Is it possible to get over a banking crisis? Comparative analysis of Ireland and Iceland

By Céline Antonin and Christophe Blot

In economics, miracles sometimes prove to be mirages. Iceland and Ireland are witnesses. These two small open economies, paradises of liberalized deregulated finance, harboured growth in the early 2000s, but were hit hard by the financial crisis. The subsequent almost complete nationalization of their financial systems has had a negative impact on the public debt of the two countries. To stem the rising debt and the risk of unsustainability, since 2010 the two governments have implemented fiscal austerity plans, but with a difference: Ireland belongs to the euro zone, while Iceland doesn't. The latest *Note of the OFCE* (no. 25 dated 4 February 2013 [in French]) reviews the recent macroeconomic and financial situation of the two countries to show the extent to which different policy mixes may account for different trajectories for a recovery.

While in Iceland the banking crisis was amplified by a currency crisis, the depreciation of the crown was then a factor in the recovery, so that the country is now growing again. GDP was very volatile: between the third quarter of 2007 and the second quarter of 2011, GDP declined by more than 13%, but has rebounded by 5.7% since. There was less volatility and a shorter recessionary phase in Ireland than in Iceland (8 quarters), and the amplitude of the decline was smaller (-10.7%). However, the recovery is more timid, with GDP growth of only 3.4% since late 2009.

Our analysis leads us to two main conclusions: first, an internal devaluation is less effective than an external devaluation; and second, fiscal consolidation is less costly when it is accompanied by favourable monetary conditions and exchange policy. It is in light of these points that one can redefine the optimal policy mix in the euro zone, as we suggest in more detail in the iAGS report. An active monetary policy is essential to allow the refinancing of the public debt. The European Central Bank should therefore act as lender of last resort for the member countries. The countries running a surplus need a "reflationary" policy to help reduce their current account imbalances. Fiscal adjustments should be relaxed or even postponed to allow a more rapid return to growth.

Repeat

By Jérôme Creel

In a beautiful book for children, every two pages Claude Ponti drew two chicks, one of which says to the other: "Pete and Repeat are in a boat. Pete falls overboard. Who is left?" Then the other chick says, "Repeat", and off we go again. At the end of the book, the second chick, its eyes bulging, screams: "Repeat!" And it never stops. It's a bit like these analyses of economic growth and fiscal contractions where almost every month it is rediscovered that the ongoing fiscal contractions are reducing economic growth or that underestimating the real impact of fiscal policy is leading to forecast errors.

Recently, and after having authored a box in the *2013 World Economic Outlook* in October 2012, Daniel Leigh and Olivier

Blanchard of the IMF published a working document that confirms that the IMF's recent forecasting errors are due to erroneous assumptions about the multiplier effect. Because this effect was underestimated, especially at the bottom of the economic cycle, the IMF forecasters, though they are not alone (see in particular the note by Bruno Ducoudré), underestimated growth forecasts: they had not anticipated that what was required by the austerity measures and their implementation would have such a negative impact on consumer spending and business investment. The attempt to reduce state debt was taking place during a period when households and businesses were also deleveraging, meaning that it would be difficult to avoid falling into the trap of recession.

Since it must be repeated, let's repeat! "Expansionary-fiscal-contractions and Repeat are in a boat. Expansionary-fiscal-contractions falls overboard. Who is left in the boat? Repeat!" In support of this short story, it is worth referring to a literature review conducted by Eric Heyer: he shows the extent of the consensus that actually exists on the value of the fiscal multipliers, a consensus that has emerged since 2009, *i.e.* in the midst of a recession and at the very time that recommendations for austerity measures began to emerge. A note by Xavier Timbeau shows that the analysis of current fiscal cutbacks supports an assessment that the value of the fiscal multiplier is much higher in a crisis than in normal times … What paradoxes!

What is to be done now? Repeat, yet again, that recession may not be inevitable: as Marion Cochard, Bruno Ducoudré and Danielle Schweisguth pointed out in a supplement to the 2013 iAGS report, it is urgent to temper existing fiscal austerity measures in the euro zone: European growth but also actual fiscal consolidation would improve at last.

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.

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[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

In GDP points	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

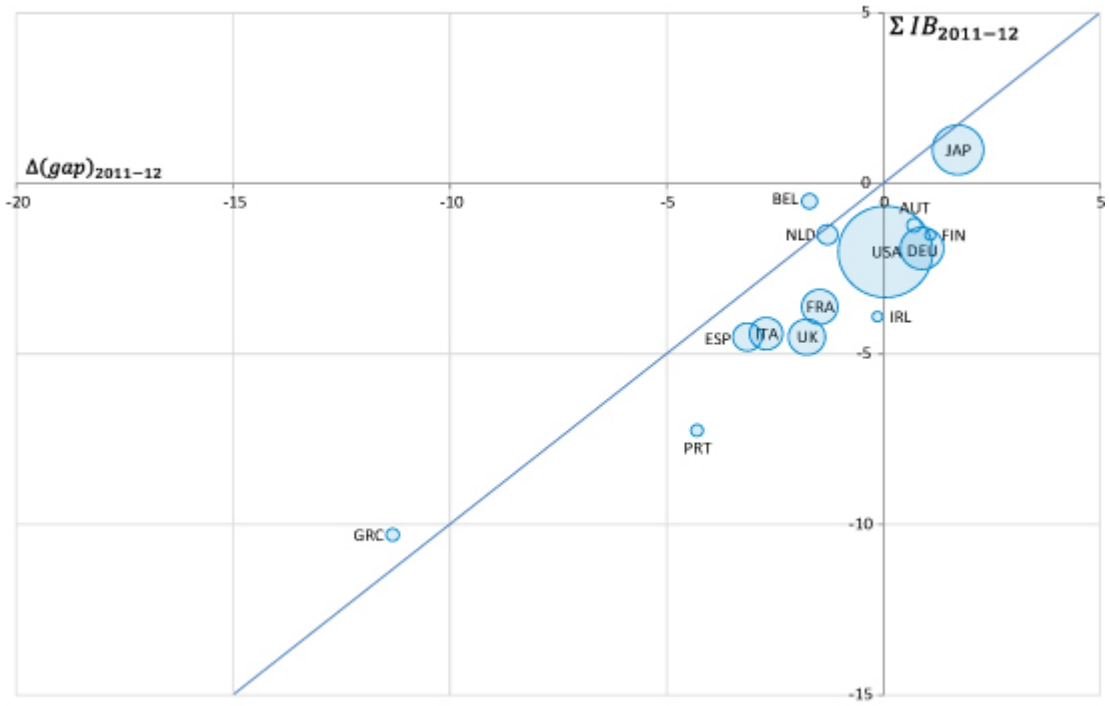
return to full employment.

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.

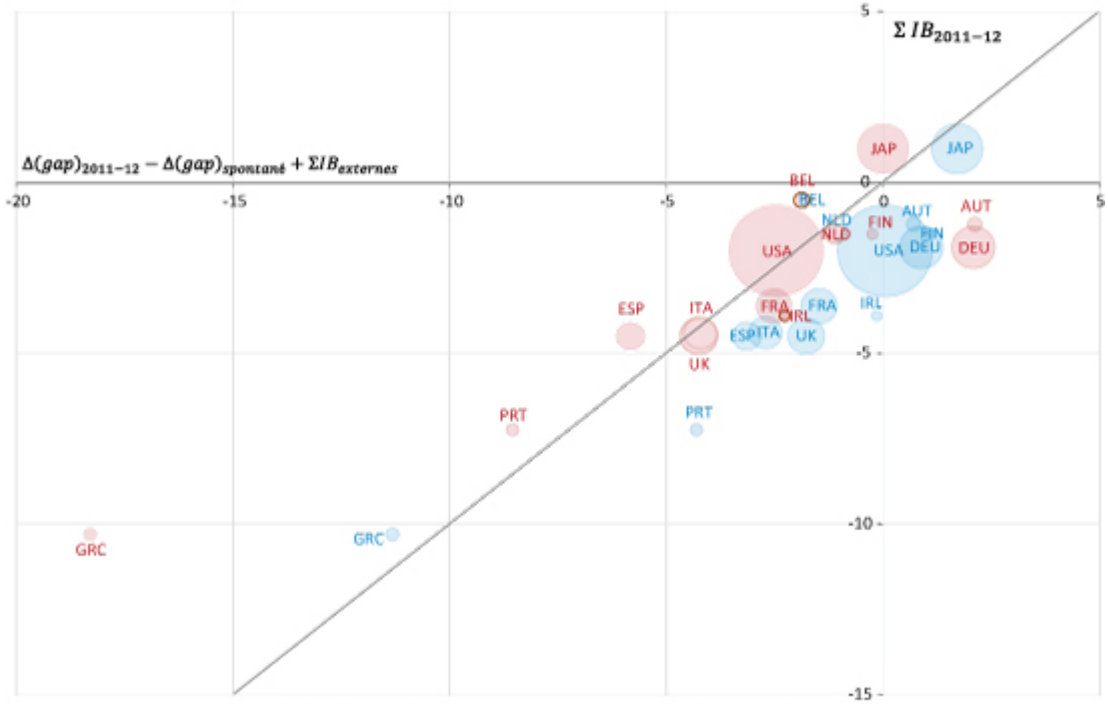
In the United States, the “2011-2012 corrected apparent” multiplier comes to 1. This “corrected apparent” multiplier is very high in Greece (~ 2), Spain (~ 1.3) and Portugal (~ 1.2), which is consistent with the hierarchy set out in point 1. This also suggests that if the economic situation deteriorates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

Graphe 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).

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[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.

A review of the recent literature on fiscal multipliers: size matters!

By Eric Heyer

Are the short-term fiscal multipliers being underestimated? Is there any justification for the belief that fiscal restraint can be used to drastically reduce deficits without undermining business prospects or even while improving the medium-term situation? This is this question that the IMF tries to answer in its latest report on the world economic outlook. The Fund devotes a box to the underestimation of fiscal multipliers during the 2008 crisis. While until 2009 the IMF had estimated that in the developed countries they averaged about 0.5, it now calculates that they have ranged from 0.9 to 1.7 since the Great Recession.

This reassessment of the value of the multiplier, which X. Timbeau discusses in an interesting reading on the basis of a

“corrected apparent” multiplier, builds on the numerous studies carried out by IMF researchers on the issue and especially that of Batini, Callegari and Melina (2012). In this article, the authors draw three lessons about the size of the fiscal multipliers in the euro zone, the U.S. and Japan:

1. The first is that gradual and smooth fiscal consolidation is preferable to a strategy of reducing public imbalances too rapidly and abruptly.
2. The second lesson is that the economic impact of fiscal consolidation will be more violent when the economy is in recession: depending on the countries surveyed, the difference is at least 0.5 and may be more than 2. This observation was also made in another study by the IMF (Corsetti, Meier and Müller (2012)) and is explained by the fact that in “times of crisis” more and more economic agents (households, firms) are subject to very short-term liquidity constraints, thus maintaining the recessionary spiral and preventing monetary policy from functioning.
3. Finally, the multipliers associated with public expenditure are much higher than those observed for taxes: in a recessionary situation, at 1 year they range from 1.6 to 2.6 in the case of a shock to public spending but between 0.2 and 0.4 in the case of a shock on taxes. For the euro zone, for example, the multiplier at 1 year was 2.6 if government spending was used as an instrument of fiscal consolidation and 0.4 if the instrument was taxation.

As the economic crisis continues, the IMF researchers are not the only ones raising questions about the merits of the fiscal consolidation strategy. In an NBER working paper in 2012, two researchers from Berkeley, Alan J. Auerbach and Yuriy Gorodnichenko, corroborate the idea that the multipliers are higher in recessions than in periods of expansion. In a second study, published in the *American Economic Journal*, these same

authors argue that the impact of a shock on public expenditure would be 4 times greater when implemented during an economic downturn (2.5) than in an upturn (0.6). This result has been confirmed for the US data by three researchers from the University of Washington in St. Louis (Fazzari *et al.* (2011)) and by two economists at the University of Munich (Mittnik and Semmler (2012)). This asymmetry was also found for the data on Germany in a study by a Cambridge University academic and a Deutsche Bundesbank researcher, Baum and Koester (2011).

In other work, a researcher at Stanford, Hall (2009), affirms that the size of the multiplier doubles and is around 1.7 when the real interest rate is close to zero, which is characteristic of an economy in a downturn, as is the case today in many developed countries. This view is shared by a number of other researchers, including two at Berkeley and Harvard, DeLong and Summers (2012), two from the Fed, Erceg and Lindé (2012), those of the OECD (2009), those of the European Commission (2012) and in some recent theoretical work (Christiano, Eichenbaum and Rebelo (2011), Woodford (2010)). When nominal interest rates are blocked by the zero lower bound, anticipated real interest rates rise. Monetary policy can no longer offset budgetary restrictions and can even become restrictive, especially when price expectations are anchored on deflation.

As already noted by J. Creel on this blog (**insert link to the post of 22.02.12**) with respect to the instrument to be used, *i.e.* public spending or taxation, other IMF economists together with colleagues from the European Central Bank (ECB) the US Federal Reserve (FED), the Bank of Canada, the European Commission (EC) and the Organization for Economic Cooperation and Development (OECD) compared their assessments in an article published in January 2012 in the *American Economic Journal: Macroeconomics* (Coenen G. *et al.* (2012)). According to these 17 economists, on the basis of eight different macroeconometric models (mainly DSGE models) for the United

States, and four models for the euro zone, the size of many multipliers is large, particularly for public expenditure and targeted transfers. The multiplier effects exceed unity if the strategy focuses on public consumption or transfers targeted to specific agents and are larger than 1.5 for public investment. For the other instruments, the effects are still positive but range from 0.2 for corporation tax to 0.7 for consumer taxes. This finding is also shared by the European Commission (2012), which indicates that the fiscal multiplier is larger if the fiscal consolidation is based on public expenditure, and in particular on public investment. These results confirm those published three years ago by the OECD (2009) as well as those of economists from the Bank of Spain for the euro zone (Burriel *et al* (2010)) and from the Deutsche Bundesbank using data for Germany (Baum and Koester (2011)). Without invalidating this result, a study by Fazzari *et al* (2011) nevertheless introduced a nuance: according to their work, the multiplier associated with public spending is much higher than that observed for taxes but only when the economy is at the bottom of the cycle. This result would be reversed in a more favourable situation of growth.

Furthermore, in their assessment of the US economy, researchers at the London School of Economics (LSE) and the University of Maryland, Ilzetzki, Mendoza and Vegh (2009), highlight a high value for the fiscal multiplier for public investment (1.7), *i.e.* higher than that found for public consumption. This is similar to the results of other IMF researchers (Freedman, Kumhof, Laxton and Lee (2009)).

In the recent literature, only the work of Alesina, a Harvard economist, seems to contradict this last point: after examining 107 fiscal consolidation plans, conducted in 21 OECD countries over the period 1970-2007, Alesina and his co-authors (Ardagna in 2009 and Favero et Giavazzi in 2012) conclude first that the multipliers can be negative and second that fiscal consolidations based on expenditure are associated

with minor, short-lived recessions, while consolidations based on taxation are associated with deeper, more protracted recessions. In addition to the emphasis on the particular experiences of fiscal restraint (Scandinavian countries, Canada), which are not found when including all experiences with fiscal restriction (or expansion), the empirical work of Alesina *et al.* suffers from an endogeneity problem in the measurement of fiscal restraint.

The notion of a narrative record of fiscal impulse helps to avoid this endogeneity. For example, in the case of a real estate bubble (and more generally in cases of large capital gains), the additional tax revenues from the real estate transactions results in a reduction in the structural deficit, as these revenues are not cyclically based (the elasticity of revenues to GDP becomes much higher than 1). So these are associated with an expansionary phase (in conjunction with the housing bubble) and a reduction in the structural deficit, which artificially strengthens the argument that reducing the public deficit may lead to an increase in activity, whereas the causality is actually the reverse.

With the exception of the work of Alesina, a broad consensus emerges from the recent theoretical and empirical work in the existing economic literature: a policy of fiscal consolidation is preferable in periods of an upturn in activity, but is ineffective and even pernicious when the economy is at a standstill; if such a policy is to be enacted in a downturn, then tax increases would be less harmful to the activity than cuts in public spending … all recommendations contained in Creel, Heyer and Plane (2011).

Has monetary policy become ineffective?

By Christophe Blot, Catherine Mathieu and Christine Rifflart

This text summarizes the special study of the October 2012 forecast.

Since the summer of 2007, the central banks of the industrialized countries have intervened regularly to counter the negative impact of the financial crisis on the functioning of the banking and financial system and to help kick-start growth. Initially, key interest rates were lowered considerably, and then maintained at a level close to 0 [1]. In a second phase, from the beginning of 2009, the central banks implemented what are called unconventional measures. While these policies may differ from one central bank to another, they all result in an increase in the size of their balance sheets as well as a change in the composition of their balance sheet assets. However, three years after the economies in the United States, the euro zone and the United Kingdom hit bottom, it is clear that recovery is still a ways off, with unemployment at a high level everywhere. In Europe, a new recession is threatening [2]. Does this call into question the effectiveness of monetary policy and of unconventional measures more specifically?

For almost four years, a wealth of research has been conducted on the impact of unconventional monetary policies [3]. Cecioni, Ferrero and Sacchi (2011) [4] have presented a review of recent literature on the subject. The majority of these studies focus on the impact of the various measures taken by the central banks on financial variables, in particular on

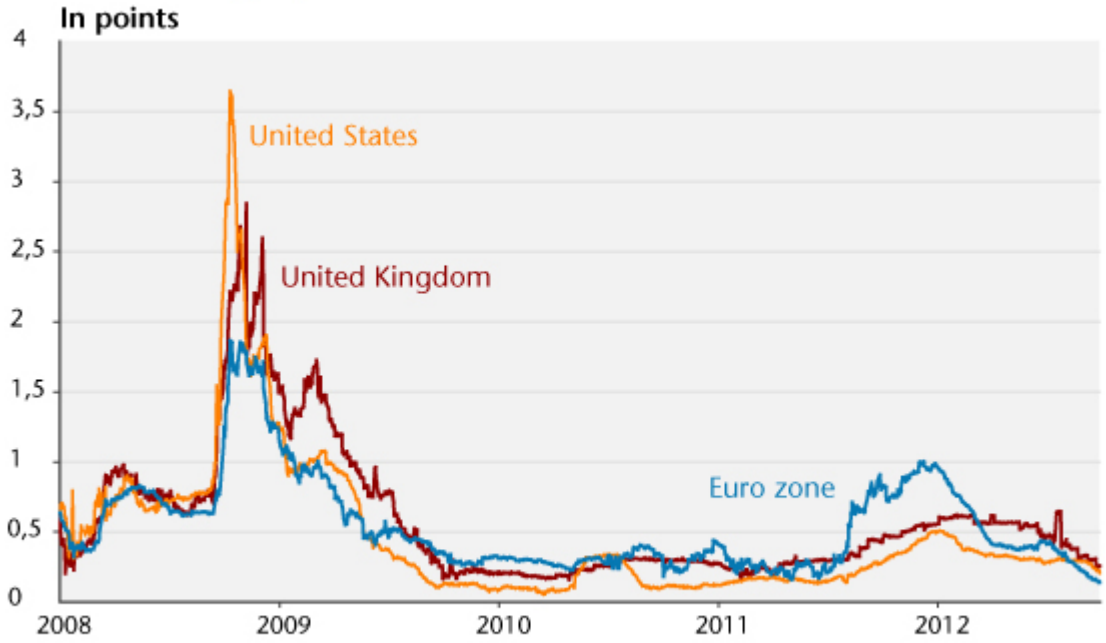
money market rates and bond yields. Given the role of the money market in the transmission of monetary policy, the ability of central banks to ease the pressures that have emerged since the beginning of the financial crisis constitutes a key vector for effective intervention. More recently, this was also one of the reasons motivating the ECB to conduct an exceptional refinancing operation in two stages, with a maturity of 3 years. This intervention has indeed helped to reduce the tensions on the interbank market that had reappeared in late 2011 in the euro zone, and to a lesser extent in the United States and the United Kingdom (see graph). This episode seems to confirm that central bank action can be effective when it is dealing with a liquidity crisis.

Another critical area of debate concerns the ability of unconventional measures to lower interest rates in the long term and thereby to stimulate activity. This is in fact an important lever for the transmission of monetary policy. The findings on this issue are more mixed. Nevertheless, for the United States, a study by Meaning and Zhu (2012) [5] suggests that Federal Reserve programs to purchase securities have contributed to lowering the rates on 10-year US Treasury bills: by 60 points for the first “Large-scale asset purchase” program (LSAP1) and by 156 points for LSAP2. As for the euro zone, Peersman [6] (2011) shows that the impact of unconventional measures on activity has in general closely resembled the effect of lowering the key interest rate, and Gianone, Lenza, Pill and Reichlin [7] (2012) suggest that the various measures taken by the ECB since the beginning of the crisis have helped offset the rise in the unemployment rate, although the impact is limited to 0.6 point.

Under these conditions, how is it possible to explain the weakness or outright absence of a recovery? One answer evokes the hypothesis of a liquidity trap [8]. Uncertainty is still prevalent, and the financial system is still so fragile that agents are continuing to express a preference for liquidity

and safety, which explains their reluctance to undertake risky projects. Thus, even if financing conditions are favourable, monetary policy will not be sufficient to stimulate a business recovery. This hypothesis probably explains the timidity of the recovery in the United States. But in the euro zone and the United Kingdom this hypothesis needs to be supplemented with a second explanation that recognizes the impact of restrictive fiscal policies in holding back recovery. The euro zone countries, like the UK, are pursuing a strategy of fiscal consolidation that is undermining demand. While monetary policy is indeed expansionary, it is not able to offset the downward pressure of fiscal policy on growth.

Graphique. Tensions on the interbank markets*



* The tensions are measured by the spread between the interbank rates (Libor ou Euribor) and the overnight interest rate swap (OIS).

Source : Datastream.

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[1] One should not, however, forget the exception of the ECB, which prematurely raised its key interest rate twice in 2011. Since then it has reversed these decisions and lowered the key rate, which has stood at 0.75% since July 2012.

[2] The first estimate of UK GDP for the third quarter of 2012 indicates an upturn in growth following three quarters of

decline. However, this rebound is due to unusual circumstances (see Royaume-Uni: l'enlisement), and activity will decline again in the fourth quarter.

[3] Unconventional monetary policies have already been analyzed repeatedly in the case of the Bank of Japan. The implementation of equivalent measures in the United States, the United Kingdom and the euro zone has contributed to greatly amplifying the interest in these issues.

[4] "Unconventional monetary policy in theory and in practice", *Banca d'Italia Occasional Papers,* no.102.

[5] "The impact of Federal Reserve asset purchase programmes: another twist", *BIS Quarterly Review*, March, pp. 23-30.

[6] "Macroeconomic effects of unconventional monetary policy in the euro area", ECB Working Paper no.1397.

[7] "The ECB and the interbank market", CEPR Discussion Paper no. 8844.

[8] See OFCE (2010) for an analysis of this hypothesis.

The euro zone: confidence won't be enough

By Céline Antonin, Christophe Blot and Danielle Schweisguth

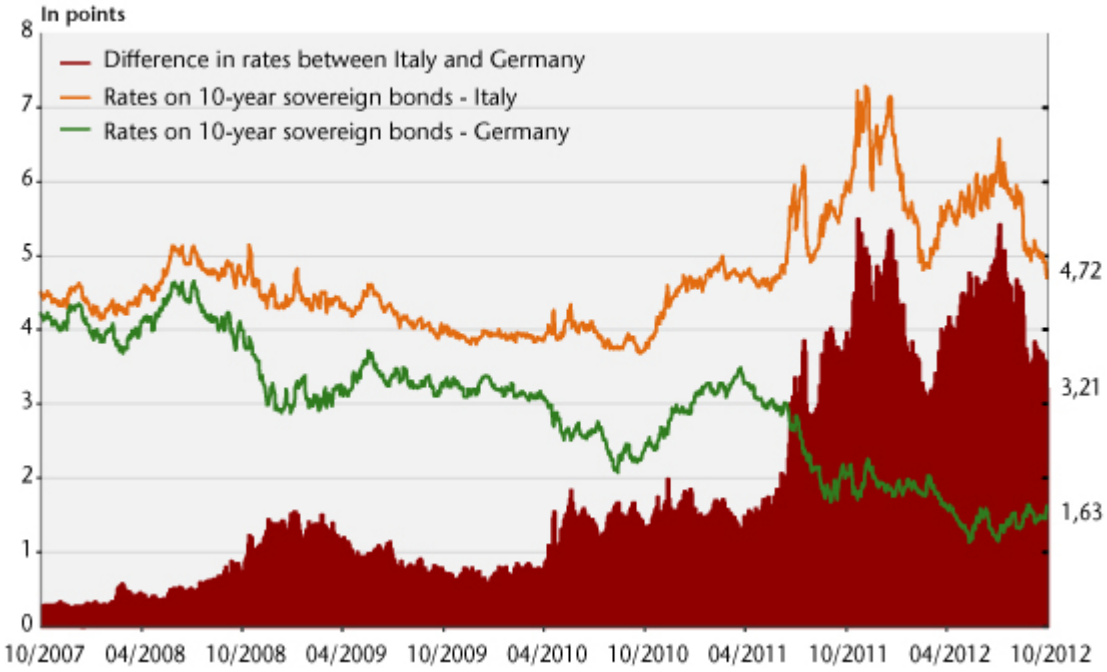
This text summarizes the OFCE's October 2012 forecasts for the economy of the euro zone.

After more than two years of crisis in the euro zone, this time the meeting of the European Council, held on 18 and 19 October, had nothing of the atmosphere of yet another last-chance summit. Even though discussions on the future banking union [1] were a source of tension between France and Germany, there was no sword of Damocles hanging over the heads of the European heads of state. However, it would be premature to assume that the crisis is coming to an end. It is sufficient to recall that the GDP of the euro zone has still not regained its pre-crisis level, and in fact declined again by 0.2% in the second quarter of 2012. This decline is forecast to continue, as we expect GDP to fall by 0.5% in 2012 and by 0.1% in 2013. Consequently, the unemployment rate in the euro zone, which has already surpassed its previous historical record from April 1997, will rise further, reaching 12.1% by end 2013. What then are the reasons for the lull? Can the euro zone quickly resume its growth and hope to finally put an end to the social crisis?

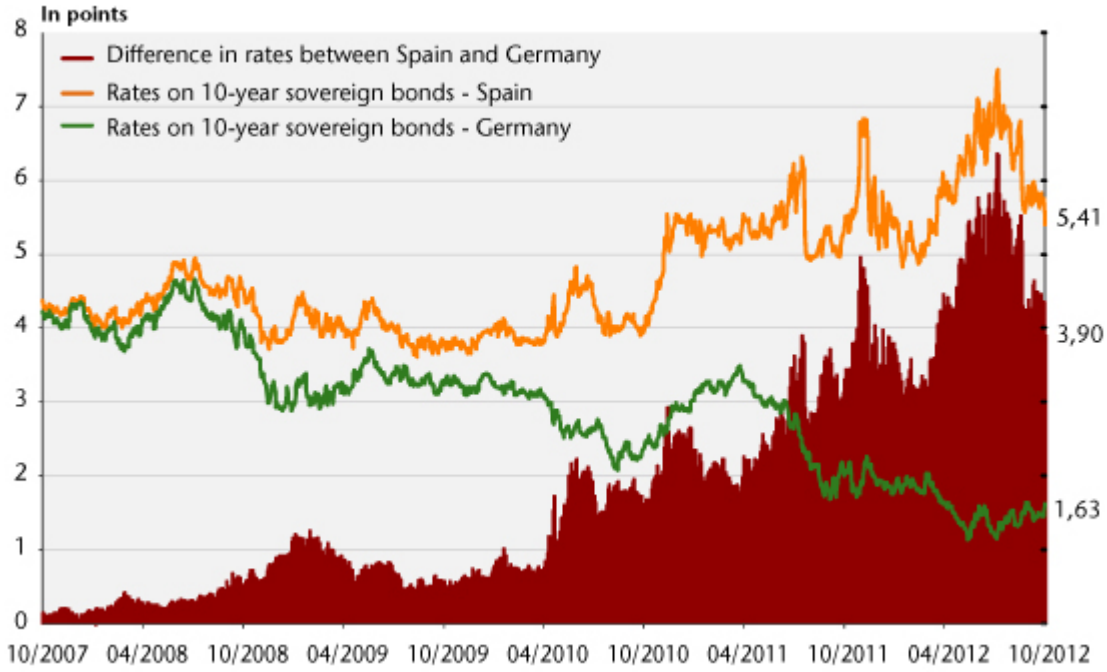
Since the end of 2011, Europe has adopted a new treaty (the Treaty on stability, coordination and governance, the TSCG) which is being ratified in the 25 signatory countries. The new law is specifically intended to strengthen both budgetary discipline – through the adoption of national golden rules – and solidarity through the creation of the European Stability Mechanism (ESM), in so far as the use of the ESM is conditional on ratification of the TSCG. On 6 September, the ECB unveiled the basic points of its new conditional purchase of sovereign debt (see here), which is aimed at reducing the interest rates of countries subject to the ESM. Thus, the risk premium, as measured by the difference between the Italian and Spanish sovereign interest rates and the German rate, after peaking on 24 July 2012, decreased respectively by 2.2 and 2.5 points (Figures 1 and 2). This is of course still far from normal, but this lull is nevertheless welcome and it shows that the spectre of a breakup of the euro zone has receded.

Could this new wave of optimism be a precursor to an upturn in the economy of the euro zone? The answer to this question is, unfortunately, negative. The fiscal policies of countries in the zone are still highly restrictive, a situation that has even intensified in 2012, pushing Italy and Spain back into recession and deepening the recession that was already hitting Portugal and Greece. For the euro zone as a whole, the fiscal stimulus will come to 1.7 percent of GDP in 2012 (table). The series of votes on national budgets confirms this strategy of a forced reduction of budget deficits for 2013, with the overall fiscal consolidation for the euro zone as a whole coming to 1.3%. There will be significant differences between the countries, since in Germany the fiscal stimulus will barely be negative (-0.2 point) while in Spain, Italy and Greece it will be more than -2 GDP points. However, the recessionary impact of this synchronized fiscal consolidation will be even greater given that the euro zone countries are still at the bottom of the economic cycle. In these conditions, the targets for budget deficit reduction will not be met, which will inevitably raise the question of the appropriateness of further budget cuts. More and more Member States thus risk being caught in a vicious circle where low growth calls for further fiscal adjustments that in turn deepen the economic and social crisis. It is essential that any decision about improving the governance of the European Union or the transmission of monetary policy restores confidence and creates the conditions for a return to growth. But this will be insufficient to escape the recession and should not obscure the impact of the fiscal strategy.

Graphique 1. Long-term sovereign interest rates in Italy and the Italy-Germany *Spread*



Graphique 2. Long-term sovereign interest rates in Spain and the Spain-Germany *Spread*



Source : Datastream.

Tableau. Fiscal stimulus in the euro zone countries

In GDP points

	2009	2010	2011	2012	2013
Germany	0,7	1,5	-0,9	-0,5	-0,2
Autria	0,4	0,6	-1,6	-0,1	-0,9
Belgium	1,9	-0,3	-0,1	-1,1	-0,8
Spain	3,8	-2,5	-1,1	-3,4	-2,4
Finland	0,4	1,5	-1,6	-0,4	-1,3
France	2,3	-0,5	-2,9	-1,6	-1,8
Greece	3,2	-8,0	-5,3	-5,0	-3,9
Ireland	2,2	-4,4	-1,5	-2,4	-1,8
Italy	0,8	-0,4	-1,2	-3,2	-2,1
Netherlands	4,0	-1,1	-0,2	-1,0	-1,2
Portugal	5,0	-0,7	-3,7	-3,7	-1,8
Euro zone 11*	1,8	-0,3	-1,3	-1,7	-1,3

* Excluding Cyprus, Luxembourg, Malta, Slovakia, Slovenia and Estonia.
Note : The fiscal stimulus is measured by the opposite of the variation in the cyclically adjusted primary balance, that is, excluding interest charges and exceptional revenue: it approximates the discretionary budget policy.
Sources : OFCE calculations and forecasts, October 2012.

tab

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[1] See here for an analysis of the importance of the proposed banking union and the questions it raises.

The governance of public finances: from the Fiscal pact to France's Organic law

by Henri Sterdyniak

So the French government has had Parliament enact an "Organic law relating to the planning and governance of public finances" (*loi organique relative à la programmation et à la*

gouvernance des finances publiques), which translates into French law the European Fiscal pact (the Treaty on stability, coordination and governance) that France had made a commitment to ratify. This Law can be assessed from two points of view: from the perspective of how well it conforms to the Treaty or from the viewpoint of its own relevance, *i.e.* will it improve France's fiscal policy?

In fact, the government has chosen – as the Constitutional Council had provided it with the possibility of so doing – a minimalist approach to taking into account the Treaty. The new budgetary procedure is not incorporated into the Constitution, and as we shall see, the Treaty provides for certain automatic binding procedures that the Organic law tempers or does not mention.

The Organic Law has three sections, dealing respectively with the budget plan (*loi de programmation des finances publiques – LPFP*), the High Council on the Public Finances (*Haut Conseil des finances publiques*), and a correction mechanism.

The Budget Plan

Article 1 of the Organic Law stipulates: "In accordance with the objective of balanced government accounts as set out in Article 34 of the Constitution, the LPFP sets the medium-term targets of the government administrations referred to in Article 3 of the TSCG."

Article 34 of the Constitution, adopted on 31 July 2008, set out only a medium-term non-binding target. It has had little influence on the fiscal policy adopted since then. In times of crisis, the multi-year guidelines quickly cease to have an influence. This was the case, for example, in 2009. The 2009 deficit, which was set at 0.9% of GDP by the four-year budget plan passed in January 2008, and 3.9% of GDP according to the January 2009 plan, ultimately amounted to 7.5%. Should we give up this flexibility?

Moreover, how can the budget plan "set a target" when the target flows from Article 3 of the Treaty, which clearly states that the target should be a structural deficit of less than 0.5% of GDP and that a path for an adjustment to ensure a rapid convergence toward equilibrium will be proposed by the European Commission?

Doesn't the ambiguity of this article actually reflect an attempt to reconcile the irreconcilable: the sovereignty of Parliament in budgetary matters with France's commitment to follow the recommendations of the Commission?

Article 1 of the Organic Law continues: "The budget plan (LPFP) determines the trajectory of the successive annual actual balances and structural balances… The structural balance is the cyclically-adjusted balance net of one-off and temporary measures." Article 3 states that the period covered is at least three years.

Thus, the Law takes no account of the experience of the Stability and Growth Pact (SGP): it is impossible to fix a trajectory for the public finances, in terms of the structural and actual deficit, for a period of three years. In January 2008, France was committed to having a balanced budget in 2012. It won't even get close. Should commitments be made that are impossible to keep?

This is impossible for two reasons. First, unpredictable economic fluctuations make it necessary to constantly adapt economic policy. In case of a deep crisis, as since 2009, it is necessary to make use of both economic stabilizers and discretionary measures (which increase what is called the structural deficit). If taken seriously, the Treaty prohibits any policy to boost activity during a downturn in activity. In the autumn of 2008, according to the Commission France had a structural deficit of 3.2% of GDP. If the Treaty had been in force, it would have had to reduce this quickly to 2.5% in 2009. In fact, France has moved to a structural deficit of 6%

of GDP, according to the Commission's assessment, in other words, 3.5 percentage points higher. Is the government wrong to have promoted activity, or to have come to the rescue of the banks? Should it have embarked on a tough austerity policy to offset the fall in tax revenue?

The text is, of course, ambiguous. On the one hand, it sets out that the structural deficit does not include "one-off and temporary" measures. Assistance to banks is undoubtedly a one-off, but why not all the 2009 stimulus measures, or in the opposite direction, the 75% income tax assessment which is scheduled for 2 years? Who decides? On the other hand, the Treaty recognizes that a country may deviate from its target or its adjustment path in the event of "exceptional circumstances" which, since the revision of the Growth and Stability Pact, can be interpreted as negative growth or a large output gap. However, the Commission refuses to recognize that most euro zone countries have actually been in this situation since 2009, and it is insisting on imposing rapid deficit reduction policies on them.

On the other hand, a State has no economic reason to set itself a standard for balancing the public purse. According to the true "golden rule of public finance", which was stated by the economist Paul Leroy-Beaulieu in the late nineteenth century, it is legitimate to finance public investment through debt. In the case of France, a structural deficit of around 2.4% of GDP is legitimate.

As in the Treaty, Article 1 of the Organic Law refers to the structural balance, the balance that would exist if France were at its potential output, the maximum output consistent with stable inflation. But the size of this potential output, which cannot simply be observed, is a subject of debate among economists. Different methods produce different results, which are subject to sharp revisions. France's structural balance in 2012 is 3.6% according to the French government, 3% according to the European Commission, 2.8% according to the OECD, and

according to us 0.5%, since the crisis has caused us to lose 8% of GDP compared to our growth trend. The Treaty requires the use of the Commission's method. Is this scientifically legitimate? Can France call into question this assessment?

Article 5 states that the potential growth assumptions should be presented in an appendix, but the definition of potential growth is even more questionable than that of potential output. For example, the latest budget bill (*projet de loi de finances – PLF*) expects potential growth of 1.5% per year up to 2017 for France, thus abandoning forever the expectation of making up the 8 points of activity lost to the crisis.

The Organic Law simply forgets Article 4 of the Treaty (which requires a country with a debt of over 60% of GDP to reduce the gap by one-twentieth per year). It also ignores Article 5, which states that a country subject to an Excessive Deficit Procedure (EDP) is to be placed under supervision, and has to submit to the EU Council and Commission annual budget plans and a list of the structural reforms that it will implement in order to make a sustainable correction to its deficit. It is this article that obliges France, like many other EU countries, to do all it can to get down to a 3% deficit by 2013, regardless of the economic situation, since, in case of an EDP, the constraint pertains to the actual balance and not the structural balance. It forgets Article 7, which states that, in this context, the decisions of the Commission are obligatory (member countries can oppose it only with a qualified majority, with the country concerned not voting).

The LPFP will cover a period of four to five years, but will be voted upon again each year, so that the constraint thus introduced can be changed by a vote on a new budget plan. This has been the case in France for as long as the Fiscal Pact has existed. Thus, the LPFP does not introduce any supplementary constraint itself, other than what is already required by European legislation.

The High Council of Public Finance

The Organic Law sets up a High Council of Public Finance, which will advise on the macroeconomic forecasts underlying the budget bill (LPF), the bill financing social security, the adjustment budget bills, the stability program that France must provide to the European authorities, and the budget plan (LPFP). It will assess whether France has been meeting its European commitments, and verify that the LPF (budget bill) is consistent with the trajectory announced in the budget plan (LPFP). It will give its opinion on any evocation of "exceptional circumstances".

Chaired by the President of France's Court of Audit (Cour des comptes), the High Council consists of four members from the Court of Audit and four members appointed for their expertise in public finance by the Presidents of the National Assembly, the Senate and the two finance commissions. This predominance of the Court of Audit is problematic. The judicial officers from the Court of Audit are not *a priori* experts in macroeconomics, and they are often, based on their function, more concerned with balancing the public finances than with growth and employment. For instance, the latest reports from the Court of Audit underestimate the output gap, support the thesis that the fiscal multiplier is close to zero, and believe that it is better to reduce public spending than to increase taxes. We would like to be certain that the composition of the High Council and its work and reports reflect the diversity of opinion that exists on fiscal policy.

More fundamentally, it is questionable whether the High Council has room for flexibility in its assessments. Will it have the right to conclude that the path of adjustment is too restrictive, and that the medium-term objective is not realistic? What strategy will be advocated by the High Council in the event of an economic slowdown: an expansionary policy to support growth or an austerity policy to restore the public finances?

Assume, for example, that the government has a budget for 2013 based on growth of 1.2%, resulting in a deficit of 3%. The High Council believes that growth will instead be only 0.6%, causing a decline in tax revenues, and thus a deficit of 3.3%. It will advocate doing whatever is necessary to achieve a 3% deficit. Assuming that the fiscal multiplier is 1, it will be necessary to come up with 12 billion in tax increases (or spending cuts), or 0.6% of GDP, to have an *ex post* deficit of 3%, but no growth. There is thus a great risk that this will lead to pro-cyclical policies. This will of course be mitigated when France is longer be subject to an EDP, as the High Council can then reason in terms of the structural deficit, but this will persist because everything will then depend on evaluating the structural deficit.

Lastly, there is the question of what legitimacy the High Council will have. The choice of fiscal policy must be subject to democratic procedures. The assessment of economic policy is part of a scientific, democratic debate. Should it be entrusted to a High Council, composed mainly of judicial experts, rather than economists on the one hand and representatives of the nation on the other?

The High Council will of course only give advice, which neither the government nor parliament are obliged to follow, but the risk is great that these opinions will affect the financial markets and the Commission and that it would be risky for the government to ignore them.

The correction mechanism

To ensure that countries do indeed follow the adjustment path, the Treaty requires countries to provide an automatic correction mechanism if deviations are observed with respect to this path. In the minds of the negotiators of the North European countries and members of the Commission, this mechanism should provide that if a deviation of 1% of GDP is seen in year N, the Constitution provides that, automatically,

a certain tax (*e.g.* VAT) would be raised by 0.5 GDP point and certain expenditures (*e.g.* social benefits) would be reduced by 0.5 GDP point.

In fact, Chapter 3 of France's Organic Law provides that the High Council is to report such a gap, the government is to set out the reasons for this discrepancy and then take it into account in drawing up the next budget bill. Parliament's rights are respected, but fortunately the character of being automatic is not guaranteed.

Conclusion

In the spirit of its founders, the fiscal treaty must put an end to the possibility of autonomous national fiscal policies. Fiscal policies should become automatic. The goal of fiscal policy should be balancing the budget, just as the goal of monetary policy should be fighting inflation; growth and employment are to be sought by means of free market structural reforms.

The Organic Law seems to be an ambiguous compromise. France is ratifying the Treaty, but implementing it only reluctantly. It's a safe bet that, as with the Stability Pact, there will be great tension in the euro zone between purists who demand the strict application of the Treaty and those who do not want to sacrifice growth to it.

Who will pay the bill in Sicily?

by Augusto Hasman and Maurizio Iacopetta

Rumors of a Sicily's possible default are in the air again. The employees of the Sicilian parliament did not receive their checks at the end of September. Another possible default of Sicily made already the international headlines in July (see the New York Times 22/07/12) due to the contagion effects it could have had on other regions. But in that occasion, the central Italian government prevented Sicily's default by providing an immediate injection of liquidity in the order of 400 million euros.

Other Italian regions are in trouble. In recent months the provision of basic health care services has deteriorated; regions are renegotiating contracts with their creditors to obtain deadline extensions. The figures reported by Pierre de Gasquet in *Les Echos* of 02/10/2012, give a good idea of the deterioration of the Italian regional public finance over the last decade.

It will take a good deal of imagination for regional governments to come out of the impending budget crisis, not only in Italy but also in other European countries that have difficulties in managing their public debts, such as Spain, Ireland and Greece.

In recent weeks we learned that some local politicians are endowed with a good deal of creativeness, but they hardly use it to find a solution to the budget crises. The governor of the region Lazio –where Rome is located – resigned a few days ago in the midst of a political scandal due to revelations that members of the regional parliament funneled electoral

funds to pay extravagant personal expenses, including car upgrades and luxury vacations.

Why don't regional governments issue their own money to finance public expenditures? It may seem absurd that now that European countries have finally accepted a common currency, regional and possibly local governments might be tempted to create some sort of fiat money. But historically it would not be the first time that local monies emerge when the central government has its hands tight.

Argentina in the early 1990s (convertibility law n° 23.928, 27/03/1991) pegged the currency on a one-to-one basis with the U.S. dollar (See Anne-Laure Delatte's article on this blog for a parallel between the Argentinean events and hypothetical scenarios for Greece.). For most of the decade, things seemed to be working well; the economy was growing at the impressive annual rate of almost 5.7%, notwithstanding (or perhaps thanks to) the fact that Argentina, in practice, gave up the monetary policy instrument. But by 1998, the load of public debt started to become unbearable. Financing it by printing money was out of question. The IMF was called for help to prevent the panic of Argentinean savers. It granted a loan of 40 thousands million dollars but it also asked the government to impose a severe austerity plan, which had, among many effects, that of depriving provinces under financial difficulties from the prospect of being rescued by the central government.

It was at this point, in 2001, that a number of provinces began to print their own money in order to pay wages and current expenses. (Krugman's open editorial of ten years ago at the New York Times – Crying with Argentina, 01.01. 2002 – gives a fresh reading on the unfolding of the events). Fifteen out of twenty-two provinces ended up using newly issued interest-bearing notes, which earned the name of 'quasi-money'. At the beginning, thanks to an agreement between provinces and large stores, quasi-money had a high level of acceptability. Indeed, competition led more and more stores to

accept the quasi-money. Local trade seemed to resuscitate. In August 2002, 5 thousands million pesos of quasi-money circulated side-by-side with 12 thousands million of (real) Argentinean pesos.

Interesting, although the case of Argentina seems very surprising, the academic literature has always been puzzled of why it does not happen more often. The question is why government non-interest bearing banknotes circulate side-by-side with government bonds that promise an interest. In principle the phenomenon defies an elementary no-arbitrage principle.

One of the first to pose the puzzle was Hicks in 1935 in a famous article by the title of 'A suggestion for simplifying the theory of money'. An answer to Hicks' puzzle was offered by Bryant and Wallace (1980). Their argument is based on observation that private banks are not allowed to slice large denomination government bonds in small denomination banknotes. If banks could issue their own small denomination notes that are fully backed by large denomination government bonds, then, competition among banks would presumably drive the return on private banknotes in line with the return on bonds. If interest rates on bonds are positive, the argument goes, the demand for non-interest bearing money should then fall to zero. For Bryant and Wallace only the legal restriction on intermediation would prevent this from happening.

But Makinen and Woodward (1986) report that, during the period from 1915 to 1927, French government treasury bonds circulated at a relatively small denomination of 100 Francs (roughly 50-60 euros of today). The bonds were issued with terms of 1 month, 3 months, 6 months, and 1 year. These bonds were continuously available to all banks (including branches of the Bank of France), post o□ces, and numerous local o□ces of the Finance Ministry. This historical episode casts some doubts on the legal hypothesis, for the Bank of France kept issuing Francs.

Why then in Argentina bonds emerged as money – albeit for a limited period? It seems to us that the key was the promise offered by the issuer to accept the regional bonds in settling a debt – typically a tax obligation. The rules on what the regions can and cannot do in Europe are different from country to country. In Italy for instance regions, provinces, and municipalities have been authorized to issue bonds by the law of 'rationalization of public finance', introduced in the first half of the 1990s (art. 32 of the law of 8.6.1990 n.142, for municipalities and provinces, and art.35, law 23.12.1994 n. 724). The law set several conditions for an administration to qualify to issue bonds. First, bonds can be issued only to finance investment projects. The law explicitly forbids the issue of bonds to finance current expenditures. Second, the issuer has to demonstrate a good history of balanced budgets. Third, the maturity of the bonds cannot be shorter than five years. Fourth, the bonds cannot go in direct competition with the central government bonds, namely cannot be offered a real return above the one offered by the central government for bonds with similar maturities. Fifth, the central government is not allowed to back-up bonds of the regions who, in turn, cannot take responsibility for the bonds issued by provinces or municipalities

Is it desirable to relax these conditions? Perhaps it is useful to see the end of the story in Argentina –not particularly that of a Hollywood movie. The acceptability of quasi-money outside the region that issued it was very low. More importantly, the central government did not allow tax payers to use quasi-money for their federal taxes. Consequently, in a few months the de-facto exchange rate between the quasi-money and the national currency dropped from 1 to around 0.7 – it was somewhat higher for Buenos Aires quasi-money, for this was accepted in many other provinces.

At the beginning of 2002, a new government, presided by Eduardo Duhalde, decided to abandon the convertibility law.

As a result, the exchange rate of the pesos vis-à-vis the U.S. dollar dropped from one to four. During that year, the GDP declined 10.9%.

Having gained the power of printing money again, the central government allowed quasi-monies holders to convert them into the devalued national peso. The short run benefits evaporated soon. The recession along with the depreciation slashed the purchasing power of the working class. At the end of the crisis, the national product was about a quarter lower than its 1998 level, and the rate of unemployment shot up to 24%. It appears that issuing of local money delayed the collapse of the financial system, but it is unclear whether the temporary breath gained by local administrators that issued bonds made the subsequent recession less severe. The case of Argentina suggests, nevertheless, that a major relaxation of the current constraints of regional and municipal entities is not going to help solve how to guarantee the provision of health care service in the long run. Nonetheless, the current policy of cutting basic public services indiscriminately is the least imaginative of the solutions. Alesina and Giavazzi in an open editorial published on Corriere della Sera on Sept 27, suggested that hospitals could charge health care users directly instead of being reimbursed by the regional authorities. By doing so, they argued, not only the quality of the service would improve, but regions would need fewer resources. Although this is food for thought, in the U.S. such a system generated a colossal profit making machine that contributed to the explosion of the health care costs. Similarly, Fitoussi and Saraceno (2008) argue that the spectacular gain in income of the last three decades in China did not go hand-in-hand with similar gains in life expectancy and quality of health care, because the government opted for a health care system based on out-of-pocket expenses.

The Argentinean experience tells us that local administrators in distressed regions of Europe are going to lobby the

government to give more freedom in managing their budget intertemporally – something that is already happening in Spain, and is summarized in the London School of Economics blog by K. Basta . They are also probably going to make more intensive use of 'creative accounting', so as to prolong their serving time in office. But this will not be the solution. A major reassessment of the national government's priorities in combination with a sensible monetary policy at the European level is the only way out. We badly need to free up resources to revitalize the public educational system and to maintain the overall good standard of public health care services.

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Friends of acronyms, here comes the OMT

By Jérôme Creel and Xavier Timbeau

We had the OMD with its Orchestral Manœuvres in the Dark, and now the OMT with its Orchestral Manœuvres in the [liquidity] Trap, or more precisely, "Outright Monetary Transactions", which is undoubtedly clearer. The OMT is a potentially effective mechanism that gives the European Central Bank (ECB) the means to intervene massively in the euro zone debt crisis so as to limit the differences between interest rates on euro

zone government bonds. The possibility that a country that comes into conflict with its peers might leave the euro zone still exists, but if there is a common desire to preserve the euro then the ECB can intervene and play a role comparable to that of the central banks of other major states. Opening this door towards an escape route from the euro zone's sovereign debt crisis has given rise to great hope. Nevertheless, certain elements, such as conditionality, could quickly pose problems.

The OMT is simply a programme for the buyback of government bonds by the European Central Bank, like SMP 1.0 (the Securities Markets Programme) which it replaces but limited to States that are subject to a European Financial Stability Fund / European Stability Mechanism (EFSF / ESM) programme and thus benefiting from European conditional aid. For the ECB to intervene, the country concerned must first negotiate a macroeconomic adjustment plan with the European Commission and the European Council, and apply it. The ECB, potentially members of the European Parliament or the IMF can be a party to this (these institutions – the Commission, the ECB and the IMF – form the Troika of men in black, so famous and feared in Greece). Secondly, and more importantly, the country will be under the supervision of the Troika thereafter.

So if Italy and Spain want to benefit from the purchase of their bonds by the ECB, then their governments will have to submit to an EFSF or ESM adjustment programme. This does not necessarily imply that the plan imposed will be more drastic in terms of austerity than what these governments might have already devised or implemented (the doctrinaire approach in the management of public finances is highly contagious in Europe), but it will require the two countries to submit *ex ante* to outside scrutiny of any adjustment plan they develop and *ex post* to control by the Commission and the Council. If the country under surveillance starts *ex post* to veer away from implementing the adjustment plan, then it could, of

course, withdraw from the programme, but its sovereign bonds would no longer be covered by OMTs. They would lose the support of their peers and would thus sail into the financial markets in uncharted waters. That would probably be the first step towards a default or an exit from the euro.

Furthermore, the ECB has not committed itself to absorbing all the bonds issued and thus maintains a real threat capacity: if the country were to rebel, it could be obliged to face higher rates. The OMT thus introduces both a carrot (lower rates) and a stick (to let the rates rise, sell the bonds the ECB holds in its portfolio and thereby push rates upward), upon each new issue. The OMT is therefore akin to being put under direct control (conditionality) with progressive sanctions and an ultimate threat (exiting the programme).

The ECB says that its interventions will mainly cover medium-term securities (maturity between 1 and 3 years), without excluding longer-term maturities, and with no quantitative limits. Note that short / medium-term emissions *usually* represent a small proportion of total emissions, which tend to be for 10 years. However, in case of a crisis, intervention on short-term maturities provides a breath of fresh air, especially as maturing 10-year securities can be refinanced by 3-year ones. This gives the Troika additional leverage in terms of conditionality: the OMT commitment on securities is only for three years and must be renewed after three years. The financial relief for countries subject to the programme may be significant in the short term. For example, in 2012 Spain, which has not yet taken this step, will have issued around 180 billion euros of debt. If the OMT had reduced Spain’s sovereign borrowing rates throughout 2012, the gain would have amounted to between 7 and 9 billion for the year (and this could be repeated in 2013 and 2014, at least). This is because, instead of a 10-year rate of 7%, Spain could be benefitting from the 2% rate at which France borrows for 10 years, or instead of its 4.3% rate at 3 years, Spain could

have borrowed at 0.3% (France's 3-year sovereign rate). This is the maximum gain that can be expected from this programme, but it is significant: this roughly represents the equivalent of the budgetary impact of the recent VAT hike in Spain (or a little less than one Spanish GDP point). This would not alter Spain's fiscal situation definitively, but it would end the complete nonsense that saw Spaniards paying much more for their debt to compensate their creditors for a default that they have been striving arduously not to trigger.

It can even be hoped (as can be seen in the easing of Spanish sovereign rates by almost one point following the ECB announcement on Thursday, 6 September 2012, or the almost half a point reduction in Italian rates) that the mere existence of this mechanism, even if Spain or Italy do not use it (and thus do not submit to control), will be enough to reassure the markets, to convince them that there will be no default or exit from the euro and therefore no justification for a risk premium.

The ECB announced that it would terminate its preferred creditor status for the securities. This provision, which had been intended to reduce the risk to the ECB, led to downgrading the quality of securities held outside the ECB and thus reducing the impact of ECB interventions on rates. By acquiring a government bond, the ECB shifted the risk onto the bonds held by the private sector, since in case of a default the Bank was a preferred creditor that took priority over private holders of bonds of the same type.

The ECB explained that its OMT operations will be fully sterilized (the impact on the liquidity in circulation will be neutral), which, if it is taken at its word, implies that other types of operations (purchases of private securities, lending to banks) will be reduced correspondingly. What do we make of this? The example of the SMP 1.0 can be drawn on in this regard. SMP 1.0 was indeed also accompanied by sterilization. This sterilization involved short-term deposits

(1 week, on the ECB's liabilities side), allocated in an amount equal to the sums involved in the SMP (209 billion euros to date, on the ECB's assets side). Each week, the ECB therefore collects 209 billion euros in short-term fixed-term deposits. This is therefore a portion of bank deposits that the ECB assigns to the sterilization instrument, without there being sterilization in the strict sense (because this does not prevent an increase in the size of the ECB's balance sheet nor does it reduce the potential liquidity in circulation). The mention of sterilization in the OMT appears to be an effort at presenting this in a way that can convince certain states, such as Germany, that this monetary policy will not be inflationary and therefore not contrary to the mandate imposed on the Bank by the Treaty on the European Union. Currently, and because the crisis remains unresolved, private banks have substantial deposits with the ECB (out of fear of entrusting these deposits to other financial institutions), which gives it considerable flexibility to prevent the announced sterilization from affecting the liquidity in circulation (the ECB has a little more than 300 billion euros in deposits that are not mobilized for sterilization). The ECB can then probably use the current accounts (by blocking them for a week), which poses no difficulty since the ECB lends to the banks on tap through long-term refinancing operations (LTROs). At worst, the ECB would lose money in the sterilization operation in case of a gap in compensation between the fixed-term deposits and the loans granted to banks. Sterilization could therefore lead to this kind of absurd accounting, but wind up, in a situation of monetary and financial crisis, having no impact on liquidity. On the other hand, if the situation normalizes, the constraint of sterilization would weigh more heavily. We're not there yet, but when we do get there, the ECB needs to limit lending to the economy or to accept an increase in liquidity if the OMT continues to be implemented for some euro zone members.

The deal that is now on the table places the euro zone

countries in a formidable dilemma. On the one hand, acceptance of the Treaty on Stability, Coordination and Governance of the euro zone (TSCG) determines eligibility for the EFSF and the ESM [1], and therefore now determines eligibility for the OMT programme. Refusing to sign the fiscal treaty means rejecting in advance the potential intervention of the ECB, and thus accepting that the crisis continues until the breakup of the euro zone or until a catastrophic default on a sovereign debt. On the other hand, signing the treaty means accepting the principle of an indiscriminately restrictive fiscal strategy (the rule on public debt reduction included in the TSCG will be devastating) that will trigger a recession in the euro zone in 2012 and perhaps in 2013.

Signing the treaty also means relieving the pressure of the markets, but only to wind up submitting solely to the Troika and to the baseless belief that the fiscal multipliers are low, that European households are Ricardian and that the sovereign debt is still holding back growth. It is true that lowering sovereign interest rates, particularly those of Italy and Spain, will create some breathing room. But the main gain from lower rates would be to spread the fiscal consolidation over a longer period of time. Interest rates place a value on time, and reducing them means granting more time. The debts contracted at negative real interest rates are not ordinary debts, and do not represent the same kind of burden as debts issued at prohibitively high rates.

It would be a terrible waste to gain new maneuvering room (the OMT) only to bind one’s hands immediately (the TSCG and the Troika’s blind fiscal strategy). Only a change in fiscal strategy would make it possible to take advantage of the door opened by the ECB. In short, saving the euro will not help if we do not first save the EU from the disastrous social consequences of fiscal blindness.

[1] Paragraph 5 of the preamble to the Treaty establishing the European Stability Mechanism states: “This Treaty and the TSCG are complementary in fostering fiscal responsibility and solidarity within the economic and monetary union. It is acknowledged and agreed that the granting of financial assistance in the framework of new programmes under the ESM will be conditional, as of 1 March 2013, on the ratification of the TSCG by the ESM Member concerned and, upon expiration of the transposition period referred to in Article 3(2) TSCG on compliance with the requirements of that article.”