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Highlights in this issue:

- Belgium progressively reduces direct taxes by 1.6% of GDP between 2002 and 2006
- The reform may have positive short-term effects on GDP and employment...
- ...but lack of budgetary compensation may reduce these effects

The reform cuts direct taxation progressively over 2002-2006...

Income tax reform in Belgium: a free lunch?

By Orlando Abreu*

Summary

In autumn 2000 the Belgian government approved a comprehensive personal income tax reform which is being phased in progressively between 2002 and 2005. This reform was motivated by the high levels of taxation that generated adverse labour market effects. In principle, such a tax reduction involves two types of effects. First, in the short run there are possible macroeconomic effects particularly if the tax reductions are perceived to be permanent. Second, in the longer run there are positive microeconomic effects on labour supply and demand.

In the Belgian case there has been no budgetary compensation for the tax cuts. Therefore there will be a negative impact on the government accounts and the public debt. To the extent that this leads to expectations of future increases in taxes, any possible short-term boost to demand would be lowered. As tax wedges are reduced, the reform will have a positive impact on labour supply, employment and output. But these positive effects can only last in so far as the reform is not put at risk by the implied deterioration in public finances.

The Belgian tax reform

In 2000, Belgium had one of the highest government revenue ratios in the EU (at 49.5% of GDP, the fifth highest after the Nordic countries, France and Austria). This is the counterpart of an equally high government spending ratio (51.4% of GDP, sixth after the same countries plus Greece). Particularly striking is the outstandingly high weight of direct taxes (Figures 1 and 2). The same conclusion of a very high level of direct taxation in Belgium holds when looking at other indicators, such as the effective tax rates on labour, tax wedges, or marginal tax rates (see Martínez Mongay and Fernández Bayón (2001) or Leibfritz *et al.* (1997)). This high level of taxation has been recognised by the authorities (see the statement of the Prime Minister in his 'Déclaration de Politique Fédérale 2000') and more widely, e.g. Carey (2003).

Hence, on 17 October 2000, in a context of expected favourable macroeconomic prospects and while other countries were also in the process of reform in their tax systems (e.g. France, Germany, Netherlands, Luxembourg) the Belgian authorities decided to carry out an extensive multi-tier reform of the direct tax system (see box).

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Fig. 1: Direct taxes much higher in Belgium

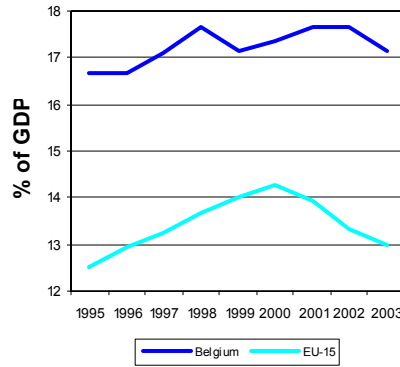
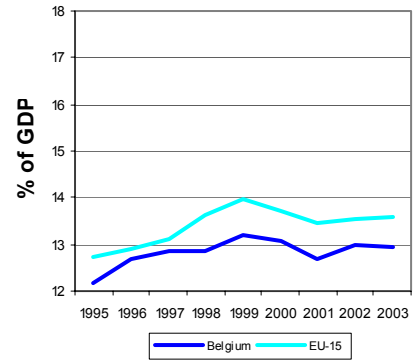


Fig. 2: Indirect taxes slightly lower in Belgium



...with the level of tax revenues falling by 1.6% of GDP as from 2006.

It was estimated that from 2006 the ex-ante yearly cost of the tax measures adopted would amount to 1.6% of GDP (Saintrain, 2001). This comprises 1.3% of GDP from the income tax reform and 0.3% of GDP from the fading out of the crisis levy.

No offsetting budgetary measures were planned since the government considered that it had enough budgetary margin to accommodate these tax cuts, derived from the primary surpluses and the falling debt service. Nevertheless, given the high cost of all the measures, the implementation has been spread over time, with a greater impact in the two last transitional years, 2005 and especially 2006.

Box: Main features of the Belgian Direct Tax Reform

- A personal income tax reform is implemented progressively in the years 2002-2005, on the revenues of years 2001-2004. A new steady state will prevail as from 2006, the first year in which taxpayers will receive the full tax benefits of the reform (the tax statements in 2005 apply to the revenues of 2004 but some tax corrections only take place in 2006). In addition, the surcharge income tax ('crisis levy') which had been introduced in the fiscal year 1994, in the context of severe budgetary difficulties, was phased out gradually over the period 2000-2003.
- The 2001 personal income tax reform includes in particular the following measures: 1) a tax credit for low labour income earners; 2) the streamlining of the marginal tax rates on medium income tax brackets; 3) new work-related tax-deductible expenses; 4) a reduction of the top marginal tax rate from 52% to 50%; 5) higher tax exemptions on the income of married double-income earning couples alongside the tax exemptions for unmarried double-income earning couples; 6) separate taxation of non-work related income; and 7) increases in the tax allowances for dependent children.
- These tax measures were accompanied by a reduction in social security contributions by 0.1% of GDP in 2003. This reduction was targeted at aligning the social security contributions of non-manual workers with the more favourable ones already applied to manual workers and at extending the reduction in contributions previously granted to the lowest wage earners also to other employees (see various Reports of the National Bank of Belgium, particularly the 2003 issue).

Tax reform boosts the supply side but comes at a budgetary cost

It has been recognized for quite some time that any tax and benefit system involves a number of trade-offs between equity/efficiency, efficiency/stabilisation and efficiency/administrative simplicity (Musgrave and Musgrave, 1973). In the earlier literature, the dimension of the public sector was not much disputed. However, since the eighties, with the increase in the weight of the public sector, lower growth and rising unemployment, more and more attention has been put on the inefficiencies and disincentives stemming from the levels of tax and benefit rates and from the design of tax/benefit systems more generally (see Buti *et al.*, 2001). Today the balance between the different trade-offs tilts in many cases towards a lower weight

of the state in the economy, especially in those countries where it is very high, as in Belgium.

It is widely accepted that there is no unique way to implement tax reforms. But it has become increasingly recognised that reforms should be as comprehensive as possible and that to get the right balance between further tax reforms and deficit reductions, tax cuts will need to be matched with corresponding reductions in spending (see European Commission, 2000).

The reform improves labour market incentives.

Any tax reduction has two kinds of potential effects. First, it has an expansionary macroeconomic effect stemming from the higher disposable income for the taxpayers who benefit from the reform, unless economic agents fully discount future government liabilities and save all the additional money. Second, to the extent that the reform leads to a lower tax wedge, this impacts positively on labour supply and eventually also on labour demanded.

Macroeconomic effects depend on taxpayers' anticipation of future government action.

The macroeconomic impact of a tax cut depends on the model which one applies, in particular on how consumers and producers anticipate the reaction of future governments to the higher deficit and debt. There are two extreme cases. In the context of a Keynesian model there may be an important expansionary effect associated with a tax cut whenever the tax reduction is not compensated by other measures. In the other extreme, in the context of Ricardian equivalence between taxes and bonds (see Romer 2002), taxpayers fully discount the future costs of currently foregone taxes (*i.e.* they anticipate a future increase in taxes) and do not increase consumption. Then the macroeconomic effect of the tax reduction is nil. There is now a wide consensus on a synthesis between these two extremes which adopts some kind of a new-Keynesian approach. This assumes that agents are partially forward-looking, which explains why in such models tax changes produce real short-term effects but lack of budgetary compensation tends to reduce the impact on demand. As shown in the Public Finance Report 2003 (see European Commission, 2003) the so-called non-Keynesian effects may occur in the event of expansionary fiscal policies, in particular in high-debt countries such as Belgium.

Regarding the microeconomic aspect, by reducing the tax wedge on the whole range of wages, primarily on low-wage workers, the reform leads to a rise in labour supply and accordingly to lower wage increases. This contributes to reducing the deadweight costs associated with taxes and to increasing employment and output. In the case of Belgium, where two-year central wage negotiations prevail, the impact of the tax reductions could already have impacted on the wage agreement signed in early 2003 for the years 2003-04. However, as this agreement was discussed in 2002 in a context of marked economic slowdown and the effects of the reform are progressive over time, it is possible that the impact on wage moderation of the lower tax wedge shows up more in the next wage agreement for 2005-2006.

Context and results of some macroeconomic simulations

The impact of the Belgian tax reform on some key macroeconomic variables has been simulated with three models. These simulations do not take into account possible future reactions by the authorities to the negative budgetary impact of the tax cuts. The three models are: two models of the Belgian Federal Planning Bureau (FPB), namely Hermes and LABMOD, and the DG Ecfm Quest II model.

The simulations with the two FPB models capture the macroeconomic impact of the tax cuts progressively spread over time (Saintrain (2001) and Stockman (2004)). In the simulation with the Quest model (more aggregate and less detailed) the tax cuts are simulated as having been fully concentrated in 2001, which corresponds to a different dynamic.

The first results were reported by M. Saintrain (2001) using the FPB's Hermes model. The impact on a number of macroeconomic variables is simulated assuming that the measures are spread and grow over time from 2002 to 2006 on the taxable revenues of 2001 to 2004. Stockman (2004) reports on two simulations with different hypotheses regarding the Belgian labour market using the FPB's LABMOD model. The same time dispersion of measures features in the simulations with LABMOD and those with Hermes.

Finally, a simulation with the Commission's macroeconomic model Quest II is reported by In 't Veld (2004), using a standard formulation of the model. In this case the policy shock that is assumed is an initial one-off cut in the income tax rate amounting to 1% of GDP.

Table 1 summarises the impact of a tax cut of 1.6% of GDP (the estimated annual cost of the reform from 2006, see above) on some selected variables according to the three models (the results in Table 1 are made comparable across the three models by multiplying the Quest results by 1.6). The results are for 2007. Their persistence hinges on the assumption that the expansionary shock from tax cuts will not be countervailed by other tax increases or by spending cuts.

Table 1: Effects on selected variables of a non-funded tax reduction of 1.6% of GDP

	Hermes II model	LABMOD model	QUEST II
Level of GDP (% change)	0.8	0.8	0.7
Government deficit (p. p. of GDP)	1.3		1.3
Employment (% change)		1.4 / 1.5	1.1
Unemployment rate (% of lab. force)		-0.8/-0.9	-1.0

Impact in 2007. Tax cuts spread over time in Hermes and LABMOD, fully applied in 2001 in Quest II.
Sources: Saintrain (2001), Stockman (2004), In 't Veld (2004)

The tax cuts are estimated to increase GDP and employment, while raising the budget deficit.

Interestingly, these results show a large consensus on the impact on some key variables after the effects of a tax reduction have been incorporated into the system. GDP is assessed to be around 0.8% higher, whereas the second round effects reduce the level of the deficit stemming from the lower tax income from 1.6% of GDP to 1.3%. As a result of the higher economic growth, employment increases between 1.1% and 1.5%, representing about three quarters of a percentage point for each percent of tax abatement. As to the unemployment rate, it falls by close to 0.6% for each initial tax alleviation of one percent of GDP. As regards the dynamics of these effects, the increase in GDP takes some years to materialize fully because the impact on growth depends on the effects on the labour market.

While the results are significant and similar across the three models, which suggests some robustness, they do not incorporate the longer term effects associated with the budgetary consequences of the tax measures.

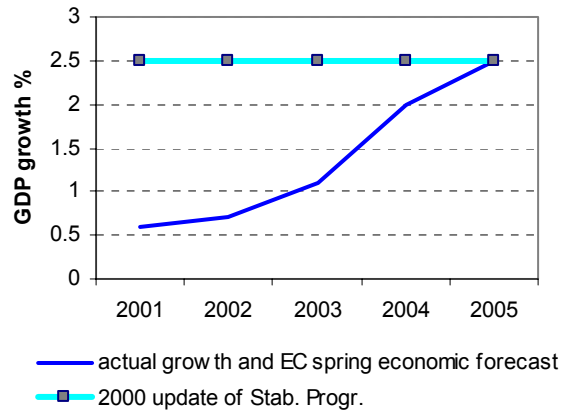
Tax policy is a poor stabilisation device

Lags prevent tax cuts from being appropriate stabilisation devices.

One of the roles traditionally assigned to fiscal policy is that of macroeconomic stabilisation. However there are a number of difficulties with the right implementation of such a policy. Prominent among those caveats is the issue of lags (policy lag, implementation and response lags). The Belgian reform illustrates this issue well.

When the reform was designed, in a period of economic growth above potential, some attention was paid to its potential overheating effects, in particular through pressures on the labour market stemming from higher net wages. However, with the unexpected sharp downturn of 2002 and 2003, the tax cuts became counter-cyclical. In fact, instead of the expected 2.5% GDP growth in 2001-05 projected in the then most recent update of the stability programme, growth actually turned out much weaker, at 0.7% in 2001 rising slowly thereafter (Figure 3). As a result, the concerns about potential overheating expressed at the time have made way for concerns about the impact of the tax cuts on the government accounts particularly because of the high debt and future costs associated with the ageing population (Conseil Supérieur de Finances (2004)).

Figure 3: Reform designed in an upturn, partly applied in a downturn



Conclusion

The income tax reform that the Belgian government adopted in 2000 was a response to a high tax burden, particularly of direct taxation and social security contributions. According to the above-mentioned simulations, in the short run the reform has a significant expansionary effect on growth and employment, which seems to suggest that taxpayers do not fully anticipate a rise in future taxes. But the simulations also show that the (unfunded) tax cuts have an important budgetary cost. This raises future liabilities for the government, which may be a problem, particularly on account of the high level of debt in Belgium, which is still close to 100% of GDP. The Belgian case also illustrates that tax policy can hardly be used as a stabilisation device, in view of the uncertainties of the business cycle and the long lags associated with fiscal policy. Whereas the tax reform was devised in a period of high economic growth, it has been partly applied in a downturn.



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