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PRESS RELEASE

Comparing fiscal multipliers across models and countries in Europe

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This article provides estimates of output multipliers for alternative fiscal instruments obtained by simulating fifteen structural models of the European System of Central Banks. It documents how estimates depend upon the zero lower bound (ZLB) on the monetary policy rate, the duration of the fiscal shock, whether the fiscal shock hits a country unilaterally or the euro area as a whole and various country-specific features.

Fourteen out of fifteen models belong to the New-Keynesian dynamic general equilibrium type, characterized by short-run nominal price and wage rigidities. The majority uses multi-country set-ups, with a home country, the rest of the euro area and the rest of the world. In these models euro area monetary policy responds to economic fluctuations in the home country only proportionally to its weight in the monetary union. The set of models also comprises several small open economy environments with an exogenous rest of the world. If the small open economy model represents a country that belongs to the euro area, monetary policy is assumed to be exogenous.

In each of the simulated scenarios, we consider the short and – if applicable – the long-run effects of a discretionary tightening of the fiscal stance on real GDP. Specifically, we consider a reduction in (unproductive) government consumption and increases in the households' labour income tax rate, the capital income tax rate and the consumption tax rate amounting to 1% of baseline GDP.

The main results are as follows. First, country-specific short-run fiscal multipliers are in general negative but smaller than one in absolute value. Temporary reductions in government consumption are typically associated with larger negative short-run GDP effects than temporary increases in tax rates. The difference in the short-run costs becomes more pronounced when the economy is financially distressed resulting e.g. in a higher share of liquidity-constrained households.

Second, imposing the ZLB to bind for two years does not greatly affect short-run multipliers associated with a temporary fiscal tightening implemented by a single euro area member country. The reason is that the monetary policy rate stays essentially at its baseline level even without the ZLB due to the limited impact of the country-specific fiscal shock on the euro area economy. In contrast, the ZLB can have sizeable effects on the size of multipliers if the fiscal tightening is simultaneously implemented in the euro area as a whole. In this case, short-run government consumption multipliers can become larger than one in absolute value. The same holds true for non-euro area countries that exhibit a country-specific monetary policy rule.

Third, the fiscal item that reacts endogenously to stabilise public debt in the long run is relevant for the short and long-run effects of permanent fiscal shocks. Long-run multipliers are in general negative when the budgetary room materialising after the fiscal tightening is used to reduce lump-sum taxes. Instead, long-run multipliers are typically positive if the households' labour income tax rate is reduced in the medium to long term. Since households anticipate these long-run GDP effects at the outset of the simulations, short-run multipliers are more favourable when distortionary taxes are reduced in the long run.