ECFIN *Country Focus*

ECONOMIC ANALYSIS FROM EUROPEAN COMMISSION'S DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS

HIGHLIGHTS IN THIS ISSUE:

- Shifting taxes away from labour could increase employment and competitiveness

- Labour tax reductions targeted on the low skilled would bring larger employment gains than across-the-board cuts

- Given the magnitudes involved, a tax shift could provide a useful but limited contribution to addressing the unemployment challenge in Spain

Assessing the impact of a revenue-neutral tax shift away from labour income in Spain

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Summary

Spain is planning a reform of its tax system during 2014, with the aims of simplifying it, increasing its economic efficiency and reducing debt bias. The reform may offer an opportunity for a growth- and employment-friendly reallocation of revenues amongst different tax bases.

Both theory and model-based simulations suggest that tax shifts involving a reduction of taxation on labour compensated by increases in less distortionary taxes can have a positive impact on both employment and the trade balance.

Increasing employment and supporting further trade balance surpluses are both highly relevant objectives for Spain in view of the needs to maintain large current account surpluses, in order to reduce external debt and the net international investment position (NIIP) from their current high levels, and to address the very high unemployment rate. However, putting emphasis on one dimension or the other has implications for the preferred design of the tax shift.

The simulations in this Country Focus show that, in order to achieve a given reduction in unemployment, a labour tax cut targeted to the low skilled would require a much smaller total tax shift than a cut across the board for all workers. In such a targeted scenario, a 1% of GDP tax shift could lower the unemployment rate by one percentage point. As equivalent reductions in unemployment can only be achieved with larger tax shifts when labour taxes are cut across the board, the positive impact on the trade balance would be stronger in the latter case due to more sizable competitiveness gains and larger increases in the taxation of consumption.

The budget neutrality of the reduction in taxation on labour could be ensured by hikes in consumption, environmental and/or (recurrent) property taxation, which in the case of the first two are currently below euro-area averages.

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Introduction

A fiscal devaluation is a particular form of tax shift that focuses on external competitiveness

In recent public debates, the concepts of fiscal devaluation and tax shift have been used interchangeably (EC, 2013a). While both concepts involve a change in the tax structure away from labour, a fiscal devaluation is a particular form of tax shift that focuses on external competitiveness. The broad objective of a tax shift is a long-term gain in terms of growth and jobs. In particular, a growth-friendly tax shift would imply a shift away from taxes that are more detrimental to growth, like labour taxes and corporate income taxes, those that are less detrimental to growth, such as consumption taxes, environmental taxes and recurrent taxes on immovable property. A fiscal devaluation aims primarily at influencing the competitiveness of a country in the short-term by mimicking the effects of nominal currency devaluation. The standard fiscal devaluation takes the form of a reduction in taxation of labour, financed by an increase in VAT.

Examples of fiscal devaluations are not abundant

Fiscal devaluations were implemented in Denmark in 1987 and more recently in Germany in 2007. Denmark introduced a wide-ranging tax reform to contain overheating pressures, reduce labour cost and improve cost-competitiveness, while preserving exchange rate stability within the European Exchange Rate Mechanism. VAT was increased by 3 percentage points (from 22 to 25 percent). OECD (1988) estimates that this increased price competitiveness by 5 percent, as measured by relative export prices. Germany raised the VAT rate from 16 to 19 percent and used about one third of the additional revenues to cut employer contributions to the unemployment insurance scheme. The remaining revenue was used to consolidate the budget. The primary objective of the reform was not competitiveness, but rather to reduce the tax wedge and improve the fiscal position. The effect on competitiveness is difficult to evaluate, as the improvement in employment also reflected several years of wage restraint following the Hartz IV labour market reforms (Burda and Hunt, 2011).

A tax shift could be considered in the planned reform of taxation in Spain

Increasing employment and supporting the trade balance are both highly relevant objectives. Spain needs to maintain large trade balance surpluses to bring down external debt and the NIIP from the current high levels and is characterised at the same time by very high unemployment. The opportunity offered by the forthcoming tax reform calls for an examination of the various possible options in terms of their expected economic impact. A similar exercise was indeed undertaken in the report of the Experts' Committee for Tax Reform released in mid-March 2014.[1]

This Country Focus discusses the pros and cons of alternative tax-shift interventions, namely a reduction of labour income taxation across the board and a reduction targeted to low-skilled/low wage earners workers (the two terms are used interchangeably in this analysis).[2] Results show that putting emphasis on one objective or the other has different implications for the design of a possible tax shift.

The paper briefly compares the structure of taxation in Spain and other EU countries and highlights budgetary and other constraints that can limit the scope for action in Spain. The impact of alternative reforms is then simulated with the European Commission's dynamic general equilibrium model QUEST.

Designing the tax shift: efficiency and equity considerations

Efficiency

■ *From an economic point of view, indirect taxes are more efficient than direct taxes*

As some categories of taxes are less detrimental to growth than others, a shift in the structure of taxation can make the tax system more efficient in terms of its impact on growth and employment in the long run. For instance, labour taxes tend to have a higher deadweight loss than taxes on consumption or property. Moreover, the composition of taxation on labour is also relevant – at least in the short run. As wages tend to adjust slowly downwards due to nominal rigidities, reducing employers' social security contributions (SSC-ER) leads to a swifter increase in employment than decreasing employees' social security contributions (SSC-EE) or personal income tax rates.

■ *Targeting labour tax cuts to worker segments with higher supply and/or demand elasticities leads to greater employment creation*

The target group of the SSC cut is also relevant. Fiscal devaluation simulation exercises point to a low elasticity of employment creation to changes in SSC rates, and, more generally, the literature relying on macro and/or computable general equilibrium models warns against expectations that high unemployment rates can be lowered substantially by decreasing social security contributions. In particular, an across-the-board reduction of SSC tends to have only a modest impact on aggregate employment.[3]

In fact, several studies find that a high tax burden on labour penalises low-skilled workers most strongly, since: (i) the labour demand for the low-skilled tends to be more elastic with respect to labour costs (due to a larger labour-capital substitution effect) and more reactive to business cycles; and (ii) their labour supply elasticity is much higher as the pool of unemployed and/or inactive is greatest amongst the low-skilled. Hence, targeting tax cuts to low-wage workers (or to the unemployed) is likely to generate larger impacts on employment, thereby limiting the magnitude of the tax shift required to achieve a given reduction of unemployment.

■ *Targeted interventions require that administrative costs and risks of opportunistic behaviour be controlled*

Targeted tax cuts, however, increase the administrative costs of tax collection and introduce distortions, thereby increasing the risk of opportunistic behaviour. Opportunistic behaviour could arise if firms were to agree to share the benefits by dividing the salary package into an official one and one "under-the-counter".[4] In this context, it is important to avoid discontinuities in the labour cost by ensuring a smooth transition from the lower tax rate to the standard rate in order not to exacerbate substitution effects. Alternative targeting could also be envisaged on the basis of individual/household-specific conditions as well as firm-specific conditions. There is however a trade-off between the degree of targeting on the one hand and the (i) cost of administrating the reform, (ii) incentives to opportunistic behaviour and (iii) possible distortive effects (including on human capital) on the other. Excessive targeting should therefore be avoided and/or mitigated through careful design of the reduction.

It should be noted that providing employment incentives via subsidies for new hires differ from tax shifts to the extent they target only the flow of new hires, leaving unaffected the stock of workers already in employment, and do not foresee an redistribution across tax bases. Spain has traditionally relied extensively on such incentives for specific categories of workers, although with unclear impacts on employment. At the end of February 2014, the Government introduced a wider scheme based on a fixed amount employers' social security contribution for common contingencies of 100 EUR/month for a period of 2 years for all new indefinite contracts, when they imply additional employment creation. This temporary measure

(applicable to contracts signed up to the end of 2014), is not related to the planned tax reform and its possible impact is not assessed in this Country Focus.

Equity

■ *While taxes on consumption are generally considered to be more regressive, the distributional impact of a tax shift depends on several factors, including the specific design of the reform*

Equity concerns are often raised to oppose tax shifts and more specifically fiscal devaluations, due to the regressive nature of consumption taxes and the impossibility for elderly households to adjust to lower real social transfers. However, when looking beyond these stylised arguments, it is in fact difficult to draw conclusions on the distributional impact of a tax shift. Several factors need to be considered, including: (i) the composition of incomes across the distribution – i.e. the weight of wage income, social transfers and capital incomes in disposable income; (ii) the number and distribution of households that are constrained by labour demand (involuntarily unemployed); (iii) the magnitude of second-order effects (i.e. behavioural reactions) from changes in labour demand and supply; and (iv) the specific welfare metrics chosen for evaluating distributional impact.

Moreover, the specific design of the reform in terms of both labour tax reduction (across the board, targeted on low-skilled or other disadvantaged group) and increase in consumption taxes (changes in standard rate, reduced rate or super-reduced rate) could be tailored to mitigate equity concerns. A targeted indexation of social transfers could also be considered.

Initial situation and constraints

Table 1 Composition of planned fiscal consolidation

(% of GDP)	2013	2014	2015	2016
Total revenues	37.9	38.2	38.4	38.4
Total expenditure	44.8	44.0	42.6	41.2
General government balance[1]	-6.8	-5.8	-4.2	-2.8

[1] The headline deficit targets enshrined in the Council Recommendation of June 2013 were -6.5, -5.8, -4.2 and -2.8% of GDP, respectively.

Source: Stability Programme of Spain, April 2013

■ *Any tax shift in Spain would have to be strictly revenue neutral so as not to undermine fiscal consolidation*

The targets laid down in the Council recommendation to Spain of June 2013 under the Excessive Deficit Procedure foresee that the budget deficit should be below 3% of GDP by 2016, from a level around 6½% of GDP in 2013. According to the 2013 Report on Effective Action, the authorities plan to undertake the necessary fiscal consolidation almost entirely through spending restraint,

with the revenue ratio only increasing slightly (see Table 1). Beyond 2016, Spain is committed to moving towards a structural budget balance. Spain is a relatively low-taxation country in the EU context. The aggregate revenue-to-GDP ratio stands at 37.5% as compared to 46.3% in the euro area. In recent years, tax hikes have been necessary to compensate for large revenue shortfalls in the wake of the crisis.

In addition, the tax wedge on labour in Spain is not particularly high in terms of international comparison (see Graph 1). The wedge was rather stable over 2001-2011 but increased in 2012 as a result of the personal income tax (PIT) rate hike. The below-average tax wedge is mainly due to relatively low PIT levels at average wages, while overall SSC are comparable to other euro-area Member States. However, SCC-ER are somewhat higher than average, whereas SCC-EE are significantly lower. Regarding the financing of a cut in SSC, there are mainly three sources that could be tapped, namely consumption taxes (in particular VAT), environmental taxation, and taxation of property (see Graph 2 for VAT).

Graph 1: Labour income taxation in Spain and in large euro-area Member States (% of GDP)
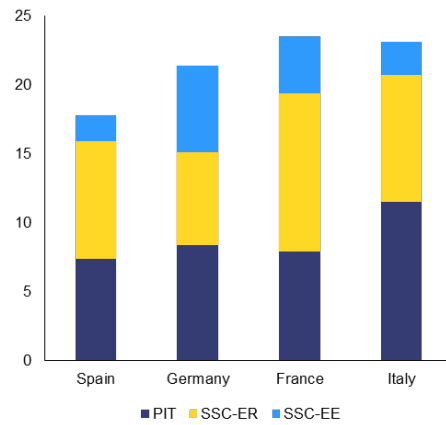
Source: Commission services (2011 data)

**Graph 2: Composition of indirect taxes in Spain and in large euro-area Member States (% of GDP)**
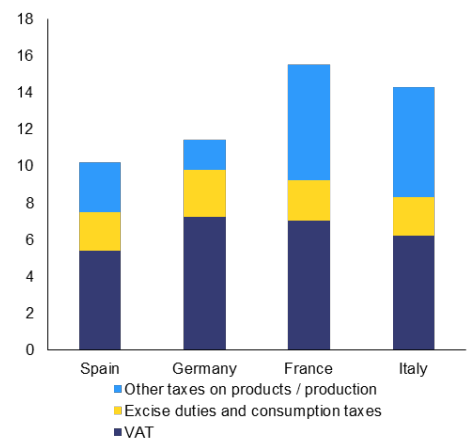
Source: Commission services (2011 data)

The model simulations are calibrated to reduce the unemployment rate by one percentage point

## Simulating the tax shifts

Two alternative tax shifts were simulated with the QUEST model: (i) a reduction in the implicit tax rate on labour across-the-board; and (ii) a reduction targeted on the low-skilled, both funded through an increase in the implicit tax rate on consumption. The low-skilled are defined in terms of workers with lower secondary education or below. In particular, we simulate the reduction in labour income tax needed to reduce the unemployment rate by one percentage point. Throughout the whole simulation horizon, the government budget balance and debt level are unaffected by the reform. The labour tax cuts are funded via a higher overall implicit consumption tax rate (i.e., the ratio of revenues from VAT and excise duties over total consumption). As such, the simulations do not allow for discrimination between different options to increase VAT revenues and do not consider environmental or property taxation.

Graph 3: Impact on employment by skill category of targeted and non-targeted cuts in labour income taxes
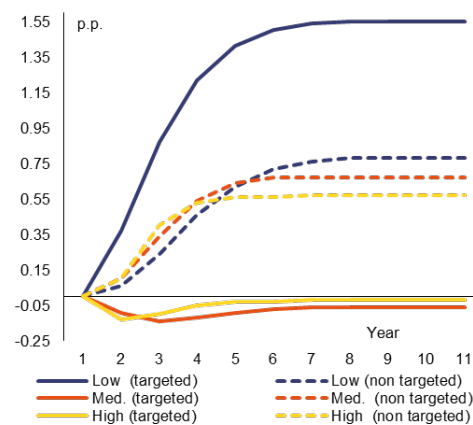
Source: Commission services

Graph 4: Impact on exports and imports of targeted and non-targeted cuts in labour income taxes
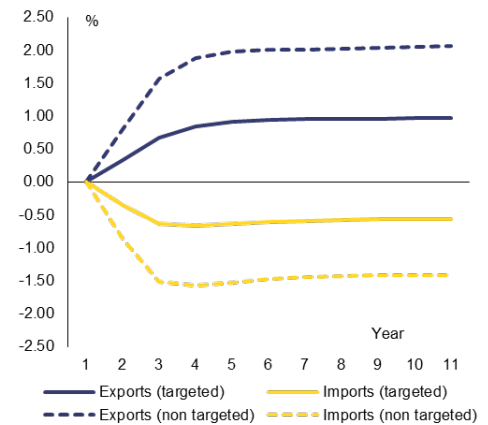
Source: Commission services

A non-targeted tax reduction requires a large tax shift

■ *A targeted tax reduction requires a smaller aggregate tax shift in order to achieve the same reduction in unemployment*

■ *In the targeted scenario, highly-skilled and medium-skilled labour does not profit from the upswing in the short run*

■ *There are limits to the degree of unemployment reduction achievable through a tax shift*

Under scenario (i), in order to reduce the unemployment rate by one pp, the tax rate on labour income is permanently reduced by around 5.7 pps, and the consumption tax rate must increase by 4.2 pps. The overall amount of the tax shift is around 3% of GDP. Employment increases across all skill groups. GDP remains almost unaffected in the first year but increases by a cumulated 0.7 pp in subsequent years.

The aggregate consumption response is negative (-0.24 pp), mainly driven by a reduction in the consumption of non-liquidity-constrained households. However, the consumption of liquidity-constrained households increases significantly. The trade balance improves by almost a ½ pp, as the fiscal reform increases competitiveness and reduces the relative price of exports to imports.[5]

Under scenario (ii) – a targeted labour tax cut to reduce the unemployment rate by one pp – the tax rate on low skilled labour must decrease by around 7 pps and the consumption tax rate must increase by only 1.2 pps permanently. The overall amount of the tax shift is around 1% of GDP. When the reduction in labour income taxes is targeted to low-skilled, less revenue has to be shifted due to the relatively higher elasticity of labour supply for low-skilled workers compared to medium- and high-skilled workers. GDP, consumption and trade balance effects are smaller in this scenario. The improvement in exports is almost half and the contraction in imports almost one third of the corresponding amounts in scenario (i), resulting in a mere 0.2 pp increase in the trade balance. However, as the revenue shift is much smaller in the targeted scenario, the GDP effect is actually proportionately much larger. These results are similar in qualitative terms to the findings of Boscá et al (2012), who conclude that "cutting social security contributions for the worst paid workers could be more effective in terms of employment and output, due to the incentive of these workers to negotiate more hours for the same wage".[6]

The targeted labour tax reduction nevertheless induces a substitution effect: while employment for the low-skilled increases, it diminishes to a small degree for the other skill groups, in particular for medium-skilled workers. This supports results found in other studies. Bajo Rubio and Gómez-Plana (2001) find that employment slightly increases for skilled and unskilled workers when social contributions fall for both types of labour; however, when contributions are reduced only for unskilled workers, total job creation is higher, although employment for skilled workers decreases. In the medium-to-long run, as output increases, the initial reduction is compensated. A similar consideration applies for investment – since capital is also initially substituted for labour. However, in the long run, aggregate investment is higher, as the output effect "dominates" the substitution effect.

To explore possible limits of tax-shift induced unemployment reductions, the simulations were replicated setting a target of a three-percentage-point reduction in the unemployment rate. Under scenario (i), the required tax shift would be more than 10% of GDP. Under scenario (ii), the revenue shift would be less than 3% of GDP. The difference between the standard and the low-skilled implicit tax rate on labour would -in the latter case- be in the order of 27 pps, implying significant distortions in the labour market.

The results are broadly in line with the conclusion of the Experts Committee that "in order to have a significant effect on competiveness, the fiscal devaluation should entail a significant reduction in social security contributions", although the GDP and employment effects appear to be somewhat stronger in the Expert Committee report.[7]

Financing a cut in labour taxes

Funding a cut in labour taxes via higher consumptions taxes would maximise the impact on the trade balance. However, if the primary aim is to increase employment, other taxes can also contribute – for instance, environmental and recurrent property taxes that are generally considered to be relatively less distortionary. In this section, we attempt to assess in rough terms the potential for additional revenues from these different sources.

Moving all products and services to the standard VAT rate could raise significant additional revenues. According to the Expert Committee report, taxing all products and services at the standard rate could lift revenues by more than € 19.6 bn (excluding € 13.6 bn stemming from products and services currently exempt from VAT, partly as a result of binding current EU legislation). For every additional percentage point increase of the standard rate on non-exempt products and services, an additional €4.5 bn in revenues could be expected under simplified assumptions.[8]

Graph 5: Environmental and energy taxation in Spain and in large Euro Area member states (% of GDP)
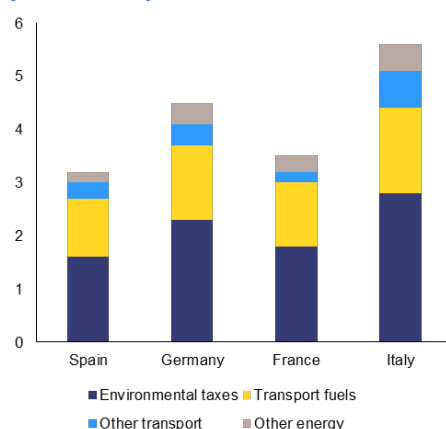
Source: Commission services

Revenues from environmental taxes in Spain are among the lowest in the EU, due in particular to very low revenues from energy taxes. Revenues from the sub-category 'transport fuel taxes' were the second lowest in the EU in 2011 (see Graph 5). The effective tax burden on energy in Spain as measured by a deflated implicit tax rate on energy is well below the EU average. However, these data do not yet reflect the recent increases in environmental taxes (inter alia on hydrocarbons, energy production and production and storage of nuclear waste). Government estimates of expected revenues from these additional taxes amount to about €3.7 bn (a bit less than 0.4% of GDP).

Given that total environmental tax revenues were almost 1% of GDP below the EU average before these changes, there could still be room to increase them further.

There might be scope for higher revenues from property taxes. While the rate of owner-occupied housing is particularly high in Spain (almost 83% in 2011, compared to an EU27 average of about 71%), the ratio of total tax revenues from property to GDP is close to the EU average. Moreover, Spain stands out for relying more extensively on taxes on property transactions rather than on recurrent taxes (which are among the taxes least detrimental to growth). Taxpayers in Spain have benefited from substantial tax credits for owner-occupied housing, amounting to more than €4 billion (or about 0.4% of GDP) in 2009. These credits have been abolished for property bought as of 2013.

Overall, these tentative estimates suggest that there could be room for financing a reduction in SSC with significant employment impact, in particular if the reduction is targeted to low-skilled or low-wage workers.

References

Bajo Rubio, O. and Gómez-Plana, A. (2001), "Reducing social contributions on unskilled labour as a way of fighting unemployment: An empirical evaluation for the case of Spain", Documentos de Trabajo, 0102 - Lan Gaiak Departamento de Economía - Universidad Pública de Navarra.

Boscá, J., Doménech, R., Ferri, J. (2012), "Fiscal Devaluations in EMU", BBVA Working Papers, Number 12/11.

Burda, M. C. and Hunt, J. (2011), "What Explains the German Labor Market Miracle in the Great Recession", Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, Vol. 42(1), 273-335.

Capéau, B., Decoster, A., De Swerdt, K. and Orsini, K. (2009), "Welfare effects of alternative financing of social security". Calculations for Belgium, in: Zaidi, A., Harding, A. and Williamson, P., New Frontiers in Microsimulation Modelling, Chapter 17, 437-470, Ashgate.

Comisión de Expertos para la reforma del Sistema Tributario Español (2014), Informe: http://www.abc.es/gestordocumental/uploads/economia/fe007a24af859ec8ce790387ba6b7755.pdf

European Commission (2011), "Internal devaluation and external imbalances: a model-based analysis", Quarterly Report on the Euro Area, Volume 10 (2011) Issue 3, Brussels: European Commission, DG ECFIN.

European Commission (2013a), "Tax reforms in EU Member States 2013 - Tax policy challenges for economic growth and fiscal sustainability", European Economy 5, October 2013, Brussels: European Commission, DG ECFIN and DG TAXUD.

European Commission (2013b), "Study on the Impacts of Fiscal Devaluation", Taxation paper, 36, Brussels: European Commission, DG TAXUD.

International Monetary Fund (2012), "Italy – Selected Issues", IMF Country Report No. 12/168.

Organisation for Economic Co-operation and Development, 1988, Danemark 1987–1988, Etudes Economiques de l'OCDE, OECD Publishing.

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[1] See Comisión de Expertos para la reforma del Sistema Tributario Español (2014). As discussed later in the text, our estimates of the employment effects of generalised reduction in labour income taxation, nevertheless, tend to be lower than those presented in the report.

[2] Clearly not all low skilled workers are earning a low wage and vice versa. Nevertheless, hourly wages are highly correlated with skill levels, so that the latter is the best proxy for earning capacity. The somewhat loose use of the two concepts is linked to the fact that, while the model used for the simulations relies on three different skill levels of the work force, the implementation of a targeted tax credit is most likely to be conditioned on the level of earnings and/or income.

[3] For a review see European Commission (2013b), IMF (2012) and Capeau et al (2007).

[4] Targeted tax cuts on low skilled have typically been calibrated on gross earnings or gross income. Low earnings are the results of low skills (i.e. low hourly wage), low efforts (i.e. limited amount of hours worked) or both. Ideally a targeted tax reduction would distinguish between low skill and low effort in order not to distort labour supply strategies (induce household to supply less hours) or favour the creation of part-time employment to the detriment of full time employment. A possibility – which some Member States have experimented with – is to condition eligibility for the tax cut on full-time equivalent earnings (or alternatively the hourly wage) instead of gross earnings.

[5] A more detailed model-based analysis of the external effects of an internal devaluation is provided in European Commission (2011).

[6] Boscá et al (2012), p. 18. The authors do not simulate alternative reforms, but rather test the sensitivity of their results to alternative specifications of the labour supply elasticity parameter.

[7] Informe de la Comisión de Expertos para la reforma del Sistema Tributario Español (2014), p. 32. The estimations contained therein were carried out with the REMS model of the Spanish Ministry of Finance.

[8] Maintaining some "sensitive" products and services in their current VAT bracket could imply a significant curtailment of the possible net financing from VAT, given their relative weight.