Summary for non-specialists
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Unexpected changes in tax revenues and the stabilisation function of fiscal policy.

Evidence for the European Union, 1999-2008

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The run-up years to the 2008-2009 global financial crisis were characterised in many EU countries by relatively sound fiscal positions in the wake of buoyant tax revenues and expansionary conditions. The global financial crisis has put a halt to these evolutions, however, hitting severely EU economies and driving to significant fall in governments' tax revenues which, together with the stimulus measures put in place under the European economic recovery Package (EERP), have led to a substantial deterioration in budgetary balances. While it is too early to draw a definitive picture on the total fiscal cost of the financial crisis, a number of important lessons can already be devised. During the expansionary phases before 2008, many EU governments' had benefited from large tax revenues windfalls allowing them to reach more favourable budgetary positions and, by the same token, increasing public expenditure without apparently compromising fiscal balance. This was especially the case of economies benefiting from dynamic internal demand and asset price appreciation such as Ireland and Spain, among others. Such pro-cyclical behaviour of fiscal policy during good times had in turn forced many EU governments to severe retrenchments once cyclical conditions reverted, i.e., when it became clear that the global crisis would have deep and wide-ranging consequences on economic activity.

With hindsight, the reading of these events is pretty clear: tax buoyancy during good times led governments, especially in countries initially lagging behind in terms of GDP per capita, to increase public spending beyond levels that would have been advisable. Two factors must be considered however, that explain why this was hard to perceive in real time. First, the length of the economic expansion that preceded the crisis explains at least part of this "fiscal myopia". For instance Ireland experienced real GDP growth rates superior to 2% each and every year since 1993 till 2007; the same applies to the UK (1993-2007), Spain (1994-2007), Greece (1995-2008) and also to some recently acceded Member States such as Slovakia (1993-2007) and Slovenia (1993-2007). The length of the expansionary phase that preceded the 2008-2009 crisis may have thus yielded the false impression that high GDP growth rate and, with them, large tax revenues, were there to stay. The global financial crisis has laid bare the fiscal weaknesses the expansionary phase had hidden for a while, however. A second factor that explains the dire state of some countries' public finances in today's crisis is that most of these had benefited from large tax revenues windfalls in the wake of sharp appreciation in asset prices and highly leveraged economies and thus suffered directly from the sudden reversion in asset prices evolutions and in financial (and credit) conditions. The impact of the global financial turmoil in fact called for counter-cyclical fiscal policies in order to keep the economy afloat. However, despite some counter-cyclical fiscal policy measures put in place in the late 2008/early 2009, many EU countries had soon to resort to start taking measures to stem rocketing public deficits and thus to run pro-cyclical fiscal policies.

So far, the evidence on the magnitude of unexpected changes in tax revenues, their determinants as well as their influence on the pro-cyclicality nature of fiscal policy has been largely anecdotic, however. The goals of the paper are therefore (i) to provide a measure of the size of unexpected changes in tax revenues in the EU during the period preceding the 2008/2009 global financial crisis and to analyse the determinants of these changes (ii) to investigate whether unexpected changes in tax revenues have had an impact on the stabilisation property of fiscal policies in the EU.

Using information about fiscal plans taken from the Stability and Convergence Programmes (SCP) submitted by the EU Member States between 1998 and 2007 we uncover that tax revenue surprises have experienced wide variations in the EU, generally in line with business cycle evolutions. Some EU Member States alternated large tax windfalls in 2005-2007 with substantial shortfalls in 2008 as for instance Spain (where tax revenue surprises represented 1.06% of GDP in 2005-2007 vs. -4.57% in 2008) and Ireland (1.15% in 2005-2007 vs.-4.30% in 2008). The main causes of these large swings in tax revenues appear to be the unexpected business cycle developments, in particular through tax composition effects related to changes in the tax bases and in some cases, such as in Spain and Ireland, to asset prices fluctuations. These unexpected tax revenue changes are, in turn, found to alter significantly the conduct of fiscal policies in EU countries and particularly so in the euro-area, as these policies appear to be more pro-cyclical during years following the occurrence of large revenue windfalls. Evidence for this is provided by estimating econometrically fiscal reaction functions. The results of these estimations suggest in particular that the effect of tax revenue surprises is not symmetrical over the business cycle: while tax revenue windfalls have a bearing on the pro-cyclical nature of fiscal policy, in turn, tax revenue shortfalls do not seem to alter the relationship between fiscal stance and the business cycle. Our results thus suggest that countries that have experienced the largest tax revenue windfalls in the run-up to the 2008/2009 financial crisis have also tended to run more pro-cyclical fiscal policies. More generally, this evidence indicates that while tax revenue windfalls may be good for the public purse during favourable times they may also (paradoxically) dwindle the ability of the countries concerned to run counter-cyclical fiscal policies when cyclical conditions revert.

A number of policy lessons can be inferred from these results: (1) The assessment and identification of past revenue windfalls/shortfalls should be improved in the context of the EU fiscal framework in particular by making regular use of information contained in the SCPs concerning differences between plans and outcomes and possibly by complementing it with more detailed country-specific information on the transitory/permanent nature of recent tax revenues developments (2) Past revenues windfalls/shortfall should be considered when assessing countries' fiscal stance and in particular to gauge the ability of governments to conduct counter-cyclical fiscal policies as our results suggest in particular that past tax revenue windfalls occurring during expansionary phase can hinder the ability of governments to run counter-cyclical fiscal policy once business cycle conditions revert.