Summary for non-specialists
Economic Papers No. 426 / September 2010
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Fiscal stimulus and exit strategies in the EU: a model-based analysis

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This paper discusses the effectiveness of fiscal policy at the current juncture, and focuses in particular first on the effects of fiscal stimulus measures and their withdrawal, and, second, on the effects of permanent fiscal consolidations that can help to reduce government debt. We base our analysis on the QUEST III model, a dynamic stochastic general equilibrium (DSGE) model which allows for a disaggregation of households into credit-constrained and non-constrained groups, where the importance of tighter credit constraints on the effectiveness of discretionary fiscal policy can be analysed. The presence of credit-constrained households raises the marginal propensity to consume out of current net income and makes fiscal policy shocks that directly impact on households' purchasing power a more powerful tool for short run stabilisation. It also reinforces the effects from monetary accommodation as credit-constrained consumers react even more strongly to a fall in real interest rates which occurs when the zero lower bound on nominal interest rates is binding. Just as the positive effects of a fiscal stimulus are larger than under normal conditions in the presence of credit-constrained households and monetary policy at the zero lower bound, the cost of a withdrawal will also be larger if these conditions still hold.

There is however an important asymmetry between the fiscal multiplier of a temporary stimulus and that of a permanent fiscal consolidation. The impact of a temporary fiscal shock is larger than that of a permanent change, and hence, the loss in output from permanent fiscal consolidations is lower than that of temporary changes in the fiscal stance. Fiscal retrenchment is likely to lower output on impact, but if the permanent nature of the fiscal consolidation is fully credible economic agents could anticipate a lower tax burden in the future. As the stock of outstanding debt gradually declines, the costs of servicing this debt also falls and creates space for reductions in distortionary taxes. In the medium and long run, this can boost employment and output.

The impact of fiscal consolidations depends crucially on the composition. On the expenditure side, the main difference is between productive and unproductive spending. Reductions in government investment (productive) are most detrimental in terms of output effect and show the largest GDP losses, both in short and in the long run. Government purchases are unproductive spending, a reduction in which has no significant output costs when compensated by cuts in labour taxes in the medium/long run. Lowering government wages has a direct impact on GDP as defined by the national accounts. But this is gradually more than offset by increases in private sector GDP which is boosted by the reduction in goverment debt.

Short term effects of tax increases depend partly on adjustment costs in capital and labour. An increase in corporate profit tax has, with relatively high adjustment costs on capital, a relatively small short term impact but GDP losses build up over following years as investment is depressed and the capital stock declines. It has the largest long run GDP loss of all tax based consolidations. In contrast, a consolidation through labour taxes yields an initial GDP loss, but in the long run labour taxes can be reduced due to the fiscal space that comes available as a result of the reduction in government debt, and GDP eventually turns positive. Taxes on consumption (VAT and other consumption taxes) and taxes on housing property have smaller short term impacts. GDP falls initially below base but gradually recovers and becomes positive after 3-4 years.

These differences in short and long run effects indicate a consolidation package can be designed that minimises the short term losses in GDP and maximises the long run gains. Such a package could consist of reductions in unproductive spending (purchases, transfers) and increases in the least distortionary taxes (consumption, housing), while at the same time reducing the most distortionary taxes (on labour and capital). This would combine the positive effects of structural reforms raising potential output with the necessary fiscal retrenchment.

An example of such a package is shown here which relies heavily on taxing consumption and housing, while reducing taxes on labour and corporate profits. The positive effects of reducing these distortionary taxes help to minimise the short term output costs of the consolidation. Private consumption falls by less while private investment increases. The fall in GDP is short-lived and output increases above baseline the following years, as this tax reform raises potential output. This scenario illustrates the importance of the two-sided approach adopted by the EU, of combining fiscal consolidations with structural reforms that raise the long term growth potential. Well designed measures can help to mitigate the output losses associated with fiscal consolidations.