

What factors have put the brakes on growth since 2010?

By [Eric Heyer](#) and Hervé Péléraux

At the end of 2012, five years after the start of the crisis, France's GDP has still not returned to its earlier level (Figure 1). At the same time, the labour force in France has grown steadily and technical progress has constantly raised workers' productivity. We are therefore more numerous and more productive than 5 years ago when output was lower: the explosion in unemployment is a symptom of this mismatch. Why had the shoots of recovery seen in 2009 been choked off by mid-2010?



The main factor stifling the recovery has been the austerity measures that were enacted in France and Europe in 2010 and then intensified in 2011 and 2012 (Table 1). The impact of austerity has been all the more marked as it has been generalized throughout the euro zone. The effects of domestic cutbacks have combined with the effects of undercutting demand from other European partners. Given that 60% of France's exports are to the European Union, any external stimulus had virtually vanished by mid-2012, less due to the slowdown in global growth, which is still almost 3%, than to the consequence of the poor performance of the euro zone, which is on the brink of recession.

It is austerity that is at the root of the lack of growth: after shaving -0.7 GDP point off growth in 2010, its effects increased in 2011 and 2012 (respectively -1.5 and -2.1 points) because of the stepped-up measures and the existence of high fiscal multipliers. Indeed, in a period of low economic activity simultaneously tightening fiscal policy in all the

European countries while there is very little manoeuvring room for monetary policy (real interest rates close to zero) has led to raising the value of the multiplier. There is now a broad consensus that the short-term fiscal multipliers are high, especially as full employment is still out of reach (see [Heyer \(2012\)](#) for a review of the literature on multipliers). The theoretical debate about the value of the multiplier and the role of agents' expectations must give way to empirical observation: the multipliers are positive and greater than 1.



In addition to the fiscal drag, there is the effect of tight monetary conditions: the easing of monetary policy – seen in particular in the lower key interest rates – is far from enough to offset the negative effect on the economy of tighter borrowing conditions and the widening of the spread between private investment and risk-free public investment.

All things considered, including taking into account the impact of the resurgence in oil prices after the onset of the recession, the spontaneous growth of the French economy would have averaged 2.6% over the past three years. The realization of this potential would have led to a further reduction in excess production capacity and would ultimately have cut short the downturn in the economy that actually took place.

2013: what impact will the

(national) fiscal measures have on growth?

By [Mathieu Plane](#)

This text supplements the [October 2012 forecasts for the French economy](#)

After having detailed the multiplier effects expected for the different fiscal policy instruments, the average domestic fiscal multiplier associated with the austerity measures being implemented in France in 2013 will be 0.9. This policy will cut GDP by 1.7% in one year alone. After a cumulative fiscal effort of 66 billion euros in 2011 and 2012, the structural saving expected for 2013 represents about 36 billion euros (1.8 GDP points) if we include both the measures in the 2013 budget bill (*Projet de loi de finances – PLF*) and the various measures adopted previously (Table). The fiscal shock resulting from the PLF for 2013 comes to 28 billion euros, of which 20 billion is solely on tax and social security contributions (*prélèvements obligatoires – PO*). Of the remaining 8 billion, an increase of nearly 5 billion euros in tax and social security contributions is from the second supplementary budget (*Loi de finances rectificative – LFR*) for the summer of 2012, the rest being mainly due to the first LFR for 2012 and to the hike in contributions resulting from the revision of the pension reform in summer 2012.

In total, the fiscal effort in 2013 can be broken down between tax and social contributions of about 28 billion euros (1.4 GDP points) and structural savings on primary public expenditure of 8 billion (0.4 GDP point). The burden of higher taxes and social contributions breaks down to nearly 16 billion euros for households and more than 12 billion for business. This breakdown does not take into account the competitiveness measures announced on 6 November by the Prime

Minister. The tax credits for competitiveness and employment (CICE) will not have any fiscal impact in 2013, with the exception of the possible establishment in 2013 of an advance on their future tax credits for some companies short of cash.

Based on the variants in the fiscal multiplier, made with e-mod.fr according to the economy's position in the cycle, for the main taxes and social security contributions as well as for the key components of public expenditure [1] and based on the different evaluations we were able to carry out, particularly in the context of [the assessment of the Five-year economic programme](#), we applied a specific fiscal multiplier to each measure for 2013 (Table). The short-term multipliers take into account only the direct effects of the measures on domestic activity, regardless of the fiscal policies of our trading partners, which amplify the impact of national policy. It is also assumed that monetary policy remains unchanged. The long-term multiplier values differ from the short-term ones, being generally lower unless a long-term negative output gap is maintained.

Of the 16 billion euro increase in tax and social security contributions on households in 2013, the discretionary increase in personal income tax (IR) will be 6.4 billion, including 3.2 billion from the 2013 Budget Act (*Loi de finances*) – against 4 billion in the PLF, as the proposal to tax capital gains on securities at the income tax scale will be largely amended, and the yield from the measure could decrease by about 0.8 billion, with the shortfall being able to be offset by the extension of the exceptional 5% contribution from the IS tax on large corporations), and with the rest coming from the supplemental LFR for 2012 (including 1.7 billion solely from the de-indexation of the personal income tax schedule). While the increase in personal income tax from the 2013 PLF is targeted at high earners, the amount this will contribute (3.2 billion) represents only 11% of the increase in tax and social security contributions (20% if we

limit ourselves to households) in 2013, and less than 9% of the total fiscal effort. According to our calculations, the average fiscal multiplier associated with the different measures that increase personal income tax will be 0.7 in 2013.

The increase in taxes and social contributions from households will come mainly from the increase in payroll taxes and social security contributions (8.7 billion euros) set out in the Social Security budget act (PLF) for 2013 (2.9 billion) and the measures in the supplemental LFR for 2013 (5.3 billion, which includes changes to the tax exemption on overtime, a limitation on tax breaks and employee savings, a higher CSG wealth tax on income from capital, etc.) and pension reform, with an increase in the contribution rate (0.5 billion). The average fiscal multiplier related to these measures is 0.9. Finally, the reform of inheritance tax will raise a further 1.1 billion in tax and social contributions. On the other hand, the revenue from the ISF wealth tax will be 1.3 billion lower than in 2012. Indeed, the yield from the one-off wealth tax contribution set up under the supplemental LFR for 2012 will be greater than from the one set up under the new reform in 2013. The fiscal multiplier for these two measures is 0.3.

In total, according to our calculations, the increase in levies on households in 2013 will on average have a multiplier of 0.8 and will amputate growth by 0.6 GDP point.

For business, the measures adopted mainly involve an increase in the corporate income tax as provided in the budget bill (PLF) for 2013 (8 billion euros, of which 4 billion is related to the reform of the deductibility of financial expenses). The average multiplier for the increase in the corporate income tax (IS) is estimated at 0.7 in 2013. 2.3 billion euros will come from a rise in social security contributions and payroll taxes with a fiscal multiplier of unity. Finally, other measures such as the sectoral measures on the taxation of insurance or the exceptional contribution of the oil industry

will increase the tax burden on business by 1.9 billion in 2013, with an average fiscal multiplier estimated at 0.5.

In our assessment, the increase in taxes and social contributions from companies will on average have a multiplier of 0.8 and will reduce GDP by 0.5 GDP point in 2013.

In addition, the short-term fiscal multiplier associated with public expenditure in a low phase of the cycle is, in our model, 1.3, so it is higher than that associated with tax and social contributions. This result is consistent with the most recent empirical literature (for details, see the box, "[Fiscal multipliers: size matters!](#)") The estimated loss of activity resulting from tightening up on public expenditure will come to 0.5 GDP point in 2013.

In total, the average domestic fiscal multiplier associated with the austerity policy being implemented in France in 2013 will be 0.9, and this policy will reduce GDP by 1.7%. This result is in the lower range of the [latest work of the IMF](#); using recent data on 28 countries, it has estimated the actual multipliers at between 0.9 and 1.7 since the beginning of the Great Recession.

Main measures affecting the structural public deficit in 2013

	Measures (in bn)	Fiscal multiplier estimated in the short term	Impact on GDP (%)
Households	15.7	0.8	-0.6
Income tax	6.4	0.7	-0.2
PLF 2013 (taxation of capital income at IR tax rate, new brackets, etc.)*	3.2	0.6	-0.1
LFR II 2012 (reversal of tax exemption of overtime)	0.5	0.4	0.0
LFR I 2012 (de-indexation of IR brackets, suppression tax breaks and Scellier scheme, etc.)	2.7	0.8	-0.1
ISF wealth tax	-1.3	0.3	0.0
PPLF 2013 (reform of ISF wealth tax)	1.0	0.3	0.0
LFR II 2012 (repercussions from one-off 2012 contribution)	-2.3	0.3	0.0
Inheritance tax	1.1	0.3	0.0
LFR II 2012 (reversal of breaks on inheritance tax)	1.1	0.3	0.0
Social contributions and payroll tax	8.7	0.9	-0.4
Social security PLF 2013 (reform of self-employed payroll tax, higher tax on beer and tobacco, etc.)	2.9	1.0	-0.1
LFR II 2012 (reversal of overtime exemption, limitation of tax breaks and employee savings, higher CSG wealth tax, capital income, etc.)	5.3	0.8	-0.2
Pension reform (higher contributions)	0.5	1.0	0.0
Other	0.8	0.6	0.0
PLF 2013 (higher tax on vacant housing, tougher "automobile malus", etc.)	0.9	0.6	0.0
LFR II 2012 (lower VAT on books)	-0.1	1.0	0.0
Business**	12.2	0.8	-0.5
Corporate income tax	8	0.7	-0.3
PLF 2013 (limits on financial expenses deductibility, reform of the "cinquième acompte", etc.)	8	0.7	-0.3
Payroll tax and social contributions	2.3	1.0	-0.1
Social security PLF 2013 (higher CNRACL contribution rate, reform on wage tax, etc.)	1.8	1.0	-0.1
Pension reform	0.5	1.0	0.0
Other	1.9	0.5	-0.1
PLF 2013 (sectoral measures on taxation of business insurance) (sectoral measures on taxation of business insurance)	1.3	0.8	-0.1
LFR II 2012 (one-off contribution of oil industry, taxation of financial transactions, etc.)	0.6	0.2	0.0
Total Business and Household Taxes and Contributions	27.9	0.8	-1.1
Structural saving on primary public expenditure	8.0	1.3	-0.5
Total fiscal impulse	35.9	0.9	-1.7

* This amount incorporates the downward revision of the yield initially foreseen in the PLF 2013 of the measure taxing capital gains at the personal income tax rate, which is to be offset by the extension of the exceptional 5% corporate income tax contribution for large corporations.

** This breakdown does not measure the final fiscal impact that is to be borne by households if the increase in business taxes is passed on in prices.

Sources : PLF 2013, Social security PLF 2013, LFR I and II 2012, OFCE calculations.

[1] For more on this, see Creel, Heyer, Plane, 2011, "Petit précis de politique budgétaire par tous les temps", *Revue de l'OFCE*, no. 116, January 2011.

What is the value of the fiscal multipliers today?

By [Xavier Timbeau](#)

We inherited higher public deficits and greatly increased public debts from the crisis (Table 1). Reducing these will require a major fiscal effort. But a programme that is too brutal and too fast will depress activity and prolong the crisis, not only compromising the fiscal consolidation effort but also locking the economies into a recessionary spiral. The value of the fiscal multiplier (the link between fiscal policy and economic activity) both in the short term and in the long term is thus a critical parameter for stabilizing the public finances and returning to full employment.

Public deficit and public debt 2007-2012

<i>In GDP points</i>	Public deficit		Net public debt minus financial assets	
	2012	Change 2012-2007	2012	Change 2012-2007
DEU	-0.9	-1.1	52	9
FRA	-4.5	-1.7	66	31
ITA	-1.7	-0.1	96	9
ESP	-5.4	-7.3	54	37
NLD	-4.3	-4.4	43	15
BEL	-2.8	-2.7	82	9
PRT	-4.6	-1.4	81	32
IRL	-8.4	-8.5	82	82
GRC	-7.4	-0.6	134	52
AUT	-2.9	-1.9	48	17
Euro area (EA11)	-3.0	-2.3	63	20
GBR	-7.7	-4.9	74	46
USA	-8.3	-5.3	85	37
JPN	-9.9	-7.8	134	54

Source : OECD, *Economic outlook 91*.

When the multiplier (in the short term) is greater than approximately 2 (actually $1/a$, a being the sensitivity of the public deficit to the economic cycle and valued at about 0.5 in the developed countries), then fiscal cutbacks produce such a decrease in activity that the short-term deficit increases with the cuts. When the multiplier is greater than approximately 0.7 (in fact, $1/(a+d)$, d being the ratio of debt to GDP), then fiscal restraint increases ratio of debt to GDP in the short term. In the longer term, things get complicated, and only a detailed modelling can help to understand in what circumstances today fiscal restraint would lead to a sustained reduction in the debt-to-GDP ratio. The value of the multiplier in the medium term is of course crucial (it is usually assumed to be null, or zero, but in the case of cost-effective public investment, this assumption does not hold), but hysteresis effects as well as changes in expectations about inflation or about sovereign interest rates (and therefore the critical gap, *i.e.* the gap between 10-year sovereign bond rates and the economy's nominal potential

growth rate) interact with changes in the debt and in GDP.

Until recently, most economists believed that the value of the multiplier depends on the composition of the fiscal stimulus (taxes, expenditure and the nature of taxes and expenditure), the size of the economy and its openness (the more open the economy, the lower its multiplier) and the existence of anticipations of a fiscal shock (an anticipated shock would have little effect, in the long term, it would have none, with only an unexpected shock having a temporary effect)[1]. [Recent literature \(since 2009\) has taken an interest](#) in the value of the fiscal multiplier in the short term in times of crisis . Two main conclusions emerge:

1. The multiplier is higher in “times of crisis” (in the short term or as long as the crisis lasts). In “times of crisis” means high unemployment or a very wide output gap. Another symptom may be a situation where safe long-term interest rates are very low (*i.e.* negative in real terms), suggesting a flight to safety (radical uncertainty) or a liquidity trap (expectations of deflation). Two theoretical interpretations are consistent with these manifestations of the crisis. One, price expectations are moving toward deflation, or radical uncertainty makes it impossible to form an expectation, which is consistent with very low safe interest rates and leads to the paralysis of monetary policy. Or second, more economic agents (households, firms) are subject to short-term liquidity constraints, perpetuating the recessionary spiral and preventing monetary policy from functioning. In one case as in the other, the fiscal multipliers are higher than in normal times because the expansionary fiscal policy (resp. restrictive) forces the economic agents to take on debt (resp. shed debt) collectively instead of individually. In “times of crisis” the multiplier is in play including when it is anticipated and its effect persists until a

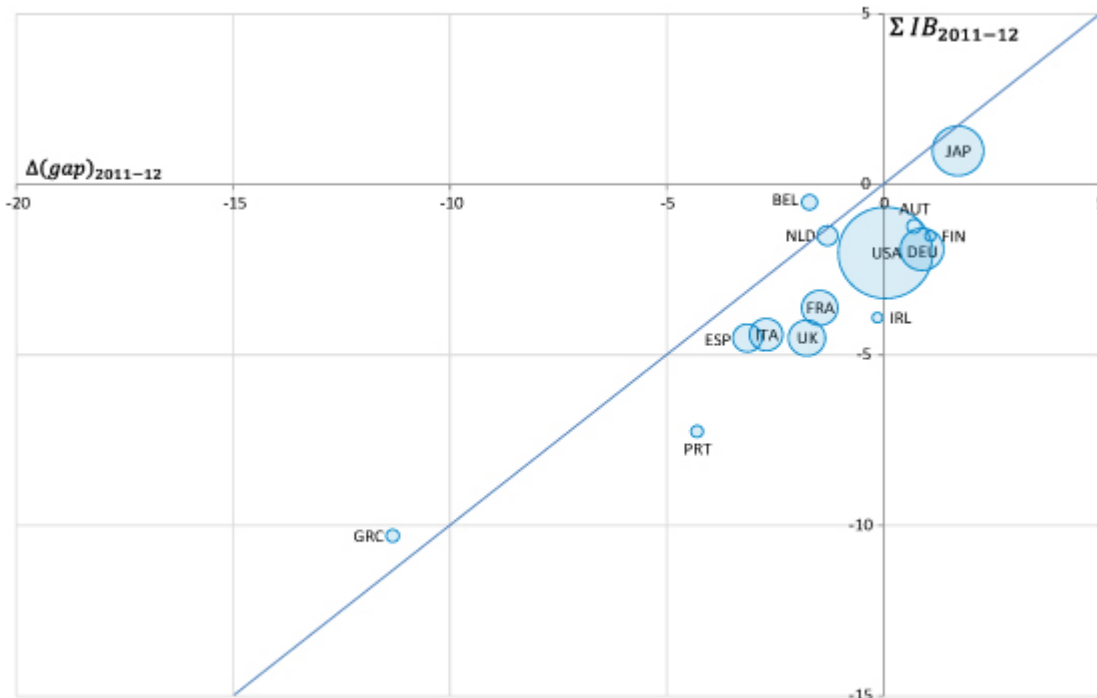
return to full employment.

2. The multiplier is higher for expenditures than it is for compulsory levies. The argument in normal times is that higher compulsory levies acts as a disincentive and spending cuts as an incentive on the supply of labour. In a small open economy, when monetary policy also induces a real depreciation of the currency, fiscal restraint can increase activity, a result that has long allowed supporters of fiscal discipline to promise all kinds of wonders. But in times of crisis, in addition to the fact that the multipliers are higher, the logic applicable in normal circumstances is reversed. The use of taxes as disincentives for the labour supply or spending cuts as incentives does not work in an economy dominated by involuntary unemployment or overcapacity. It is in fact the expectations of a recession or of deflation that act as disincentives, which is another factor indicating high multipliers.

Econometric estimates (based on past experience of “times of crisis”) lead to retaining a fiscal multiplier of around 1.5 (for an average mix of spending and compulsory levies).

Taking together 2011 and 2012, years in which a very strong fiscal impulse was carried out, confirms this econometric evaluation. By comparing on the one hand changes in the output gap from end 2010 to 2012 (on the abscissa) and on the other hand the cumulative fiscal impulse for 2011 and 2012, we obtain the short-term impact of the fiscal consolidation. Figure 1 depicts this relationship, showing a close link between fiscal restraint and economic slowdown.

Graphe 1 : Change in the output gap and the impulse 2011-2012



Source: OECD, *Economic Outlook 91*, June 2012. The year 2012 is a projection (OFCE forecast October 2012). The area of the bubbles is proportional to real GDP in 2011 (\$ PPP).

For most countries, the “apparent” multiplier is less than 1 (the lines connecting each of the bubbles are below the bisector, the “apparent” multiplier is the inverse of the slope of these lines). Figure 2 refines the evaluation. The changes in the output gap are in effect corrected for the “autonomous” dynamic of the closing of the output gap (if there had been no impulse, there would have been a closing of the output gap, which is estimated as taking place at the same rate as in the past) and for the impact of each country’s budget cutbacks on the others through the channel of foreign trade. The bubbles in orange therefore replace the blue bubbles, integrating these two opposing effects, which are evaluated here while seeking to minimize the value of the multipliers. In particular, because the output gaps have never been so extensive, it is possible that the gaps are closing faster than what has been observed in the last 30 or 40 years, which would justify a more dynamic counterfactual and therefore higher fiscal multipliers.

Austria and Germany are exceptions. As these two countries

enjoy a more favourable economic situation (lower unemployment, better business conditions), it is not surprising that the multiplier is lower there. Despite this, the “corrected apparent” multiplier is negative. This follows either from the paradoxical effects of the incentives, or more likely from the fact that monetary policy is more effective and that these two countries have escaped the liquidity trap. But the correction provided here does not take into account any stimulus from monetary policy.

In the United States, the “2011-2012 corrected apparent” multiplier comes to 1. This “corrected apparent” multiplier is very high in Greece (~ 2), Spain (~ 1.3) and Portugal (~ 1.2), which is consistent with the hierarchy set out in point 1. This also suggests that if the economic situation deteriorates further, the value of the multipliers may increase, exacerbating the vicious circle of austerity.

For the euro zone as a whole, the “corrected apparent” multiplier results from the aggregation of “small open economies”. It is thus higher than the multiplier in each country, because it relates the impact of the fiscal policy in each country to the whole zone and no longer just to the country concerned. The aggregate multiplier for the euro zone also depends on the composition of the austerity package, but especially to the place where the measures are being implemented. However, the biggest fiscal impulses are being executed where the multipliers are highest or in the countries in the deepest crisis. The result is that the aggregate multiplier for the euro zone is 1.3, significantly higher than that derived from the US experience.

A comparison of the fiscal plans for 2011 and 2012 with the economic cycle in those years yields a high estimate for the fiscal multipliers. This confirms the dependence of the multiplier on the cycle and constitutes a serious argument against the austerity approach, which is to be continued in 2013. Everything indicates that we are in a situation where

[austerity is leading to disaster.](#)

Grphe 2 : Changes in the output gap and the impulse 2011-2012



Source: OECD, Economic Outlook 91, June 2012. The year 2012 is a projection (OFCE forecast October 2012). The area of the bubbles is proportional to real GDP in 2011 (\$ PPP).

[1] There has been an intense debate about the theoretical and especially the empirical validity of these assertions (see [Creel, Heyer and Plane 2011](#) and [Creel, Ducoudré, Mathieu and Sterdyniak 2005](#)). Recent empirical work undertaken for example by the IMF has contradicted the analyses made in the early 2000s, which concluded that anti-Keynesian effects dominate Keynesian effects. Thus, at least with regard to the short term, before the crisis and in “normal times”, the diagnosis today is that the fiscal multipliers are positive. The endogeneity of measurements of a fiscal impulse by simply varying the structural deficit interfered with the empirical analysis. The use of a narrative record of fiscal impulses addresses this issue and significantly alters estimates of the multipliers. In most macroeconomic models (including dynamic stochastic general equilibrium – DGSE – models), the fiscal

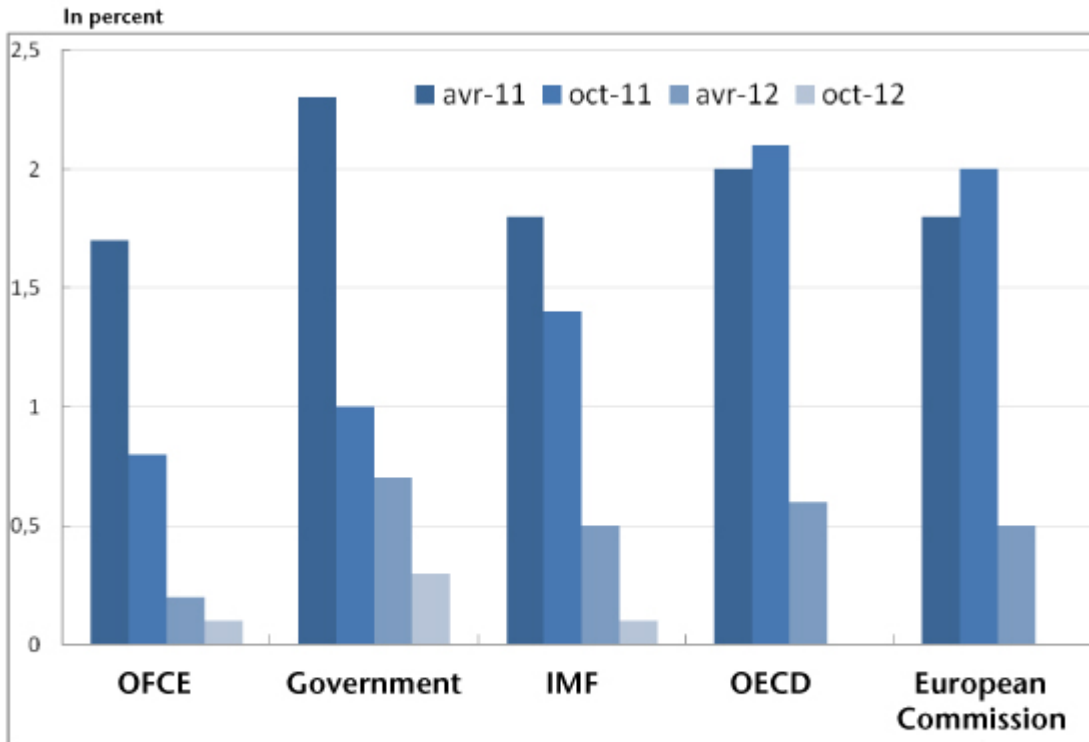
multipliers are also positive in the short term (on the order of 0.5 for a pure fiscal shock “in normal times”). In the long run, the empirical analysis does not tell us much, as the noise drowns out any possibility of measurement. The long term therefore reflects mainly an *a priori* theory that remains largely dominated by the idea that fiscal policy can have no long-term effect. However, in the case of public investment or of possible hysteresis, the assumption of a non-null effect in the long run seems more realistic.

Why has French growth been revised downwards?

By Bruno Ducoudré and [Eric Heyer](#)

In its [October 2012 forecasts](#), the OFCE has revised its growth forecast for 2012 and 2013. The major international institutions, the OECD, the IMF and the European Commission, also regularly review their growth forecasts to incorporate newly available information. An analysis of these revised forecasts is particularly interesting in that it shows that these institutions use low fiscal multipliers in developing their forecasts. In other words, the recessionary impact of fiscal policy has been underestimated by the OECD, the IMF and the European Commission, leading to substantial revisions of their growth forecasts, as is evidenced by the dramatic shifts by the [IMF](#) and the [European Commission](#) in the size of the multipliers.

Graphique 1. Révisions of growth in French GDP for 2012



Note : Growth in 2012 is reviewed four times each year by each institution. The first revision took place in April 2011, the second in October 2011, the third in April 2012 and the final one in October 2012. The OECD has not yet published its latest revisions.

Sources : IMF, European Commission, OECD, OFCE October 2012 calculations and forecasts.

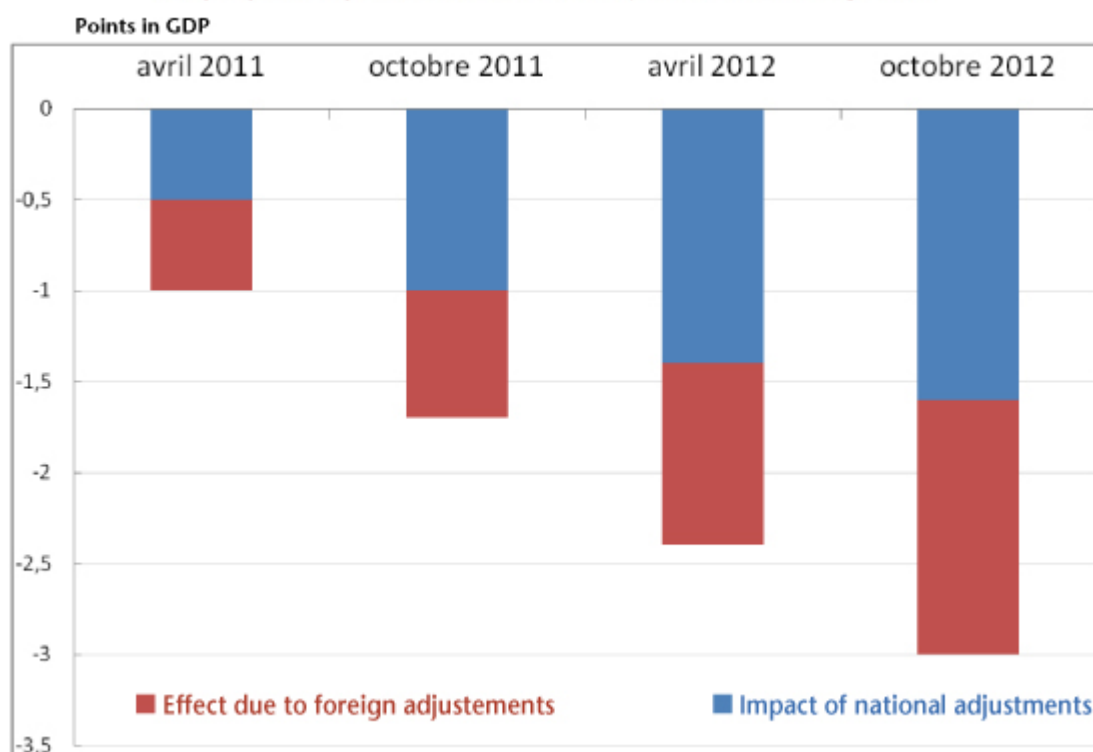
Figure 1 shows that between the forecast made in April 2011 and the latest available forecast, the government, like all the other institutions, revised its growth forecast for France sharply downwards.

The austerity policies have also been strengthened at the same time, particularly in the euro zone. The European countries undertook their stability program in order to return to balanced public finances within three years. In contrast to the years before the crisis, the implementation of these commitments is now considered a necessary or even sufficient condition for pulling out of the crisis. Moreover, in a context of financial uncertainty, being the only State not to meet its commitment to fiscal consolidation would be punished immediately by the markets (higher sovereign rates, a downgraded rating, a fine from the European Commission, implicit contagion of sovereign defaults). But in trying to reduce their deficits abruptly and synchronously, Europe's governments are inducing new slowdowns in activity.

A vicious circle has been created: with each downward revision in their forecasts for 2012 growth, Europe's governments implement new austerity measures to meet their deficit commitments. This has happened in France, but especially in Italy, which has virtually tripled its fiscal effort, and in Spain, which is now engaged in the greatest austerity effort of any major European country.

According to our estimates for the French economy (that is to say, using a multiplier of 1), the series of fiscal savings plans adopted at the national level have led to revising growth downwards by -1.1 points between April 2011 and October 2012 (from an impact of -0.5 GDP point to -1.6 points). Since these same policies are in force in our trading partners, this has led to revising growth for this same period by 0.9 point due to foreign trade (from -0.5 GDP point to -1.4 point) (Figure 2).

Graphique 2. Impact of the latest fiscal adjustments on 2012 growth



Source : OFCE October 2012 calculations and forecasts.

For the year 2012, the OFCE's revisions for the French economy can be explained in full simply by the escalation in the fiscal savings measures announced over the last 12 months,

i.e. the national plans and those applied by our partner countries (Table 1).

Tableau 1. Determinants of the revisions to the OFCE forecast for France for 2012

	April 2011	October 2012	Revision
GDP growth	1,7	0,1	-1,6
(a) - Austerity measures (in GDP pt)	-0,6	-1,60	-1,0
(b) – Value of the fiscal multiplier	0,95	0,95	0,0
Impact of austerity plans in France (a + b)	-0,5	-1,6	-1,1
Impact of the austerity measures of France's partners	-0,5	-1,4	-0,9
Other adjustment factors			0,4

Source : OFCE calculations.

Leaving aside this escalation of austerity, our diagnosis of the French economy has changed very little over the last 18 months: without it, we would have even revised our growth forecast slightly upwards (0.4%).