Trade shocks, growth and resilience in CESEE countries

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1. Openness, FDI and agglomeration effects

This conference is about the CESEE region, which includes countries that are already member states of the EU, I will refer to them as EU11, countries that are candidates (or potential candidates) for future membership, and countries that do not have such status. In my talk, I will focus on the EU11 group, but will draw at the very end some conclusions for the broader region at the end.

EU11 economies are among the most open economies globally. Moreover, their degree of trade openness increased, and the nature of their trade flows changed rapidly in this millennium, in large part because they joined the EU (Figure 1). Other factors also contributed, such as the strong reform drive involved in their transition from central planning to market economy and in their preparation for EU membership; and global trends that led to the emergence of global value chains (GVC) in this period.

**Figure 1 Export openness**

Source: World Bank

Note: EU15 small open includes Austria, Belgium, Denmark, Finland, Netherlands and Sweden; SEA small open includes Cambodia, Korea, Malaysia and Vietnam. EU11 includes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

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There are however important characteristics of EU11 countries that are different from those of other countries with similar degrees of trade openness. Their institutions and their social support systems are less developed than those of small open EU15 countries, and their households have much less financial savings to smooth their consumption. As the capacity of an economy to absorb shocks and manage the necessary structural changes greatly depends on the quality of institutions and on that of the social support system, this is an important difference within the EU. On the other hand, similarly open lower-middle income countries in other parts of the world are not part of supra-national organization such as the EU. Thus, they have not adopted the institutional and legal systems of highly developed countries, and they are not part of a single market with free movement of capital and labor. As trade flows are significantly influenced by the decisions of firms on the location of their production and labor migration, these characteristics of EU11 countries are highly relevant to understanding how trade and other shocks impact them.

EU11 countries show many important similarities when it comes to trade integration, most importantly the large share of intra-EU trade, and its implications for growth and development. Nevertheless, there are also important differences among these countries regarding their level of development, the composition and quality of their exports and the degree to which they participate in GVC.

In what follows, I shall focus on two closely interrelated aspects of rapid trade integration and the underlying FDI. Its impact on the long-term growth potential and on the degree of resilience of these economies.

While most economist would agree on the positive economic effects of closer trade integration at the aggregate level, there is an increasing awareness of the importance of other aspects, such as

- income distribution and more broadly equal chances and fairness (Milanović, 2016, OECD, 2019);
- agglomeration effects and the resulting regional disparities and the increasing prices of housing and regional labour market mismatch (EBRD, 2018, Ossa, 2019);
- labor migration and the resulting fiscal and social implications (Andor, 2019); and
- more lasting impact on societies than previously experienced (Buti, 2019).

Reflecting this, I will also try to move beyond the traditional framework of analysis. One of the most important lessons of the recent crisis in Europe is that the focus on narrowly defined aggregate economic growth and economic resilience is not sufficient to understand the longer-term impact of economic shocks, shocks that stimulate growth but can also trigger a crisis. A broader focus that entails social and political aspects is necessary to understand current developments and to formulate adequate polices. Put differently, it also matters who benefit and who lose out from rapid trade integration and convergence, and who and how absorb the hits during a crisis; and how different groups in society, winners and losers, and the society as a
whole react to the challenges trade integration brings about. If left unaddressed, negative social trends created by market forces can lead to reform reversals, and ultimately to an erosion of growth potential and economic resilience (Székely and Ward-Warmedinger, 2018). They can also have major implications on political developments, at the national and at the European levels that can be detrimental to the deepening of European integration.

The emergence of GVC (Baldwin, 2012, Baldwin and Obuko, 2019) changed the nature and impact of trade integration. The ICT revolution of the 1990s made it easier, safer and more profitable for leading firms in advanced countries to combine their know-how with low cost labour available in nearby countries. Offshoring is particularly attractive in industries like apparel, automobiles, electronics and machinery. There is currently a predominance of intra-regional value chains (Antras and De Gortari, 2017). However, as trade costs are further reduced, the global (including European but extra-EU) component of value chains is likely to increase. Similarly, as the service component of GVC increases, competitive pressure from global markets increases. Moreover, GVCs, particularly its service component which is growing rapidly, are strongly impacted by disruptive technological innovation, with major impact on the skill structure of labor demand. This leads to a constant relocation of the different elements of GVCs, including possible reshoring of certain parts to EU15, but also offshoring of core elements from EU15 to EU11 or to countries outside the EU (Mayer and Head, 2019). I expect this trend to further strengthen in the future.

The process of trade integration and the creation of GVCs also drove a significant inflow of FDI into EU11 countries, with imports of modern technology and capital deepening, as well as a rapid modernization of the product structure, having a positive impact on productivity of local suppliers (Harding and Smarzynska Javorcik. 2011, Hagemejer and Muck, 2019). This confirms the empirical analysis in Alfaro and Chen (2012) which shows that domestic markets experience both knowledge spillovers and factor reallocation as a consequence of multinational production. The policy mix that facilitates reallocation includes improving credit access and labour supply (particularly skilled labour), while eliminating regulatory barriers, reforms that have been carried out in CESEE countries. The empirical results on the effects of tax incentives, however, appear to be mixed (Dellis et al., 2017; for EU11 countries, Wach and Wojciechowski, 2016). Nevertheless it has been widely applied to the extent EU state-aid rules allow it, or sometimes even beyond that.

As with trade, many of the underlying forces that promoted FDI were global and geographical proximity helped, but EU accession provided a fertile ground for these forces to work, as it helped improve institutions and create a higher degree of legal certainty for investors. EU11 countries benefited significantly from the reduction of barriers to trade. Merlevede and Purice (2019) estimate that supplying inputs to a multinational just across the border is productivity enhancing only when countries share an EU border. These spillover effects become even stronger when borders become seamless, as it is the case in the Schengen Area. Point estimates imply that an increase of one standard deviation in FDI activity across the border results in a
productivity level that is about 2% and 6% higher for cross-border EU and cross-border Schengen effects, respectively. In fact, as a result, these countries now trade more intensely with each other than they ever did before transition started (in the USSR-led autarchic trade organization of these countries, called CMEA).

As a result, inward FDI (excluding special purpose entities, SPEs) relative to GDP in EU11 countries has caught up with the trend observed in the most developed small open economies in the EU and in the world (Figure 2). The same however has not been true for outward FDI.

**Figure 2 Stocks of Inward and outward FDI in small open EU15 and EU11 countries**

Source: UNCTAD
Note: EU15 small open includes Austria, Belgium, Denmark, Finland, Netherlands, and Sweden; EU11 includes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Unweighted group averages.

As the overall capital stock relative to GDP is smaller in EU11 than in EU 15 countries, the share of FDI in total stock of capital is higher (Figure 3). Put differently, foreign capital and thus foreign influence in the corporate sector is more important in these countries, particularly in their export (tradable) sector. Moreover, the technological sophistication of FDI is significantly above the rest of the economy, a large part of R&D is made in these companies and they employ a higher share of skilled labor than their share in the private economy.
Proximity to Germany, with companies that were among the first in the EU to embark on the creation of GVCs, and to other main European markets, and the abundance of a low-cost but relatively skilled labour force made EU11 countries perfect targets for integration into European, mostly German, global value chains. They were at the right place at the right time in the right condition to benefit from this global process. The closer to the center of gravity and the better the transport infrastructure, the more so, even within countries. Export-oriented companies, particularly those that are part of GVC are dominantly foreign-owned and highly concentrated in certain regions.

Increasing FDI has also further accelerated the already strong agglomeration effects and increased the demand for, and the wage premium on higher skills. FDI is highly concentrated in main urban areas particularly in capitals and in areas that are close to the main west European manufacturing firms creating GVCs (Szabo, 2019). As Figure 4 shows, FDI is particularly high around capital cities, such as Warsaw, Prague and Bratislava (green coloured areas), and in areas close to Germany with urban centers, such as Győr in Hungary where Audi has its main production site. Large differences exist within countries, for example between the region where Warsaw is in Poland (where FDI relative to GDP is very high, and thus it is in green) and the (mostly rural) regions surrounding this region (where FDI relative to GDP is very low, and thus they are in black).
As Figure 5 shows, the creation of GVC had major agglomeration effects also in the countries in which the firms creating GVCs are located, most visibly in Germany. The location of newly created jobs seems to be rather different from that of the eliminated ones. As a result, decline in (localized) population density is as strong in the middle of Germany (also in the western part) as it is in some of the regions in the CESEE countries. Thus, the process of trade integration and the creation of GVC have major social and political implications also in the EU15 countries, even in the highly successful ones.
2. Economic responses during the crisis: a model-based simulation

One of the salient characteristics of the crisis experience of EU11 countries was that in many of these countries the decline in domestic demand was much bigger relative to the decline in GDP than in the core EU countries. The reason for this particular experience was manifold, including a credit-driven consumption and real estate boom in the run-up to the crisis. At this stage, the latter seems unlikely to be repeated, albeit in some countries household credit and house prices have picked up sharply.

With the help of calibrated DSGE models, we can pinpoint two important characteristics of EU11 countries that can explain a large part of this phenomenon and will remain relevant moving forward:

- large share of foreign ownership of productive capacities, without a comparable magnitude of outward FDI; and
- a large share of hand-to-mouth consumers, that is people who have little savings and thus have to live on their current income, which is partly a consequence of the first characteristic.
As a combined effect of these two characteristics, the income share of unconstrained households, whose consumption would react less to shocks, is significantly lower in an EU11/CESEE economy than in an EU15 economy.

As the charts in Figure 6 show, these characteristics have important implications on how the economy reacts to a global recessionary shock in an EU11 economy with high foreign ownership of productive assets relative to an EU15 economy, and relative to the somewhat hypothetical case an EU 11 economy without sizable foreign ownership. Regarding the first comparison, which is more relevant to understand recent and future economic developments in EU11 countries, domestic demand particularly consumption decline more sharply. The decline investment is somewhat bigger reflecting the accelerator effect of higher consumption decline. Since exports follow similar paths, trade balance paths are very different.

Figure 6 Response to a recessionary shock in CESEE countries, with and without major foreign-ownership of productive capital

![Graphs showing economic indicators response to recessionary shock in CESEE countries]

Source: Economic Commission, DG ECFIN staff calculations using Quest model

Note: QUEST models calibrated to EU11 and rest of EU countries. The model used for EU11 (Foreign Own.) assumes a high share of foreign ownership of productive capacities in EU11 countries. Models assume flexible exchange rate regimes.

Given the high share of non-tradables in consumptions, a much larger decline in consumption, which is not fully passed on to imports, implies that non-tradable sectors decline much more in
an EU11 economy with sizable foreign ownership. Moreover, despite relatively flexible labor markets, hysteresis remains significant and equally importantly, investments recover more gradually. In short, growth potential may be reduced more. Thus, not only actual production but also potential output can be more volatile than in more matured economies. As Figure 7 shows, this has indeed be the situation.

**Figure 7 Potential output growth 2001-2018**

![Potential output growth graph](image)

Source: AMECO
Note: EU15 small open includes Austria, Belgium, Denmark, Finland Netherlands, and Sweden.
EU11 inlcudes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

A crisis tends to accelerate relocation of production, and reorganization of GVC as it puts renewed pressure on multinational firms to reduce costs (Zlate, 2016). As Figure 1 above shows, after the initial shock, EU11 countries indeed benefited from the relocation effect during the recent crisis as their export openness increased significantly after a temporary crisis-related decline.

If we add up these two effects, i.e., a bigger shock to the non-tradable sector and a renewed reallocation of modern export-oriented production to EU11 countries, the outcome is that winners win even more and losers lose even more. The growth potential at the aggregate level may have been largely restored but the vulnerabilities I discussed above have increased. In the absence of an efficient state with high quality public expenditure and social support system, this may destabilize societies and domestic politics. The emergence of reform reversals in the region is a likely manifestation of this impact (Székely and Ward-Warmedinger, 2018).
In the charts I showed earlier (Figure 6), the models incorporated exchange rate flexibility. Flexible exchange rate regimes, especially when they are allowed to work, help absorb external shocks, and can be particularly helpful when external shocks are asymmetric. This is also confirmed by model simulations. If this is taken away, the volatility in output becomes somewhat bigger.

Exchange rate regimes in the CESEE region have continuously moved towards the two extremes, floating and fixed regimes, and EU11 countries with the latter regime, with the exception of Bulgaria, have already joined the euro area. (IMF, 2016). Bulgaria has applied for entering ERM2.

While joining the euro area undoubtedly takes away the exchange rate as an adjustment tool, EU11 countries that have joined the euro area had given up this tool beforehand. Moreover, a major part of the excess output volatility in these countries during the recent crisis was related to the excessive macroeconomic imbalances that had been accumulated in the boom years prior to the crisis. Looking forward, the focus should be on avoiding this in the future. In fact, the Macroeconomic Imbalances Procedure, and more broadly surveillance under the European Semester process should help these countries to avoid accumulating such imbalances.

Regarding the EU11 countries that have no yet joined the euro area or expressed interest to do so, they have floating rates as an adjustment tool at their disposal. It served them well during the crisis (IMF, 2016), albeit could not eliminate the consequences of poor policies. Moreover, with foreign exchange-denominated loans greatly reduced, they can use exchange rate flexibility more than before the crisis. But like during the crisis, exchange rate flexibility will not be a panacea for poor macroeconomic policies and lack of structural reforms. Just the opposite, with poor polices, the volatility of the exchange rate can well aggravate the situation.

3. Policy options moving forward

Policy options to react to trade shocks can range from the short-termism of protecting rents tied to vested interests to longer-term strategies consisting of adopting appropriate structural reforms and enhancing the quality of institutions to retain the position of an attractive investment destination, but also for moving up the value chain and leap-frogging. We see these different responses simultaneously present in the current situation in the world.

Trade protectionism of any form would be particularly detrimental for EU11 countries (Vandenbussche et al., 2017), and this is well understood in these countries. What is perhaps less well understood by some policy makers in these countries is that restrictions on foreign entry (FDI) in their non-tradable sectors (such as retail trade) and sectors that are yet less exposed to competition from the outside (certain service sectors) also reduce their competitiveness and capacity to attract FDI in the tradable sector (Blanchard, 2006).
Reforms that can make a lower-middle income country a more desirable destination for FDI, and for domestic private investment, and hence enhance their growth potential, are well known (EBRD, 2019). Accelerate human capital accumulation, improve the business environment, strengthen institutions, and reduce corruption. These “standard” reforms help improve allocative efficiency and innovation. The country specific recommendations issued to these countries as part of the European Semester process reflect this well (European Commission, 2018), and similar recommendations are given to these countries by other international organizations, such as the IMF, the World Bank, the EBRD or the OECD. What is perhaps a less emphasized aspect of necessary reforms is the need to strengthen local firms, to help them to become European or global firms, invest abroad and thus create more symmetry between inward and outward FDI in EU11 countries.

However, success on this front may also make CESEE countries more vulnerable to external shocks (Deltuvaitė, 2017). Therefore, the right balance and sequencing of reforms is needed to make their convergence not only fast but also sustainable—economically, socially and politically. As Figure 8 shows, given their strong exposure to global shocks, social policy reforms should address all three dimensions, pre-, in- and post-market to make CESEE countries more socially, and thus politically, more resilient. Institutional reforms are key on all fronts, and can also help to build capacity and use EU funds more efficiently.

Figure 8 Social policy reforms to strengthen social resilience in CESEE countries
Reforms at the EU level that can mitigate the negative impact of outward labour migration on national social security systems, and reforms that can help EU11 countries to strengthen their unemployment system and diversify away risk related to labour income are such important areas (Andor, 2015, Andor and Pasimeni, 2016).

Continued capital imports will remain a necessary element of a development strategy and risk diversification is essential for such small and highly-specialized open economies. The crisis clearly demonstrated the vulnerabilities of debt financing. Thus, reforms that can reduce these vulnerabilities, such as the completion of the Banking Union (which is important also for EU11 countries outside the EA as their banking sectors are dominantly owned by banking groups in the EA) and reforms that can make alternative source of finance more easily available, such as the completion of the Capital Market Union are an essential part of such a strategy.

Deeper integration amplifies agglomeration trends, which without appropriate regional development strategies can lead to divided societies and declining regions in otherwise dynamic economies. This in turn can spill over into the rest of the EU through labor migration and can increase negative attitude in EU11 countries towards new European initiatives to address problems such as global migration. This can then create tension within the EU. Overcoming these political tensions is essential to avoid weakening overtime the cross-border cooperation between multinationals and their regional suppliers.

Most of what I have said so far applies also to countries in the CESEE region that are not yet EU member states, but which are, as candidates or potential candidates, at different stages of the EU accession process. As the experience of EU11 countries shows, the prospect of future EU membership constitutes an important anchor for political, economic and institutional reforms. It can accelerate trade integration, FDI inflows, and increase participation in GVC, and so do reforms. In fact, comprehensive reforms are indispensable to comply with the criteria for future EU membership, but the opposite is also true. Slowing down reforms, or worse reversing them, makes EU membership a more distant option, and makes these countries less desirable for FDI. Hence the central role of reforms for CESEE countries. Infrastructure is also crucial, as the type of the FDI and the part of the GVC that are likely to move to this part of Europe at this stage of development heavily relies on transportation. The other side of the coin, increased vulnerability and strong agglomeration effects, including outward migration from the region, is equally if not more important to bear in mind for these countries. As Figures 5 shows, outward migration and agglomeration effects inside the countries are extremely strong forces in these countries, with all the potential consequences on social and political developments I talked about earlier.

To conclude, to maintain the high growth potential of these countries, and thus to support rapid and sustainable convergence that meets the expectations of people in this part of the world, CESEE countries should make themselves ready to benefit from the new trends in the global and European economy. However, success on this front will expose them even more to global shocks and make them more vulnerable on other fronts. Therefore, they need to learn to live with them
better by increasing their economic, social and political resilience to these shocks. This is also in the best interest of the EU as a whole, and reforms at the EU level can also help with this process.

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