Fiscal Devaluation – Can it Help to Boost Competitiveness?

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OECD

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02-Oct-2013
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English - Or. English

ECONOMICS DEPARTMENT

FISCAL DEVALUATION – CAN IT HELP TO BOOST COMPETITIVENESS?

ECONOMICS DEPARTMENT WORKING PAPER No. 1089

By Isabell Koske

All Economics Department Working Papers are available through OECD's Internet website at www.oecd.org/eco/Workingpapers

JT03345491

ABSTRACT/RESUMÉ

Fiscal devaluation – can it help to boost competitiveness?

The recent crisis has revealed large differences in external competitiveness between euro area member countries. Since nominal exchange rate devaluation is not an option for members of a currency area, governments in troubled member countries have been considering so-called fiscal devaluation, *i.e.* a shift from employers' social security contribution to value added tax, as an alternative means to restore competitiveness. This paper discusses the potential benefits and drawbacks of such a reform and investigates under which circumstances it would have the intended effects. It argues that a fiscal devaluation can have transitory effects, but that any permanent real effects are likely to be small in size. The policy tool can thus not be a substitute for deeper structural reforms of labour, product and financial markets. However, it may be helpful as part of a broader package of reforms.

JEL classification codes: E62; H23; F13

Keywords: Fiscal devaluation, competitiveness, social security contributions, value added tax

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Dévaluation fiscale - peut-elle aider à stimuler la compétitivité ?

La crise récente a révélé de grandes différences de compétitivité externe entre les pays membres de la zone euro. Comme la dévaluation du taux de change nominal n'est pas une option pour les membres d'une zone monétaire, les gouvernements des pays membres en difficulté ont examiné la dévaluation fiscale, c'est à dire substitution de la taxe à la valeur ajoutée aux cotisations sociales des employeurs, comme un autre moyen de rétablir la compétitivité. Ce document examine les avantages et les inconvénients d'une telle réforme et analyse les circonstances dans lesquelles il aurait les effets escomptés. Il soutient que la dévaluation fiscale peut avoir des effets transitoires, mais que les effets réels permanents sont susceptibles d'être faibles. Cet outil de politique ne peut donc pas se substituer à des réformes structurelles plus profondes des marchés du travail, des produits et financiers. Toutefois, il peut être utile dans le cadre d'un ensemble plus large de réformes.

Classification JEL : E62 ; H23 ; F13

Mots clés : Dévaluation fiscale, compétitivité, cotisations sociales, taxe à la valeur ajoutée

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FISCAL DEVALUATION – CAN IT HELP TO BOOST COMPETITIVENESS?

by Isabell Koske[1]

1. Introduction and summary of main findings

1. With the recovery still weak, growth below potential and unemployment above its structural level, many countries are thinking about ways to restore competitiveness and rebalance their economies. In particular in the euro area, diverging trends in competitiveness have developed over the past decades, the consequences of which have been vividly exposed by the crisis (Figure 1). Between the introduction of the euro in 1998 and 2008, relative unit labour costs fell by 16% in Germany, but rose by around 6% in France, 12% in Portugal, 15% in Italy, 24% in Spain and 35% in Ireland. Unit labour costs of most external-deficit countries have started to decline in recent years, but the necessary adjustment in intra-euro area cost competitiveness is far from complete. More adjustment in relative costs is needed to regain competitiveness not only vis-à-vis other euro area members, but also against competitors in emerging markets.

Figure 1. Competitiveness has evolved heterogeneously across the euro area
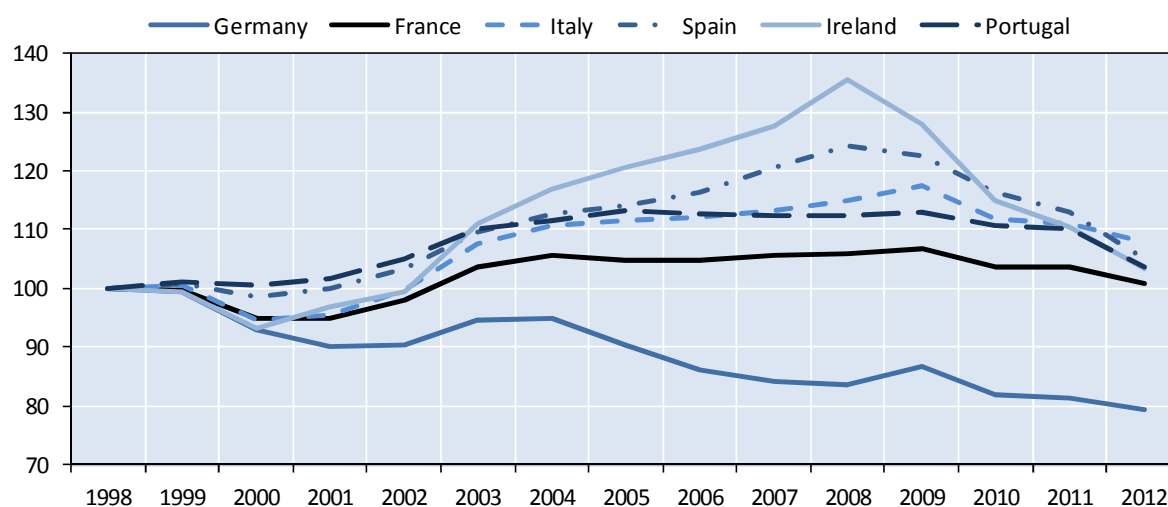
Note: The figure shows competitiveness-weighted relative unit labour costs in dollar terms. An increase in the index indicates a real effective appreciation and a corresponding deterioration in the competitive position. Percentage changes in the index are computed by comparing the change in the index for the country concerned (expressed in US dollars at market exchange rates) to a weighted average of changes in the indices for 49 other countries: $\Delta \ln R_{i,0}^t = \ln\left((P_i^t X_i^t)/(P_i^{t-1} X_i^{t-1})\right) - \sum_{j \neq i} w_{ij}^{t-1} \ln\left((P_j^t X_j^t)/(P_j^{t-1} X_j^{t-1})\right)$, where $R_{i,0}^t$ is the competiveness index of country i with base period 0, X_i^t is the exchange rate against the US dollar in period t, P_i^t is country i's unit labour costs in the manufacturing sector and the weights w_{ij} take into account the structure of competition in both export and import markets. For more details on the methodology see OECD Economic Outlook Sources and Methods http://www.oecd.org/eco/sourcesandmethods.htm.

Source: OECD Economic Outlook Database.

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1. The author is member of the Economics Department of the OECD. She would like to thank Jørgen Elmeskov, Jean-Luc Schneider, Anne Épaulard, Guntram Wolff, Werner Roeger, Alain de Serres, Caroline Klein and Isabelle Wanner for their useful comments and suggestions and Caroline Abettan for her excellent editorial support. The views expressed in this paper are those of the author and do not necessarily reflect those of the OECD or its member countries.

2.   As a means to restore competitiveness, governments have been considering so-called fiscal devaluation, *i.e.* a shift from employers' social security contribution (ESSC) to value added tax (VAT). This working paper assesses what potential benefits such a reform would entail and in which circumstances it should be considered for this purpose, *i.e.* what conditions must be fulfilled in order for a fiscal devaluation to be most effective. The paper also discusses potential negative side effects of such a reform and how they could best be avoided or at least mitigated. The following main conclusions emerge from the analysis:

-   A shift from ESSC to VAT may improve the trade balance by reducing the relative price of exports and increasing the relative price of imports. Such an improvement is the more likely the more responsive export and import volumes are to price changes. At the same time, the cut in ESSC may induce firms to raise labour input.

-   The price effects are stronger and more persistent in the context of nominal exchange rate rigidities. If the reform primarily aims at boosting net exports, it would thus be meaningful only for members of a currency union.

-   Provided monetary policy is accommodative, a fiscal devaluation will lead to a permanently higher domestic price level. Once wages catch up with higher prices, the initial drop in wage costs is reversed, so that *a priori* the reform should not have any permanent real effects on the economy.

-   However, if certain conditions are met, permanent real effects may in fact materialise. One such condition is a broader tax base of the VAT as compared with social security contributions, which is typically the case. A permanent rise in output and employment can also be expected in the presence of wage rigidities – caused, for example, by a high minimum wage.

-   While such permanent effects may well occur in practice, they are likely to be small in size. Most model simulations put the employment and GDP increase that follows a 1% of GDP revenue shift from ESSC to VAT at well below 1%.

-   If public transfers are indexed to inflation, either explicitly or implicitly, public expenditure will rise alongside the VAT increase, reducing the fiscal space available for cutting ESSC.

-   The fairly modest macroeconomic effects of a fiscal devaluation suggest that this policy tool cannot be a substitute for deeper structural reforms of labour, product and financial markets. However, it may be helpful as part of a broader package of reforms to regain external competitiveness by enhancing the flexibility of prices and wages as well as the quality and variety of goods produced.

-   Similarly, a shift from employers' social security contributions to VAT may be useful in the context of a more wide-ranging reform of the tax system aimed at making it more growth-friendly.

3.   The remainder of this paper is structured as follows: Section 2 provides some background information about the recent discussion of fiscal devaluations and presents some statistics on employers' social security contributions and value-added taxes in OECD countries. Section 3 lays out the basic economic mechanisms behind the reform and section 4 discusses a number of implementation issues that may arise in practice. Section 5 summarises the existing evidence from model simulations and econometric exercises on the effects of a fiscal devaluation on GDP, employment and the trade balance.

2.   What is a fiscal devaluation and why is it discussed?

4.   Before the creation of the common currency, changes in nominal exchange rates would have helped to restore balance between countries in terms of competitiveness. Since this is not an option in a currency union, the fiscal devaluation is discussed as a means to improve the competitiveness of troubled member states. While a fiscal devaluation could in principle be achieved through a variety of tax reforms, the recent debate has mostly focused on shifting from employers' social security contributions (ESSC) toward a value-added tax (VAT) in a revenue-neutral way. The competitiveness effects of a fiscal devaluation could in principle be offset by endogenous responses of the nominal exchange rate. For this reason, the tool appears relevant predominantly for countries that are part of a currency union.

5.   A couple of countries have implemented such a reform of the tax and benefit system. A first example is Denmark, which phased out employer payroll tax for unemployment and disability insurance in 1987 and replaced this tax by a VAT-like tax on consumption, which was later merged into the general VAT. More recently, Germany increased the standard VAT rate from 16% to 19% in 2007 and simultaneously reduced ESSC by 1.8 percentage points. Hungary decided in 2009 a simultaneous 5 percentage point reduction in ESSC and a 5 percentage point increase in VAT. In France, the government has announced a plan to lower social contribution costs of employers through the introduction of a tax credit based on a company's gross wage bill for low to middle-wage workers. The resulting drop in public revenues by around 1% of GDP shall largely be financed through a hike in the standard VAT rate from 19.6% to 20% and the intermediate VAT rate from 7% to 10%.

6.   A cross-country comparison of current VAT and ESSC rates reveals a great variation across the OECD (Figures 2 and 3). The main VAT rate ranges from 5% in Japan and Canada to 25% in Hungary, Norway, Sweden and Denmark and 25.5% in Iceland, suggesting that some countries have ample room to raise the VAT rate. However, often, the countries with a low VAT rate are not the ones where high social security contributions weigh heavily on unit labour costs. At over 40%, France has the highest ESSC rate in the OECD, followed by Estonia, the Czech Republic, Italy and Belgium, which all have ESSC rates between 30% and 35%. All five countries have VAT rates around 20%.

Figure 2. Statutory VAT rates and VAT revenues in OECD countries
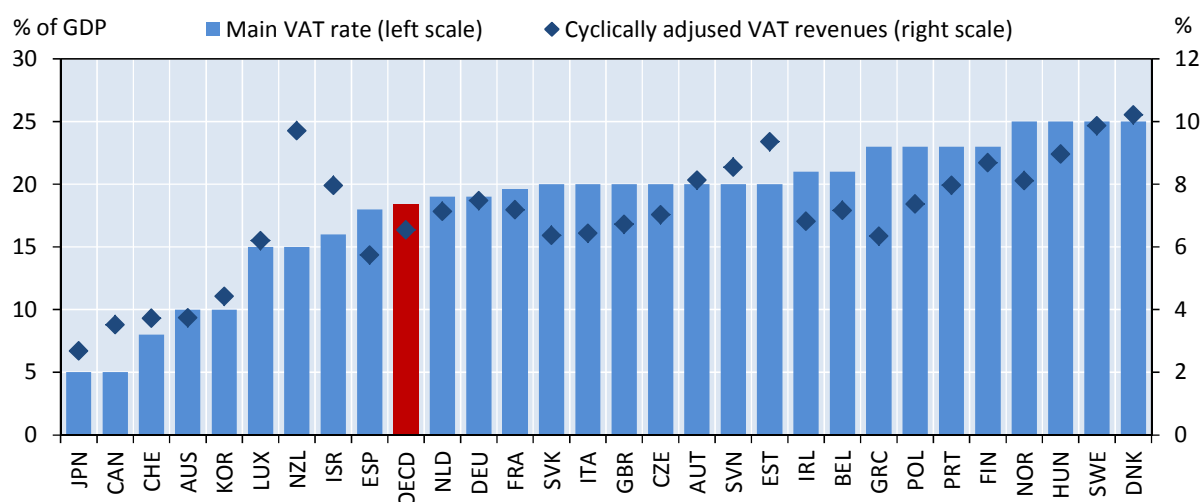
Note: Revenue data refer to 2010 with the exception of Australia, Greece, Ireland, Netherlands and Poland (2009). Tax rate data refer to 2011. OECD is the unweighted average across all countries shown.

Source: OECD Revenue Statistics, OECD Economic Outlook Database.

Figure 3. ESSC rates and ESSC revenues in OECD countries
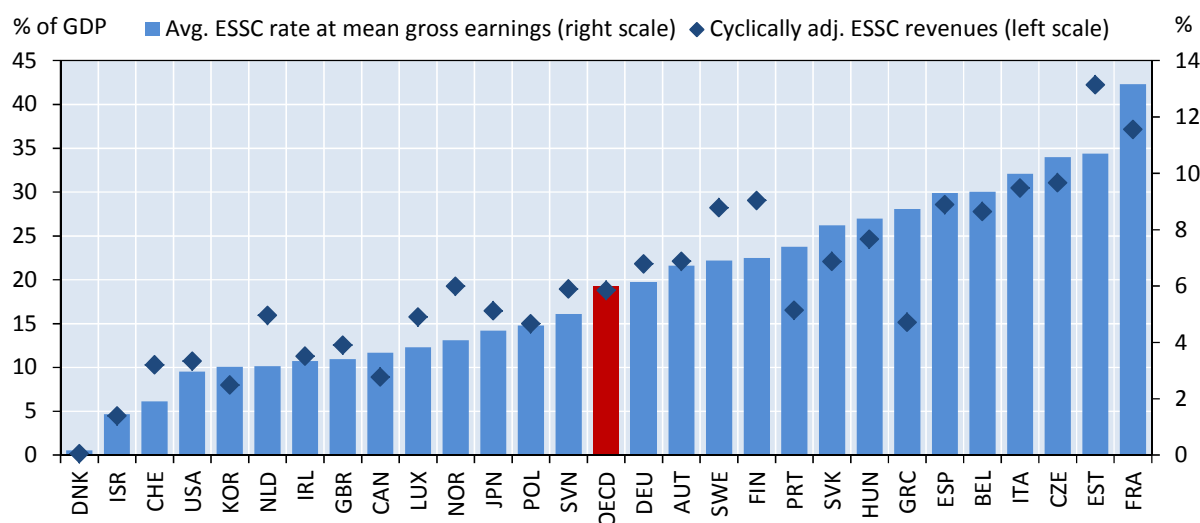
Note: Revenue data refer to 2010 with the exception of Australia, Greece, Ireland, Netherlands and Poland (2009). Tax rate data refer to 2011 with the exception of Greece (2010). The ESSC rate of Slovakia does not include 9% contribution to the fully funded pension pillar. The ESSC rate of Sweden does not include the general wage tax of 9.23%. The ESSC rate of Switzerland excludes the pension fund contribution of 5%. OECD is the unweighted average across all countries shown.

Source: Taxing Wages, OECD Economic Outlook Database.

3. What are the main economic mechanisms behind a fiscal devaluation?

3.1. What are the impact and transition effects of the reform?

7. The basic idea behind a fiscal devaluation is simple. Assuming that employers' social security contributions are borne by employers, the cut in the ESSC rate lowers unit labour costs, at least in the short run (for a brief discussion of the opposite in case in which workers benefit from the ESSC cut, see Box 1 of OECD, 2008). If this fall in unit labour costs is passed on into prices, the producer prices of goods destined for the domestic and export markets decline. The higher VAT only bears on goods consumed domestically, including imported ones, but not on exports. Consequently the consumer price of imports increases due to the higher VAT, the consumer price of exports falls due to the lower ESSC and the consumer price of goods produced and consumed domestically remains more or less unchanged since the VAT hike and the ESSC cut work in opposite directions.

8. What happens to other macroeconomic variables ultimately hinges on a number of factors and conditions prevailing in the economy and which could vary across countries. In essence, a fiscal devaluation results in a simultaneous decline in the relative price of domestically produced goods and the cost of labour. While the volume of exports rises, a fall in private consumption (on account of a negative income effect associated with higher domestic prices) and a shift in its composition towards domestic goods push down imports, leading to an improvement in the trade balance in volume terms. The more responsive export and import volumes are to price changes, the more likely the trade balance will also improve in value terms.

9. The counterpart of the rise in the GDP share of net exports is a fall in the shares of consumption and investment. Consumption falls on account of the loss in purchasing power resulting from higher prices of imported goods. Investment falls because of the change in relative factor prices. In this context, the effectiveness of a fiscal devaluation is likely to depend on the degree of openness of the economy. If exports account for a large part of total output, firms benefit more from the cut in ESSC in terms improved competiveness vis-à-vis their (foreign) competitors. Likewise, the larger the share of imports in total

demand the larger the shift from imports to domestically produced goods in terms of domestic production. A fiscal devaluation is thus more meaningful for more open economies (Figure 4).

Figure 4. The effectiveness of a fiscal devaluation is likely to increase with greater openness

Share of exports and imports in GDP, 2011

Source: OECD Economic Outlook Database.

10. Over time, the cut in ESSC triggers a rise in the demand for labour. Assuming that there is some slack in the economy, employment will rise, which puts upward pressure on wages. The stronger the bargaining power of workers or the less responsive labour supply is to wage changes, the more rapidly the rise in wages will offset the cut in social security contributions and stem the rise in employment. On account of the income gains associated with the rise in employment and nominal wages consumption gradually increases again. Imports rise as part of the additional consumption is spent on foreign goods, exports fall and the initial improvement in the trade balance is gradually reversed.

3.2. *Will there be any permanent effects of the reform?*

11. *A priori*, it is not obvious that a fiscal devaluation will have any permanent real effects on the economy. If the tax shift is not associated with a broadening of the tax base, the increase in nominal wages would fully offset the initial cut in ESSC as workers try to make up for the VAT-induced loss in the purchasing power of real after tax income. However, by spreading the burden of taxation from workers to other segments of the population such as pensioners (provided that pensions are not indexed to inflation) and capital income earners, the reform may permanently reduce labour costs. The net effect would be higher employment (assuming that labour supply is not inelastic) and a shift in the composition of demand from investment and potentially consumption to net exports, but a lower capital-labour ratio, lower productivity and no clear long-run effect on GDP.

12. Under certain circumstances a fiscal devaluation can be expected to also have permanent effects on real GDP. This could for example be the case in the presence of labour market distortions which lower the utilisation of labour. If ESSC distort the relative price of capital and labour, cutting them could lead to a reallocation of inputs within and between firms or industries that makes the use of production inputs more efficient and raises multifactor productivity (Johansson et al., 2008). Also, if the initial situation is characterised by unemployment due to wage rigidities – caused, for example, by a too high minimum wage – a cut in labour costs could relax these constraints and help bring unemployment down towards the rate that would prevail under flexible wages. In this sense, a fiscal devaluation is more likely to be beneficial in countries with a high minimum wage (Figure 5).

Figure 5. A fiscal devaluation might be particularly effective in countries with a high minimum wage

Minimum wage as share of median wage, full-time workers, 2011
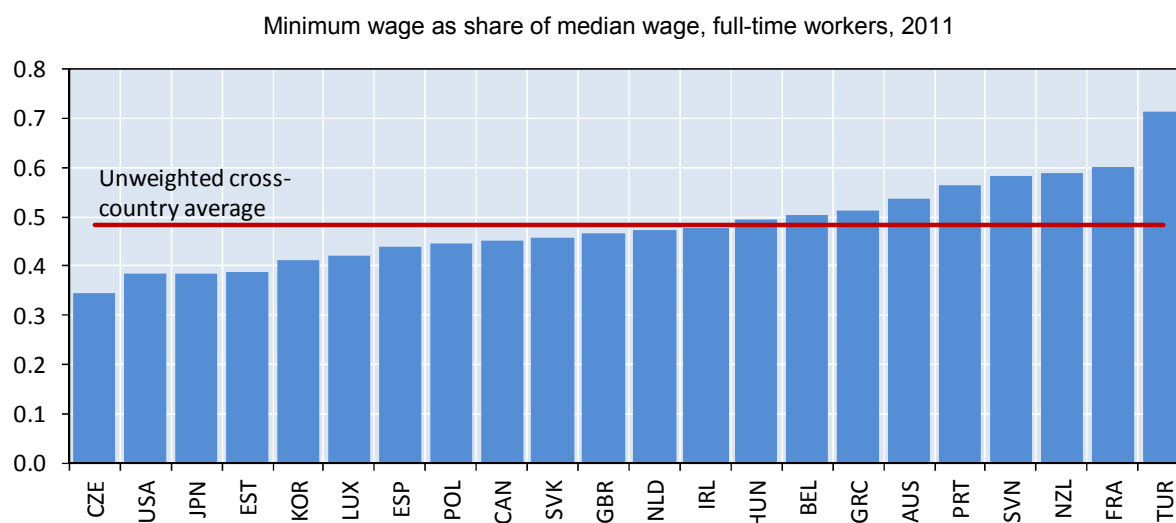
Source: OECD Employment Database.

4. Which implementation issues may arise in practice?

13. While a fiscal devaluation appears simple in principle, a couple of implementation issues need to be addressed when putting the reform into action:

- *Design details*. The size of the effects of a fiscal devaluation is likely to depend on the precise design of the reform. As regards the cut in ESSC, targeting low-wage earners may entail larger employment effects since labour demand may be more responsive to tax changes at the lower end of the wage distribution. As regards the VAT hike, there seems to be a case for raising (or eliminating) reduced rates as this lowers distortions in the economy. However, to the extent that reduced rates apply foremost to non-tradable goods and services this could encourage the substitution of tradables for non-tradables and dilute the improvement in the trade balance.

- *Timing*. If the reform is announced in advance, consumers may bring forward purchases of durable consumption goods in order to avoid paying the higher VAT rate. This would give a temporary boost to domestic activity and imports, with adverse effects on the current account position. These effects would be reversed in the immediate aftermath of the reform, when consumption would be lower than without the pre-announced VAT hike.

- *Equity effects*. A fiscal devaluation will have distributional effects which are complex in nature and depend on the precise design of the reform. The reduction in ESSC will increase employment at the low end of the wage distribution (particularly if low-wage earners are at the centre of the reform) and thus be progressive, while the VAT increase would be regressive to the extent that lower-income households consume a larger share of their income. Also, some population groups such as pensioners will lose from the VAT hike but not directly benefit from the ESSC cut. Public transfers could be raised to compensate households, but this would reduce the scope for lowering the rate of social security contributions given that some of the additional VAT revenues would have to be used to fund such transfers.

- *Benefit indexation*. The same applies if public transfers are indexed to inflation. The rise in prices would lead to a corresponding rise in public transfers. While this would limit the initial fall in consumption because disposable incomes fall by less, it would reduce the fiscal space for cutting

ESSC. The smaller cut in ESSC would translate into smaller gains in net export, employment and output. An indexation of out-of-work benefits to the unemployed may lower the increase in employment also by reducing work incentives through a higher real reservation wage of the unemployed. From this point of view, a fiscal devaluation is likely to be more beneficial in countries such as Austria, Ireland, Luxembourg and Norway, where benefits are generally not indexed to wage or price inflation (Table 1).

Table 1.   Benefit indexation in OECD countries

Country	Invalidity	Old age	Work accidents & occupational diseases	Childcare	Unemploy-ment	Guaranteed minimum resources	Minimum wage
Austria	d	d	d	d	d	d	-
Belgium	p	p	d	p	pw	p	p
Czech Republic	pw	pw	pw	d	d	d	r
Denmark	w	w	w	w	w	w	-
Estonia	pw	pw	pw	d	d	d	r
Finland	pw	pw	pw	d	pw	pw	d
France	p	p	p	d	d	p	pw
Germany	r	r	r	d	pw	pw	-
Greece	d	d	d	d	d	-	d
Hungary	pw	pw	pw	d	d	d	r
Iceland	pw	pw	pw	d	r	r	-
Ireland	d	d	d	d	d	d	r
Italy	r	r	d	p	d	r	-
Luxembourg	p	pw	p	d	d	p	p
Netherlands	w	w	w	w	w	r	-
Norway	w	w	w	d	d	d	-
Poland	pw	pw	pw	d	pw	d	p
Portugal	r	r	r	d	d	r	r
Slovak Republic	pw	pw	pw	d	d	d	r
Slovenia	w	w	w	d	d	p	r
Spain	p	p	p	d	d	r	r
Sweden	pw	pw	pw	d	d	r	-
Switzerland	pw	pw	p	r	d	pw	-
United Kingdom	p	pw	p	p	p	r	r

Note: d = no regular adjustment or regular adjustment at the discretion of the relevant authority; p = regular adjustment depending on prices; w = regular adjustment depending on wages; pw: regular adjustment depending on prices and wages; r = regular adjustment taking into account other factors than price and wage inflation (*e.g.* sustainability of the system, level of benefits) or adjustment done at the local level. - = not applicable or data not available.

Source: National authorities and European Commission, MISSOC database.

- *Fiscal neutrality.* Since a fiscal devaluation has repercussions on macroeconomic conditions, the second-round effects on the fiscal balance may be hard to assess with precision *ex ante*. There is thus a risk that the net impact of the VAT hike and the ESSC cut does not turn out to be fiscally neutral *ex post*. Since most countries currently envisaging a fiscal devaluation are in need of fiscal consolidation, there might be a case for acting conservatively to make sure that the government's budget balance does not worsen as a result of the reform.

- *Externalities on other countries*. In a monetary union, a fiscal devaluation is non-cooperative in the sense that its benefits in one country, if successful, are at least partially mirrored by negative repercussions on other countries. Similarly, if several countries implement a fiscal devaluation simultaneously, the impact on each one of them will be smaller. Even though this form of revenue-neutral tax competition would not leave each country worse off (as discussed above, a shift from ESSC to VAT may have permanent positive effects on the economy independent from the direct trade impact), within a currency union the policy should be pursued primarily in countries with the most urgent need for improving their competitiveness in order to maximise its benefits for the union as a whole.

5. What does the empirical evidence say about the economic impact of fiscal devaluations?

14. A number of studies have tried to quantify the effects of a fiscal devaluation based on model simulations (Table 2). Overall, these studies point to positive permanent effects on GDP and labour market outcomes, but the size of these effects is rather modest. For example, the Bank of Portugal (2011) simulates a cut in ESSC by 1% of GDP financed through an increase in VAT using a general equilibrium model and finds a lasting positive impact of about 0.6% on GDP and hours worked. Simulations with the QUEST model by the European Commission (2011) point to effects of similar magnitude, though the results hinge crucially on the responsiveness of labour supply to changes in the wage rate. Fève *et al*. (2009) conclude that a similar fiscal devaluation would boost employment in France by 0.8% and GDP by 0.9% in the long run, with the effects cut to one-third if the labour market is characterised by matching frictions. Besson (2007), Heyer *et al*. (2012) Klein and Simon (2010) and Langot *et al*. (2011) provide a more pessimistic picture, arguing that the employment gains associated with a fiscal devaluation would only be temporary.

15. Model simulations of the trade balance effects of fiscal devaluations suggest that these would also be moderate. For example, the European Commission (2011) finds for Portugal that a fiscal devaluation of 1% of GDP would raise net exports by 0.1% of GDP in the first year after the reform, with most of the improvement being reversed after about 7 years. The model simulations by Bank of Portugal (2011) and Klein and Simon (2010) point to similarly small effects. By contrast, relying on an econometric approach rather than a model-based one, de Mooij and Keen (2012) point to much larger effects in the short run, of up to 4% of GDP for euro area countries for a 1% shift in revenues (for non-euro area countries the results are less clear-cut and there might well be no impact at all). While this improvement in the trade balance is found to dissipate in the long run, the adjustment is fairly sluggish – half of the initial improvement in the trade balance would still be present after 3½ years.

Table 2. Overview of quantitative studies on the effects of fiscal devaluations

Shift from ESSC to VAT worth 1% of GDP

Study	Country	Short-term effects			Long-term effects[a]		
		GDP (%)	Employ-ment (%)	Net exports (% of GDP)	GDP (%)	Employ-ment (%)	Net exports (% of GDP)
Besson (2007) – DGTPE, complete pass through	France		0.2			~0	
Gauthier (2008) – uniform ESSC cut	France				0.1	0.3	
Gauthier (2008) – targeted ESSC cut	France				0.7	1.5	
Fève et al. (2009) – model without matching frictions	France	0.7			0.9	0.8	
Fève et al. (2009) – model with matching frictions	France	0.1	0.2		0.3	0.3	
Klein and Simon (2010)	France	-0.1	0.2	0.1	0.1	0.3	0.1
Bank of Portugal (2011)	Portugal	0.2	0.4[b]	0.2	0.6	0.6[a]	0.2
Langot et al. (2011)	France				0.1	0.0	
EC (2011) – low labour supply elasticity	Portugal	0.0	0.2	0.1	0.4	0.4	~0
EC (2011) – high labour supply elasticity	Portugal	0.1	0.2	0.1	0.7	0.8	~0
Heyer et al. (2012) – basic case	France	0.1	0.2	0.4	0.3	0.3	0.3
de Mooij and Keen (2012) – specification 2	Eurozone OECD countries			4.0			~0
de Mooij and Keen (2012) – specification 2	Non-eurozone OECD countries			2.8			~0

Notes: [a] Effect after 5 years for Heyer et al. (2007) and Klein and Simon (2010), after 10 years for Gauthier (2008) and Bank of Portugal (2011), after 30 years for EC (2011), after 40 years for Fève et al. (2009) and after 100 years for Langot et al. (2011). [b] Impact on hours worked since employment effect is not available.

16.   Overall, a fiscal devaluation thus appears to be beneficial in the short term for net exports (at least for countries that are part of a currency union), output and employment, but the size of the effects is likely to be moderate. This is even more the case as the assumed one-percent-of-GDP tax shift is not negligible in size: on average across OECD countries, (cyclically adjusted) ESSC revenues amount to around 6% of GDP and (cyclically adjusted) VAT revenues to around 7% of GDP. A fiscal devaluation should thus not be a substitute for more fundamental reforms of labour and product markets, aimed at boosting employment and output through higher competitiveness. It may however be helpful as part of a broader package of reforms to achieve short-term gains in competitiveness in the face of changing market conditions. Similarly, it may be useful in the context of a more comprehensive reform to reduce growth-restraining distortions in the tax and transfer system.

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