The very great recession

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Economic outlook updated for the major developed countries in 2012

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The growth outlook for the developed countries, in Europe in particular, has deteriorated dramatically in recent weeks. The "voluntary and negotiated" devaluation of Greek sovereign debt securities, which is really nothing but a sovereign default, the wave of budget cuts being announced even as the budget bills are still debated, the inability of the European Union to mobilize its forces in the crisis – all these factors render the forecasts made two months ago obsolete. For many European countries, including France, 2012 will be a year of recession.

Published in August 2011, the growth figures for the second quarter of 2011 in the developed countries put the positive signals from early 2011 into perspective. In the third quarter of 2011, the national accounts were better than expected, but the respite was short-lived. The economic indicators for most of the developed countries (see below) heralded a reduction in activity in the fourth quarter of 2011 and early 2012. The euro zone will be stagnant in 2012, with GDP growth of 0.4% and Germany recording the "best" performance in the zone (Table 1).

The first phase of the great recession, in 2008-2009, led to the swelling of public debt (about 16 points in the euro zone, more than 30 points in the United States and the United Kingdom, see Table 2). Phase II will be determined by how the public debt caused by the crisis has been digested: either the low interest rates will make it possible to postpone the adjustment of public deficits and the economies can bounce back, thus easing the necessary adjustment, or the adjustment will be immediate, amplified by higher public rates and the persistence of under-employment (Table 3). Gripped by the fear of default, Europe is transforming the *great* recession that began in 2008 into a *very great* recession.

After the "voluntary" Greek default, the euro zone countries have inflicted on themselves not only an adjustment that was even more brutal than that required by the Stability and Growth Pact, but also contagion and a general collapse in sovereign debt.

The measures proposed by the European Union, from the European Financial Stability Facility (EFSF) to the adoption of the "golden rule", have not been persuasive of its ability to solve the public finance problems of the euro zone members either in the short or long term, especially as Europe seems to have forgotten that growth and the restoration of full employment are fundamental to the sustainability of public debt and to the European project more generally.

Faced with the risk of insolvency on sovereign debt, creditors are demanding higher risk premiums to continue to fund both new debt and the renewal of the fraction of old debt that is expiring. The hardening of financing conditions, even as business prospects are deteriorating as a result of budget cuts, is nipping the attempts at fiscal consolidation in the bud. The result: a downward spiral. The rising cost of debt adds to interest charges, which undercuts deficit reduction and leads to additional fiscal discipline to reassure donors. The added restrictions weigh on activity and wind up augmenting the cyclical deficits. At which point the governments, panicked at the stubborn resistance of the deficits and the prospect of a downgrade in their sovereign rating, respond with even greater rigor.

Because the economies of the European countries are so closely interconnected, the simultaneous implementation of restrictive fiscal policies leads to magnifying the global economic slowdown by undercutting foreign trade (we developed this point in our previous forecasting exercise). Restrictive policies hit domestic demand in whichever countries implement them and thus reduce their output, but also their imports. This dynamic decreases the exports of their trading partners, and therefore their activity, regardless of their own fiscal policies. If these partners also implement a restrictive policy, then an external impact has to be added to the internal cutbacks (indirect). The magnitude of these effects depends on several factors. The direct effects are mainly linked to negative impulses in each country. The indirect effect is more difficult to measure, since it depends on the degree of openness of each country, the geographical distribution of its exports and the elasticity of imports to GDP of the countries that are tightening their policy. Thus, a very open country for which the majority of exports are going to a country with severe budget cuts will suffer a strong indirect effect. In this respect, the highly integrated countries of the euro zone will suffer more from the restrictive policies of their partners than will the United States or Japan. Their growth will be seriously curtailed, pushing back deficit reduction. In many countries, the coming recession is the result of the increasingly restrictive measures being taken to try to stabilize their debt / GDP ratio as soon as possible in an increasingly unfavourable economic environment.

The race to tighten up to try to bring public deficits below 3% of GDP and to stabilize debt ratios is aimed as much at meeting the requirements of European agreements as it is at reassuring the rating agencies and financial markets. The latter, among them the European banks, in fact, hold at least 50% of the public debt of the developed countries in the form of securities issued by the national debt agencies. This percentage varies from 77% of the public debt held by financial institutions in France to 97% for Spain.

In the euro zone, between 9 and 23 percentage points of GDP of public debt, depending on the country, has to be renewed in 2012 (see Table 2). Outside of Japan, it is Italy, which combines a high debt with a large proportion of short-dated securities, that will have the largest financing requirement. If requirements related to the financing of the public deficit in 2012 are added to this, then the potential for total issues in the euro zone ranges between 10% of GDP in Germany to 24% in Italy.

These high levels are posing problems for countries that have lost the confidence of the markets. If the interest rates at which these countries are financed in 2012 remain at their average levels for the last quarter of 2011, Spain would borrow at 5% and Italy at 4.3%. France and Germany, however, would continue to benefit from low interest rates (1.5% and 0.9% respectively). The issue rates in December 2011 for these two countries have been little affected up to now by the threats to downgrade the sovereign debt of the euro zone countries. Even though the need for funding from the markets was greater in 2012 for the United Kingdom, the United States and Japan than for the euro zone, their rates have remained low. Paradoxically, the downgrading of the US sovereign rating in August 2011 was accompanied by a decrease in 10 year rates and short-term rates in the United States. Within this context of a flight to safety, the programmes of massive purchases of government securities on the secondary market that were implemented by the Federal Reserve (FED), the Bank of England (BoE) and the Bank of Japan have been keeping public long-term rates low. Monetary policy is aimed at affecting short-term interest rates as well as long-term rates. The role of lender of last resort being adopted by these central banks is thus reassuring the markets and avoiding higher interest rates during Treasury auctions. In contrast, the ECB's mandate and the strict supervision of Europe's legal scaffolding limit its actions. The relatively low amounts of government bonds purchased since 2010 (2.3% of euro zone GDP compared with 11% of US GDP for the Fed and 13% of UK GDP for the BoE) and tension between euro zone countries concerning the role of the central bank is fuelling demands by investors to protect their risks by raising premiums.

To stop the collapse of European sovereign debt, we must rule out any possibility of a sovereign default, public interest rates must be reduced to the maximum by all means possible, and a European strategy for stabilizing the public debt needs to be implemented, first by dealing with under-employment so as to renew growth, followed by the adjustment of public finances.

The fiscal consolidation efforts being undertaken in Europe are inflicting a new shock on the global economy. Economic indicators have worsened everywhere over the past six months, putting a brake on activity at the turn of the year, and even pushing some euro zone countries into recession. The debt crisis in the euro zone has once again hit the financial system, which could undermine the banks' lending activity and reinforce the recessionary impact of the fiscal consolidation programmes. The expansion in the cyclical component of the deficits that these programmes have generated is hindering the achievement of the initial budget targets and calling forth yet more fiscal discipline. If governments stick to their commitments in 2012 no matter what the cost, the depth of the recession will come close to that of 2008/2009.

Table 1. Forecasts for 2012

		2011				2012				2011	2012
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Germany	GDP	1.3	0.3	0.5	-0.1	0.1	0.1	0.1	0.1	3.0	0.4
	Unemployment rate	6.1	5.9	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.7
	Public deficit*									-1.2	-1.4
France	GDP	0.9	-0.1	0.4	-0.2	-0.1	0.0	0.0	0.0	1.6	-0.2
	Unemployment rate	9.2	9.1	9.3	9.6	9.9	10.2	10.5	10.7	9.3	10.3
	Public deficit*									-5.8	-5.3
Italy	GDP	0.1	0.3	0.1	-0.2	-0.4	-0.4	-0.3	-0.3	0.7	-0.9
	Unemployment rate	8.2	8.1	8.2	8.4	8.6	8.8	8.9	9.0	8.2	8.8
	Public deficit*									-3.9	-2.3
Spain	GDP	0.4	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.7	0.0
	Unemployment rate	20.6	21	22.2	22.6	22.8	23	23	23	21.6	23.0
	Public deficit*									-7.4	-5.4
Euro zone	GDP	0.8	0.2	0.2	-0.1	-0.1	0.0	0.0	0.0	1.6	0.0
	Unemployment rate	10.0	10.0	10.6	10.8	10.9	11.0	11.1	11.2	10.3	11.1
	Public deficit*									-3.5	-2.9
United Kingdom	GDP	0.4	0.1	0.5	-0.1	0.0	0.2	0.2	0.2	0.9	0.5
	Unemployment rate	7.7	7.9	8.3	8.5	8.6	8.7	8.8	8.8	8.1	8.7
	Public deficit*									-9.1	-8.5
United States	GDP	0.1	0.3	0,6	0,4	0.4	0.1	0.2	0.3	1.7	1.4
	Unemployment rate	8.9	9.1	9.1	8.7	8.7	8.7	8.7	8.7	9.0	8.7
	Public deficit*									-9.2	-9.2
Japan	GDP	-0.7	-0.3	1.5	0.7	0.6	0.6	0.4	0.4	-0.1	2.4
	Unemployment rate	4.7	4.6	4.4	4.5	4.5	4.6	4.7	4.7	4.5	4.6
	Public deficit*									-8.8	-9.4

* in GDP points.
Sources: National accounts, OFCE forecasts December 2011.

Table 2. Financing requirements, public debts and debt characteristics

	GER	FRA	ITA	SPA	UK	USA	JPN	EZ 4
Financing requirement on the markets in 2012								
In billions	255 M€	295 M€	391 M€	175 M€	257 M£	3151 M$	226 tls ¥	1116 M€
In percentage pts of GDP	9.8	14.1	24.4	15.8	16.5	19.8	47.4	15.1
Of which public deficit financed by recourse to the market in 2012								
In billions	20 M€	78 M€	31 M€	57 M€	134 M£	910 M$	32 tls ¥	186 M€
In percentage pts of GDP	0.8	3.7	1.9	5.1	8.6	5.7	6.7	2.5
Of which debt reaching maturity financed by recourse to the market in 2012								
In billions	235 M€	217 M €	360 M€	118 M€	122 M£	2241 M$	194 tls ¥	930 M€
In percentage pts of GDP	9.0	10.4	22.5	10.6	7.8	14.1	40.7	12.6
Total public debt - 2011								
In billions of euros	2 062	1 693	1 884	568	1 381	11 064	9 516	6 207
In billions of dollars	2 795	2 294	2 553	770	1 871	14 994	12 896	8 412
In billions of euros 2010 PPP	2 051	1 823	1 869	500	1 283	10 210	11 144	6 216
In dollars per capita	34 183	35 258	42 109	16 693	29 972	46 510	101 156	33 171
In percentage pts of GDP	80.3	83.7	118.7	52.4	78.5	98.3	213.4	85.5
Change from 2007	15.4	19.9	15.1	16.3	34.0	33.5	46.3	16.6
Market public debt estimated at 31 December 2011								
In billions of euros	1 108	1 315	1 571	558	1 326	7 297	6 727	4 551
In billions of dollars	1 502	1 782	2 129	756	1 797	9 890	9 116	6 168
In billions of euros 2010 PPP	1 102	1 416	1 558	490	1 809	9 890	11 568	4 558
In percentage pts of GDP	43.1	65.0	99.0	51.4	75.4	64.8	150.8	62.7
In dollars per capita	18 368	27 385	35 116	16 372	28 786	30 678	71 505	24 322
Characteristics of the market debt								
Average interest rate on the debt in 2011	nd	3.1	nd	4.0	2.2	3.3	1.0	nd
Average interest rate on issues in 2011	nd	nd	3.5	nd	2.8	nd	0.3	nd
Average interest rate on issues in 2012	0.9	1.5	4.3	5.0	2.0	1.4	0.5	2.9
Interest rate on 10-year issues in 2012	2.0	3.2	6.3	5.3	2.3	2.2	1.1	4.3

Note : Purchasing power parities (in French: "PPA") are calculated relative to the euro zone and take into account price differences between euro zone countries.
Sources: OFCE calculations December 2011, Eurostat, National Treasuries.

Table 3. Changes in the state of the unemployed between 2007 and 2010

In points of the working population

Change between 2007 and 2010	Germany	Spain	France	Italy	UK
Unemployment	-1.6	11.9	1.3	2.4	2.6
Long-term unemployment	-1.5	5.7	0.5	1.2	1.3
Unemployment not covered by benefits	-0.3	5.7	0.5	2.0	4.3

Source: Eurostat.

The economic downturn heralded by the indicators

The publication in August 2011 of the growth figures for the second quarter dampened the hopes that had been kindled by the brief first-quarter upturn for a painless recovery from the sovereign debt crisis, particularly in Europe. The turnaround in the economic indicators during the summer months has reinforced the view that the economies have reversed course, with mounting concerns that the European economies are once again sinking into recession (see below). The National Accounts for the third quarter, though better than what might have been expected from the business climate, have not alleviated the negative expectations for the end of this year and the start of next year. The hopes for positive growth in the major European countries over 2012 as a whole have thus vanished, and Germany, with virtually stagnant average annual growth in GDP (0.4%), will be the top performer in the euro zone (Table 1).

While economic growth in the third quarter of 2011 was more robust in the United States, the United Kingdom and Japan than was predicted in our October forecast, in the euro zone it was in line with our forecasts (Figure 1). The slowdown in growth, 0.2% for the spring quarter, has continued throughout the zone. This general stagnation nevertheless conceals major differences in national performance, which might be related in part to the adverse effects of the disruptions in Japanese production last spring in the automotive and electronics industries following the Fukushima disaster. In Germany and to a lesser extent in France, growth has definitely been better (0.5% and 0.4%, as against the October forecast of 0.3% and 0.2%), in particular because of a stronger rebound in household consumption (0.8% in Germany and 0.3% in France) from the contraction in spring, along with a pick-up in exports. In contrast, the smaller and more open countries have experienced a more marked slowdown in GDP growth, or even a decline. This was true in particular for Spain (where the revised accounts indicate that domestic demand worsened through the first half of 2011, and was still deteriorating in the third quarter), Belgium and the Netherlands.

In the fourth quarter of 2011, this divergence in growth rates in Europe should fade away as the surveys and cyclical indicators deteriorate in all the countries. The heightening tensions in the euro zone financial markets and the announcement of new fiscal adjustment plans are increasingly stamping their mark on the outlook for production. All the forecasts are being revised downwards in the fourth quarter, and the euro zone will experience a decline in GDP of -0.1%, in contrast to the 0.2% growth originally forecast. In Germany and France, the economy will shrink in the quarter by -0.1% and -0.2%, respectively (versus the initial forecast of growth of 0.3% and 0.2%). In Germany, domestic orders and export orders from industry fell in the third quarter, suggesting a downward adjustment in investment. Household consumption may slow, but will still remain positive. In France, surveys of industry have become much gloomier during the summer, and the utilization rate of production capacity, which recovered strongly from mid-2009 to mid-2011, plunged once again in the third and fourth quarters of 2011. According to the October 2011 survey, company heads have cut their forecast for investment in industry for 2011 and expect a sharp slowdown in 2012. More importantly, financing conditions are tightening. Since business margins and cash flow levels are at very low levels, in France in particular, financial constraints are weighing heavily on investment decisions, which have already been affected by the lack of visibility and the resurgence of the risk of recession.

In the United Kingdom, third-quarter growth was better than expected (0.5%, up from the 0.2% forecast in October), but the improvement is deceptive. The state of private demand has deteriorated, household consumption has continued to stagnate, the decline in business investment has become more pronounced, and exports have fallen instead of rising. Caught by surprise, companies have massively re-stocked, which generally propped up growth (contributing 0.7 point). But by year end activity will no longer benefit from this phenomenon, and growth will turn negative. This is already being reflected in the net deterioration in surveys of industry (total order books, including for exports; the 6-month production outlook; etc.), and consumer confidence indicators have stabilized at very low levels.

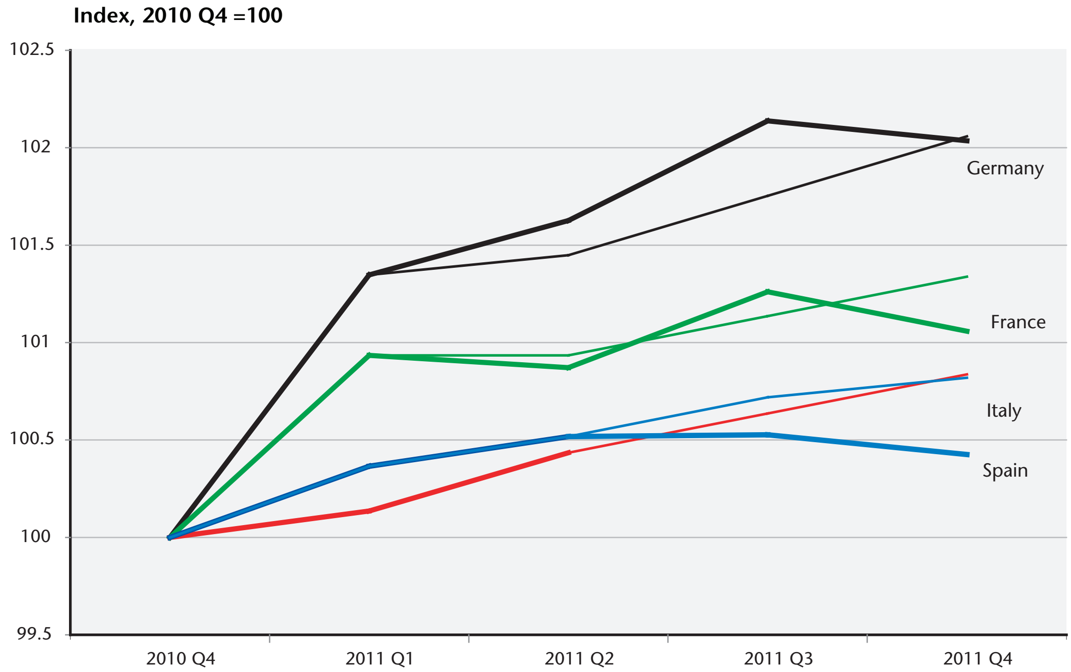
In the United States, growth, which was revised upwards in the first half year, was still accelerating in the third quarter, reflecting a good performance both by household consumption (up 0.6% from the 0.2% forecast) and by business investment (3.5% versus 1% predicted). Surveys of households and firms, which had worsened earlier this year, reflect a rather morose state of affairs, without, however, indicating the start of a recession. Fourth-quarter growth is still expected to be 0.4%, as economic agents continue to enjoy tax breaks until year end.

In Japan, the 2011 recession was slightly less deep than had been indicated in earlier versions of the national accounts, and the recovery that began last autumn has picked up speed faster than expected (1.5% versus 0.9%). Once again it is private domestic demand that is driving growth, with public spending still way down.

This update of the available information thus leads us to begin the year 2012 with a downward revision of between -0.1 and -0.2 point of the expected "carry-over growth rate" [*acquis de croissance*[1]] for the four major euro zone countries and an upward revision of between 0.1 and 0.3 point for the United States, Japan and the United Kingdom.

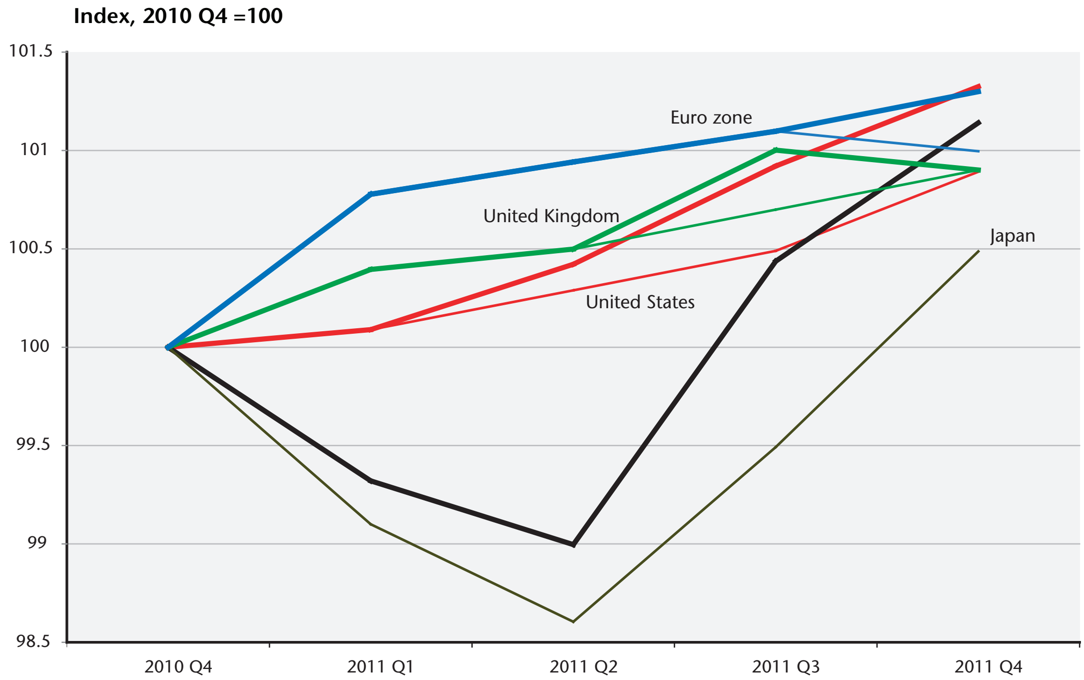
1. The *acquis de croissance* or "carry-over growth" refers to the growth rate for the year assuming that there is no change in subsequent growth during the year from that in the most recent quarter known.

Graph 1. Comparison of the October and December forecasts for 2011 for the main euro zone countries



Bold line: actual GDP until Q3 2011 and OFCE forecast since December 2011.
Thin line: actual GDP until Q2 2011 and OFCE forecast of October 2011.
Sources: Eurostat, OFCE forecasts.

Graph 2. Comparison of the October and December forecasts for 2011 for the main countries



Bold line: actual GDP until Q3 2011 and OFCE forecast since December 2011.
Thin line: actual GDP until Q2 2011 and OFCE forecast of October 2011.
Sources: Eurostat, OFCE forecasts.

New warning on credit

The debt crisis of the euro zone countries is striking a financial system that still bears the scars of the previous crisis. The rise in government bond yields is leading to losses on the debt securities portfolios of Europe's banks, which is undermining their liquidity and solvency. While the central banks[2] have shown their resolve to act in a coordinated manner to prevent systemic collapse, the increased fragility of the financial system could still hurt lending and reinforce the already highly recessionary impact of the fiscal consolidation programmes.

While tensions on the interbank markets began to resurface everywhere this summer, they are more intense in the euro zone, where in mid-December the gap between rates for secured loans and those for unsecured loans reached 1.75 for interbank loans with a 1-year maturity and 1.2 points for those with a 3-month maturity (Figure 3). This indicator reflects how difficult it is for banks in the euro zone to regain confidence and thus ensure their refinancing. The deposits of the euro zone's financial institutions are contributing less and less to the financing of their liabilities. Despite the interventions of the ECB, the share of these deposits fell from 20.6% in late 2007 to 18.2% in October 2011. In addition, at the conclusion of the October 23rd European summit in Brussels, the 27 member countries of the EU agreed on the principle of an increase in the capital held by the private banks in order to guard against the declining value of certain bonds. According to the European Banking Authority, to achieve a Tier One ratio of 9% by June 2012 Europe's banks need to be recapitalized by 106 billion euros: 8.8 billion in France, 5.2 billion in Germany, 7.8 billion in Portugal, 26 billion in Spain, 14.7 billion in Italy and 30 billion in Greece. However, in a context of financial stagnation, banks will find it difficult to raise new funds and would then have no choice but to sell risky assets and reduce their lending. Indeed, as European banks hold a large amount of euro zone sovereign debt, they are being forced to offload weakened public assets in order to prevent a decline in their prudential ratio. This pro-cyclical mechanism is pushing up rates in countries in trouble, accelerating the loss of investor confidence. Banks that cash in their losses on assets that are declining in value and are then finding it difficult to recapitalize on the markets are driven to reduce the size of their balance sheets by restricting bank lending.[3]

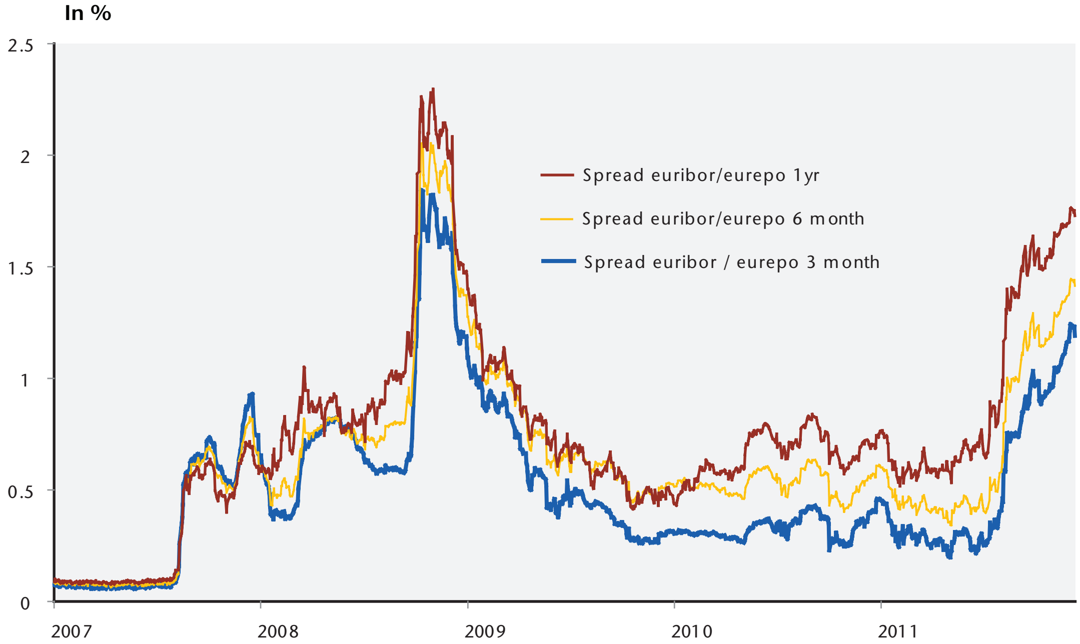
Aware of this risk of a credit crunch, the ECB decided on a further cut in its key interest rates at its meeting in December 2011, and thus reversed both of the untimely increases of the first half of 2011. It also announced new non-standard measures aimed at improving liquidity and securing bank refinancing over the long term. Indeed, anticipating major funding requirements, the ECB will carry out two refinancing operations with a maturity of three years. In addition, the criteria for collateral eligibility were expanded and the reserve ratio requirement lowered. While these measures are essential to avoid intensifying the crisis, it is not certain that they will be sufficient to reverse the tightening of credit. In the fourth quarter survey, the banks declare that they are

2. On 30 November 2011, six central banks (Bank of England, Bank of Japan, European Central Bank, US Federal Reserve Bank, National Bank of Switzerland and Bank of Canada) announced a concerted effort to provide liquidity to the banks. The agreement provides in particular for the reactivation of dollar swaps to meet the dollar liquidity needs of the banks.

3. This notion, characterized as a bank capital channel, was developed initially by Peek & E. Rosengren (1995): "The capital crunch: Neither a borrower nor a lender be", *Journal of Money, Credit and Banking,* vol.27, no. 3, pp. 625-638.

actually putting tougher conditions on lending to households – especially for mortgages – and businesses (Figure 4) because of the outlook for the sector but also due to the cost and difficulty of access to refinancing. Although this is on a smaller scale than what was seen in late 2008, the tightening of loan terms will block credit and ultimately growth.[4] Thus, the euro zone will see the continuation of a lower level of grants of new loans to households, a factor since mid-2007, and to businesses, a factor since mid-2008. The impact of this crisis on fourth-quarter macroeconomic performance is probably already being felt in the periodic surveys and leading indicators. For 2012, the decrease in activity associated with this second phase of the credit crunch should be about 0.1 to 0.2 percentage point of growth in the euro zone.

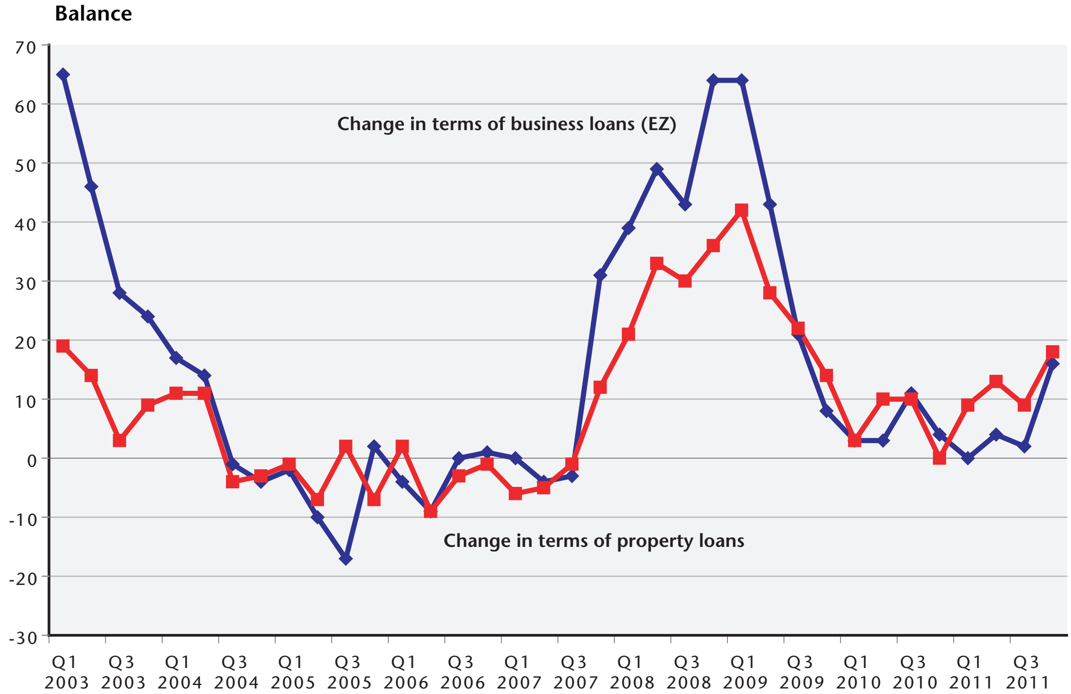
Graph 3. Tensions on the interbank market



Note : The Euribor rate corresponds to unsecured interbank loans whereas the Eurepo is the rate for interbank loans that are secured by collateral.
Source: Datastream.

4. G. de Bondt, A. Maddaloni, J-L. Peydro & S. Scopel (2010) showed that surveys of the distribution of credit in the euro zone have a predictive power on the evolution of credit and growth, with tighter credit conditions causing a decline in credit and activity. See "The euro area bank lending survey matters: Empirical evidence for credit and growth", ECB Working Paper No. 1160. These findings confirm in particular the similar results found for the United States.

Graph 4. Credit conditions in the euro zone



Note: Balance between banks that declare that their conditions are tighter and those that declare their conditions are looser.
Source: ECB (Bank lending survey).

The *machine infernale* of public deficit reduction: Europe on trial

All the European governments, which are committed under the Stability programme to an ambitious programme of public deficit reduction, are facing a deteriorating cyclical component in their public balances. The growth forecasts for 2012 used by governments as the framework for their budget bills have quickly become outdated, exposing fiscal austerity plans that are under-calibrated to achieve their public deficit targets. Most governments have chosen to revise their growth forecasts downward and announce a new round of fiscal tightening to meet their commitments. The French case is a good example of this strategy. By revising its growth forecast for 2012 from 1.75% to 1%, the government has anticipated a shortfall of 7 billion euros in tax revenue and social contributions.[5] To compensate for this cyclical loss, the government has also announced a new plan for fiscal savings of 7 billion euros in 2012. This approach thus assumes that the new plan will not affect growth, and so the forecast of 1% growth in GDP has not been further revised downward to reflect the tightening austerity. This hypothesis of a fiscal multiplier equal to 0 is far from the current empirical evaluations.[6] With a fiscal multiplier of 1 in the short term, the austerity measures announced should actually result in a fall in GDP of 0.35 point, cutting growth to under

5. As 1 percentage point of GDP represents 20 billion euros, a revision of 0.75 point of GDP corresponds to a loss of 15 billion euros in activity in 2012. As compulsory levies represent 43.7% of GDP, this revision reduces tax revenue by almost 7 billion euros.
6. For more information, see "La multiplication de la rigueur", *Revue de l'OFCE*, no. 119, October 2011.

0.7%. Due to the lower economic growth, the public deficit will fall by only 0.17 GDP point. To reduce the *ex post* deficit by 0.35 point, as envisaged by the government, the fiscal savings would need to amount to 14 billion euros, which, through the action of the fiscal multiplier, would reduce the growth forecast for 2012 to 0.3%.

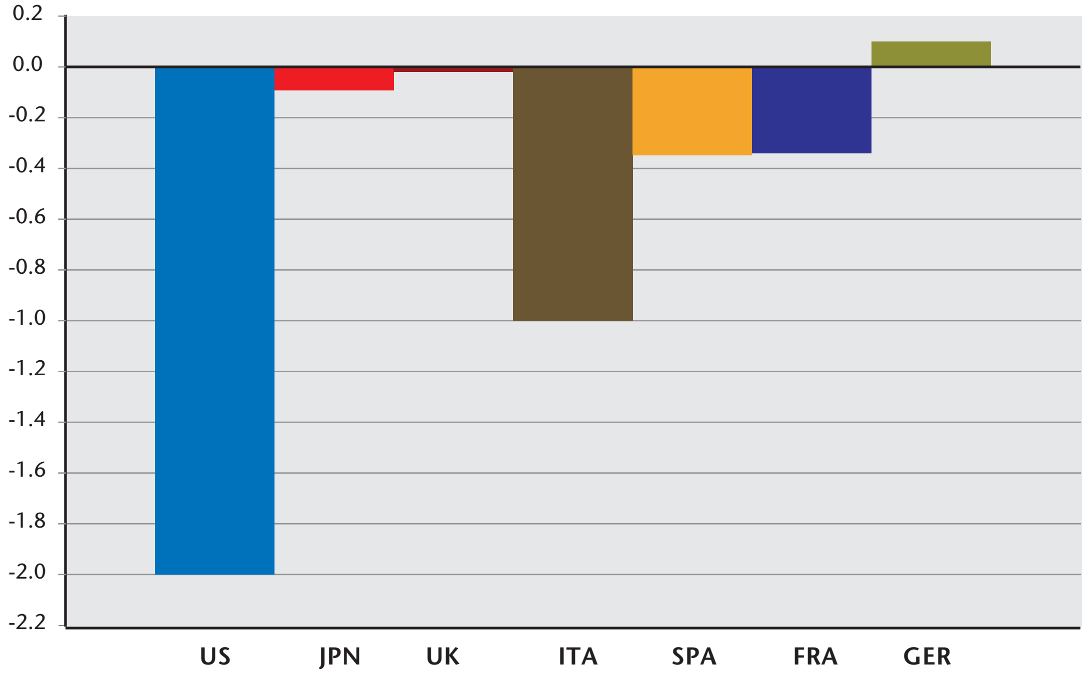
With the exception of Germany and the United Kingdom, between October and December 2011all the major industrialized countries intensified the structural fiscal efforts they had planned for 2012. This was particularly true of the United States, where the fiscal stimulus programmed for October of 0.9 GDP point is now estimated at -1.1 GDP points, due to the failure to approve the 447 billion dollar American Jobs Act announced by Obama in September. US fiscal policy is, however, still less restrictive than that of the euro zone (Figure 5). In Italy, the appointment of the Monti government was accompanied by the enactment of a new austerity programme that increased the country's fiscal effort by one GDP point (the fiscal stimulus for 2012 is now estimated at -2.6 GDP points). In Spain and France, an additional 0.35 GDP point was added to the fiscal consolidation programme, resulting in a fiscal stimulus in 2012 of -2.9 GDP points in Spain and -1.4 GDP points in France. For the United Kingdom, the fiscal stimulus remains unchanged at -1.9 GDP points, while Germany has slightly relaxed its fiscal policy, with the stimulus now at -0.2 GDP point. Although Japan has reduced its fiscal stimulus package by 0.1 GDP point, it is still quite positive for 2012 (at 1.3 GDP points).

This underestimation of the impact of fiscal policy on official growth will lead either to new rounds of fiscal tightening, accelerating the current recessionary dynamics, or to higher than expected public deficits. The race to cut public deficits, regardless of the cyclical impact, is hindering growth and undercutting the sustainability of the public finances. Underestimating the value of the fiscal multiplier has two consequences: first, the various countries, by minimizing the impact of fiscal policy on the cyclical component of their public accounts, will not achieve their public deficit reduction targets enshrined in the stability programmes, which will further fuel the markets' distrust of the States' ability to repay their debts. Second, by affecting growth more severely than the governments expect, these policies could lead many euro zone countries into recession, which would also further heighten market fears about the sustainability of the public finances.

In the face of this *machine infernale*, only countries that are clearly protected from the risk of default by a credible lender of last resort (the role assigned to the central banks of the United States, United Kingdom and Japan) can afford to refrain from this escalating series of austerity measures without fear of the impact of a downgrade in their sovereign debt rating. The euro zone countries, on the other hand, would be hit immediately by higher refinancing costs if their debt rating were downgraded, and thus have no choice but to respond to the market by more austerity to achieve their public deficit targets. The least indebted countries that have less restrictive fiscal policies, like Germany in particular, would not be spared by the general slowdown in activity that would result from the austerity programmes of their major trading partners. Given the high level of commercial integration in the euro zone, the countries that depend most heavily on intra-European trade will suffer the full force of the sudden downturn in demand for exports due to the compression of demand within each country. Faced with this dynamic, the rating agencies have become concerned about the risk of recession and its potential impact on the financial system. The contagion is spreading, and the major euro zone countries are now in the sights of the financial markets and speculators. The decisions taken by the European Summit of 9 December 2011 to strengthen fiscal discipline including through the adoption of fiscal rules that are binding on the euro zone States, will not calm the financial markets. Without as a counterpart an absolute guarantee on public debts from the European Central Bank, this fiscal constraint cannot ensure the survival of the euro. Indeed, simply strengthening fiscal austerity will only accelerate the crisis and ultimately increase the risk that the single currency becomes extinct.

Graph 5. Revisions (between October and December 2011) of fiscal stimulus packages for 2012

In percentage points of GDP



Source: OFCE calculations.

Without this assurance of a lender of last resort, the euro zone governments face no-win budget choices: either they decide to impose much greater discipline to meet their budgetary commitments (see section below), which would lead automatically to plunging the euro zone into a deep recession that could lead to a system-wide crisis. Or they renounce new austerity plans in order to prevent the zone from sinking into recession, in which case they would be exposed to the thunder of the financial markets. Only a re-consideration at the European level of current budgetary strategy, in order to ensure that the medium-term adjustment of public finances is economically and socially sustainable, would make it possible to begin emerging from the crisis. A strategy of restoring growth becomes possible only if the ECB announces clearly that it will act as a lender of last resort in the euro zone so as to avoid speculation on sovereign debt and stop the contagion.

This overall picture leads us to significantly revise the forecasts we made two months ago for the outlook for growth in 2012. This revision can be broken down into four main factors (Table 4):

1. Lower "carry-over growth" [*acquis de croissance*] in the euro zone: as mentioned in the previous section, the end of 2011 will be different than what was anticipated last October. While this difference does not change the average annual growth rate of GDP for 2011, it does however have an impact on the carry-over growth expected for 2012. Growth will be lower for the euro zone countries than was envisaged in October (-0.2 point on average for the zone), while it will be about 0.2 percentage point higher for the other major countries outside the euro zone.

2. The implementation of new austerity plans: the new measures will directly cut Italian growth by 0.8 percentage point of GDP in 2012. In Spain and France, the measures are smaller in scale but will still cut growth by 0.3 GDP point. Finally, the United States will undergo a radical change of course in fiscal policy, with an impact on its growth of more than 1 point.

3. The emergence of tighter credit conditions for households and business: this will constrain internal growth.

4. A less dynamic external environment: these revisions of the forcasted growth in each country naturally reverberate on the external environment, which will in turn undercut business by lowering the growth of exports. For the big European countries, the decline in the activity of their trading partners will cut their own growth by 0.3 to 0.4 GDP point. The United States and Japan, which are less exposed to the slowdown of the countries studied, will see their growth cut by respectively 0.1 and 0.2 GDP point.

Table 4. Annual growth rate of GDP in 2012 as forecast in…

In points of GDP

	GER	FRA	ITA	SPA	UK	USA	JPN
… In October 2011	**1.2**	**0.8**	**0.4**	**0.9**	**0.8**	**2.0**	**2.9**
… In December 2011	**0.4**	**-0.2**	**-0.9**	**0.0**	**0.5**	**1.4**	**2.4**
Revision of GDP for 2012	-0.8	-1.0	-1.3	-0.9	-0.3	-0.6	-0.5
due to …							
… "carry-over growth"	*-0.2*	*-0.2*	*-0.1*	*-0.1*	*0.1*	*0.3*	*0.1*
*… effective fiscal stimulus**	*0.1*	*-0.3*	*-0.8*	*-0.3*	*0.0*	*-1.3*	*-0.1*
… internal factors	*-0.3*	*-0.2*	*-0.1*	*-0.1*	*-0.1*	*0.5*	*-0.3*
… the external environment	*-0.4*	*-0.3*	*-0.3*	*-0.4*	*-0.3*	*-0.1*	*-0.2*

* Impact of budget and fiscal policy on growth (Fiscal stimulus x Multiplier).
Sources: National sources, OFCE forecasts.

Finally, growth in the euro zone countries was revised significantly (Table 4): the growth rate was lowered by 0.9 percentage point for the zone as a whole. At the national level, the revision ranges from -0.8 point for Germany to -1.3 points for Italy. For the other major countries outside the euro zone, the revision is smaller, at -0.3 point for the United Kingdom and -0.6 point for the United States.

The slowdown in activity, which will be stronger than anticipated by the various governments, will widen the cyclical component of the public balance and prevent the developed countries from honouring their respective commitments to deficit reduction.

This will be the case, according to our forecasts, in particular for the Spanish and especially the British, who could face a gap between their actual public deficit and their commitment of between 1 and 2 points of GDP. In the case of France and Italy, the gap will be 0.8 point. Only Germany will come very close to its commitment (Table 5).

Table 5. Public deficit in 2012 as forecast in…

In percentage points of GDP

	GER	FRA	ITA	SPA	UK	USA	JPN
… OFCE	-1.4	-5.3	-2.3	-5.4	-8.5	-9.2	-9.4
… Governments	-1.3	-4.5	-1.5	-4.4	-6.5		
Gap	**0.1**	**0.8**	**0.8**	**1.0**	**2.0**		

Sources: national sources, OFCE forecasts.

We simulated a scenario in which the governments would, whatever the cost, and whatever the circumstances, plough ahead and meet their budgetary commitments. If this were to happen, it would require the adoption of new budget cut plans in the months to come.

Several possible scenarios were studied. Before going into them in detail, we should note that we have used the assumption of an internal fiscal multiplier of 0.9, corresponding to a total multiplier of 1.3 by incorporating the feedback effects on foreign trade. Indeed, as we have detailed in a recent work (OFCE, 2011[7]), in a context marked by a cyclical downturn and little manoeuvring room for monetary policy, the simultaneous implementation of austerity programmes in all the European countries contributes to the formation of a multiplier that is greater than one.

In order to isolate the impact on growth of the national savings plan and those of the partners, we assumed that each country alone would respect its commitment (Table 6). Under this assumption, the effort would be considerable in the United Kingdom, which would present a new fiscal austerity plan of 3.7 GDP points (65.2 billion euros). France, Italy and Spain would implement a plan that was two times smaller, between 1.5 GDP points (31 billion for France) and 1.9 points. Finally, the German savings plan would be the smallest, at 0.3 GDP point (7 billion euros).

These different national austerity plans, each taken alone, would have a non-negligible impact on the growth of the countries studied. With the exception of Germany, which would still avoid recession, such a strategy would again see the economies plunge in 2012, with a decline in GDP ranging from -1.6% in France to -2.9% for Britain. Spain's economy would shrink by -1.7% and Italy's by -2.3% (Table 6).

7. "La multiplication de la rigueur", *Revue de l'OFCE*, no. 119, October 2011.

Table 6. Impact on GDP of meeting the deficit reduction commitments in 2012

In %

	GER	FRA	ITA	SPA	UK	USA	JPN
OFCE forecasts							
GDP	0.4	-0.2	-0.9	0.0	0.5	1.4	2.4
Public deficit (in pt of GDP)	-1.4	-5.3	-2.3	-5.4	-8.5	-9.2	-9.4
If each country alone meets its commitment							
Amount needed							
In billions of dollars	7.0	30.8	23.8	20.3	65.2		
In points of GDP	0.3	1.5	1.5	1.9	3.7		
Impact on…							
… GDP	0.0	-1.6	-2.3	-1.7	-2.9		
… the public deficit (in GDP points)	-1.3	-4.5	-1.5	-4.4	-6.5		
If all the European Union countries meet their commitments							
Amount needed							
In billions of dollars	26.0	44.6	34.9	28.2	71.8		
In points of GDP	1.0	2.2	2.2	2.6	4.1		
Impact on…							
… GDP	-1.4	-3.0	-3.7	-3.2	-3.7	1.1	2.1
… the public deficit (in GDP points)	-1.3	-4.5	-1.5	-4.4	-6.5	-9.3	-9.5
If all the euro zone countries meet their commitments							
Amount needed							
In billions of dollars	17.1	38.5	30.1	24.9			
In points of GDP	0.7	1.9	1.9	2.3			
Impact on…							
… GDP	-0.7	-2.4	-3.1	-2.6	0.1	1.3	2.2
… the public deficit (in GDP points)	-1.3	-4.5	-1.5	-4.4	-8.7	-9.3	-9.5

Source: OFCE forecasts and calculations.

Of course, if all the major European countries were to adopt the same strategy at the same time, the savings effort would be greater. It would amount to nearly 72 billion euros in the United Kingdom and 44.6 billion euros in France, representing respectively 4.1 and 2.2 percentage points of GDP. This additional effort would come to 2.2 GDP points for Italy (34.9 billion euros), 2.6 GDP points for Spain (28.2 billion) and 1 GDP point for Germany (26 billion euros). In all, for the five countries studied, the cumulative savings effort would total more than 200 billion euros in 2012.

This would deliver a powerful shock to activity in these countries: it would cause a severe recession in some countries in 2012, with a fall in GDP of 3.7% in Italy and the United Kingdom (as against -5.1% and -4.9% respectively in 2009). The decline in GDP would be similar in France (-3.0%) and Spain (-3.2%). Under this assumption, Germany would also tip over into recession (-1.4%).

ANNEX
SCHEDULE FOR PUBLIC DEBT IN 2012

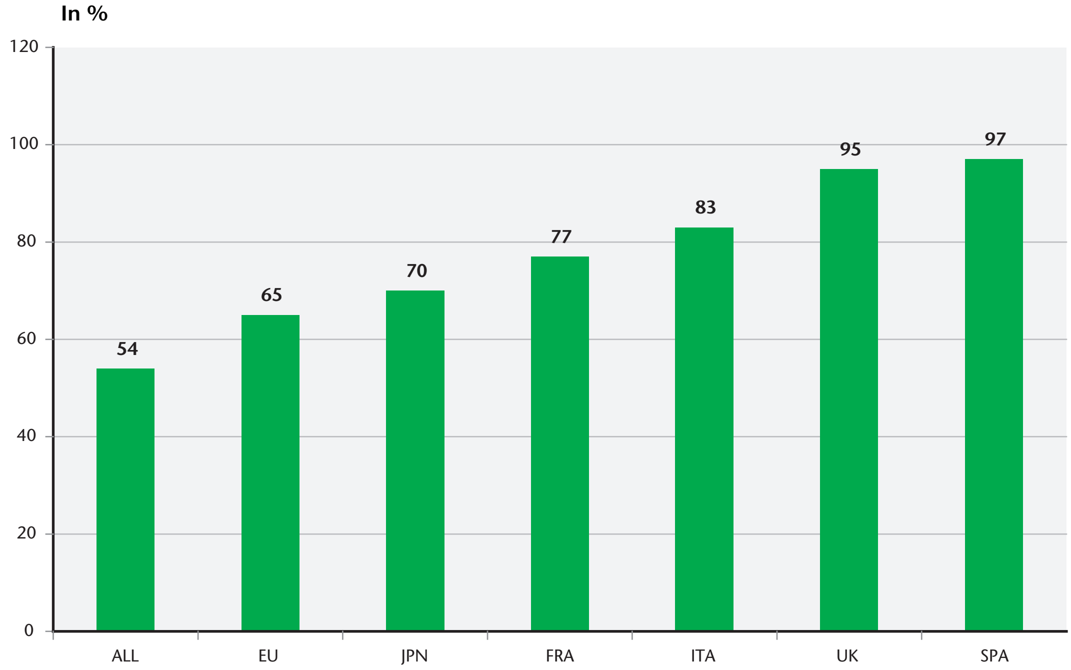
The total financing requirement of the various States in 2012 is composed of 1) past debt that is reaching maturity in 2012, which must be refinanced, 2) new funding requirements generated by public deficits. We sought to estimate the requirements for the four major countries in the euro zone (Germany, France, Italy, Spain), as well as for the United States, Japan and the United Kingdom, for comparison (Figure A1).

Graphe A1. Composition of total financing requirements in 2012

Notes : all the amounts were converted into euros. The euro 4 group consists of Germany, France, Italy and Spain.
Source: OFCE forecasts and calculations.

The new funding requirements, financed by recourse to the market, are calculated from our forecasts of the public deficits for 2012. The latter is corrected by the share of market debt in the total public debt (Figure A2), since part of the deficit can be financed by means other than calling on the market, such as bank financing.

Graphe A2. Market debt as a share of total debt



Source: OFCE calculations.

The public debt

For the European countries, the total debt used is debt within the meaning of Maastricht, as estimated at end 2011. Public debt is understood in a broad sense: it includes short-term securities (with a maturity of less than one year). For Germany, it covers only the federal debt, and does not include the debt of the Länder. For Japan, it does not include debt issued by local governments or government agencies.[8]

Securities reaching maturity in 2012

The timelines of securities maturing in 2012 were constructed from existing information about the characteristics of public debt in late 2011, and from assumptions about the term structure of total refinancing needs in 2012. These are broken down into two parts:

- Securities issued before end November 2011 and maturing in 2012.
- Short-term securities requiring refinancing sometime in 2012.
- There is also the structure of financing requirements in 2012.

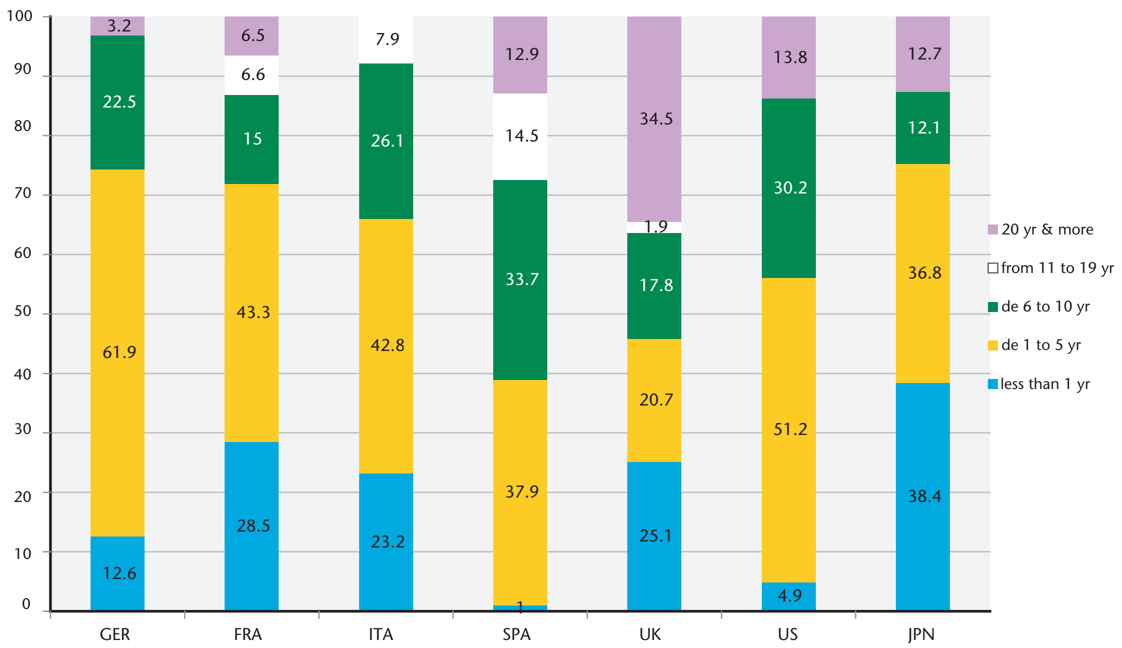
8. Japanese market debt has been reconstructed from the published results of issues of T-bills and JGBs since 1999. It does not take into account the issuance of 20-year securities that took place before that date, nor reissues through "auctions for enhanced liquidity" or securities withdrawn from the market through "buy-back" operations. Likewise, Italy's market debt does not include "buy-back" operations.

The hypothesis is made that the debt maturing in 2012 and the new funding requirements would be financed by calling on the market based on a distribution key specific to each country and based on its debt management policy (Figure A3). This assumption proved necessary, in that the details of security issues have not been announced for all of 2012. The distribution key used was generally calculated from the structure of issues in 2011.[9] Spain and the United Kingdom have issue policies that are longer term than the other countries. The issues conducted in 2011 by Spain were for longer terms than in previous years, the ultimate goal being an extension of the average maturity of the debt.

The distribution keys take into account the faster pace of issue of securities with a maturity of less than a year. For example, the share of securities with a 3-month maturity is calculated taking into account that the total of outstanding securities with a 3-month maturity is renewed four times a year.[10]

Graphe A3. Breakdown by maturity of total financing requirements in 2012

In %

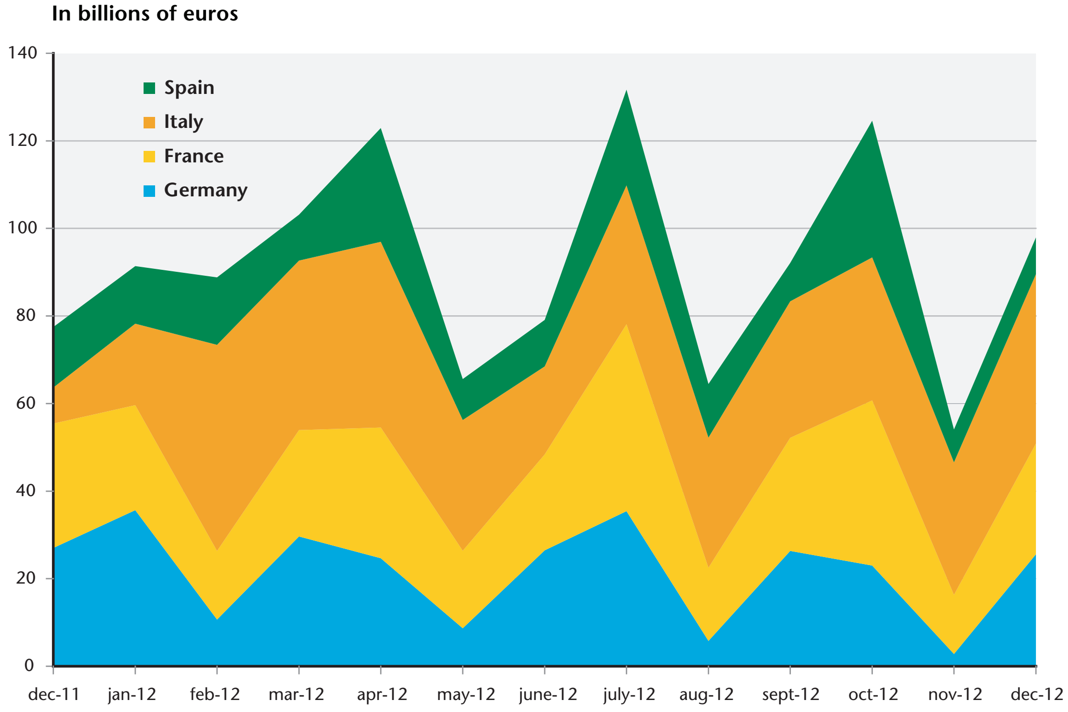


Source: OFCE forecasts and calculations.

The total funding requirement was reconstituted monthly (Figures A4 and A5). Despite this, it should not be interpreted strictly speaking as a flow of securities being issued every month, since the flow of issues depends on the cash flow management of each State and on market conditions (which can induce the State to advance or postpone some issues from one month to another), and because the seasonality observed for the total refinancing requirement in most countries is inherited from the timing of past issues.

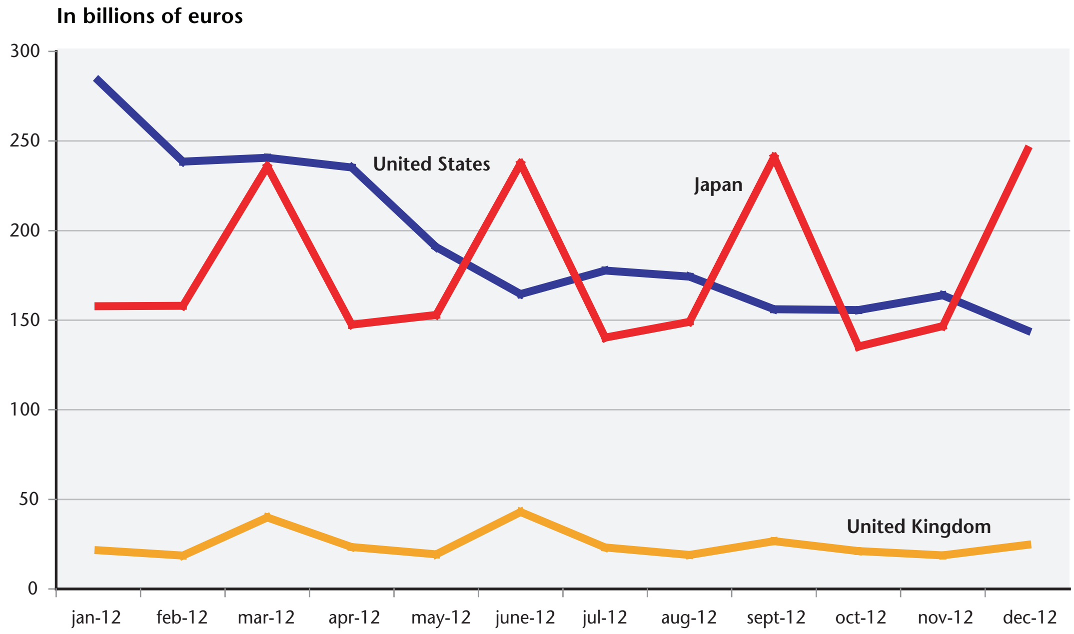
9. With the exception of Italy, for which it was calculated over the period October 2009 to September 2011.
10. The total monthly need for financing in securities maturing in 3 months was thus divided by 4 during the calculation of the distribution key.

Graphe A4. Total monthly funding requirement in the euro zone



Source: OFCE forecasts and calculations.

Graphe A5. Total monthly funding requirement



Source: OFCE forecasts and calculations.

By way of comparison, a BNP study published in *Les Echos* newspaper breaks down the total issues of securities planned for 2012 into the outstanding amounts reaching maturity and into those being financed through the market (the deficit share financed by recourse to the market). The BNP calculations of the amount of securities reaching maturity are lower: they do not include very short-term securities, which are used by the State as a tool for cash flow management. We have chosen to take into account the very short-term securities outstanding, as they have an immediate impact on the debt burden in case of large variations in interest rates.

Table A1. Comparison of issued volumes in 2012

In billions of euros

Total bonds reaching maturity	OFCE	BNP
France	217	99
Germany	235	157
Italy	360	194
Spain	118	47
Net call on market	**OFCE**	**BNP**
France	78	82
Germany	20	28
Italy	31	26
Spain	57	52
Total issues	**OFCE**	**BNP**
France	295	179
Germany	255	185
Italy	391	220
Spain	175	99

Sources: « Les États de la zone euro émettront plus de 800 milliards d'euros de dette l'an prochain », *Les Echos* (30/11/2011) ; OFCE forecasts and calculations.

The average maturity of the debt

Given the distribution key for each country and the average maturity of the debt at end 2011, we calculated changes in the average maturity of the debt. This depends on the stock of existing debt, whose average maturity declines over time, and on the average maturity of the securities issues to come (Table A2). The average maturity of the debt will decline in 2012 in most of the countries studied. It will increase slightly in the United States and Spain, as both countries are implementing a policy of lengthening the average maturity of the debt by issuing on a longer-term basis than in the other countries. In the United Kingdom, despite a policy favouring very long maturities, the average maturity of the debt is decreasing, as new debt issues are only partially offsetting the decline in the average maturity of the outstanding debt stock.

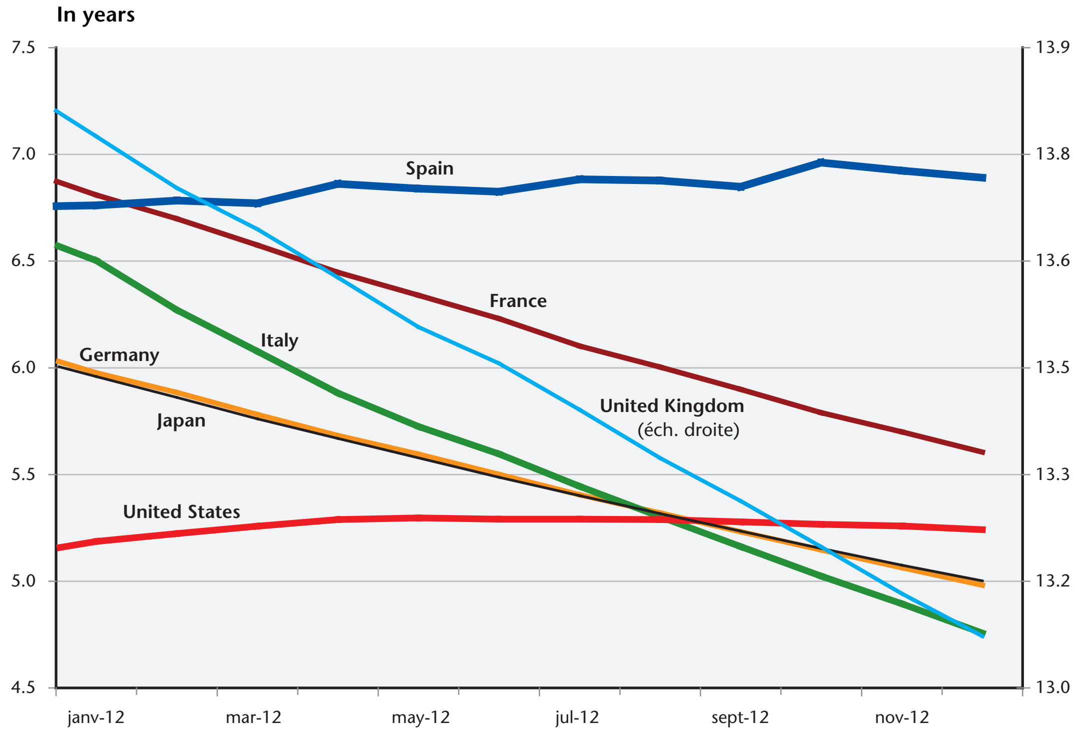
Table A2. Average maturity of issues in 2012

In years

	Average maturity in years
Germany	5.0
France	5.2
Italy	3.5
Spain	10.6
United Kingdom	14.5
United States	8.5
Japan	5.3

Source: OFCE forecasts and calculations.

Graphe A6. Average maturity of the stock of negotiable government debt



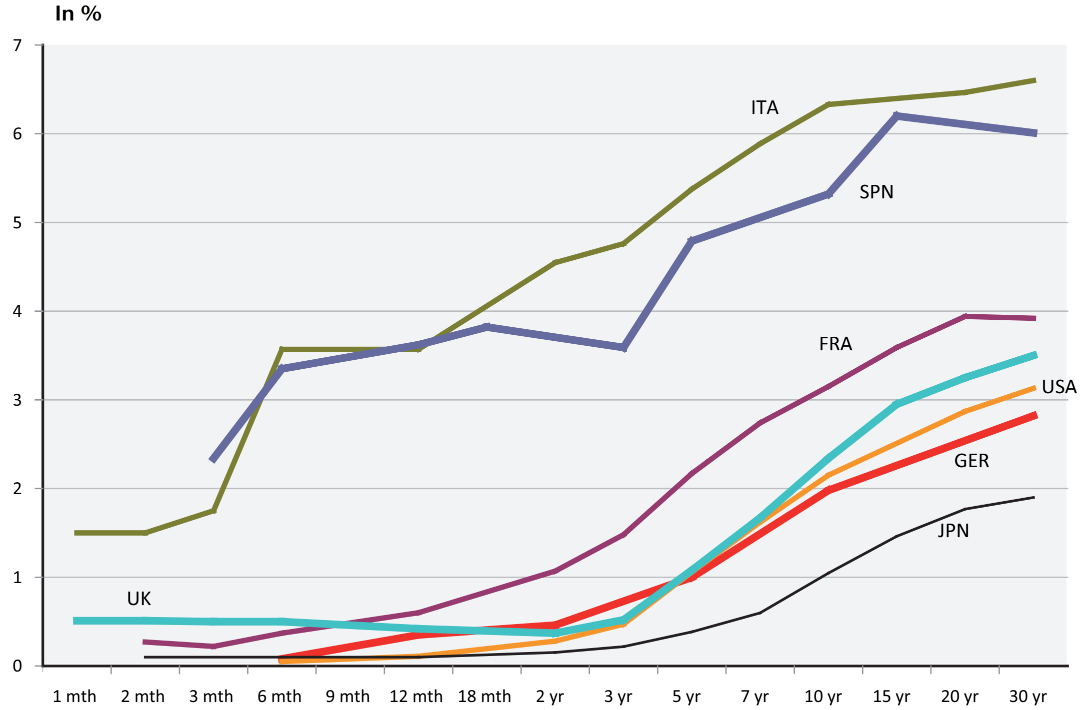
Source: OFCE forecasts and calculations.

The average interest rates on the issues

The sovereign debt crisis in the euro zone has resulted in changes in interest rates – a decline in long-term rates in Germany, rising spreads between German long-term rates and the long-term rates in other countries – which, if continued in 2012, will result in a change in the average cost of refinancing for the States. Where possible, we calculated the average rates of the issues in 2011, and based on the respective distribution key and on hypotheses about the term structure of interest rates, an average rate expected for issues in 2012.

The average rates calculated for the issues in 2011 are the average yields weighted per issue.[11] The interest rates selected for 2012 (Figure A7) are those observed in October 2011 (Italy), at end November 2011 (Japan, United Kingdom, United States), at beginning December 2011 (France), and for the latest issues (Spain, Germany).

Graphe A7. Term structure of interest rates



Sources: Datastream, DataInsight, OFCE forecasts and calculations.

Table A3. Average rates for issues in 2011-2012

In %

	Average yield at issue	
	2011	2012
Germany	na	0.9
France	na	1.5
Italy	3.5	4.3
Spain	na	5.0
United Kingdom	2.8	2.0
United States	na	1.4
Japan	0.3	0.5

Source: OFCE forecasts and calculations.

11. Therefore, they reflect the coupons paid but also the difference between the face value of the security and the average auction price. They do not correspond to the stated interest rate on the debt.