parties. The trend analysis shows that the EU's overall share in Turkey's trade declined during the BPTF period, while Turkey became somewhat more important for the EU as a trading partner, both as an export destination and a source of imports. The gravity modelling analysis suggests that the BPTF expanded goods trade in both directions initially but that Turkey's post-2001 opening up eroded the EU's position in Turkey's market while powering Turkey's export performance in the EU market. Services trade was minimally impacted by the BPTF, while the strengthening of FDI links was likely due primarily to Turkey's real growth, which increased its attractiveness as an FDI destination and generated new-found capacity for outward investment.

The overall sense of the analysis is that the BPTF acted to offset significant headwinds facing bilateral trade that emerged during the BPTF period, and kept the relationship larger and deeper than it otherwise would have been, even though the momentum in the deepening of the relationship ebbed in the latter part of the BPTF period.

More details are provided in Chapters 0, 3 and 4 of the study.

IMPACT ON ECONOMIC DEVELOPMENT AND COMPETITIVENESS

Q5: To what extent has the CU contributed to economic development in Turkey and in the EU, and has enabled increased competitiveness of the former on the global markets?

The analysis suggests that Turkey's progress up the technology ladder during the BPTF period was concentrated on medium-technology production, while higher-technology production failed to take off. Turkey was already a middle-income economy by the time the BPTF came into force. The subsequent transformation of the Turkish economy towards the profile of a high-income economy appears to have stalled midway during the period, as shown by the trend analysis. The counterfactual CGE analysis confirms that the BPTF favoured industrial production, including in the traditional textiles, clothing and footwear area, but does not have the granularity to expose whether the BPTF favoured or disfavoured higher-technology goods production. Whether the failure to break through into higher-technology production could be attributed to the comparative advantage effects of the BPTF which favoured EU high technology exports, or whether it reflected structural factors in the Turkish economy (e.g., weakness in the innovation system, weak SME performance, and the under-development of its professional business services) is not laid bare by the counterfactual. The analysis does suggest that Turkey's global competitiveness and growth prospects were improved as a result of the lowered cost of trade in industrial products with the EU, as well as through greater alignment of rules, which worked to improve Turkey's ability to make stronger undertakings in its recent FTAs with third parties.

More details are provided in Chapters 0, 3 and 4 of the study.

IMPACT ON SOCIAL INDICATORS

Q6: To what extent has the CU contributed to improving employment, living conditions and overall welfare in the EU and Turkey?

At the sector level, the BPTF has impacted on **employment** both in the EU and in Turkey by changing the sectoral composition. In the EU, the sector allocation effects were small: the BPTF resulted in employment in the oil seeds and vegetable oils and steel sectors being marginally higher than it otherwise would have been, while employment in textiles, clothing and footwear, and vegetables and fruits being marginally lower than it otherwise would have been. In Turkey, based on the foregone employment from removing the BPTF, the BPTF shifted employment creation towards construction (1.9% over baseline), textiles, clothing and footwear (1.4%) and the fishery sector (0.9%); and it shifted employment creation away from coal and steel (2.6% below baseline), insurance (2.4%), the oil seeds sector (2%) and the chemicals, rubber and plastics complex (1.8%). The BPTF impact on women's employment appears to have been slightly positive; its impact on youth employment cannot be determined from the available information.

With regard to the BPTF impact on overall **welfare**, the CGE analysis shows positive effects on household incomes (welfare) both in the EU and Turkey, of EUR 1.6 billion and EUR 7.5 billion, respectively. Given the small effects of the BPTF on the EU in terms of aggregate welfare and sectoral allocation of employment, the further analysis of the BPTF's social effects focussed on outcomes in Turkey.

The effect of the BPTF on **incomes** has been positive: it raised average disposable income and there is some evidence to suggest that the distributional effect was not regressive: not only have real minimum wages increased, but the increase in inequality observed in the period preceding the BPTF was reversed during the BPTF period. This is further supported by the modelling results that the BPTF contributed to growth in wages and the progressive income redistribution observed over the period 2010-14. As regards gender income equality, the BPTF impacts appear to have been mixed: some of the sectors benefitting most from the BPTF in terms of output (e.g., construction) saw a closing of the gender wage gap, while others, including trade and financial services, saw the wage gap actually widen.

The impact of the BPTF on **poverty** in Turkey is considered to have been positive: not only did the BPTF contribute to increasing incomes overall, but it also appears to have had a positive impact on income distribution.

Regarding **job quality and non-income related living conditions**, data regarding excessive working hours are not available for Turkey. Average working hours across sectors do not vary sufficiently as to draw any conclusions regarding the potential effect, which the BPTF may have had on working hours. Similarly, the impact of the BPTF on occupational health and safety cannot clearly be established.

In terms of **social protection**, the BPTF appears to have contributed to a strengthening overall in Turkey, but this was mostly concentrated in pensions and health, whereas family and unemployment benefits were not positively affected by the BPTF, nor were, as a consequence, women, who would have been the primary beneficiaries of spending on family benefits.

Finally, the effect of the BPTF on **social dialogue** in Turkey seems to have been limited to those firms and sectors that attracted increased investment from the EU; increased trade between Turkey and the EU does not seem to have had any noticeable impact on social dialogue.

A general weakness in the current BPTF framework is that social implications are not addressed explicitly in the legal documents. Therefore, any social benefits that have been achieved under the BPTF have "trickled down" from the economic impact. While this has worked reasonably well for employment, wages and income, at an aggregate level, specific benefits for women and youth, as well as progress in labour standards have been more limited. Although these have been pushed in the context of the bilateral policy and civil society dialogue, a stronger legal basis for this would have been desirable.

More details are provided in Chapter 5 of the study.

EFFICIENCY OF BPTF

Q7: To what extent has the EU-Turkey BPTF been efficient with respect to achieving its objectives?

The objectives of the BPTF are articulated in Article 2(1) of the Ankara Agreement.[119] These are "to promote the continuous and balanced strengthening of trade and economic relations between the Parties, while taking full account of the need to ensure an accelerated development of the Turkish economy and to improve the level of employment and the living conditions of the Turkish people." As the ex post analysis of the BPTF in this study has shown, these objectives have been achieved to a large extent.

To assess the efficiency of the BPTF with respect to its objectives two questions need to be answered: First, could the objectives of the BPTF have been achieved to the same extent with other instruments requiring fewer resources and/or a lower level of regulation? Second, could the BPTF instruments have led to a higher level of objective achievement?

To respond to the first question, the BPTF is compared to an alternative scenario, which would have required a lower level of regulation, i.e., an FTA between the EU and Turkey. However, judging from the ex post analysis of the BPTF, which has shown that large welfare gains in Turkey were the result of Turkey's liberalisation against third countries (due to the adoption of the CCT), it is unlikely that an FTA would have yielded the same level of outcome. This finding is further corroborated by the fact that the ex ante analysis shows very limited positive effects from a DCFTA, whereas the ECF (i.e., the expansion of the CU), leads to further welfare gains.

With regard to the second question, this study (as well as the 2014 World Bank study) has identified a number of areas where the BPTF could have performed better. These

[119] Other BPTF legal texts commonly refer to the objectives as stated in the Ankara Agreement.

include, in addition to the reduced scope of the CU which has had a limiting effect on CU objective achievement, the following institutional aspects:

- The lack of concrete *decision-making power bestowed on the CUJC* may leave it with limited authority to solve problems, thereby contributing to slower problem solution and impacting on the functioning of the CU. With the main decision-making power resting with the Association Council, the CUJC in most instances has to refer cases to the Association Council. As the Association Council meets only twice a year, this leads to delays in addressing problems. In addition, in the Association Council issues are handled in a political environment rather than at a technical level. For a rapid and efficient solution of problems and recurrent issues, the possibility of enabling the CUJC with the authority to take decisions could be explored.

- Although Decision No 1/95 entails the requirement for both Parties to *inform and consult* with each other while legislating, the practice does not seem to converge with the obligation weighing on the parties that is stipulated by the text. A restructuring of the consultation and information mechanisms could therefore be considered. With regard to information procedures, the Commission's 2012 proposal constituted an improvement to the current system; its adoption should therefore be reconsidered. The effectiveness of consultations foreseen under Decision 1/95 could be improved by making them compulsory and subject to dispute settlement.

- The *dispute settlement* mechanism that was foreseen in Decision 1/95 was based on Article 25 of the Ankara Agreement and as it stands suffers from inoperability due to its limited and restrictive nature that require parties' consensus for any dispute to be brought before the Court and lays down a tool that will mainly regulate disputes in relation to "the scope or duration of protection measures taken in accordance with Article 58 (2), safeguard measures taken in accordance with Article 63 or rebalancing measures taken in accordance with Article 64". Given its advantages and subject to parties' agreement, a mechanism whereby consultations followed by arbitration and mediation could be employed as a successful dispute resolution mechanism to tackle all matters in relation to the interpretation or application of the bilateral agreement. Once again, the compulsory and exclusive nature of the CJEU to interpret the TFEU remains to be reserved.

Overall, given the identified shortcomings, the EU-Turkey BPTF is considered to have been partly efficient with respect to achieving its objectives, with a number of areas presenting room for improvement.

INTERNAL COHERENCE OF BPTF

Q8: To what extent are individual pieces of the EU-Turkey BPTF coherent among themselves?

Presently, the BPTF is comprised of several legal bases: the *EU-Turkey Association* Council Decision No 1/95 has established the CU, covering industrial and processed agricultural goods. Agricultural and fishery products are covered by Decision of the EU-Turkey Association Council No 1/98, and coal and steel products by the CSA of 1996. In addition, negotiations on Turkey's accession to the EU began in 2005, also covering trade between the parties.

From one perspective, coherence between the various Agreements in terms of product coverage is high, given that they all address different goods; no overlap in terms of product coverage exists. However, the fact that the BPTF actually comprises a CU for some goods and a preferential trade agreement for others creates different regimes for trade in goods between the parties which could well be interpreted as lacking coherence.

In particular, the application of a lower-cost trading regime for CU goods versus for AFTR/CSA goods creates a bias in favour of CU goods, which is an internal distortion to the pure forces of comparative advantage. Similarly, the absence of a regime for services generally tilts the playing field in favour of industrial trade over services trade.

Finally, the lack of harmonised trade defence regime affects free circulation of goods under the CU in cases where only one party imposes measures on third countries.

COHERENCE OF THE BPTF WITH EU COMMERCIAL POLICY

Q9: To what extent is the EU-Turkey BPTF coherent with the recent EU commercial policy, in particular with the concept of recently negotiated DCFTAs?

The BPTF is a unique trading arrangement that is not closely aligned with EU commercial policy in general. For CU-covered industrial goods, it is much deeper than DCFTAs with third parties; for CSA products it is deep but narrow FTA; for AFTR products, it is a shallow and unbalanced FTA. The lack of coverage of services, investment, and public procurement distinguishes it from recent EU DCFTAs. At the same time, while it lacks the many additional features of EU DCFTAs, the alignment process that parallels the BPTF provides a stronger impetus to reduction of bilateral trade and investment frictions than can be expected from DCFTAs, which harmonize regulations only in limited areas and which put in place more complex operating conditions for the evolution of value chains in industrial products than prevail for EU and Turkish producers under the CU.

RELEVANCE OF THE BPTF

Q10: To what extent is the current EU-Turkey BPTF still relevant for the needs of the EU and Turkey?

The BPTF provides a strongly preferential trading arrangement for the parties. For the EU it covers important goods trade interests with an economic partner that has been growing in importance over time as a destination for EU exports; for Turkey, it provides highly advantageous market access for goods trade to its important economic partner, and serves as an anchor for an open, trade-oriented economic and commercial policy. At the same time, given the increasing importance of non-traditional trade interests, the BPTF stands out for its limited coverage of emergent issues.

In terms of pure trade potential, the BPTF does not leave much unexploited potential: as can be seen from the ECF analysis (see table below), the remaining scope for bilateral liberalization of tariffs in an FTA context generates only limited gains.

	Real GDP %Change					Economic Welfare (USD millions)				
	Tariffs and ROOs	Goods NTBs	Services NTBs	FDI NTBs	**Total**	Tariffs and ROOs	Goods NTBs	Services NTBs	FDI NTBs	**Total**
EU28	**0.000**	0.005	0.003	0.000	0.007	1,571	5,451	532	2	5,388
Turkey	**0.106**	1.209	0.122	0.001	1.438	-742	12,587	2,118	9	12,522

As can also be seen from the ECF analysis, neither the BPTF nor the alignment process have been fully successful in reducing NTBs to trade.

Further, the BPTF's asymmetric structure has become a problematic factor. From the perspective of Turkey, which is a small, open economy, it is unavoidably a "rule taker" in international commerce. Hence the alignment with international regulation (and primarily with the EU's given the dominant role of the EU in Turkey's trade) is unavoidable and welfare-enhancing for Turkey. However, the CU's obligation for unilateral liberalisation by Turkey vis-à-vis EU FTA partners weakens Turkey's leverage to obtain reciprocal commercial concessions from the EU FTA partners and also imposes on Turkey commercial policy changes in which it has no say over the timing or depth, which can impact on its own industrial interests. This issue, which looms especially large in the shadow of the TTIP negotiations, has led to dissatisfaction on the Turkey side and contributed to lack of compliance: "surveillance measures, external tariff increases, safeguard measures, NTBs and regulatory restrictions" (European Commission, August 2015: 2).

The BPTF also lacks the instruments to address services, agriculture, investment, public procurement, etc.; this limits its relevance for addressing the emerging issues that both economies face, although the practical consequences of this feature of the BPTF is mitigated at least partially by the alignment process.

Finally, the lack of a functioning dispute settlement mechanism has prevented systematic and rule-based responses to deficiencies in the functioning of the CU.

Annex B: Gravity Model for Measuring Trade Creation and Trade Diversion in the EU-Turkey Customs Union

This annex develops a gravity model-based evaluation of the effects of the EU-Turkey BPTF on trade in industrial goods, trade in services, and on FDI. Section 1 provides a brief background discussion of the use of the gravity model for ex post analysis of policies; Section 2 develops a gravity model-based analysis of the impact of the BPTF on trade in industrial goods; Section 3 develops a gravity model-based analysis of the impact of the BPTF on trade in services; and Section 4 develops a gravity model-based analysis of the impact of the BPTF on FDI.

1 GENERAL BACKGROUND

The gravity model is widely used for empirical analysis of the impact of policies or natural factors, such as distance and economic size, on the pattern of global trade and investment. The gravity model is based on an analogy to the physical theory of gravity, which states that the force of gravity is related positively to the mass of the bodies and inversely related to the square of the distance between them, all multiplied by the gravitational constant. In application to trade and investment, masses are replaced by measures of economic size (e.g., GDP), the effect of distance is allowed to vary, and the gravitational constant is replaced by a vector of factors that can influence the intensity of trade between two parties.

Gravity equations can be derived as reduced form equations from all the standard trade theories, including the modern workhorse heterogeneous firms theory. For recent reviews of the theoretical foundations for the gravity equation in trade, see Anderson (2010), Bergstrand and Egger (2011), and Costinot and Rodríguez-Clare (2013). Olivero and Yotov (2012) develop the basis for a dynamic gravity model to support use of the equation using panel data (for examples of dynamic panel methods, see inter alia De Benedectis and Vicarelli, 2005; and Egger et al., 2011).

A consensus cannot be said to exist on the appropriate research design and choice of statistical estimation technique to measure the impact of preferential arrangements on trade or investment using gravity modelling.

The impact of preferential arrangements, such as the BPTF, involves Vinerian trade creation between the parties to the arrangement, and trade diversion away from third parties. In terms of research design, Carrere (2006) addresses the issue of trade diversion using dummy variables; the World Bank (2014) gravity model study followed the research design of this particular study. However, Cardamone (2009) criticizes the use of dummies, rather than preference margins to identify the marginal effect of FTAs on trade. This drives at the fact that no two FTAs have the same amount of "work" to do in liberalizing a relationship. Meanwhile, Baier et al. (2015) show that the heterogeneity in various agreements' impact on trade far exceeds what can be explained by variation in the depth of the trade liberalization in the agreements, with the main factor being differences in other determinants of trade costs, including differences in cultural characteristics (e.g., religion).

The intensity of bilateral trade or investment is also impacted by the remoteness of country pairs from other alternative markets. Thus, for example, Australia and New Zealand trade far more intensively with each other than Austria and Portugal, although the size of the economies and the distance between them is very similar; this is the case even when controlling for the various known factors affecting trade costs. This difference in intensity is explained by the fact that between Australia and New Zealand lie the Tasman Straits and both are remote from third market, whereas between Austria and Portugal lie major European markets and both economies have many nearby alternative markets. This factor, along with issues, such as the varying height of barriers to alternative markets, is captured by the concept of "multilateral resistance" (Anderson and van Wincoop, 2003).

The issues surrounding estimation techniques also remain open. It is generally accepted that the conventional ordinary least squares (OLS) method leads to inconsistent estimates (in addition to suffering the disadvantage of not being able to handle observations where trade is zero, requiring that these observations be omitted from the analysis).

Helpman et al. (2008) extend Heckman's selection method to take into account the heterogeneity of firms. The intuition is that, if at least one firm in a country is productive enough to export, country-level exports in that case will be positive. An observation of zero exports implies no firm in that country is productive enough to export profitably. In this manner, information that would normally require firm-level data is extracted from country-level data. Using a two-stage selection method controls, in theory, for both the extensive margin (selection stage) and the intensive margin (scale of exports conditional on there being positive trade). Notably, this method also deals with the issue of zero trade between country pairs.

Another method of addressing zeroes in the trade matrix is to use the Poisson Pseudo Maximum Likelihood (PPML) estimator, which has been used in a number of recent gravity studies. Santos Silva and Tenreyro (2006, 2015) show that PPML successfully addresses the issues of heteroskedasticity and zeroes in bilateral trade flows and is consistent with the structural gravity model of Anderson and van Wincoop (2003), which provides theoretical foundations for gravity modelling of trade.

There are, accordingly, a range of issues concerning gravity estimates of the impact of arrangements, such as the BPTF, on the intensity of bilateral trade in goods and services and on FDI that remain open.

2 THE IMPACT OF THE BPTF ON BILATERAL TRADE IN GOODS

As the historical review of trends in trade in goods showed, overall bilateral trade in goods between the EU and Turkey expanded very strongly during the BPTF period. The trend analysis also suggests that trade in BPTF-covered goods expanded much more than trade in non-BPTF-covered goods. Moreover, there is a prior expectation that the BPTF enhanced bilateral trade as it reduced the cost of industrial goods covered by the CU. However, identifying a clear-cut impact of the BPTF on bilateral goods trade from trend analysis alone is difficult, given the many other factors that impacted on the intensity of the bilateral trade relationship during this period, including the multilateral liberalization under the WTO Agreement, China’s accession to the WTO and the expansion of its share of both parties’ trade, the deterioration of the economic climate in West Asia, and the various episodes of turbulence, including the emerging market crisis of the late 1990s-early 2000s which contributed to Turkey’s balance of payments crisis in 2001, and the global economic and financial crisis of 2008-2009.

Applying a gravity model helps shed light on whether a statistically significant impact can be identified of the CU on bilateral industrial goods trade.

2.1 Review of the Literature

The effect of the BPTF on bilateral trade flows has been studied using gravity model analysis in several papers in recent years. This literature features a very wide range of estimates as to whether or not the CU had a positive impact on EU-Turkey trade, with some studies finding large positive impacts and others finding no significant impact or even, counter-intuitively, a negative impact. Some studies reach different conclusions for Turkey’s exports to the EU versus for the EU’s exports to Turkey.

A principal resource for the present study is the World Bank (2014) review of the CU. This study includes a gravity model assessment of the impact of the CU on bilateral EU-Turkey trade and fails to identify a statistically significant positive impact; indeed, in many of the reported equations, the effect is found to be negative. The World Bank study uses panel data covering the period 1990-2010 and focuses on separately identifying trade creation within the CU and trade diversion. To do this, it introduces the following dummies: *CUEU-TUR* is a dummy variable equal to one if the importer and exporter are either the EU or Turkey (zero otherwise); this dummy captures intra-bloc trade. *DM CU* is one if the importer is either the EU or Turkey and the exporter is a country from the rest of the world (zero otherwise); this dummy captures bloc imports from the ROW. *DXCU* is one if the importer is the rest of the world and the exporter is either the EU or Turkey (zero otherwise); this dummy captures bloc exports to the ROW. The study obtains a coefficient for the intra-CU dummy of 0.2, suggesting a 22% increase in trade due to the CU (=exp(0.2)-1); however, this effect is not statistically significant in the World Bank's regression. The regression also finds positive trade diversion (i.e., imports from the rest of the world increase rather than decrease) from the CU of 15%, and positive trade deflection (i.e., exports to the rest of the world increase rather than decrease) of about 15% as well. The trade diversion and trade deflection coefficients are statistically significant. This study poses interpretational challenges since the coefficient on the CU dummy is positive in the panel but negative in each individual annual cross-section (see Table 17). Further, in the probit regression used for the selection stage, the coefficient values include negatives for importer and exporter GDP and a trade deflection coefficient of 1.068, which implies a 191% increase in CU bloc exports to the rest of the world as a result of the CU.

Magee (2016), using data from 1993 and 1996-2010, and relying on the PPML estimator, finds that the EU's exports to Turkey rose by between $135 billion and $166 billion over the 1996–2010 period as a result of the CU, or by 25–30% of the EU's exports to Turkey, and equivalent to about 14–17% of Turkey's total imports. Most of these trade impacts were estimated to be trade creation. Trade creation accounts for $100–$119 billion of the increased trade flows, while $35–$47 billion of the increase in bilateral trade is due to trade diversion.

Akan and Balin (2016) use panel data covering the period 1980-2013 to estimate the impact of the CU on EU15-Turkey trade, using an OLS estimator and random fixed effects. They find a negative but insignificant coefficient for Turkey's exports to the EU15 and a positive but insignificant coefficient for Turkey's imports from the EU15. They conclude the CU had no significant impact on EU15-Turkey trade. We observe that the GDP variable in their equation has twice the expected value of about unity, which suggests a specification issue, and/or an issue with the choice of estimation technique (the use of OLS is not considered to allow for robust estimates in this context).

Golovko et al. (2015) study Turkey's bilateral trade flows over the period 2004-2014 using panel data for more than fifty countries. They conclude that the CU and the trade preferences it affords are not enough to make Turkey's trade relations with the EU special.

Adam and Moutos (2008), using the OECD's STAN Bilateral Trade database with coverage for the period 1988-2004, estimate that the CU raised EU15 exports to Turkey by 65% while increasing Turkey's exports to the EU15 by 31% over the period from 1996 to 2004.

Bilici et al. (2008), using panel data covering Turkey's trade over the period 1992-2006, conclude that the CU increased the EU's importance in Turkey's trade flows only marginally.

Nowak-Lehmann et al. (2007), using data covering the period 1988-2002 for Turkey's sixteen most important export sectors, find that the CU boosted Turkey's exports to the EU by between 1.2% and 38%, depending on the product, with a simple average increase of 6.8%.

Neyapti et al. (2007) find that Turkey's bilateral trade with the EU rose due to the CU, with bilateral exports rising 17% and imports by 47%, and also that the price elasticity of Turkey's imports from the EU fell, which may be associated with harmonizing rules and regulations and removing TBTs.

Antonucci and Manzocchi (2006), using Turkey's bilateral trade flows between 1967 and 2001, estimate a gravity model that generates the following conclusions: (i) the gravity model provides a good fit of Turkey's trade patterns, and (ii) the coefficient on the CU dummy for Turkey's imports from the EU is 0.063, implying about a 6.5% increase, but the standard error is 0.045, which makes this result borderline insignificant; and the coefficient on the CU dummy for Turkey's exports to the EU is 0.024 but the standard error is 0.104, which makes the result highly insignificant.

Kandogan (2005) examines the effect of the CU on Turkey's imports in five sectors: (1) Resource-intensive industries; (2) labour-intensive industries; (3) human capital-intensive, low-technology industries; (4) human capital- and labour-intensive, high-technology industries; and (5) human and physical capital-intensive high technology industries. This study finds that the CU boosted trade in all sectors by varying degrees, ranging from 0.21% to 2.04%.

Ketenci (2014) finds that the CU had a limited effect on trade with EU countries while the lower external tariffs of the CU have had a more significant effect on Turkey than the CU itself.

A notable non-gravity study, Aytug et al. (2015), using non-parametric methods, finds that the CU boosted Turkey's exports to the EU by 38% in 2013, compared to what they would have been otherwise.

The empirical literature, at this point, has not reached a consensus on the impact of the CU on bilateral EU-Turkey trade.

2.2 Methodology

To add value to the existing body of analysis, we estimate a gravity model to capture the impact of the CU using the PPML estimator, which, as noted above, is the main alternative estimation technique to the two-stage Helpman et al. model that did not yield robust results in the World Bank (2014) study.

While it is of some interest to determine the extent of trade diversion and deflection generated by the trade creation induced by the CU, this is of secondary interest to the question of whether there was trade creation generated by the CU. As the World Bank study pointedly notes, the estimates of trade diversion and deflection are meaningless if there is no robust estimate of trade creation in the first place. Accordingly, in this study we focus on the trade creation issue.

The equation we estimate is as follows:

$$\mathrm{Tij} = \beta_0 + \beta_1 \ln D_{ij} + \beta_2 \ln Y_i + \beta_2 \ln Y_j + \beta_3\, G_{gij} + \beta_4 CU + \varepsilon$$

In this equation:

T_{ij} denotes imports of country *i* from country *j*

D_{ij} denotes the distance between country *i* and country *j*

Y_i denotes the GDP of country *i*

Y_j denotes the GDP of country *j*

G_{gij} are additional variables, indexed by *g* that vary by equation, including:

- CU where the value is set to 1 if the origin or destination of a trade flow with Turkey is an EU Member State post implementation of the CU
- *Contiguity – Europe where the value is set to 1 if the origin or destination is in Europe and contiguous with Turkey*
- *Contiguity – Other where the value is set to 1 if the origin or destination is contiguous with Turkey but is not in Europe*
- RTA – e.g., CU, where the value is set to 1 is a regional trade agreement is in force, excluding the CU with the EU.

Note: in the nomenclature, the suffix "d" is for destination country and "o" is for origin country. All trade and GDP data are in current US dollars, avoiding issues of deflation.

2.3 Data

The trade panel data are partner imports from Turkey and Turkey imports from its partners sourced from UN COMTRADE for 224 countries for the years 1990-2014. Other variables for the model are taken from CEPII's gravity dataset covering the period to 2006 and augmented for the period 2007-2014. Population, GDP and GDP per capita in the CEPII file were updated with current data reported from the IMF World Economic Outlook Database.

Two hundred and sixty four (264) observations were excluded due to mapping issues. This represents 2% of the transactions over the period and 4% of the value. Seventy one percent (71%) of the excluded transactions were for trade between Turkey and various Free Zones,

An important feature of the statistical record on Turkey's trade is that there are missing observations that do not appear to be instances of no trade, but rather missing records. Previous research has remarked on this (e.g., Nowak-Lehmann et al., 2007: 11). This muddies any attempt to draw information from instances of zero trade, as per the Helpman et al. 2008 method used in the World Bank (2014) study, and also potentially compromises estimates using the PPML estimator, which would interpret a missing observation as zero trade.

The general expectation is that, for any given trade flow, the importer-reported data are more reliable than exporter-reported data. This reflects the fact that imports attract tariffs and customs authorities pay careful attention to the source of the products. Exports meanwhile are often recorded as going to the first destination abroad, resulting in over-statement of exports to points of trans-shipment and under-statement of exports to many final destinations.

With Turkey, however, the trade data do not fall into this conventional pattern. Over the period of observation, Turkey reported exports in 53 instances to markets that did not report imports from Turkey. Through the period 1990-2014, Turkey reported USD 1,615 billion in exports to the world; importers reported USD 1,467 billion in imports from Turkey through the same period – a gap of USD 149 billion. Normally, import values would exceed export values. Accordingly, there is an unusual degree of uncertainty concerning the robustness of the underlying trade data.

2.4 Results

Table 1 reports the results for regressions run separately for Turkey's imports, Partner imports from Turkey, and two-way trade between Turkey and its partners. As well, we consider four periods: 1990-2000, the period that covers the entry into force of the CU and the post-Uruguay Round liberalization; 2001-2007, the period that covers the BOP crisis and post-crisis recovery; 2008-2009, the global financial crisis years; and 2010-2015, the post crisis period

In these results, the core gravity model independent variables – GDP of both the importer and exporter and bilateral distance – fall into the expected range and are little affected by the inclusion or exclusion of additional variables. The RTA ex CU variable has little explanatory power and often has the wrong sign. Using a single variable for contiguity resulted in coefficients with the opposite sign to that which is expected; this appears to reflect the role of conflict in the Middle East, as well as historical legacy. Differentiating contiguity by region (Europe versus other), the results differ, confirming that neighbourhood effects reflect factors other than trade costs. The common language variable also has little explanatory power and was excluded as an independent variable as there is only one country – Cyprus – that shares a common language with Turkey. Regressions with this variable generated coefficients that were likely influenced by other factors in the relationship.

Table 1: Main Results for CU impacts on goods trade

	Turkey Imports	Partner Imports from Turkey	Two-way trade
1990-2015			
ln(gdp_o)	0.96	0.78	0.99
ln(gdp_d)	0.8	0.86	0.82
ln(distwces)	-1.16	-1.07	-1.12
RTA-ex CU	-0.49	0.17	-0.27
Contiguous - Europe	-0.54	-0.59	-0.56
Contiguous - Other	0.14	0.06	0.16
Customs Union	**-0.44**	**0.37**	**-0.14**
Pseudo R2	0.90	0.89	0.87
Observations	4522	4258	8780
1990-2000			
ln(gdp_o)	0.88	1.4	0.97
ln(gdp_d)	1.71	0.97	0.83
ln(distwces)	-0.98	-1.12	-1
RTA-ex CU	-0.34	-0.36	-0.29
Contiguous - Europe	-0.95	-0.91	-0.93
Contiguous - Other	0.01	-0.51	-0.11
Customs Union	**0.12**	**0.4**	**0.33**
Pseudo R2	0.90	0.83	0.85
Observations	1833	1744	3577
2001-2007			
ln(gdp_o)	0.96	0.47	0.93
ln(gdp_d)	0.65	0.88	0.85
ln(distwces)	-1.32	-1.09	-1.18
RTA-ex CU	-0.57	0.12	-0.33
Contiguous - Europe	-1.01	-0.46	-0.74
Contiguous - Other	-0.02	0.12	0.05
Customs Union	**-0.68**	**0.4**	**-0.23**
Pseudo R2	0.88	0.92	0.87
Observations	1254	1175	2429
2008-2009			
ln(gdp_o)	1.03	1.17	1.04
ln(gdp_d)	1.51	0.8	0.84
ln(distwces)	-1.43	-1.16	-1.33
RTA-ex CU	-1.13	-0.14	-0.75
Contiguous - Europe	-1.05	-0.63	-0.82
Contiguous - Other	-0.13	-0.41	-0.14
Customs Union	**-1.01**	**0.07**	**-0.61**
Pseudo R2	0.90	0.87	0.87
Observations	360	336	696
2010-2015			
ln(gdp_o)	1.01	1.32	1.05
ln(gdp_d)	0.86	0.83	0.83
ln(distwces)	-1.18	-1.08	-1.15
RTA-ex CU	-0.45	0.22	-0.2
Contiguous - Europe	-0.07	-0.63	-0.3
Contiguous - Other	0.2	0.2	0.28
Customs Union	**-0.49**	**0.33**	**-0.19**
Pseudo R2	0.90	0.87	0.87
Observations	1075	1003	2078

Source: Calculations by the study team.

Over the full sample, the CU dummy has the expected positive sign and is statistically significant for partner imports from Turkey. This is consistent across time periods. However, the CU dummy has a negative sign for Turkey's imports from the EU. This reflects the fact that the CU required Turkey to liberalize its imports from EU FTA partners and GSP beneficiaries; this reduction of trade diversion in favour of bilateral intra-CU trade appears to have dominated the bilateral trade cost reduction between Turkey and the EU under the CU. For the full two-way trade sample, the reduction of trade diversion effect dominates and the effect of the CU is seen to be negative. However, seen from the perspective of improving welfare, reduction of trade diversion is a positive for Turkey.

For 1990-2000, the CU dummy had a positive sign for all trade flows indicating that the early days of the CU resulted in increasing both Turkey's imports from the EU, as well as the EU's imports from Turkey.

3 THE IMPACT OF THE BPTF ON BILATERAL SERVICES TRADE

Services were not subject to the BPTF and thus the impact on services trade between the EU and Turkey was indirect, running through the impact on goods trade, which was subject to the BPTF, or through the broader commitment for approximation of laws.

On a priori grounds, the BPTF would be expected to have worked to stimulate bilateral services trade through some effects and to discourage it through other effects.

The positive effect will have come from the complementarity between goods trade and services trade, from the consequential impact of bilateral FDI motivated by the low-cost bilateral industrial goods trade framework on the flow of bilateral services (e.g., headquarters services from the home to the host country), and from the reduction of services trade costs from greater alignment of regulations.

The negative effect will have come through the forces of comparative advantage, which will have worked to favour goods trade between the EU and Turkey and, by the same token, to disfavour services trade.

Overall, there is no prior expectation that the BPTF had a major impact on bilateral services trade one way or the other, since the above-mentioned factors work in offsetting directions.

The trend analysis shows that Turkey's services sector developed well during the BPTF period, growing from below-average as a share of GDP for its income class to about average. Turkey indeed became a prominent services exporter in several categories, including insurance, construction and tourism. There was one major exception, however, namely business and professional services, where Turkey's export performance lagged badly the performance in comparator countries. Moreover, the lagging export performance on business and professional services largely accounts for the divergence in Turkey's overall services export performance vis-à-vis comparator countries.

The gravity model has been successfully applied to trade in services (e.g., Anderson et al., 2015), although the literature is thin compared to that on trade in goods, in part because the data availability on bilateral trade flows is much more limited.

In this section, accordingly, we focus on professional and business services to determine whether the under-performance could be attributed to the BPTF.

3.1 Methodology

We estimate a conventional panel model in which trade data vary over time, sector and country, and introduce the conventional indicators of trade costs (distance, common language, etc.) along with measures of the degree of economic freedom in the home and host countries, as indicators of general business climate, and measures of the restrictiveness of the trade regime.

The equation we estimate is as follows:

$$\ln T_{ij} = \beta_0 + \beta_1 \ln D_{ij} + \beta_2 \ln Y_i + \beta_2 \ln Y_j + \beta_3 G_{gij} + \beta_4 CU + \varepsilon$$

In this equation:

- Tij denotes exports of business and professional services from country i to country j
- Dij denotes the distance between country i and country j
- Yi denotes the GDP of country i
- Yj denotes the GDP of country j
- Ggij are additional variables, indexed by g, that impact on bilateral trade costs, including:
    - Common official language
    - Common currency
    - Economic freedom in the source country
    - Economic freedom in the destination country
    - Services trade restrictiveness index score in the destination country
    - “Water” in the destination country (i.e., the gap between the bound and applied services trade regimes)
    - EU membership
    - CUij is a dummy variable which takes the value one if countries i and j are party to the CU.

3.2 Data

The OECD’s Trade in Services database has 12 sectors, namely: accounting, computer services, courier services, legal services, telecoms, transport (air, maritime, road, and rail), construction, and commercial banking and insurance. We focus on accounting, computer, courier, and legal services. Our sample covers the aforementioned four service sectors for the 40 countries listed in the panel below for the five-year period 2008-2012.

Table 2: Regions in the Gravity Model for Services

EU Member States	Other Economies
Austria	Australia
Belgium	Brazil
Czech Republic	Canada
Denmark	Chile
Estonia	China
Finland	Iceland
France	India
Germany	Indonesia
Greece	Israel
Hungary	Japan
Ireland	Korea
Italy	Mexico
Luxembourg	New Zealand
Netherlands	Norway
Poland	Russia
Portugal	South Africa
Slovakia	Switzerland
Slovenia	**Turkey**
Spain	United States
Sweden	
United Kingdom	

As regards the sources of the gravity data, GDP in current US dollars is drawn from the IMF's World Economic Outlook Database. Other gravity variables come from the CEPII gravity dataset. The index of economic freedom (EFI) is taken from the Fraser Institute. The measures of trade restrictions include the OECD's Services Trade Restrictiveness Index (STRI) as developed by Geloso Grosso et al. (2015), which measures applied restrictions; and the GATS Trade Restrictiveness Index (GTRI), as developed by Miroudot and Pertel (2015). The difference between the GTRI and STRI ("water in the GATS") measures the uncertainty surrounding the applied regime.

3.3 Results

Generally speaking, the gravity modelling framework fits the data reasonably well, albeit less well than in the case of goods.

Bilateral trade in business and professional services is positively correlated with the size of the exporting and importing economies with coefficient estimates in a plausible range (about 0.8 for destination and about 0.6 for source countries).

Physical distance has a negative impact on bilateral trade, but its impact depends on whether we take into account the positive effect on services trade of differences in time zones. The greater the differences in time zones, the greater the extent of cross-border trade in business and professional services; this is consistent with the distance/proximity trade-off in investment decisions, where larger distances motivate FDI to avoid shipping costs in the case of goods, and establishment of offices abroad to provide 24 hour coverage in the case of services. If we include the difference in time zones, the distance coefficient for cross-border services increases to approximately the same size as is found for goods; excluding time zone differences, the distance coefficient falls to the 0.3 to 0.4 range, depending on the exact roster of explanatory variables. In short, east-west distance matters more then north-south.

The impact of a common language and currency, as well as the value of being a member of the EU all appear to be eminently reasonable in terms of size and sign. Common currency is a positive factor but its precise contribution is hard to evaluate because it is relatively strongly correlated with a number of other factors, which results in the coefficient lacking stability, with sharp shifts in its value depending on what other explanatory variables are included in the equation. This is hardly surprising given the strong convergence conditions that are required for entry into a common currency (in this case, the only common currency is the euro). One important consequence is that the common currency variable affects the coefficient on the dummy for the EU single market; depending on the exact specification of the equation, the regression shifts explanatory power from one to the other.

Economic freedom in the destination and source countries has a powerful effect on the level of bilateral services trade and interacts with the level of restrictiveness of the cross-border services trade regime. Again, this accords with intuition, since economic governance regimes that feature greater government intervention tend to be more restrictive on indices of market access.

There is also a noteworthy correlation between time zone differences and readings on the economic freedom index. Our sample has a heavy North Atlantic component. In the North Atlantic region, there is comparatively little government intervention in the economy; in East Asia, the other major source of countries for the database, there is a greater degree of government intervention. In our view, the more plausible reading of the data is that economic freedom rather than time zone differences has the greater weight in affecting trade – in other words, we view the time zone differences as acting as a proxy for the differences in economic freedom, rather than the reverse. Accordingly, in our final equation, we drop time differences.

Introducing the CU variable into the mix generates results that depend on the specification. The study team's considered opinion is in favour of a reasonably specified equation that produces a near-nil outcome, as shown in Table 3.2 below.

Note that the size of the coefficient for the Economic Freedom variable reflects the small degree of variation in the index, which nonetheless correlates very well with the pattern of trade amongst the countries in the dataset.

Further, note that the coefficient for "water" is half that of the coefficient for the STRI, which is consistent with the findings of Ciuriak and Lysenko (2016) concerning the relative restrictiveness of applied measures vs. uncertainty created by the practice of having bound commitments being more restrictive than applied practice.

Against this background, the insignificant impact of the CU dummy is rendered the more persuasive. Finally, note that the same specification estimated in a panel time-series, cross-section regression yields an estimated coefficient of -0.002. Accordingly, there is little to choose between alternative econometric strategies.

Table 3: Impact of the BPTF on Business and Professional Services Trade

	Coefficient	Standard Error
ln GDP Destination	0.75	0.0009
ln GDP Origin	0.58	0.0009
ln Distance	-0.34	0.0016
ln Economic Freedom Origin	7.16	0.0251
ln Economic Freedom Destination	3.93	0.0325
ln STRI Destination	-1.36	0.0029
ln Water Destination	-0.74	0.0013
Dummy Common Official Language	0.88	0.0030
Dummy Common Currency	0.27	0.0036
Dummy EU Member	0.54	0.0045
Dummy CU	0.002	0.0224

Source: Calculations by the study team.

The BPTF does not address services trade. However, there are reasons to expect that the BPTF worked to deepen bilateral services trade (through complementarities with goods trade and FDI); and reasons to expect that the BPTF worked to weaken bilateral trade (by deepening comparative advantage in favour of goods). Turkey's services sector generally developed well during the BPTF period, with its share of GDP rising from below average to average in global comparisons over the period. Moreover, in some sectors, Turkey's services trade performed very well (e.g., insurance, construction, and tourism). In one important area – business and professional services exports – Turkey under-performed quite significantly. The analysis above suggests that this under-performance may have reflected other factors bearing on Turkey's trade in this services sector and not the BPTF. At a minimum, the analysis demonstrates that we cannot exclude the possibility that the BPTF had an essentially neutral impact on the evolution of Turkey's bilateral services trade.

4 THE IMPACT OF THE BPTF ON BILATERAL FDI

Investment was not covered by the BPTF and thus, as in the case of services trade, the impact on FDI flows and stocks between the EU and Turkey was indirect, running through the impact on goods trade, which was subject to the BPTF, or through the broader commitment for approximation of laws. The following summarizes the inferences from the theoretical literature on the likely direction of the impact of the BPTF on bilateral investment:

- The reduction of bilateral trade costs <u>reduces</u> the incentive for outward horizontal FDI aimed at avoiding transportation and border costs.
- An increase in bilateral trade <u>increases</u> the need for outward FDI to provide complementary goods or services (e.g., follow-up after-market services).
- The reduction of bilateral trade costs <u>increases</u> the incentive for outward vertical FDI to take advantage of value chain opportunities; and for outward horizontal FDI to take advantage of lower production costs (e.g., "platform" FDI

to produce goods for the EU market while taking advantage of lower labour costs or other local advantages in Turkey)

- An increase in the quality of the institutional framework in Turkey reduces the costs of contracting and facilitates out-sourcing on an arm's length basis, and thus reduces the incentive for FDI to internalize cross-border transactions.

There are accordingly offsetting factors reflecting the fact that investment can be a complement or an alternative to cross-border trade; and the fact that off-shoring can be either on an in-house (FDI) basis or on an arm's length (contractual) basis.

4.1 Literature Review on the Gravity Modelling of Investment

Gravity models have been applied with some success to investment (see Anderson, 2010, for a survey). This empirical literature has introduced a large number of potential explanatory variables that are broadly in line with theory. In addition to the standard variables measuring the size and distance of economies, independent variables found in empirical studies include indicators for the following:

- Investment barriers, investment risk, bilateral investment treaties, and protection of foreign investors (Egger and Pfaffermayr, 2004a; Bevan and Estrin, 2004);
- Availability of capital and/or labour, education of the workforce (Egger and Pfaffermayr, 2004a; Bevan and Estrin, 2004; and Milner et al., 2004);
- Labour costs (Kumar and Zajc, 2003; Egger and Pfaffermayr, 2004b; and Lada and Tchorek, 2008);
- Expenditures on R&D (Lada and Tchorek, 2008);
- Financial market development and level of interest rates (Portes and Rey, 2005; Bevan and Estrin, 2004; Lada and Tchorek, 2008);
- Taxation (Egger and Pfaffermayr, 2004b; Milner et al., 2004);
- Quality of the economic infrastructure (Egger and Pfaffermayr, 2004b; Roberto, 2004; and Portes and Rey, 2005);
- Quality of the legal system (Milner et al., 2004; Lada and Tchorek, 2008);
- Common language, legal systems and culture (Buch et al., 2003);
- Common currencies (Szczepkowska and Wojciechowski, 2002; Lada and Tchorek, 2008);
- Membership in international organizations (Brenton et al., 1999; Buch et al., 2003; Kumar and Zajc, 2003; and Lada and Tchorek, 2008);
- Openness of economies (e.g., Portes and Rey, 2005; Bevan and Estrin, 2004; Lada and Tchorek, 2008; Szczepkowska and Wojciechowski, 2002; and Kumar and Zajc, 2003);
- Exchange rates and macroeconomic stability (Szczepkowska and Wojciechowski, 2002; Lada and Tchorek, 2008);

On a priori grounds, many of the above-mentioned factors would work in offsetting directions. For example, the BPTF worked to increase Turkey's openness to the world, which would have tended to increase EU FDI inflows; on the other hand, linguistic and cultural differences, macroeconomic instability, and exchange rate volatility would have worked in the opposite direction. The progressive internalization by Turkey of the *acquis* would have worked in a positive direction to attract capital, but this would have been at least partly offset by the competitive impact of the EU's eastward expansion, which created still deeper integration between the EU and Turkey's regional competitors during the BPTF period. The BPTF's reduction of trade costs would have an ambiguous impact on FDI, depending on whether value chain opportunities were seized more by outward FDI or by arm's length contracting. Similarly, improvements in the quality of Turkey's legal system could induce inward FDI or facilitate out-sourcing through contracting. Accordingly, there is no strong presumption for or against an increase in bilateral FDI due to the BPTF.

The trend analysis generally corroborates this prior expectation. The entry into force of the BPTF had no discernible impact on Turkey's total inward FDI; it was not until the balance of payments crisis in 2001 that resulted in significant IMF-mandated reforms that inward FDI into Turkey took off. While the EU was a major source of this FDI – consistent with a gravity model interpretation – the causal factor was not the BPTF per se.

Nonetheless, the BPTF may have resulted in the stock of EU FDI in Turkey being higher than it otherwise would have been without the BPTF. Similarly, in terms of Turkey's outward investment, the BPTF's encouragement to the evolution of firms with the capacity for outward investment (e.g., in such areas as construction) through its more general impact on the enabling business environment may have resulted in higher outward stocks than might otherwise have been in place; moreover, given the progressive alignment of rules and regulations, the EU would have been a disproportionately favoured destination. Accordingly, it is relevant to assess whether the ultimate level of bilateral FDI stocks in Turkey from the EU and in the EU from Turkey can be attributed at least indirectly to the BPTF.

4.2 Methodology and Data

We implement a gravity model of FDI similar to that employed for goods and services:

$$\ln FDI_{ij} = \beta_0 + \beta_1 \ln D_{ij} + \beta_2 \ln Y_i + \beta_2 \ln Y_j + \beta_3\, G_{gij} + \beta_4 CU + \varepsilon$$

Where FDI_{ij} is the FDI stock of country i in country j and the other core variables are as described in the discussion of the goods gravity model.

Given the literature, we incorporate a dummy variable for countries that function as tax havens or conduits for FDI according to the list in Kudrle and Eden (2003), a list that largely coincides with OECD (2010) and World Bank (2014). The list of the partners coded as tax havens by Kudrle and Eden is presented in Table 4.

Table 4: FDI Partners Classified as Tax Havens

1	AIA	11	CRI	21	JEY	31	MUS
2	AND	12	CYM	22	JOR	32	PAN
3	ATG	13	CYP	23	LBN	33	SMR
4	BHR	14	DJI	24	LBR	34	SYC
5	BHS	15	DMA	25	LIE	35	TCA
6	BLZ	16	GGY	26	LUX	36	VGB
7	BMU	17	GIB	27	MCO	37	VIR
8	BRB	18	HKN	28	MDV	38	VUT
9	CHE	19	IMN	29	MHL	39	WSM
10	COK	20	IRL	30	MLT		

Source: Kudrle and Eden (2003). Note that not all the partners are present in the FDI dataset.

As well, we include a variable for an extended MENA region to capture the possibility that Turkey's investment would flow into the MENA region where its firms would have competitive advantage, crowded out by inflows of capital into Turkey seeking to benefit from the CU low-cost access to the European market.

Table 5. MENA countries – standard and extended definition

MENA countries (standard classification)			
Algeria	Bahrain	Egypt	Iran
Iraq	Jordan	Kuwait	Lebanon
Yemen	United Arab Emirates	Libya	Morocco
Oman	Palestine	Israel	Qatar
Saudi Arabia	Syria	Tunisia	
MENA countries (extended classification)			
Armenia	Azerbaijan	Chad	Djibouti
Mali	Mauritania	Niger	Somalia
Sudan	Turkmenistan	Turkey	

The dataset covers the years 2001-2012 to match the data availability for Turkey's bilateral FDI stocks. In this dataset we have 171 country pairs: Turkey as an origin country for 84 countries and as a destination country for 87 countries. This yields 2052 observations.

Table 6. Turkey's FDI Partners

Turkey as Source																	
1	ANT	11	BIH	21	CZE	31	GIB	41	IRQ	51	LBN	61	NOR	71	SDN	81	USA
2	ARE	12	BLR	22	DEU	32	GRC	42	ISL	52	LBR	62	NZL	72	SGP	82	UZB
3	AUS	13	BLZ	23	DNK	33	HKG	43	ISR	53	LBY	63	PAK	73	SVN	83	VGB
4	AUT	14	BMU	24	DZA	34	HND	44	ITA	54	LUX	64	PAN	74	SWE	84	ZAF
5	AZE	15	BRA	25	EGY	35	HRV	45	JOR	55	MAR	65	POL	75	SWZ		
6	BEL	16	BRB	26	ESP	36	HUN	46	JPN	56	MDA	66	PRT	76	SYR		
7	BFA	17	CAN	27	FIN	37	IDN	47	KAZ	57	MHL	67	QAT	77	TCA		
8	BGR	18	CHE	28	FRA	38	IND	48	KGZ	58	MLT	68	ROU	78	THA		
9	BHR	19	CHN	29	GBR	39	IRL	49	KOR	59	MYS	69	RUS	79	TTO		
10	BHS	20	CYM	30	GEO	40	IRN	50	KWT	60	NLD	70	SAU	80	UKR		
Turkey as Destination																	
1	ALB	11	BHR	21	DEU	31	GIB	41	ISL	51	LTU	61	MYS	71	RUS	81	TUN
2	ANT	12	BHS	22	DNK	32	GRC	42	ISR	52	LUX	62	NGA	72	SAU	82	TZA
3	ARE	13	BIH	23	DZA	33	HKG	43	ITA	53	LVA	63	NLD	73	SDN	83	UKR
4	ARG	14	BLR	24	EGY	34	HRV	44	JOR	54	MAR	64	OMN	74	SEN	84	USA
5	AUS	15	BRA	25	ESP	35	HUN	45	KAZ	55	MDA	65	PAK	75	SGP	85	UZB
6	AUT	16	CAN	26	EST	36	IDN	46	KGZ	56	MEX	66	PAN	76	SVK	86	VNM
7	AZE	17	CHE	27	ETH	37	IND	47	KOR	57	MHL	67	POL	77	SWE	87	ZAF
8	BEL	18	CHN	28	FIN	38	IRL	48	KWT	58	MKD	68	PRT	78	SYR		
9	BGD	19	CYM	29	FRA	39	IRN	49	LBR	59	MLT	69	QAT	79	THA		
10	BGR	20	CZE	30	GBR	40	IRQ	50	LBY	60	MRT	70	ROU	80	TJK		

Source: UNCTAD.

4.3 Results

The results permit only qualified inferences to be drawn concerning the impact of the BPTF on bilateral EU-Turkey investment.

First, the data available do not extend to the pre-CU period, thus depriving the analysis of the possibility of testing a changed behaviour after the implementation of the CU.

Second, regressions on Turkey's inward FDI vs. outward FDI show marked difference in behaviour as revealed by the size and signs of the coefficients on various gravity variables. This alerts that the potential determinants of the direction of FDI differ for inward vs. outward FDI – which is not a surprising finding given the long list of potential determinants that has been identified in the literature. By the same token, pooled data may generate misleading conclusions.

Third, for Turkey, a critical factor for outward FDI was internal growth. Turkey's ability to generate outward FDI flows is thus heavily influenced by its own GDP. This results in a very large coefficient on GDP of country of origin in Turkey's outward FDI regressions, while the regressions focussing on Turkey's inward FDI reveal a much less pronounced effect of size of country on its role as an outward investor.

As a result, we focus on separate regressions for Turkey's inward and outward FDI to identify BTPF impacts. However, it must be considered that, as Turkey is at the early stages of becoming an outward investor, the data have not settled down, resulting in very low R-squared values for regressions for Turkey's outward FDI.

The results suggest that Turkey's attractiveness as an FDI destination increased through the positive impulse to real growth provided by the BPTF (as shown by the high elasticity of inward investment to destination GDP). Turkey's ability to engage in outward FDI was also significantly related to growth dividends from the BPTF (as shown by the high elasticity of outward investment to source country GDP). This heterogeneity is masked in the two-way FDI regressions.

Free trade agreements had little impact on Turkey's FDI pattern; this is consistent with the general finding that bilateral investment treaties have no established impact on the pattern of global FDI. Money flowing through tax havens constituted an important source of FDI into Turkey.

Table 7. Gravity Model Results for Turkey's Two-Way FDI

	Inward FDI	Outward FDI	Two-Way FDI
ln GDP_o	1.532	2.769	1.73
	(14.87)**	(3.64)**	(15.85)**
ln GDP_d	3.041	0.548	1.249
	(7.33)**	(4.22)**	(13.28)**
ln Distw	-0.418	-0.273	-0.88
	-1.4	-0.8	(3.20)**
EU28_o	1.563		1.823
	(7.13)**		(8.25)**
EU28_d		1.466	-0.365
		(4.38)**	-1.38
RTA	-0.069	0.396	-0.128
	-0.29	-1.01	-0.52
Tax Haven	1.045		1.185
	(4.11)**		(5.54)**
MENA_d		1.162	-0.162
		(4.19)**	-0.52
R^2	0.34	0.05	0.33
N	944	996	1,940

Source: Calculations by the study team. Z-statistic is in parenthesis. * *p-value*<0.05; ** *p-value*<0.01

Overall, the results suggest that the BPTF had a strong positive impact on bilateral flows of FDI. This must be mostly attributed to the indirect effect of unfettered access to the EU market for industrial products manufactured in Turkey, and secondarily to the investment-facilitating effect of approximation of laws (although the relative strength of these factors cannot be discerned from the available evidence, making this a judgement call).

As with services trade, the effects of the BPTF appear to have been asymmetric, an important consideration for future research.

Annex C: The Computable General Equilibrium Modelling Framework

1 BACKGROUND ON CGE MODELLING

The analysis of economy-wide trade policy changes, such as are introduced in implementing a CU or FTA, is conventionally conducted using a multi-sector, multi-region CGE model.[120]

At the core of a CGE model is a set of Social Accounting Matrices (SAMs), one for each country/region represented. A SAM sets out the linkages between supply and use of goods and services and incorporates institutional sector accounts (i.e., accounts for firms, households, and governments). This allows the tracing of the circular flow of income within an economy. Production generates incomes, which are allocated to the institutional sectors; incomes are either spent on goods and services or saved; expenditures by institutional sectors constitute demand for domestic production and imports (this demand includes final demand from consumers and demand for intermediate goods from firms); savings, meanwhile, support investment. Trade accounts link the national/regional SAMs.

CGE models build on the SAMs by introducing behavioural equations that determine how households respond to changes in relative prices of goods and services and to changes in incomes (the expenditure equations), how firms respond to changes in product prices and factor costs (the production functions), and, in dynamic models, how labour supply and investment respond to, respectively, changes in wages and rates of return (RORs) on capital. The models also incorporate various accounting identities that "close" the model by ensuring that, in aggregate, incomes equal expenditures, the balance of payments balance, and so forth.

CGE models thus are capable of providing a broad description of the impact on an economy of a policy change, including the impacts on the following:

- The standard national income and expenditure accounts;
- A breakdown of impacts on industry by sector that reflects inter-sectoral input-output links, including internationally-sourced intermediate goods and services;
- The impacts on demand for the factors of production – that is, the quantity of land, capital, skilled and unskilled labour, and intermediate inputs (including domestically- and internationally-sourced);
- The impacts on consumer prices and household incomes;
- Trade by sector and region, including each region's terms of trade; and
- In models that allow for international capital flows to augment the capital stock, the impact on FDI by sector.

The key bottom-line measure of economic impact of a policy is economic welfare. In the CGE modelling framework, this is measured by equivalent variation, the lump sum payment at pre-shock prices without the shock that leaves households as well off as in the post-shock economy. This reflects both the impact of changes in the quantity of consumption and in prices.

The data requirements of CGE models are significant. These requirements have been met through an international collaborative effort centred on the GTAP at Purdue University (see Hertel, 1997). While there are many CGE models capable of modelling global trade agreements, they generally rely on the GTAP dataset. By the same token, analysis is generally constrained to working within the GTAP's 57-sector classification for goods and services and 140-region disaggregation of the global economy.

On the production side, CGE models capture efficiency gains from reallocation of factors of production across sectors. In the first stage, land, labour (skilled and

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[120] See Dixon (2006) for a concise history of the evolution of quantitative modelling of trade policies and the emergence of the CGE model as the standard tool.

unskilled), and capital substitute for one another to generate domestic value-added by sector; intermediate inputs, which include imported intermediates, substitute for domestic value-added in a second stage. In dynamic models, both labour and capital respond to changes in factor returns. This generates "endowment effects" – that is, labour supply expands when wages rise and capital supply is increased due to higher savings and investment elicited by higher RORs. These dynamic effects add to the static efficiency gains generated by reallocating production resources to their most efficient uses. With a shock that reduces efficiency, these endowment effects amplify the negative impacts through discouraged worker effects (individuals withdrawing from the labour force) and reduced savings and investment.

On the demand side, an aggregate utility function (usually taking the Cobb-Douglas form) allocates expenditures to private consumption, government spending, and savings so as to maximize per capita aggregate utility. Following a shock, such as removal of the EU-Turkey CU, the changes in consumption are allocated across these three aggregates based on their income shares in each region.

Private household demand responds to changes in consumer prices and incomes. Consumption of particular types of goods, such as luxury goods, increases more with higher income than does consumption of other goods, such as staple food products.[121] Notably, changes in trade protection not only result in changes in the prices of intermediate production goods, but also in the prices of consumer goods, which induces demand responses.

The trade module is based on the assumption of imperfect substitutability of products based on region of origin (Armington, 1969). The key parameter determining the scale of impacts on trade from a tariff shock is the elasticity of substitution or Armington parameter – a high substitution elasticity generates relatively large trade impacts for a given size of tariff shock. Note that the GTAP sectors reflect relatively large aggregates of individual products; accordingly, substitution elasticities are lower than they would be for product categories that are defined more narrowly and, thus, are more substitutable for each other. Further, the substitution elasticities for a given sector are the same across all regions; this is a strong assumption given that there is evidence that various factors systematically influence empirically estimated elasticities.[122] The GTAP substitution elasticities have recently been updated.

The standard GTAP model assumes perfect competition for its market structure. Other models adopt alternative assumptions. Some incorporate imperfect competition for industrial goods sectors, introducing price mark-ups that represent monopolistic pure profits in equilibrium.[123] These price mark-ups are reduced by intensified competition under trade liberalization, generating additional welfare gains.[124] Several recent models incorporate heterogeneous firms features, which generate productivity gains from reallocation of market shares to more productive firms under trade liberalization.[125]

Different models and different modelling protocols (i.e., assumptions concerning the "closures" of the model and approaches to implementing policy shocks) can generate significant differences in results. We comment on these issues in the next section, which discusses the specific CGE model and modelling protocols used in the present study.

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121 Household demand is modelled using a Constant Difference of Elasticities function, which captures the fact that the structure of household demand changes as income increases (i.e., in technical terms, it is "non-homothetic").

122 See Blonigen and Wilson (1999) for a discussion of such factors, which include, *inter alia*, product and industry characteristics, trade policies, and also the extent of FDI in an economy (multinational firms tend to source more foreign inputs, thus raising substitution elasticities).

123 See, e.g., the imperfect competition version of GTAP developed by Francois et al. (2005) (GTAP-FMT), which features prominently in the CGE-based empirical trade literature.

124 See Roson (2006) for a review of the issues raised by this methodology.

125 These include Zhai (2008); Dixon et al. (2013); Balistreri and Rutherford (2013); Oyamada (2013); and Itakura and Oyamada (2013). See Roson and Oyamada (2014) for a review.

2 THE GTAP-FDI MODEL

The simulations in the present study are based on a variant of the standard GTAP model – "GTAP-FDI". Like the standard GTAP model, the GTAP-FDI model adopts the perfect competition specification for market structure. Its distinguishing features are a recursive dynamic framework based on the Monash investment function and the introduction of a foreign-owned firm into each region-sector to allow analysis of FDI and foreign affiliate sales (FAS).

2.1 Dynamic Framework

The GTAP-FDI model incorporates a recursive dynamic investment framework based on the Monash-type investment model (Dixon and Rimmer, 2002). In this investment model, the growth rate of capital (and hence the level of investment) is determined by investors' willingness to supply increased capital to each sector in each country, which in turn depends on changes in the expected ROR for capital in that sector and region. Assuming that investors are cautious, any shock to the ROR in a given sector and region is, however, eliminated only gradually. This results in similar treatment of investment as in models that incorporate costs of adjustment that are positively related to the level of investment in a given year (based on, e.g., construction/installation costs of capital suppliers). The Monash model, however, instead of relying on increasing adjustment costs as the mechanism to limit investment, incorporates investor perceptions of risk for this purpose.

An alternative dynamic framework is adopted in inter-temporal dynamic models (e.g., the GTAP Dynamic Model[126]). In such models, consumers and firms solve an inter-temporal maximization problem, whereas in recursive dynamic frameworks the model solves a sequence of static equilibria in which the "end of period" capital stock in one year is the "beginning of period" capital stock in the next year. Recursive dynamic CGE models thus do not involve inter-temporal maximization of consumer utility or firm profits; behaviour is implicitly based on backward-looking adaptive expectations rather than forward-looking rational expectations.

Quasi-dynamic effects can also be achieved in a single-period static model by invoking closure rules that allow for labour supply and the capital stock to adjust to wages and RORs, generating "endowment effects".[127] In the dynamic framework applied in the present study, the capital response is explicitly modelled, while the labour response is generated by this quasi-dynamic effect via a closure assumption. We discuss the assumptions behind this closure in more detail below.

2.2 Introducing a Foreign-Owned Firm into Each GTAP Region-Sector

The key distinguishing feature of the GTAP-FDI model is that it separates each GTAP goods and services sector in each region into a domestically-owned sector and a foreign-invested sector (Ciuriak and Xiao, 2014). Sales of the GTAP representative firm in each sector are split into sales by domestic firms and FAS. In the services sectors, this allows direct representation of Mode 3 trade (commercial presence). This model thus captures the impacts of trade and investment agreements covering goods, services, and investment.

By introducing a foreign supplier in each sector of the GTAP dataset, the model captures the effect of international capital movement on the stock of productive capital in each sector, as well as of capital accumulation in the domestic sectors. In terms of the FDI dynamics, a shock to the restrictions on FDI in a GTAP region induces additional inflows of capital from a common global investor into the representative foreign-owned firm. As there is only one representative foreign-owned firm, the FDI is

[126] See Ianchovichina and Walmsley (2012) for a description; see Narayanan et al. (2015) for a recent application.

[127] See Harrison et al. (1995) for an early application of this technique in the context of modelling the Uruguay Round. See Ciuriak and Chen (2008) for an application in an analysis of the Canada-Korea FTA.

not differentiated by country of origin. However, in a bilateral simulation where FDI is liberalized for only one partner, it is a reasonable inference that the additional inflow comes from investors of that partner and that the impact on FAS represents the additional sales of the FDI-invested firms of that partner.

The characteristics of the foreign-owned firm are developed from firm-level data for listed companies based on Standard & Poor's Capital IQ dataset. Importantly for policy simulation purposes, the returns to FDI capital in this dataset tend to be higher than the returns to domestic capital. This is consistent with the theoretical and empirical results from the heterogeneous firms' trade literature (Helpman et al., 2004). Accordingly, the reduction of impediments to FDI results in a compositional shift in each sector that leads to an increase in the productivity of capital in sectors that experience an increased FDI share, again consistent with the empirical firm-level literature. By the same token, while we do not directly represent firm-level heterogeneity, we do nonetheless capture some of the compositional effect of trade liberalization on productivity, working in this case through the capital stock; however, the effects from reallocation of capital across domestic firms is not captured.

The increase in efficiency of capital results in an ambiguous effect on total capital accumulation in each region. It is possible for increased capital efficiency to cause net capital requirements to fall, freeing up capital for other investments. This freed-up capital then flows into the global capital pool and is reallocated globally. Notably, this can create positive spillover effects on third parties. This is consistent with a "crowding out" effect of foreign capital on domestic investment. It is also possible for increased capital efficiency to drive competitiveness gains, resulting in increased domestic capital expenditure, consistent with a "crowding in" effect. This ambiguity is consistent with the empirical literature on this topic.

3 REGIONAL AND SECTORAL AGGREGATIONS

The regional aggregation adopted for the present study consists of the EU28, Turkey, and 15 other regions (Table 1). Several observations on this regional aggregation are in order.

- The Eastern Partnership (Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova, and Ukraine) members are all represented separately in the GTAP V9 database since Moldova is now the only state left in the rump "Rest of Eastern Europe" region in the GTAP V9 database; accordingly, this grouping is exact.
- The Southern Partnership (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia) poses some issues. Five of the ten partners (Israel, Jordan, Egypt, Morocco, and Tunisia) are represented separately in the GTAP V9 database. Three others (Lebanon, Palestine, and Syria) are grouped in the region "Rest of Western Asia" with Iraq and Yemen. Algeria and Libya, meanwhile, are grouped in the region "Rest of North Africa" with Western Sahara. From the perspective of interpreting spillover effects, it was judged most reasonable to include the full Rest of Western Asia and Rest of North Africa regions in the Southern Partnership group.
- The LDCs and ODCs classifications follow standard practice.
- The LDCs in ASEAN – Cambodia, Laos, and Myanmar (which is not separately represented in the GTAP V9 dataset, but rather lumped in with Timor Leste in the "Rest of Southeast Asia" region) – are assigned to the LDC group.
- Macau would ideally be aggregated with China and Hong Kong; however, as it forms part of a residual "Rest of East Asia" with North Korea, it is included in the "Rest of the World".

Table 1: Regional Aggregation for the CGE Analysis

Study Region	GTAP Region	Study Region	GTAP Region	Study Region	GTAP Region	Study Region	GTAP Region
1 EU28	EU28	8 China	China	14 Russia	Russia	16 ODC	O/South America
2 Turkey	Turkey	8 China	Hong Kong	15 LDC	Cambodia	16 ODC	O/Central America
		9 Japan	Japan	15 LDC	Laos	16 ODC	Dominican Republic
3 EFTA	Norway	10 Korea	Korea	15 LDC	O/SE Asia	16 ODC	Jamaica
3 EFTA	Switzerland	11 ASEAN7	Brunei	15 LDC	Bangladesh	16 ODC	Puerto Rico
3 EFTA	Rest of EFTA	11 ASEAN7	Indonesia	15 LDC	Nepal	16 ODC	Trinidad and Tobago
4 Canada	Canada	11 ASEAN7	Malaysia	15 LDC	O/South Asia	16 ODC	Caribbean
5 US	US	11 ASEAN7	Philippines	15 LDC	Benin	16 ODC	Cameroon
6 Mexico	Mexico	11 ASEAN7	Singapore	15 LDC	Burkina Faso	16 ODC	Cote d'Ivoire
7 CSA	Argentina	11 ASEAN7	Thailand	15 LDC	Guinea	16 ODC	Ghana
7 CSA	Bolivia	11 ASEAN7	Viet Nam	15 LDC	Senegal	16 ODC	Nigeria
7 CSA	Brazil	12 EP	Armenia	15 LDC	Togo	16 ODC	Kenya
7 CSA	Chile	12 EP	Azerbaijan	15 LDC	O/Western Africa	16 ODC	Mauritius
7 CSA	Colombia	12 EP	Belarus	15 LDC	Central Africa	16 ODC	Zimbabwe
7 CSA	Ecuador	12 EP	Georgia	15 LDC	South Central Africa	16 ODC	Botswana
7 CSA	Paraguay	12 EP	Ukraine	15 LDC	Ethiopia	16 ODC	Namibia
7 CSA	Peru	12 EP	O/Eastern Europe	15 LDC	Madagascar	16 ODC	South Africa
7 CSA	Uruguay			15 LDC	Malawi		
7 CSA	Venezuela	13 SP	Israel	15 LDC	Mozambique	17 ROW	Rest of the World
7 CSA	Costa Rica	13 SP	Jordan	15 LDC	Rwanda		
7 CSA	Guatemala	13 SP	O/Western Asia	15 LDC	Tanzania		
7 CSA	Honduras	13 SP	Egypt	15 LDC	Uganda		
7 CSA	Nicaragua	13 SP	Morocco	15 LDC	Zambia		
7 CSA	Panama	13 SP	Tunisia	15 LDC	O/Eastern Africa		
7 CSA	El Salvador	13 SP	O/North Africa				

Source: As agreed with the Commission. Nomenclature: CSA = Central and South America; EP = Eastern Partnership; SP = Southern Partnership; LDC = Least Developed Countries; DC = Developing Countries. Note: O/ stands for "Rest of…".

The present study aggregates the 57 GTAP sectors into 31 sectors, as shown in Table 2. We note that the World Bank (2014) study used the full 57-sector breakdown.

Table 2: Sectoral Aggregation for the CGE Analysis

	Description	GTAP Sectors
1	Rice	1 (PDR); 23 (PCR)
2	Cereals (wheat, coarse grain)	2 (WHT); 3 (GRO)
3	Vegetables, fruits	4 (V_F)
4	Oil seeds, vegetable oils	5 (OSD); 21 (VOL)
5	Sugar	6 (C_B); 24 (SGR)
6	Other primary agricultural products	7 (PFB); 8 (OCR); 12 (WOL)
7	Dairy products	11 (RMK); 22 (MIL)
8	Beef, sheep, and other bovine meat	19 (CMT)
9	Other meat products	20 (OMT)
10	Other processed food	25 (OFD)
11	Other primary animal products	9 (CTL); 10 (OAP)
12	Beverages and tobacco	26 (B_T)
13	Fishing (including aquaculture)	14 (FSH)
14	Other primary products	13 (FRS); 18 (OMN)
15	Energy	16 (OIL); 17 (GAS); 32 (P_C); 43 (ELY); 44 (GDT)
16	Coal and steel	15 (COA); 35 (I_S)
17	Chemicals, rubber, and plastics	33 (CRP)
18	Textiles, clothing, and footwear	27 (TEX), 28 (WAP), 29 (LEA)
19	Other industrial goods	GTAP 30 to 42, ex 32 (P_C), 33 (CRP), and 35 (I_S)
20	Water	45 (WTR)
21	Construction	46 (CNS)
22	Trade	47 (TRD)
23	Transport nec	48 (OTP)
24	Water transport	49 (WTP)
25	Air transport	50 (ATP)
26	Communication	51 (CMN)
27	Financial services nec	52 (OFI)
28	Insurance	53 (ISR)
29	Business services nec	54 (OBS)
30	Recreational and other services	55 (ROS)
31	Public administration, defence, education, health, and dwellings	56 (OSG); 57 (DWE)

Source: As agreed with the Commission.

4 DATA AND BASELINE PROJECTIONS

The model is built on the GTAP V9 dataset with a base year of 2011, the latest available. The model database is simulated forward to 2026, using the GTAP Dynamic tool, based on macroeconomic data for the following variables from the IMF World Economic Outlook (April 2016) for the period 2011-2021; and from the long-term projections from CEPII, as published in Fouré et al. (2012) for the period 2022-2026:

- GDP real growth rates applied to the GTAP V9 aggregated regions;
- Population;
- Skilled labour; and
- Unskilled labour.

The baseline projections are in real terms based on 2011 prices.

This initial baseline is updated to take into account trade policy changes since 2011. In particular, we pre-simulate the trade agreements that have been entered into by the EU and Turkey, which have not been fully reflected in the GTAP 2011 base year data.

For the EU, only FTAs with countries/regions accounting for 1% of the EU's trade and that are not reflected in the GTAP V9 dataset are pre-simulated. This list consists of the following: Korea (EIF in 2011), West Africa, the Southern African Development Community, Singapore, and Canada. Apart from the Korea FTA, assumptions must be made about the date of entry into force of the other four FTAs. To avoid speculation concerning the progress of ratification of each of these agreements, we assume these FTAs are implemented in 2017 for purposes of baseline preparation.

We note that the West Africa region includes 13 countries in the LDC group and 3 in the ODC (the three in the latter class are Cote d'Ivoire, Ghana, and Nigeria; these FTA partners account for about 80% of the EU's trade with the composite region). Accordingly, the West Africa FTA impact is modelled as falling partly on both groups, based on GDP shares.

In addition to the BPTF with the EU, Turkey has signed FTAs with a number of countries/regions: EFTA, Israel, FYROM, Bosnia-Herzegovina, Tunisia, Morocco, the Palestinian Authority, Syria, Egypt, Georgia, Albania, Montenegro, Serbia, Chile, Jordan, Korea, and Lebanon. Of these, only Korea and Lebanon were signed after 2011 and, thus, are not reflected in the GTAP 2011 base year data; however, as Lebanon accounts for only about 0.25% of Turkey's global two-way trade, only the Turkey-Korea FTA is pre-simulated as part of the baseline.

Croatia poses a minor special issue for the baseline, since it became an EU Member State in 2013, a fact which is not reflected in the GTAP database in terms of protection levels. That is, upon aggregation of the GTAP dataset to create the EU28, the external tariffs that Croatia applied to Turkey, which were eliminated upon Croatia's accession to the EU, will be reflected in the average GTAP protection data in 2011. A similar situation exists with respect to Turkey's protection data facing the EU. Given the small share of Croatia in total EU trade with Turkey (about 0.3%), this is of no practical importance for the simulations.

5 CLOSURES

Three "closures" of the model (assumptions adopted concerning how the various accounts in the model are cleared) are of particular importance in influencing the results: the microeconomic closure, which determines the response of factor supply to factor returns; the macroeconomic closure, which determines the response of the trade account to a policy shock; and the government tax-expenditure closure, which determines whether the government balance adjusts passively or whether a tax replacement assumption is imposed.

The present study adopts the long-run closure where overall labour force participation and employment levels are determined by factors outside the model.[128] Given the dynamic framework of the model, however, savings and investment respond to changes in the expected rate of return; accordingly, there is an "endowment" effect – that is, the productive capacity of the economy expands/contracts with changes in incentives for investment.

Consistent with the direct modelling of FDI flows, the present study necessarily allows the external balance to adjust in response to the trade and investment impacts.

Finally, the government balance is allowed to adjust, which means that the effects of the various policies are not affected by additional assumptions concerning a government reaction function (e.g., to raise taxes or to raise spending) given changes in the fiscal balance.

[128] The fixed labour supply closure adopts the most conservative assumption for the labour market impact of a trade agreement. Given this assumption, the model interprets the impact of the policy shock on labour markets through adjustments in wages and mobility of labour across sectors, rather than in terms of net job creation or net job loss. This assumption avoids the risk of over-stating the GDP gains for a given policy shock on trade and investment due to endowment effects. This assumption also facilitates comparability of the results of the present study with other studies conducted on behalf of the European Commission, which conventionally adopt this closure.

Annex D: Sensitivity Analysis

This annex reports in detail the sensitivity analysis conducted for the present study. Several specific issues were identified in the course of the analysis that bear importantly on the qualitative and quantitative assessment of the ECF and DCFTA options: the model-generated splits between price and quantity impacts, between wages and productivity, between trade creation and trade diversion, and between the EU's sectoral gains in its area of comparative advantage (services) versus industrial goods generally fall outside of historically validated bounds. These issues emerge from the initial conditions and from the modelling protocols.

1 SPECIFIC ISSUES

1.1 Price-quantity split

The simulation protocols treat the EU as a tightly supply-constrained economy. Accordingly, the gain in the value of output in the enhancement scenarios is channelled primarily into prices. In the ECF, this can be seen from the breakdown of the value of GDP (0.10%) into changes in GDP in real or quantity terms of 0.01% and price terms of 0.09%. In reality, the EU is not at all supply constrained but has considerable excess capacity and could meet a supply shock from an enhanced economic framework with Turkey without having to raise prices for labour and capital.

1.2 Wage-productivity split

Modern trade theory, which recognizes that firms in an economy are highly heterogeneous in many characteristics, and a large body of empirical evidence developed in this vein suggests that wages and productivity both are positively impacted by trade liberalization. In the simplest theoretical models (e.g., Melitz, 2003), the wage rate facing all firms is equal. Given the symmetry assumption in Melitz (2003), the wage rate is also equal across countries (i.e., factor price equalization holds strictly). The increased competition for scarce labour resources induced by a trade shock results in real wages being bid up by the relatively more productive firms that are able to enter into export markets and thus able to expand production. The increase in real wages forces the least productive firms to exit. The reallocation of market share from lower- to higher-productivity firms in response to a trade shock thus raises productivity. While the Melitz model predicts that both productivity and wages will rise in response to a trade shock, it does not make any prediction about the wage-productivity split since this depends on the calibration of the model for the degree of heterogeneity of firm productivities and the elasticity of the supply of labour to the wage rate. The model only assumes that this elasticity is less than infinity since this is necessary to the scarce labour assumption that underpins the market share reallocation effect.

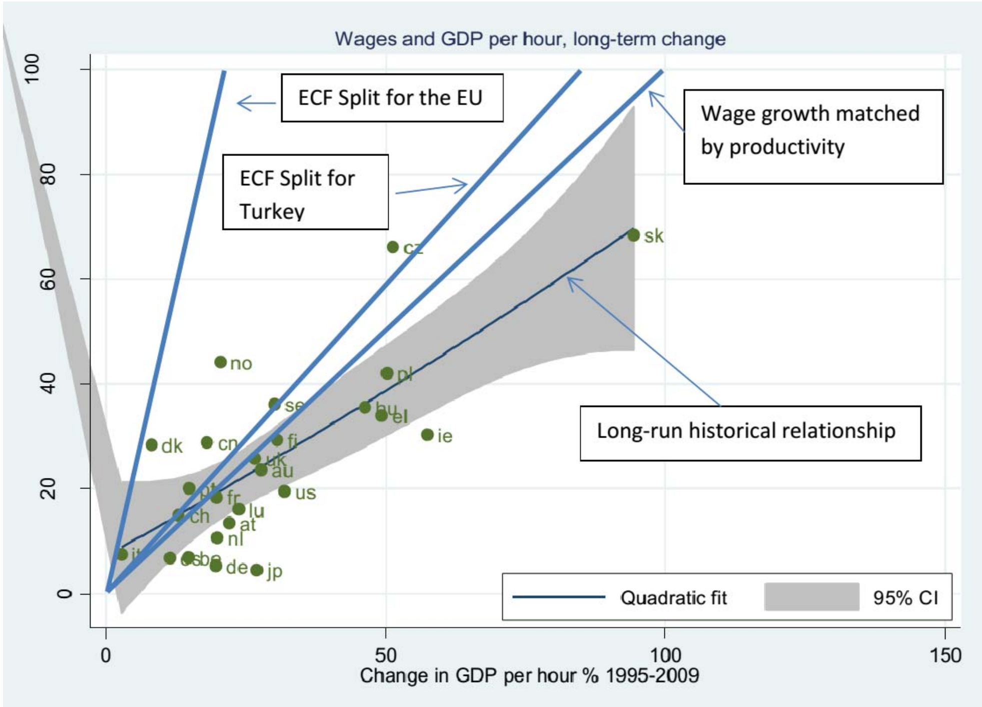
The simple assumption of a uniform wage rate and full factor price equalization are inconsistent with the observed heterogeneity in wages across firms and across countries. Bernard and Jensen (1995) and the ensuing literature in this area show that firms that export pay higher wages than firms serving the domestic market. Abowd, Kramarz and Margolis (1999) show that more productive firms pay higher wages and, controlling for person-effects, are also more profitable. Helpman, Itskhoki and Redding (2008) develop a theoretical framework to explain this observed relationship. They allow for heterogeneity of workers' abilities and incorporate labor market frictions as firms screen to identify the more productive workers. In their model, in equilibrium, more productive firms screen to a higher ability threshold, employ workers with a higher average ability, and pay higher wages. Accordingly, reallocation of market share to higher productivity firms also implies reallocation of market share to higher wage-paying firms. Egger and Kreickemeier (2009) introduce a different form of market friction, namely that workers care about the fairness of wages. In this model, trade liberalization drives marginal firms out and average productivity rises. The average real wage of employed workers also rises because the share of employment accounted for by higher-wage, higher-productivity firms rises. Felbermayer et al. (2008) introduce wage bargaining and also obtain a positive relationship between productivity and wage increase. In their case, trade liberalization only raises real wages as long as it improves aggregate productivity net of transport costs. Moreover, they show the effect on wages is stronger if wages are individually negotiated rather than determined by collective bargaining. Behrens et al. (2008) develop a general equilibrium model with heterogeneous firms, variable demand elasticities and endogenously determined wages. Since the productivity and wage responses are both endogenously determined, this model directly addresses the wage-productivity split. Applied to the Canada-US border effect issue, the study finds that productivity gains consistently are larger than wage increases. On average, across the within-sample Canadian provinces and US states, the wage increase is about 55% of the productivity gain.

To summarize, the heterogeneous firms trade literature points to trade liberalization driving up both wages and productivity through the reallocation of market share within sectors from lower-productivity to higher-productivity firms with an accompanying increase in the share of labour in the sector being accounted for higher-paying jobs.

Meager and Speckesser (2011), in a study for the European Labour Observatory, provide evidence for a positive relationship between the growth of productivity and the growth of wages at the national level. Their Figure 1.1 provides support for this relationship, using data for 25 countries for the years 1995-2009. Their fitted line suggests that wages grow somewhat less than proportionately to productivity (measured as GDP per hour worked), but the proportional line would be within their confidence band. They argue that this is broadly consistent with a long-run pattern of labour being paid its marginal product.

The simulations show a strikingly different pattern: almost all the increase in the contribution of labour to the change in GDP is in wages and almost none in productivity. Compared to the historical relationship, which features a slope below the 45 degree line (which would be consistent with labour being paid its marginal product), the ECF line is has a very steep slow.

Figure D-1: Wage-productivity splits

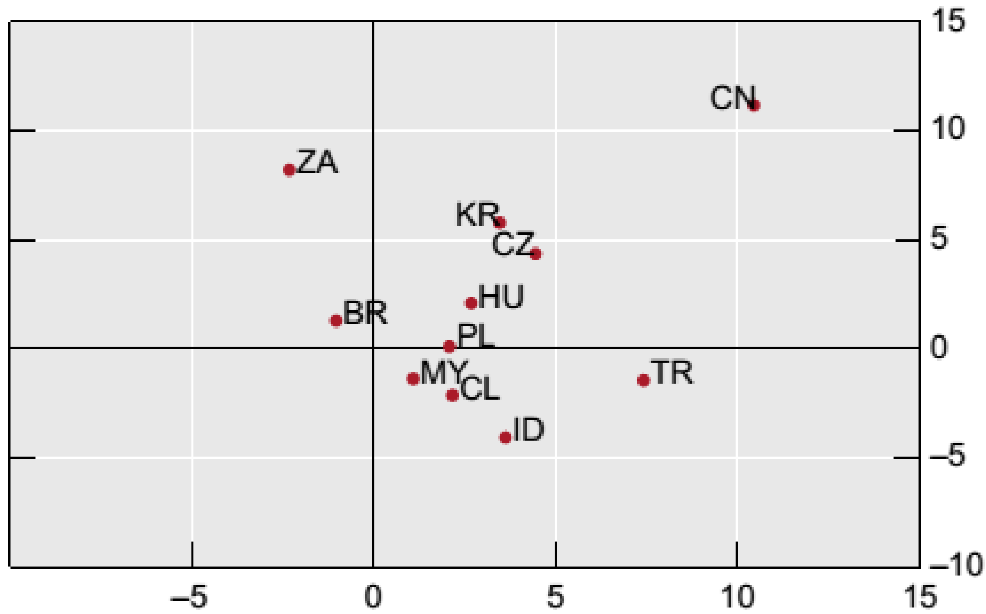


Source: Meager and Speckesser (2011), Figure 1; and calculations by the authors

In Europe, only Italy and Denmark have exhibited a wage-productivity relationship as charted by the ECF response. The Czech Republic as well as Norway (which is not an EU member) have outcomes that lie well above the 45 degree line. Several EU economies are tightly on the 45 degree line, including Portugal, France, the UK and Finland. Germany is a notable outlier below the 45 degree line, a result of the wage restraint that is built into the German wage bargaining system. Overall, this evidence suggests the 45 degree line is a reasonable for the EU.

For Turkey, ECF outcomes are somewhat above the 45 degree line. This is highly inconsistent with historical outcomes: for example, Mihaljek and Saxena (2008) found Turkey as an outlier on the low side, with real wages falling despite strong productivity growth. A split well below the 45 degree line would be more consistent with Turkey's historical outcomes.

Figure D-2: Wage-Productivity Relationships in Emerging Markets



Source: Mihaljek and Saxena (2008), Graph 3.

The limited productivity gains that are generated in the base case simulations come from reallocation of labour across sectors – an effect that the model used for the simulations takes into account – but there is no productivity impact from reallocation of market share within sectors, as this heterogeneous firms effect is not incorporated in the model. This results in outcomes inconsistent with historical patterns.

1.3 Trade creation versus trade diversion

Preferential trade liberalization generates both trade diversion as import sourcing switches to the liberalizing partner and trade creation, as domestic production is displaced by lower-cost imports. There is an extensive literature that examines the balance between the phenomena. A recent summary concludes as follows: "Empirical analyses indicate that trade creation, not trade diversion, is the norm. Evidence suggests that this is both because governments 'choose well' when forming RTAs and because they adjust other trade policies to moderate the distortions from discrimination" (Freund and Ornelas, 2010).

Another form of trade diversion is the redirection of existing exports to third parties to meet the demand from the liberalizing partner. In a supply-constrained economy, part of the bilateral export gain is "cannibalized" from existing exports in this manner.

While such trade diversion is an inherent property of all simulation models based on the Armington framework, which assumes goods from different countries are imperfect substitutes, a realistic depiction of a liberalization scenario should not feature excessive trade diversion, especially in the context of an economy such as the EU which is not supply-constrained.

The ECF scenario, however, features very powerful trade diversion effects, in part due to the displacement of internal Single Market trade towards Turkey. This is the result of a feature of the GTAP modelling framework under which the aggregation of multiple countries into a single region preserves the internal trade account and provides for substitution from this internal account against Turkish production and third party imports. While this effect is to be expected, the model assumption is that EU Single Market trade is as readily substituted for third party imports as would be the case, say, of trade within an aggregate region consisting of a group of unrelated countries (e.g., the "Rest of the World").

In reality, a 'single market' effect would reduce this substitutability against third party products due to common regulatory standards, the use of EU-wide quality marks on products (the CE mark), and so forth. In this regard, the Single Market should behave more like a federation such as the United States or Canada, rather than an amalgam of unrelated countries. The absence of a Single Market treatment in the simulations results in a greater degree of trade diversion than would realistically be expected.

1.4 Endogeneity Bias in Services Trade

The low initial level of EU services exports results in a well-known problem in the trade modelling literature, which is known as the "stuck on zero" problem (alternatively the "endogeneity bias" in trade). Trade models calculate gains as implied percentage increases multiplied by a base level. If the base level is zero or very small, even large percentage increases translate into nil or minimal gains. For the aggregate services sectors analyzed in the study, the initial levels of EU exports to Turkey are low because many of the sub-sectors are effectively closed; accordingly, even the double-digit percentage gains in the value of EU exports of services to Turkey implied by the liberalization assumptions arithmetically add up to relatively small total gains.

The following notional experiment allows us to identify a plausible gain in EU services exports to Turkey.

First, we consider a hypothetical figure for EU exports to Turkey under a services trade regime on the level of openness of the goods regime under the customs union. Based on the services share of the EU's exports to the world (about 26.36% of total exports in 2011 in the GTAP V9 dataset), this implies about USD 32.5 billion in services exports to Turkey in 2011 relative to the USD 90.8 billion of goods exports. By comparison, the 2011 GTAP V9 data shows total services imports by Turkey from the EU amounted to only about 5% of Turkey's total imports from the EU.

Table D-1: Formulating a Services Trade Impact that addresses the Endogeneity of Protection Bias

	GTAP V9	Hypothetical Free Trade in Services	Realistic Liberalization
Goods	90,790	90,790	90,790
Services	4,826	**32,501**	**12,188**
Total	95,616	123,291	102,977
Services Share	5.05%	26.36%	11.84%

Source: GTAP V9 database and calculations by the study team

Recognizing that services barriers are not always actionable, the free trade benchmark in column 2 would likely be unattainable in reality. Applying the formula of 50% of barriers being actionable and 75% of the actionable barriers being reduced, we arrive at a total level of EU exports of services to Turkey relative to the free trade benchmark of about USD 12.75 billion (USD 34 billion times 0.5 times 0.75). This is 2.6 times the observed level of USD 4.8 billion.

Thus, working backward from a hypothetical free trade level of EU exports of services to Turkey results in a substantially greater boost to the observed level than is suggested when the same liberalization formula is applied to an initial level of trade that is biased downwards due to high levels of protection.

2 RESULTS

We provide summary statistics on the alternative scenarios run to test the implications of taking the issues identified above into account in terms of the marginal impact on estimated outcomes (Table D-2).

Table D-2: Impacts on Real GDP and Welfare of the Additional Treatments, Relative to the Base case, EU outcomes under the ECF

Treatments	EU			Turkey		
	Real GDP	Welfare	Wage Share	Real GDP	Welfare	Wage Share
Base Case	0.007	0.032	0.819	1.44	1.253	0.551
Single Market	0.0003	0.003	0.824	0.17	0.120	0.547
Services	0.004	0.013	0.812	0.62	0.545	0.521
Wage-Productivity	0.016	0.017	0.532	0.93	0.760	0.358
Sum of Individual Treatment Effects	0.02	0.033	-	1.72	1.425	-
Sum of Treatment Effects, including Synergies	0.028	0.042	-	1.86	1.727	-
Total	**0.035**	**0.074**	**0.521**	**3.3**	**2.980**	**0.342**

Source: Simulations by the study team. Note the wage share is the simple average % increase in real wages divided by the sum of this simple average and labour productivity growth, which equals real GDP growth under the assumption of fixed labour supply.

First, it can be noted that addressing each of these issues raises the GDP and welfare gains. For example, the Single Market treatment adds 0.0003% to the EU's real GDP as estimated in the base case; for Turkey, it adds 0.17%. For the EU, taking into account the endogeneity bias in services adds 0.004%, while accounting for the wage-productivity relationship. Accordingly, this suggests that the base case modelling protocols yields a very conservative estimate of the impact, biased downwards in case of real GDP and economic welfare.

Second, there are synergies from treating the effects together, as this generates a stronger response than the sum of the individual elements. The reason is that the additional gains from the Single Market and Services treatments are assigned overwhelmingly to wage gains rather than to a balance of wages and productivity. When these treatments are simulated in conjunction with the wage-productivity effect, the effect on real GDP is stronger in each case.

Third, the Single Market treatment has a greater effect on welfare than on real GDP since it reduces the extent of welfare-reducing trade diversion from intra-EU Single Market trade.

Fourth, generally speaking, calibrated models should reproduce stylized facts of economic growth and development. When the CGE model simulations are run with a constraint imposed that the marginal contribution of labour is split evenly into wages and productivity, the economy-wide labour productivity-wage outcomes are consistent with observed historical outcomes. Accordingly, this appears to be a reasonable constraint to impose on the model.

Finally, it was not possible in the time frame available to the project to reconstruct the services database to address the issue of Turkey's services prices being the same as the EU's despite its higher level of protection. We observe that, in goods sectors, when a highly protected sector faces liberalization, its output typically falls while low-cost economies gain. We expect that addressing this issue would further transform the EU's services gains and boost the EU's economic gains and reduce Turkey's somewhat.

Table D-3: Macroeconomic Sensitivity to the Alternative Treatments

	Base Case		Base Case - Services		Single Market		Single Market - Services		Single Market + Prod		Single Market + Prod - Services	
	EU28	**Turkey**	**EU28**	**Turkey**	**EU28**	**Turkey**	**EU28**	**Turkey**	**EU28**	**Turkey**	**EU28**	**Turkey**
Economic Welfare (% change)	0.032	1.253	0.045	1.798	0.035	1.373	0.048	1.995	0.052	2.133	0.074	2.980
GDP volume (% change)	0.007	1.438	0.011	2.056	0.008	1.609	0.012	2.314	0.023	2.372	0.035	3.302
GDP deflator (% change)	0.093	-0.47	0.135	-1.11	0.114	-0.58	0.161	-1.32	0.116	-0.82	0.164	-1.62
GDP Value (% change)	0.100	0.97	0.146	0.94	0.121	1.03	0.173	0.99	0.139	1.55	0.199	1.69
Consumption (% change)	0.04	1.27	0.053	1.82	0.038	1.40	0.054	2.03	0.056	2.08	0.080	2.90
Government Expenditure (% change)	0.02	0.59	0.02	1.21	0.02	0.65	0.02	1.31	0.04	1.70	0.05	2.66
Investment (% change)	0.02	2.46	0.04	2.71	0.02	2.72	0.05	2.98	0.04	3.54	0.07	4.07
Total Exports of Goods & Services (% change)	0.05	3.20	0.05	4.82	0.18	3.64	0.22	5.43	0.19	4.13	0.24	6.05
Total Imports of Goods & Services (% change)	0.11	3.02	0.13	4.15	0.34	3.26	0.45	4.42	0.36	3.85	0.48	5.18
Trade balance (USD millions)	-372	-2,808	-1,051	-3,085	388	-3,045	55	-3,313	335	-3,879	-36	-4,442
Capital Stock (% change)	0.01	1.29	0.01	1.37	0.01	1.43	0.02	1.50	0.01	1.82	0.02	2.00
Unskilled labour Input (% change)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.032	1.212	0.041	1.679
Skilled labour Input (% change)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.021	1.429	0.035	1.745
Unskilled labour (number of jobs)	0	0	0	0	0	0	0	0	0	0	0	0
Skilled labour (number of jobs)	0	0	0	0	0	0	0	0	0	0	0	0
Real Wage of Unskilled labor	0.04	1.61	0.05	2.24	0.05	1.77	0.06	2.51	0.03	1.210	0.041	1.677
Real Wage of Skilled labor	0.02	1.92	0.04	2.23	0.02	2.11	0.05	2.54	0.02	1.433	0.035	1.750
Terms of Trade (% change)	0.05	-0.53	0.07	-0.87	0.13	-0.68	0.18	-1.08	0.13	-0.76	0.18	-1.18
CPI (% change)	0.07	-0.45	0.10	-1.01	0.09	-0.53	0.12	-1.19	0.09	-0.69	0.13	-1.38

Source: Simulations by the study team

Annex E: Background information

1. Turkey's FTAs and FTA Agenda

Agreed	Signed	EIF	Under Negotiation	Planned
EFTA	10.12.1991	01.04.1992	Cameroon	United States
Israel	14.03.1996	01.05.1997	Colombia	Canada
FYROM	07.09.1999	01.09.2000	Democratic Republic of the Congo	Thailand
Bosnia and Herzegovina	03.07.2002	01.07.2003	Ecuador	India
Palestine	20.07.2004	01.06.2005	Japan	Indonesia
Tunisia	25.11.2004	01.07.2005	Libya	Vietnam
Morocco	07.04.2004	01.01.2006	MERCOSUR	Central America Community
Syria	22.12.2004	01.01.2007 (suspended)	Mexico	Other Africa, Caribbean, Pacific (ACP)
Egypt	27.12.2005	01.03.2007	Peru	Algeria
Albania	22.12.2006	01.05.2008	Seychelles	South Africa
Georgia	21.11.2007	01.11.2008	Ukraine	Pakistan
Montenegro	26.11.2008	01.03.2010	Chad	
Serbia	01.06.2009	01.09.2010	Gulf Cooperation Council (negotiations suspended)	
Chile	14.07.2009	01.03.2011		
Jordan	01.12.2009	01.03.2011		
Korea	24.11.2010	01.05.2013		
Mauritius	09.09.2011	01.06.2013		
Lebanon	24.11.2010	(Turkey internal procedures completed)		
Kosovo	27.09.2013			
Moldova	12.09.2014			
Malaysia	18.04.2014	1.08.2015		
Faroe Islands	16.12.2014	(internal procedures continue)		
Ghana	17.04.2014	(completed)		
Singapore	14.11.2015	2017		

Source: WTO List of RTAs (2016); various sources.

2. Literature Review on the BPTF

a. Major Recent Ex Post Evaluations of EU-Turkey Commercial Relations

Several recent reviews of the functioning of the BPTF have been published, providing a very up-to-date perspective. Generally, the BPTF can be characterized as having played a significant role in anchoring Turkey's economic reforms towards a modern, private-sector-oriented, outward-looking economy, functioning on the basis of economic framework policies aligned with OECD norms. At the same time, OECD norms were not fully attained in the CU"s first decade when progress was greatest in the context of strong political will and conducive economic conditions; since then, the pace of realizing full alignment has slowed markedly in the face of often severe headwinds from external factors, such as the 2008-09 global economic and financial crisis and its aftermath, the roiled waters in Turkey's neighbouring Middle East and North Africa (MENA) region that has seen weak growth amid conflict, and the internal challenges that Turkey has faced in giving full effect to its undertakings in respect of the *acquis*.

The World Bank (2014: "Trading Up") paints a relatively positive picture of Turkey's economic progress in terms of diversification of export markets, moving up the technological ladder into more sophisticated product lines, relying on more capital-intensive production and less on cheap labour, improving the quality of its products, and integrating into global value chains (GVCs). Turkey also is judged to be in an advantageous position to move further up GVCs due to a comparatively good trade infrastructure and logistics capacity. At the same time, the review observes that progress since 2007 has largely stalled and the overall increase in Turkey's export intensity has lagged other emerging markets. Areas of lagging performance include attracting FDI, services sector growth, and small business dynamism.

Several risks for Turkey's future prospects are highlighted in the "Trading Up" report. These include:

- Specialization in slower-growing export segments and the significant "distance" in industrial terms of its export palette from higher-growth sectors;
- The "missing middle" of medium-sized firms: the report observes that "Turkey's export growth is driven almost exclusively by the intensive margin, as new entries (firms, products, and markets) have not delivered sufficient growth to offset corresponding losses of old firms, products, and markets. On the one hand, this indicates that Turkey's established exporters are becoming increasingly competitive. On the other hand, it also means that there may be a problem of access to exporting and export survival for smaller firms"; and
- Excessive reliance on trade remedies and export promotion policy flexibilities, which has resulted in sectors generating a very large (44%) share of exports benefiting from some form of contingent protection.

In terms of the impact of its relationships with the EU, the report emphasizes the positive spillovers for Turkey from the relationship. It notes that it is the "companies that exported to the EU that led the expansion of exports to MENA, drawing on their experience in serving a demanding client. Moreover, the spillovers from the strong trade and investment relationship with the EU – including of technology, management and marketing expertise – are essential for generating solid value added and helping upgrade Turkey's export basket." The report recommends the option of Turkey deepening integration with the EU by expanding the coverage of the CU or through a complementary FTA in agriculture and services. It also makes a series of recommendations to improve the supply side of Turkey's economy,

Methodologically, the review is based on a technically-sophisticated analysis of descriptive statistics describing competitiveness, the sophistication of production (following Hausmann et al., 2007), the quality of exports, the level of technology in which Turkey has specialized, its position in GVCs (including the level of value added), market diversification (including survival rates in markets), and analysis of determinants of export performance (following Gaulier et al., 2013). The statistical analysis is largely based on the World Bank's Trade Competitiveness Diagnostics (TCD) approach (Reis and Farole, 2012). The report also draws on various multilateral surveillance reports (e.g., from the WTO and World Bank) and benchmarking exercises, such as the World Bank's Doing Business (2016a) and Logistics reports (Arvis et al., 2013), and the OECD's analytical work. Throughout, the report emphasizes firm-level considerations, drawing on the World Bank's Exporter Dynamics Database (2016b) and performance at the extensive versus intensive margins (drawing on the analysis for Turkey by Aldan and Çulha, 2013). As the analysis is primarily focussed on goods trade, key data sources are UN Comtrade (2014) and the World Integrated Trade Solutions (WITS), as well as the UN's Food and Agriculture Organization (FAO).

The World Bank (2014) study, "Evaluation of the EU-Turkey Customs Union," provides another very recent analysis that addresses many of the issues being considered in the present study. While it concludes that the CU has been an important factor in deepening Turkey's global integration, it emphasizes that "the CU is increasingly becoming less well equipped to handle the changing dynamics of global trade integration." Further, it argues that, due to EU expansion to the east, Turkey is already starting to lose ground to newer EU members, requiring a reworked CU. The report also emphasizes the problems of asymmetry that Turkey experiences when the EU negotiates FTAs with third countries.

The analysis of the functioning of the BPTF highlights various points of trade friction that have emerged due to imperfections of design or implementation of the CU:

- Non-tariff measures that interfere with the free circulation of certain products (pharmaceuticals, chemicals, second-hand goods, sugar confectionary, scrap metal, and retreaded tires);

- Weaknesses in the bilateral institutional processes responsible for ensuring that changes to the EU *acquis* in areas covered by the CU are transposed into Turkish law in a timely manner;
- Road transport permits, particularly for transit, faced by transport operators and visa restrictions.
- Classification by Turkey of certain processed food products (including feta cheese, certain beverages, spirits, and vinegar) as primary agricultural products and thus subject to tariffs.

The gravity-model-based ex post assessment of the CU in this study concludes that it had no significant effect on Turkey's bilateral exports. The gravity equation follows conventional lines. The study adopts a 1990-2010 time frame and a panel of 150 regions. The estimator used is the 2-stage Heckman approach (following Helpman et al., 2008). The research design follows Carrere (2006), a study that focuses on accurately identifying FTAs' trade-creation and trade-diversion effects by incorporating the appropriate number of dummy variables.

b. Other Quantitative Studies of the CU

Several older studies have attempted to quantify the impact of the CU using CGE methodologies. These all find a significant impact – which we emphasize is virtually guaranteed in a CGE modelling framework, since CGE models interpret trade protection as distortions; accordingly the reallocation of resources following a liberalization shock necessarily improves efficiency.

Harrison et al. (1996) provide an early quantitative assessment of the CU at the time of its inception. The study found that Turkey would benefit substantially from the CU – between 1.0 and 1.5% of GDP – with the main benefits derived from the mandated liberalization vis-à-vis third parties, including reciprocal FTAs with EU FTA partners. As the quantitative impact was estimated using a static CGE model, the authors offered the opinion that the gains could be substantially larger: indeed, they venture that dynamic gains from trade liberalization would be several times the static gains and the impact of imperfect competition would also increase the gains, although to a much smaller extent than the dynamic impacts. The main issue anticipated in this study was the fiscal impact of foregone tariff revenues, which the authors estimated would require a significant hike in domestic taxes to offset: e.g., a value added tax (VAT) increase from 10.0% to 11.6%.

Francois et al. (2005) provide comparative assessments of the EU's FTAs, including the Turkey CU. The study uses a modified version of the Global Trade Analysis Project (GTAP) model that incorporates savings-investment linkages to create a dynamic effect through capital accumulation. Based on the GTAP V5 database, which reflects the global economy as it was in 1997, it calculates a USD 2.2 billion gain for Turkey from the CU, equivalent to about 1.3% of GDP. The study also provides an estimate of a full agreement: this would raise the gain for Turkey only marginally to 1.4%. The estimate for the CU as implemented is very similar to the Harrison et al. (1996) estimate, notwithstanding that it incorporates dynamic effects, which the Harrison et al. study anticipated would drive the gains much higher.

Demirci and Aydın (2011) also using the GTAP V5 dataset and a modified version of the GTAP model to build in a steady state capital accumulation response report a much larger USD 7.2 billion gain for Turkey, most of it through endowment effects generated by the liberalization required to align Turkey's MFN tariff with the EU's vis-à-vis third parties.

c. Progress Reports on Turkey's Accession

Since 1998, the Commission prepares annual reports on Turkey's progress towards EU accession ("Progress Reports"). While a more in-depth review of these will be addressed in the specific analytic dimensions covered by the study, the two most recent Progress Reports can be summarised as follows.

The 2014 Progress Report review of the CU's functioning concludes that, overall, the CU's level of alignment is high, but progress on outstanding issues is slow: "Little progress was made in the field of customs legislation. Shortcomings remain in the area of duty relief, free zones, surveillance measures, tariff quotas and the requirement to present proof of origin for some goods in free circulation. Although capacity-building efforts have increased, further progress is required on intellectual property rights enforcement at customs" (73).

The 2014 report highlights other areas of progress in terms of Turkey's alignment efforts with the *acquis*, including the opening of a new negotiation chapter and good progress on trans-European networks, as well as migration and asylum policy. Implementation of the EU-Turkey readmission agreement and the roadmap towards a visa-free regime continues. However, the report also emphasizes that further significant progress is needed, especially in the area of the judiciary and fundamental rights, social policy, and employment, in particular in the areas of labour law and health and safety at work. The report emphasises that Turkey could do much to accelerate the pace of negotiations by advancing in the fulfilment of the benchmarks, meeting the requirements of the negotiating framework, and respecting its contractual obligations towards the EU.

Compared to 2014, the 2015 Progress Report found that "the pace of reforms slowed down" (European Commission, 2015e: 4) both on the political agenda and alignment with the *acquis*. Regarding areas covered by the CU, however, the Report notes that "The country has also achieved a good level of preparation in the areas of free movement of goods, intellectual property law, enterprise and industrial policy, customs union and external relations" (6).

Despite this overall good progress, the 2015 Progress Report calls for further improvements regarding "additional testing and conformity assessment requirements applied at the border" (34). It also notes that "technical barriers to trade persist in areas such as textiles, second-hand goods and alcoholic beverages" (34), as well as de facto export restrictions for metals, paper, and leather exports from Turkey. Certain state aid schemes breach Turkey's obligations under the CU according to the Report (41). Public procurement is another area in which Turkey is only moderately prepared (37).

A recent Progress Report prepared by Turkey (Republic of Turkey, Ministry for EU Affairs, 2013), details Turkey's progress in the EU accession process on the 50th anniversary of the Ankara Agreement. It highlights the steps taken towards a visa-free Europe under the Visa Liberalization Dialogue. The report covers the 33 chapters of the framework for accession negotiations. It states that the EU accession process is the most significant modernization project of Turkey after the proclamation of the Turkish Republic. Chapter 29, which addresses the CU specifically, acknowledges that the CU chapter was suspended (as well as seven other chapters) as a result of Turkey not implementing the Additional Protocol fully.

The substantive elements of the report mainly detail progress on customs and border management, with a recital of progress made in developing capacity in the following areas: the alignment with the *acquis* in the area of AEOs; x-ray screening of trains and airport baggage; anti-smuggling capacity (including additional maritime patrol boats, drug-sniffing dogs, and customs personnel); implementation of customs risk-management practices; capacity building for risk-analysis units; the resulting reduction in physical inspection rates and time for clearing import and export documentation; development of risk management for electronic trade; and progress in implementing the tariff systems (TARIC, Quota, and Surveillance) needed for future interconnectivity and interoperability with the EU information technology systems. The chapter does not give a clear sense of the scale of the remaining gap.

d. WTO Trade Policy Reviews

The WTO Trade Policy Reviews (TPRs) have consistently found that the CU has had a liberalising effect on Turkey’s trade policies (WTO, TPR Body, 1998; 2003; 2008; 2012a; and 2016a). The advantages mentioned in the latest TPR are as follows.[129]

First, the 2016 Report raised certain points with respect to the CU: “Turkey's trade policy in terms of preferential trade continues to be influenced by the EU and the provisions of its customs union with the EU, as Turkey negotiates and concludes FTAs in parallel with the EU” (WTO, TPR Body, 2016a: 10). The CU has helped align Turkey’s negotiation position in the WTO with the EU: “Turkey generally takes the EU negotiation position into consideration in the DDA, particularly with respect to non-agricultural products, as these are fully covered under the Customs Union between Turkey and the EU” (WTO, TPR Body, 2012a: 14). Second, an important impact of the CU is on Turkey’s tariffs – those for industrial goods, which are covered by the CU – are markedly lower than agricultural tariffs (WTO, TPR Body, 2012a: 28). Turkey's FTAs typically only covered trade in goods. “However, the FTA with the Republic of Korea is broader in scope, as it includes commitments on investment and services, and Turkey has started to include deeper commitments and disciplines on TBT, SPS, intellectual property, competition, dispute settlement, and trade remedies as part of its FTA negotiations. Turkey has aligned its unilateral preference regime with that of the EU as well, and with few exceptions, offers GSP, GSP+, and Everything-But-Arms (EBA) arrangements to certain developing and least developed countries” (WTO, TPR Body, 2016a). Third, the 2012 TPR notes that the CU also acts as a cap on increases on MFN tariffs, which are possible under Law No 474 on Customs Tariff Schedule when MFN tariffs “are deemed insufficient to provide ‘adequate’ protection to domestic industries” (WTO, TPR Body, 2012a: 29). Large increases of tariffs would be possible for Turkey under WTO rules due to the relatively high bound rates. In the 2016 review the WTO notes that “Turkey's overall applied tariff average increased slightly during the period to 12.8% due to tariff increases in response to requests by domestic producers” (WTO, TPR Body, 2016a). Fourth, under the CU Turkey has also aligned preference schemes with the EU preference regime: “This is leading to progressive elimination of all or virtually all tariffs on products falling within HS Chapters 25 to 97, and selective liberalization of certain agricultural commodities and processed agricultural products” (WTO, TPR Body, 2012a: 32). Fifth, Turkey has aligned trade related laws with WTO and CU requirements, including legislation on ROOs (44), trade defence (45), and export credits (57). “Turkey has continued its efforts to achieve harmonization with the EU in respect of aligning its technical legislation and SPS measures with its largest trading partner. Following the 2010 adoption of the main framework law on SPS (the Law on Veterinary Services, Plant Health, Food and Feed), Turkey has adopted and implemented many of the implementing regulations during the review period, thus, approximately 100 regulations have been put in place as secondary legislation. Regarding TBT matters, Turkey revised its regulations in 2012 to conform to the EU in the areas of CE marking, conformity assessment bodies, and notified bodies” (WTO, TPR Body, 2016a).

The latest review of Turkey’s trade policy took place in March 2016 and was based on the Report by the WTO Secretariat (WTO, TPR Body, 2016a). The Report provides a detailed analysis of the functioning of Turkey’s trade and investment regime, policy instruments and practices by measures, trade policy by sectors including industrial, agricultural and services areas. The Report reveals that ‘despite a difficult external environment with low growth in the EU and conflict in the Middle East region (both are important export markets of Turkey), Turkey’s economy and trade continued to grow over 2011-2015 period’. However, the Report also claims that Turkey faces challenges like the conflict in Syria that affects tourism, erosion of preferential margins in EU market due to EU’s free trade agreements, and persistent current account deficit (WTO, TPR Body, 2016a: 13). The CU is one of the most important instruments in

[129] Only the most recent two TPR Reports for Turkey (2012a and 2016a) were analysed in depth for this section.

shaping Turkey's trade policy for years, in line with the multilateral (WTO) and bilateral agreements (WTO, TPR Body, 2016a: 28). The Report describes the Turkey's preferential trading relationship with the EU based on CU Decision No 1/95, free trade in coal and steel products, and the preferential trade of processed agricultural products (as described under CSA and AFTR in this study) (WTO, TPR Body, 2016a: 31-32)). Turkey also has a long history of negotiating free trade agreements based on the requirements under Article 16 of Decision No 1/95 to align its commercial policy with EU commercial policy. Turkey currently has 18 FTAs in force, and negotiates several others with not only neighbouring countries, but also emerging and developed economies in the world. Turkey's early FTAs, which comprise a majority of existing agreements, cover mainly goods, without having provisions referring to trade in services or investments. Thus, Turkey's FTAs in terms of their coverage by and large diverged from the EU FTAs. However, Turkey currently started to have new generation FTAs with provisions extending into services, investment, IP, government procurement and competition by reference to WTO Agreements albeit shallow parameters (WTO, TPR Body, 2016a: 33).

Following the alignment with the CCT, Turkey's applied tariffs are at low levels close to EU rates (5.5%), however Turkey's Tariff Schedule allows the country to keep its bound MFN tariffs on average at 17.6% for non-agricultural goods and 46.2% for agricultural goods. Furthermore, Turkey has bound only half of its tariff lines (50.4%) in WTO (WTO, TPR Body, 2016a: 51). This allows Turkey to raise its tariffs by a large margin between applied and bound rates (tariff watering) and create uncertainty for traders. The CU is an important constraint to discourage its practice for non-agricultural products. Turkey's implementation of Decision No 1/95 yields a marked difference between tariff protection afforded to the agricultural sector versus manufacturing sector. For the former simple average applied tariff rate is 49% and simple average bound rate is 72%. There is a strong protection in several tariff lines, in some cases (like live animals and meat products) extending over 225% (WTO, TPR Body, 2016a: 53).

In the case of standards and other technical requirements in trade, the Report describes Turkey's alignment process with the EU legislation. It states that Turkey has aligned the sector-specific EU directives into Turkish legal system, including 250 technical regulations and other EU directives adopted pursuant to Decision No 2/97 of the EU-Turkey Association Council, covering several products (WTO, TPR Body, 2016a: 72). Similar to the changes that have occurred for TBTs, Turkey has been focusing on harmonising its SPS legislation with that of the EU (75).

The Report, with respect to trade in agriculture, indicates that Turkey has a trade surplus. The main destination for exports of most agricultural products varies, but the EU market is the largest especially in the case of nuts, grapes, and sugar confectionary; and the main import source for food preparations and sunflower seeds. Turkey applies tariff rate quotas for certain agricultural and processed goods pursuant to agreements with the EU and other countries (WTO, TPR Body, 2016a: 123-25). Turkey's agricultural policy and strategy, on the other hand, has been influenced through its identification of five priority areas for harmonisation with the EU; including statistical system; integrated administration and control system; organic farming; import quotas under Decision No 1/98; and Farm Accountancy Data Network (WTO, TPR Body, 2016a: 129-30).

e. Academic Studies

In addition, there is an extensive literature commenting on the Turkey-EU economic relationship and the CU in particular. These studies analyse the CU effects through different lenses.

Erzan et al. (2002) study the impact of the CU on the productive and industrial structure of manufacturing in Turkey, and on its competitiveness. They conclude that the CU increased import penetration in manufacturing following its inception, but did not significantly affect the share of the EU in Turkey's trade. The study finds that multilateral aspects of the CU dominated over its preferential impact and that the trade shares of the EU did not affect industry concentrations in Turkey. Accordingly, "it was import penetration from all sources that mattered, therefore as a result of the CU (lower CCT levels) imports did have a disciplining effect on Turkish manufacturing, but not the EU."

Nowak-Lehmann et al. (2007) investigate Turkey's sectoral trade flows to the EU to measure the impact of the CU, based on a panel data from period 1988 to 2002 and focusing on the 16 most important exporting sectors. The study, which is based on an extended gravity model, emphasises the role of price competition, protection and transport costs in EU-Turkey trade relying on EUROSTAT trade database based on HS (harmonised system) classification. The study results indicate that transport costs and differences in transport costs between trade competitors did significantly influence exports in sectors like vegetables and fruit, plastic and rubber, staple fibres, and articles of apparel and clothing, while they were irrelevant for iron and steel, cotton and machinery.

Akkemik (2011) tests the theoretical argument that the CU would improve efficiency by stimulating productivity gains in tradable sectors and via technological gains due to spillover effects. Examining changes in major Turkish exports destined to the EU market, and determinants of competitiveness using dynamic shift-share analysis, the study shows that competitive position of Turkey in the CU has only partially improved, mainly in sectors like textiles, iron and steel and automotive exports. However, its competitiveness deteriorated in technologically more advanced sectors. The major determinants were linked to a non-priced "productivity" factor. The study overall argues that the benefits from the CU have not been materialised for major Turkish exports (in the 1996-2006 period).

Several studies analysed further deepening of the CU and evaluated it in terms of its sufficient coverage. Mercenier and Yeldan (1997), in their pioneering study based on applied inter-temporal GE analysis, claim that for the CU to be welfare improving, the partial trade reform in the form of a tariff harmonisation must be complemented by the elimination of all forms of NTBs. This could prevent domestic oligopolies to shield from foreign competition at the expense of local consumers.

Ülgen and Zahariadis (2004) denote that considerable degree of convergence between Turkey and the EU under the CU makes Turkey almost part of a Single Market. However, areas like services and agriculture have not been incorporated – thus the CU needs to be widened. The authors also claim that a deeper form of CU could be possible if the EU addressed Turkey's concerns in terms of policy dependency, particularly in relation to the development of a "genuinely common commercial policy"; if Turkey eliminated "hidden forms of protectionism" in the area of technical barriers to trade (TBTs); and if both parties eliminated trade defence instruments (TDIs).

Togan (2016) evaluates the liberalisation of transportation services in the EU and Turkey, by referring to transportation costs, regulatory framework, global value chains, the effects of infrastructural development. He proposes that to open up transportation services between the EU and Turkey, there are two options: to negotiate separate agreements on all modes of transportation sectors (Swiss model) or deepen economic integration as advocated in the World Bank report (2014), i.e., an FTA covering services.

Kirisci (2015) underscores the longer-run transformation: "In 1975, foreign trade was only 9 percent in proportion to Turkey's GDP. In 2013 this figure had increased to almost 50 percent. Turkish foreign trade increased from around 6.1 billion USD in 1975 to about 400 billion in 2013. This was a period during which Turkey became a 'trading state', that is, a state whose foreign policy is shaped increasingly by economic considerations. The Customs Union dramatically improved the competitiveness of Turkish industry as a consequence of Turkey's adoption of the EU's trade and competition rules. Today, over 55 percent of European economic legislation has corresponding provisions in Turkish law, which effectively means that Turkey is part of the EU economy. This has not only helped Turkey expand its trade and broaden its economic relations with the EU, but has also made Turkish exports more attractive to many countries outside the region."

Togan (2012) reviews Turkey's economic progress in terms of trade and FDI performance, as well as customs procedures, TBT, competition policy, industrial property rights, contingent trade protection, and public procurement. He concludes that the CU has been a success, as it credibly locked Turkey into a liberal foreign trade regime and prompted the adoption of modern, high-standard microeconomic framework policies, which have moved the Turkish economy from a government-controlled regime to a market-based one, under which Turkish producers of industrial goods have performed "remarkably well". While Togan finds that the CU promoted economic integration with the EU, he emphasizes the role that the CU played in Turkey's global integration through the liberalization vis-à-vis third parties, which in his view reversed the usual negative spillovers and resulted in trade gains for third parties. He observes that the administrative costs of implementing the CU's requirements, which have been quite substantial, were willingly incurred on the hope of becoming a full EU member. He also notes that there was almost no resistance to the integration process on the part of Turkish society.

Yucel (2014) examines the effect of the CU on economic integration through the lens of intra-industry trade (IIT). The value of the Grubel-Lloyd Index (GLI) is high for EU-Turkey manufacturing trade, ranging between 85%-95% since 2001. Yucel examines Turkey's trade with individual EU Member States. With Turkey's largest EU trading partner, Germany, the ITT is of the horizontal (HIIT) variety, which is more typical of trade between developed countries. However, with some other EU Member States, such as France, it is of the vertical (VIIT) variety, which is more typical of trade between developed and developing economies. Overall, the study finds that the CU has strengthened bilateral economic and commercial ties and promoted an increase in economic integration, as measured by the IIT intensity. However, since 2008, there has been some tailing off.

There is a massive literature dealing with the social and human rights aspects of the EU-Turkey relationship. Kirisci (2005) provides an account of the societally-wrenching reforms in Turkey that enabled it to move forward from the situation described in the EU's 1998 report on Turkey, which found Turkey's progress toward pre-accession on the basis of the Copenhagen political criteria to be wanting, to the 3 October 2005 European Council decision to open membership negotiations with Turkey.

Grethe (2003) distinguishes different categories of EU agricultural imports from Turkey and simulates the effects of extending the CU to include all agricultural products. Based on the assumption that all barriers to trade between the parties are eliminated, Turkey adopts the EU CCT in these goods, and prices in Turkey are aligned with EU prices, he concludes that despite a drop in agricultural production and a deterioration of the trade balance Turkey would experience a welfare increase, as consumer benefits from lower prices more than offset the losses of agricultural producers. Turkey would be a net exporter of fruits and vegetables and a net importer of cereals and processed products. These findings were consistent with Çakmak and Kasnakoğlu (2003) who estimate that the value of production in cereals would decline but rise in fruits, vegetables and nuts. It is also consistent with Eruygur and Çakmak (2005) who indicate, based on simulation findings, that winners of a possible enlargement of the CU to agricultural products are the EU Member States as a result of Turkey's increased imports in several products subject to some degree of substitution effects implying trade diversion for third countries.

f. Major Ex Ante Evaluations of Enhanced EU-Turkey Commercial Relations

The World Bank's (2014) forward-looking CGE analysis suggests an updated arrangement could add up to almost USD 3 billion, or 0.46%, to Turkey's GDP under the most advantageous scenario, which includes extension of the CU to cover trade in primary agriculture and liberalization of services (Table 1). This scenario does not involve Turkey adopting the Common Agricultural Policy (CAP).

Table 1: Summary of World Bank Study Ex Ante Simulation Effects on Welfare in Turkey

	Scenario i		Scenario ii		Scenario iii		Scenario iv	
	With Services	Without Services	With Services	Without Services	With Services	Without Services	With Services	Without Services
Economic Welfare								
USD Millions	72	1,238	292	1,458	843	2,010	500	1,666
Percent	0.01	0.19	0.05	0.23	0.13	0.31	0.08	0.26
Real GDP								
USD Millions	339	1,661	755	2,078	1,661	2,986	1,211	2,538
Percent	0.05	0.26	0.12	0.32	0.26	0.46	0.19	0.39

Source: World Bank (2014: Table 34). Scenarios are as follows:

i) All EU-Turkey trade in primary agriculture becoming duty- and quota-free (i.e., a comprehensive FTA);
ii) Scenario i plus Turkey adopting the CET and EU TRQs on agricultural imports from the rest of the world;
iii) Scenario ii plus Turkey adopting the primary agricultural components of EU FTAs and its GSP (i.e., extension of the CU to cover trade in primary agriculture); and
iv) Scenario iii plus Turkish adoption of the CAP.

The study considers the implications of replacing the CU with an FTA using selected sector simulations with the SMART computable partial equilibrium (CPE) model. The key assumption is to incorporate alternative ROOs costs of 2% and 6% ad valorem equivalent (AVE). This exercise finds that EU imports from Turkey would decline by between 3% and 7.2% depending on the cost of ROOs; Turkey's imports from the EU would decline by between -2.0% and -4.2%, depending on ROOs and if Turkey retains its current tariffs against third parties; but would rise by 0.7%, if Turkey reverted to its 1993 MFN tariff, thereby creating significant trade-diversion in favour of the EU.

The study also examines the potential impact of Turkey concluding FTAs with EU FTA partners that have not concluded FTAs with Turkey:

> "Under the CU, most of Turkey's imports of industrial products from EU FTA partners are duty-free. For those EU FTA partners where Turkey has also concluded an FTA, its exports of industrial products to these destinations are also accorded duty-free treatment. However for those EU FTA partners that have not concluded an FTA with Turkey, while imports of industrial goods from these sources trans-shipped via the EU mostly enter duty-free, Turkey's industrial exports to these destinations still face tariffs. Simulations were run assuming the ten economies identified in the Global Trade Analysis Project (GTAP) database that currently do not have an FTA for industrial goods with Turkey concluded one and so Turkey could export duty-free to these markets. … the highest income gains for Turkey would be obtained from concluding FTAs with Mexico (USD 111 million), South Africa (USD 115 million) and Colombia (USD 41 million). Sectors that would experience the largest increases in exports would be textiles (to Mexico); clothing (to Mexico and South Africa); paper products (to South Africa); petroleum and coal products (to Mexico); and motor vehicles and parts (to Mexico, South Africa and Colombia)" (25-26).

Methodologically, for the CGE-based analysis, the study uses the static, perfect competition version of the GTAP model, with a 57-sector and 21-region disaggregation. The simulations are run on the V8 database, which has a base year of 2007. The model's closure generates strong terms of trade effects, an outcome that in our view is unrealistic in the current environment of considerable excess capacity.

Kirisci (2013: 2015) considers the implications for Turkey of the TTIP, arguing strongly that Turkey should be involved in the TTIP to deepen its transatlantic relations, as well as to strengthen its "democracy through a continued expansion of the principles of accountability, transparency and rule of law" (Kirisci, 2013: 4). If it is not included, the author suggests that Turkey will be pushed into "the arms of those countries that challenge the Western economic order" (Kirisci, 2013: 5). At the same time, it underscores that participation in TTIP would mean signing onto an ambitious WTO-plus and WTO-extra set of trade- and investment-related disciplines.

Güneş et al. (2013) conduct a CGE-based study of the impact of TTIP for the Central Bank of Turkey. They use the standard static, perfect competition GTAP model with the V7 version of the database with a base year of 2004. The study finds very small effects from the TTIP for the EU and US (0.009% and 0.004%, respectively) from tariff elimination alone. Adding in NTB reductions of 5% in services and 2% in other sectors raises the gains for the EU and the US to 0.092% and 0.105%, respectively. Raising the cut of goods NTBs to 5% raises the gains for the EU and US to 0.151% and 0.185%, respectively. Further, adding in a direct positive spillover effect to third parties exporting to the EU and US equal to one-fifth the 5% NTB cut raises the gains to the EU and US to 0.264% and 0.300%, respectively. We note that these results are the same order of magnitude as those in Francois et al. (2013), which found gains for the EU of between 0.27% and 0.48% in the less and more ambitious scenarios; and for the US of between 0.21% and 0.29%, respectively. Against this background, the study considers two alternative scenarios for Turkey (Table 2): If Turkey is excluded from the TTIP, its GDP declines about USD 4 billion, or about 0.5%. If Turkey signs a parallel FTA with the United States, it makes a large gain of USD 35 billion, or about 4%, of GDP. The authors observe that Turkey's inclusion in the FTA also generates modest positive GDP impacts for the EU and US.

Table 2: TTIP Impact on Turkey, Excluded vs. Included, Real GDP % Change

	Turkey Excluded	Turkey Included
Removal of tariffs	-0.132	0.460
Removal of tariffs and limited reduction in NTBs	-0.359	2.046
Removal of tariffs and more ambitious reduction in NTBs	-0.561	4.001
Removal of tariffs, reduction in NTBs, and direct spillover effects	-0.191	3.793

Source: Güneş et al. (2013).

Akman et al. (2015) argue that the impact of TTIP on third countries will depend on a range of factors, such as the degree of participation in GVCs, the nature of the pre-existing preferential arrangements between TTIP economies and third countries, and the ability of outsiders to align themselves with TTIP's regulatory arrangements. To minimize vulnerability, the study emphasizes that third countries, including Turkey, should undertake domestic reforms to achieve regulatory convergence. Turkey should undertake substantial legislative changes in several areas, which could also help the country to transform its economy under the new trading rules following the transformative impact of the CU. In this way, TTIP, if well-managed could prove to be an opportunity to give Turkey leverage to become a rule-maker.

Official views in Turkey are comparatively pessimistic, with fears of large negative impacts if Turkey is not included in the TTIP. The former EU Minister and Chief Negotiator Bozkır has stated that "There are many calculations being made. In one of them, they pronounce a figure that corresponds to 3% of the National Revenue. And that makes around $3 billion initially. This is the commercial dimension. Together with loss of jobs and accumulating economic losses, they claim that perhaps in a time span of 5–10 years this loss may amount to $50 billion" (Hurriyet, 2015).

Akman (2010) evaluates the major challenges resulting for Turkey's trade patterns from the EU's FTAs in general. The study categorises different arguments raised in Turkey for the implications of EU FTAs by examining several critical points ranging from preference erosion for Turkish exporters in the EU market, to EU's partners' unenthusiastic practices towards Turkey for similar agreements, the asymmetric structure of the preferential regime, the tariff revenue loss, Turkey's non-inclusion in EU's FTA policy-process. The study explains that a viable and sustainable relationship against this backdrop is contingent upon certain criteria to be accomplished.

On the business side, IKV notes that Turkey faces difficulties in meeting its obligation of aligning its trade policy with EU's preferential trade regimes, since the EU's FTA partners do not feel the need to sign a separate agreement with Turkey. By signing a FTA with EU, these countries benefit from the free movement of goods ensured by the CU since they can enter to Turkish market via the European market without paying the customs duties. Meanwhile, Turkey does not benefit in return from trade facilitation concessions granted to the EU. This asymmetry has become a concern for the Turkish business community in terms of loss of competitiveness since the EU started to negotiate agreements with much greater scope than the CU with stronger trade partners especially with the US, but also with competitive emerging markets, such as South Korea. IKV supports the view that was raised by the Turkish business community on several instances, such as Turkey-EU High Level Economic Dialogue, that Turkey should take part in these negotiations and the decision-making processes. It is therefore of outmost importance for the Turkish business community, argued by IKV that during the negotiations of the revision of the CU, Turkey's request to take part in the decision-making process be accepted.

3. Business Sector Views

While academic opinion on the CU is generally positive, there is evidence of some business sector frustration. Although most prominent business circles have an overall positive approach towards the CU, and appreciate its impact on the competitiveness of Turkey's industry, as well as the transformative power it has exercised on economic policy in Turkey, many commentators have raised concerns about its functioning.

A recent position paper by the European Foreign Trade Association stated that the arrangement is outdated and is being undermined by the EU not including Turkey in its FTA negotiations, which gives rise to Turkish protectionism, which hurts EU exporters. The Association specifically mentions Turkey's imposition of 50% tariffs on footwear with testing requirements of "dubious relevance and legality". Further, the association mentions measures, which in its opinion are contrary to the CU, imposed on textiles and apparel, alcoholic spirits, beef, pharmaceuticals, second-hand goods, and metal hand tools (Foreign Trade Association, 2015).

The Association of European Chambers of Commerce and Industry (EUROCHAMBRES) and the Union of Chambers and Commodity Exchanges of Turkey (TOBB) along with the EU conducted a survey of 1760 companies in the EU27 countries in 2013. The survey showed that: "1) European companies do not feel properly informed about both the Turkish market and Turkey's accession process to the European Union, 2) trade and investment opportunities for European companies in Turkey remain under-exploited, 3) European companies are divided regarding the impact of Turkey's potential EU membership on their business and on the overall society, 4) almost three quarters of European companies (72%) believe that Turkey will be member of the European Union one day. The survey's results stress the importance of improving the business environment in Turkey, as well as actively promoting the Turkish market in Europe, in order to further untap the potential for trade and investment between the two regions" (EUROCHAMBERS and TOBB, 2013) In addition, in a joint statement with TOBB, A. Abruzzini the Secretary General of EUROCHAMBRES stated that "the success of the Customs Union between the EU and Turkey is undeniable but it should be modernised, its functioning should be improved and its scope expanded. These massive mutual economic interests and benefits should be better reported and acknowledged" (EUROCHAMBERS and TOBB, 2014).

BUSINESSEUROPE supports updating the CU. "A modernised Customs Union should be able to address tariff and non-tariff barriers, cover services, public procurement, intellectual property rights and include an effective dispute settlement mechanism. These are essential components that will allow the EU and Turkey to realise the full potential of their trade and economic relations" (BUSINESSEUROPE, 2016).

The Turkish Economic Development Foundation (İKV) has voiced overall support for the joint decision taken by the EU and the Turkish government to revise the framework and the scope of the CU, despite the challenges that Turkish business representatives might face as a result of the expansion of the scope of the CU to new areas. The İKV position is important as it reflects the views of many leading business associations, such as TOBB, Istanbul Chamber of Commerce, Istanbul Chamber of Industry, TİM-Turkish Exporters Assembly, TÜSİAD, TİSK-Turkish Confederation of Employers Association, The Banks Association of Turkey, and TZOB-the Union of Agricultural Chambers of Turkey, which are corporate founders of İKV. According to İKV, the current limited framework of the CU does not satisfy anymore the new global economy resulting from the increase of world trade in services, the expansion of international investment, the emergence of global value chains, the rise of new economic actors, and the increasing importance of trade-related topics, such as IP rights, competition and state aid rules, and public procurement.

TOBB President M. Rifat Hisarcıklıoğlu pointing to the World Bank (2014) report stated that the results vindicate Turkish private sector views concerning the asymmetry in the relationship: "The Turkish private sector should not be subject to unfair competition from within or without the Customs Union and Turkey should be made party to FTA negotiations with third parties including the USA simultaneously" (The Union of Chambers and Commodity Exchanges of Turkey, 2014).

Mehmet Büyükekşi, Chairman of the Turkish Exporters' Assembly (TİM), has stated: "The Customs Union has made a major contribution to factor efficiency and Turkey's competitiveness, as well as raising Turkey's total trade volume, opening way for new markets and various goods and leaning to technology-based production systems" (Anadolu Agency, 2014). Nonetheless, he has called for reforms to Turkey-EU relations, in particular regarding the impact of the EU's FTAs: "the CU causes an unfair competition and boosts imports in Turkey ... [which] increases Turkey's economic fragility. The biggest problem here is that Turkey is a member of the CU without being a full EU member. Thus, Turkey has to bear consequences of all these FTAs without any negotiation. This flaw in the CU needs to be fixed" (Hürriyet, 29 March 2013).

The Turkish Industry and Business Association (TÜSİAD) evaluates the CU in a recent Report (British Embassy Ankara and TÜSİAD, 2015) and states that "the modernisation of the CU, in order to broaden its scope, resolve its asymmetries and establish a more advanced cooperation mechanism, appears to be an important opportunity for the Turkish economy." It also argues that a modernised CU would play a key role in successfully concluding EU accession negotiations.

TÜSİAD favours liberalisation of trade in services with the EU, and proposes different models to make it operational. The most ambitious scenario would be legal harmonisation and EU *acquis* adoption by Turkey, following the European Economic Area (EEA) model. An alternative would be based on the GATS model. The report also proposes a hybrid approach of the two models entitled Deep Free Trade Agreement, where legal harmonisation could be preferred in areas if it is achievable, and the GATS model in the areas where legal harmonisation is not desirable.

TÜSİAD also calls for a deepening in agricultural trade, referring to the results of the World Bank (2014) CU study, and for opening up public procurement to foreign bidders to increase competition. In the latter regard, TÜSİAD observes that: "it would be useful to link public procurement talks to the freedom of establishment, freedom to provide services and temporary movement of workers" considering the importance of the issue to Turkey's construction and contracting industries (10).

The report states that it would be desirable "to condition the conclusion of EU FTA with a third party to its initiation of a negotiation with Turkey," but goes on to observe that "political and economic realities have not allowed for this option to be fully enforced" (11). TÜSİAD argues that the deepening of the CU will be a necessary criterion for Turkey's TTIP membership. It also refers to the BUSINESSEUROPE Position Paper, which supports Turkey's association to the TTIP and argues it is "an added-value for business communities of both sides." For TÜSİAD, the TTIP agenda has motivated Turkey to agree the negotiations on the deepening of the CU with the EU. TÜSİAD advocates the manifold changes, but reiterates that "commitment for the full adoption of *acquis* without being a member is tantamount to agreeing to implement the *acquis* devoid of the ability to contribute to its shaping” (17).

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