Less austerity = more growth and less unemployment

Eric Heyer and Xavier Timbeau

The European Commission has just released its <u>spring forecast</u>, which anticipates a recession in 2012 for the euro zone ("mild" in the words of the Commission, but still -0.3%), which is in line with <u>the OFCE's economic analysis of March</u> 2012.

The brutal fiscal austerity measures launched in 2010, which were intensified in 2011 and tightened even further in 2012 virtually throughout the euro zone (with the notable exception of Germany, Table 1 and 1a), are hitting activity in the zone hard. In 2012, the negative impact on the euro zone resulting from the combination of raising taxes and reducing the share of GDP that goes to expenditure will represent more than 1.5 GDP points. In a deteriorating fiscal situation (many euro zone countries had deficits of over 4% in 2011) and in order to continue to borrow at a reasonable cost, a strategy of forced deficit reduction has become the norm.

Table 1. The euro zone in 4 macroeconomic aggregates from 2009 to 2012

	2009	2010	2011	2012
GDP growth (%/yr)	-4,4	1,8	1,5	-0,4
Public deficit (% GDP)	-5,5	-5,5	-3,6	-2,9
Jobless rate (% active pop)	9,6	10,1	10,2	10,9
Fiscal impulse (% GDP)	1,7	-0,3	-1,1	-1,5

Sources: National accounts, OFCE calculations and forecasts.

This strategy is based on declarations that the 3% ceiling will be reached by 2013 or 2014, with balanced budgets to follow by 2016 or 2017 in most countries. However, these goals seem to be overly ambitious, as no country is going to meet its targets for 2013. The reason is that the economic slowdown

is undermining the intake of the tax revenue needed to balance budgets. An overly optimistic view of the impact of fiscal restraint on activity (the so-called fiscal multiplier) has been leading to unrealistic goals, which means that GDP growth forecasts must ultimately be systematically revised downward. The European Commission is thus revising its spring forecast for the euro zone in 2012 downward by 0.7 point compared to its autumn 2011 forecast. Yet there is now a broad consensus on the fact that fiscal multipliers are high in the short term, and even more so that full employment is still out of reach (here too, many authors agree with the analyses made by the OFCE). By underestimating the difficulty of reaching inaccessible targets, the euro zone members are locked in a spiral where jitters in the financial markets are driving ever greater austerity.

Unemployment is still rising in the euro zone and has hardly stopped increasing since 2009. The cumulative impact on economic activity is now undermining the legitimacy of the European project itself, and the drastic remedy is threatening the euro zone with collapse.

What would happen if the euro zone were to change course in 2012?

Assume that the negative fiscal impulse in the euro zone is on the order of -0.5 percent of GDP (instead of the expected total of -1.8 GDP points). This reduced fiscal effort could be repeated until the public deficit or debt reaches a fixed target. Because the effort would be more measured than in current plans, the burden of the adjustment would be spread out more fairly over the taxpayers in each country, while avoiding the burden of drastic cuts in public budgets.

Table 2 summarizes the results of this simulation. Less austerity leads to more growth in all the countries (Table 2a), and all the more so as the fiscal consolidation announced for 2012 intensifies. Our simulation also takes into account

the impact of the activity in one country on other countries through trade. Thus, Germany, which has an unchanged fiscal impulse in our scenario, would experience an 0.8 point increase in growth in 2012.

Table 2. Fiscal impulse of -0.5 GDP point in the euro zone in 2012

		GDP Public deficit (%/yr) (% GDP)			Jobless rate (% active pop.)		
	2011	2012	2011	2012	2011	2012	
2012, under current plans	1,5	-0,4	-3,6	-2,9	10,2	10,9	
2012, if 0.5% GDP impulse		1,7		-3,1		9,7	

Note: The impulse is the change in the structural deficit. The structural deficit is the public deficit excluding the impact of the economic cycle. A negative impulse reflects a restrictive fiscal policy. Here the public («administrations publiques», or "APU") deficit includes the central state, regional government and social security agencies.

Sources: National accounts, OFCE calculations and forecasts.

In the "less austerity" scenario, unemployment would decline instead of continuing to increase. In all the countries except Greece, the public deficit would be lower in 2012 than in 2011. Admittedly, this reduction would be less than in the initial scenario in certain countries, in particular those that have announced strong negative impulses (Spain, Italy, Ireland, Portugal and ... Greece), which are the ones most mistrusted by the financial markets. In contrast, in some countries, such as Germany and the Netherlands, the government deficit would shrink more than in the initial scenario, with the indirect positive effect of stronger growth outweighing the direct effect of less fiscal consolidation. For the euro zone as a whole, the public deficit would be 3.1 percentage points of GDP, against 2.9 points in the initial scenario. It is a small difference compared to more favorable growth (2.1%), along with lower unemployment (-1.2 points, Table 2)instead of an increase as in the initial scenario.

The key to the "less austerity" scenario is to enable the countries in greatest difficulty, those most obliged to implement the austerity measures that are plunging their economies into the vicious spiral, to reduce their deficits more slowly. The euro zone is split into two camps. On the one hand, there are those who are demanding strong, even brutal austerity to give credibility to the sustainability of public

finances, and which have ignored or deliberately underestimated the consequences for growth; on the other are those who, like us, are recommending less austerity to sustain more growth and a return to full employment. The first have failed: the sustainability of public finances has not been secured, and recession and the default of one or more countries are threatening. The second strategy is the only way to restore social and economic — and even fiscal — stability, as it combines a sustainable public purse with a better balance between fiscal restraint and employment and growth, as we proposed in a letter to the new President of the French Republic.

Table 1a. Details on the 4 macroeconomic aggregates for the euro zone from 2009 to 2012

	,		rowth /yr)	•		Public (%	defici GDP)	it		Jobles % activ		o.)	F	iscal ii (% (mpuls GDP)	e
	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012	2009	2010	2011	2012
DEU	-5,1	3,6	3,1	0,3	-3,2	-4,3	-1,0	-1,1	7,8	7,1	6,0	5,5	0,7	1,2	-0,9	-0,3
FRA	-2,6	1,4	1,7	0,2	-7,5	-7,1	-5,2	-4,4	9,2	9,4	9,3	9,8	2,5	-0,7	-1,7	-1,7
ITA	-5,5	1,8	0,5	-1,7	-5,4	-4,6	-3,8	-2,8	7,8	8,4	8,4	9,4	0,8	-0,4	-1,0	-2,9
ESP	-3,7	-0,1	0,7	-1,1	-11,2	-9,3	-8,5	-6,5	18,0	20,1	21,7	23,5	4,1	-1,9	-1,2	-3,4
NLD	-3,5	1,6	1,3	-1,1	-5,6	-5,1	-5,0	-4,5	3,7	4,5	4,5	5,4	3,8	-1,5	-0,2	-1,9
BEL	-2,7	2,3	1,9	0,1	-5,8	-4,1	-4,0	-3,4	7,9	8,3	7,2	7,6	1,8	-0,3	-0,1	-1,4
PRT	-2,9	1,4	-1,5	-2,9	-10,1	-9,8	-4,0	-4,5	10,7	12,1	12,9	13,4	4,9	-0,6	-5,5	-3,0
IRL	-7,0	-0,4	0,7	-0,3	-14,4	-32,0	-10,1	-8,7	11,9	13,7	14,5	14,9	3,7	-4,1	-2,5	-3,0
GRC	-2,3	-4,4	-6,2	-5,3	-15,8	-10,6	-9,3	-7,3	9,5	12,5	17,2	19,5	3,4	-7,9	-5,6	-5,3
FIN	-8,4	3,7	2,8	0,7	-2,5	-2,5	-1,2	-0,9	8,8	8,4	7,8	7,5	0,4	-1,5	-1,1	-1,1
AUT	-3,6	2,5	3,0	0,4	-4,1	-4,4	-3,4	-3,0	4,8	4,4	4,2	4,5	0,4	0,6	-0,5	-1,2

Note: DEU Germany; FRA France; ITA Italy; ESP Spain; NLD Netherlands; BEL Belgium; PRT Portugal; IRL Ireland; GRC Greece; FIN Finland; AUT Austria.

Sources: National accounts, OFCE calculations and forecasts.

Table 2b. Fiscal impulse of -0.5 GDP point in the euro zone countries in 2012

	DEU	FRA	ITA	ESP	NLD	BEL	PRT	IRL	GRC	FIN	AUT
GDP growth rate (%/yr)	1,1	2,2	1,4	2,6	2,1	1,8	0,7	2,8	0,2	1,9	1,8
Difference with Table 1a	0,8	2,0	3,1	3,7	3,2	1,7	3,6	3,1	5,5	1,2	1.4
Of which: - direct impact	0,0	1,2	2,4	2,9	2,5	0,9	2,5	2,5	4,8	0,6	0,7
- impact via trade	0,8	0,8	0,7	0,8	0,7	0,8	1,1	0,6	0,7	0,6	0.7
Public deficit (% GDP)	-0,7	-4,6	-3,7	-7,5	-4,3	-3,4	-5,2	-9,7	-9,4	-0,9	-3,0
Difference with Table 1a	0,4	-0,2	-0,9	-1,0	0,2	0,0	-0,7	-1,0	-2,1	0,0	0,0
Jobless rate (% active pop.)	5,1	8,8	7,9	21,6	3,8	6,7	11,6	13,3	16,8	6,9	3,8
Difference with Table 1a	-0,4	-1,0	-1,5	-1,9	-1,6	-0,9	-1,8	-1,5	-2,7	-0,6	-0,7

Sources: National accounts, OFCE calculations and forecasts.

Competitiveness at the expense of equality?

By <u>Hélène Périvier</u>

Working time has made its appearance in the presidential campaign, and the idea that people work less in France than elsewhere is gaining ground. This is the subject of a report by COE-Rexecode, which unfortunately does not take into account the sexual division of labour.

The employment policies being implemented by European governments are not, however, gender neutral, and ignoring this gives a distorted view of the reality of how work is divided up in our economies: an integrated approach to equality (or "gender mainstreaming"), which requires thinking about the differential effects of public policies on women and men, is far from automatic.

The counteranalysis to the Coe-Rexecode report proposed by Eric Heyer and Mathieu Plane emphasises the importance of not just looking at full-time workers when trying to compare

working hours and their impact on the labour market dynamics of the major European countries. Indeed, part-time workers represent 26% of all employees in Germany, against 18% in France, so it is misleading to exclude them from the analysis.

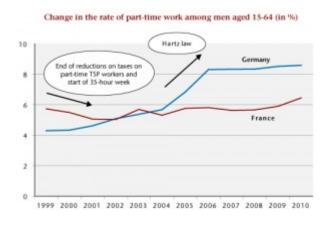
It is well known that the distribution of full-time and part-time jobs is gender-biased: throughout Europe, women work part-time more than men do. While in France about 30% of women employees work part-time, the rate is 45% in Germany, and in both countries the part-time rate for men is below 10%. The gendered nature of part-time work is a factor in inequality: recall for example that in France working time explains about half of the wage gap between men and women (see in particular Ponthieux, Meurs). The issue of working time is central to the promotion of occupational equality.

According to the methodological note to the Coe-Rexecode report, "The annual data provided by Eurostat and published by Coe-Rexecode in the paper, "La durée effective du travail en France et en Europe" | "Average effective working time in France and in Europe"] are the only data on average annual hours of work that is comparable between European countries." It is unfortunate that in its order to Eurostat, Rexecode did not see fit to ask for a gender breakdown of its data. This would have provided a cost-effective way of determining trends in working hours by gender in both countries. Despite this omission, is there anything that can be said about changes in working hours from a gender perspective in the two countries during the last decade, based on the data available to us? How were the adjustments in the labour market divided between women and men?

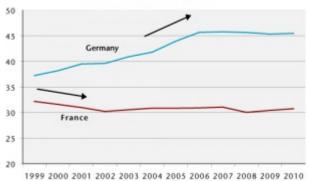
The changes over the period studied are instructive in terms of the employment policy approaches adopted in the two countries. In the early 2000s, the introduction of the 35-hour work week in France put an end to the reductions in charges that had made hiring part-time workers attractive and which had been driving the ramp-up of part-time employment in

France, without significantly affecting the employment conditions of men. Since then, the rate of part-time employment has been stable for women as well as for men (see figure). In Germany, the implementation of the Hartz law (effective as of April 2003) introduced "mini-jobs" [1], which basically meant the creation of part-time precarious employment. This affected both men and women, but while the part-time rate of German men rose by 4.3 points, the rate of German women rose by 8.2 points (Figure). German women were thus significantly more affected by part-time employment than were German men, or French women. Furthermore, the average working time for part-time jobs was slightly over 4 hours less in Germany than in France (according to the Eurostat data).

French women were of course more affected by the increase in part-time work than were French men, but this increase has been limited, since new part-time jobs accounted for only 21% of the total jobs created between 1999 and 2010. In contrast, in Germany, part-time work has been the driving force in employment during the period, with German women being the main ones concerned by the individual reduction of working time: they represent 70% of the battalion of part-time workers added during this period. Thus, not only did France create more jobs than Germany between 1999 and 2010, but the choice of a collective rather than an individual approach to reducing working time led to a more balanced distribution of employment between men and women.



Change in the rate of part-time work among women aged 15-64 (in %)



Source : Eurostat [lfsa_eppga]

In %			
	Change in employment	Share of part-time jobs in the growth of employment	Share of female part-time jobs in the growth of employment
Germany	6,1	130	93 (or 70 % of 130 %)
France	12,2	21	15 (or 76 % of 21 %)

What employment policy during a crisis?

By Marion Cochard

After a lull of only a year, unemployment figures started to rise again in April 2011. We are seeing a replay of the dynamics of the 2008 recession: a hiring freeze and the non-renewal of temporary and fixed-term ("CDD") contracts, with redundancies to follow later in the year. The reason, of course, is the current economic downturn, which is hitting while French business margins are still in bad shape after the shock of 2008-2009, particularly in industry. The weakened companies no longer have the strength to cushion the fall as they did four years ago. The French economy is thus expected

to slide into recession in the fourth quarter of 2011, and we foresee a fall in activity of 0.2% in 2012. Given that annual growth of 1.1% is needed to kick-off job creation, the resumption of job losses seems inevitable. If we add the existence of a growing workforce to this bleak picture, the number of unemployed will surpass the 3 million threshold by year end.

On the eve of a tense social summit, what are the options for cushioning the impact of the crisis on the labor market? Given the urgency of the situation, the government has two main levers that are responsive and inexpensive: partial unemployment and subsidized jobs in the non-profit sector.

Partial unemployment can cushion the economic hardships faced by business and retain skills in the companies. There is substantial room to expand its use. By way of comparison, in 2009 maximum compensation for partial unemployment was extended to 24 months in Germany, versus 12 months in France. In addition, the greater level of state coverage in Germany partly explains how extensively it is taken up there: partial unemployment affected 1.5 million people at the peak of the crisis, but only 266,000 in France. Nor does this put much of a burden on public finances, as the 610 million euros disbursed by the States on partial unemployment in 2009 were offset by savings on unemployment benefits and the preservation of human capital.

But partial unemployment benefits workers in stable industrial jobs above all, while the brunt of the crisis is being borne by those in precarious employment and young people. These are the sections of the population targeted by subsidized employment. Again, the government has some leeway, because 70,000 subsidized non-profit contracts were eliminated since end 2010 and 300,000 since the early 2000s, and it is also not a very expensive scheme. The creation of 200,000 jobs would for instance cost the state 1 billion euros — contrast this with the shortfall of 4.5 billion euros due to the tax

exemption of overtime, which, furthermore, is inconsistent with the logic of partial unemployment. These programs are targeted at those among the unemployed who are most isolated from the labor market — the long-term unemployed and unskilled — and would lower their risk of dropping out of the labor market.

However, even though these tools should be used immediately, they are still just stop-gaps. Partial unemployment remains confined to 80% of industry and designed for short-term use. If today's dire economic situation continues, we know that this approach will only delay layoffs. Similarly, subsidized jobs are not intended to be long-term. These are low-paid part-time jobs intended to deal with reintegration into the labor market, and not a long-term approach.

The biggest challenge is really a correct diagnosis of the current economic situation. By focusing negotiations on the issue of partial unemployment and subsidized jobs, the government seems to be betting on a quick recovery. Yet it is precisely the combined effect of austerity plans throughout Europe that will weigh on growth in the years to come. Furthermore, the policy of reducing public deficits, which will cost 1.4 percentage point of growth in France in 2012, is expected to continue at least into 2013. It is difficult in these circumstances to expect to pull out of the stagnant situation quickly enough to avoid the looming catastrophe. Unless there are plans for a new permanent reduction in working hours and the creation of public sector jobs, the best employment policy remains growth. It is thus the issue of macro-economic governance that is posed above all today in France and throughout the euro zone.

The very great recession

Economic outlook updated for the major developed countries in 2012

OFCE Department of Analysis and Forecasting, under the direction of Xavier Timbeau

The growth outlook for the developed countries, in Europe in particular, have 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 budget bills are still debated, the inability of the European Union to mobilize its forces to deal with 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.

The growth figures for the second quarter of 2011 in the developed countries, published in August 2011, 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 and a companion note) 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 euro zone (Table 1).

Tableau 1. prévisions pour 2012

			2011				20	2011	2012		
		tt.	12	13	16	tt	12	t3	14		
	PIB	1,3	0,3	0,5	-0,1	0,1	0,1	0,1	0,1	3,0	0,4
Allemagne	Taux de chômage	6,1	5,9	5,7	5,7	5,7	5,7	5,7	5,7	5,8	5,7
	Solde public*									-1,2	-1,4
	PIB	0,9	-0,1	0,4	-0,2	-0,1	0,0	0,0	0,0	1,6	-0,2
France	Taux de chômage	9,2	9,1	9,3	9,6	9,9	10,2	10,5	10,7	9,3	10,3
	Solde public*									-5,8	-5.3
	PIB	0,1	0,3	0,1	-0,2	-0,4	-0,4	-0,3	-0,3	0,7	-0,9
talie	Taux de chômage	8,2	8,1	8,2	8,4	8,6	8,8	8,9	9,0	8,2	8,8
	Solde public*									-3,9	-2,5
6	PIB	0,4	0,1	0,0	-0,1	0,0	0,0	0,0	0,0	0,7	0,0
Espagne	Taux de chômage	20,6	21	22,2	22,6	22,8	23	23	23	21,6	23,0
	Solde public*									-7,4	-5,4
	PIB	0,8	0,2	0,2	-0,1	-0,1	0,0	0,0	0,0	1,6	0,0
Zone euro	Taux de chômage	10,0	10,0	10,6	10,8	10,9	11,0	11,1	11,2	10,3	11,1
	Solde public*									-3,5	-2,9
	PIB	0,4	0,1	0,5	-0,1	0,0	0,2	0,2	0,2	0,9	0,5
Royaume-Uni	Taux de chômage	7,7	7,9	8,3	8,5	8,6	8,7	8,8	8,8	8,1	8,7
	Solde public*									-9,1	-8,3
	PIB	0,1	0,3	0,6	0,4	0,4	0,1	0,2	0,3	1,7	1,4
États-Unis	Taux de chômage	8,9	9,1	9,1	8,7	8,7	8,7	8,7	8,7	9,0	8,7
	Solde public*									-9,2	-9,2
	PIB	-0,7	-0,3	1,5	0,7	0,6	0,6	0,4	0,4	-0,1	2,4
Japon	Taux de chômage	4,7	4,6	4.4	4,5	4,5	4,6	4.7	4,7	4,5	4,6
	Solde public*									-8,8	-9,4

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 US and UK, see Table 2). Phase II will be determined by how the public debt caused by the crisis has been digested: either 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 interest rates and the persistence of underemployment (Table 3). Gripped by the fear of default, Europe is transforming the *great* recession that began in 2008 into a very great recession.

6	All	Fra	1te	Esp	No.	USA	18M	23.4
	Besoi	n de finan	cement s	ur les man	dies en 2	012		
En milliands	255 Mg	295 ME	397 ME.	175 ME	257 945	THEORE	228 th ¥	71116 ME
En point de PIS	9.8	14.1	24.6	15,6	16,5	15.6	47.4	35.3
	forst delfk	it public f	brancé po	r appel as	marché e	en 2912		
In milianis	30 5/8	DEME	TIME	ATME	194346	910 MS	5716.9	100 546
En point de PER	0.8	1,7	1,9	5,1	8,0	9,7	67	2,5
dont dette a	errivant à	maturité i	financie j	oar appel	au marché	en 2012		
En milliands	235 646	217 M €	368 ME	THEME	122 840	ZINIMS	194 th W	930 ME
En point de PIS	9,8	16,4	22,5	16.6	7.8	14.1	40.7	12.6
		Dette	publique	totale - 20	011			
In militards of marror	2 062	1 691	1 894	548	1.181	11 044	9.516	6.307
En militando do dollaro	2.795	2.294	2.553	770	1871	14 254	12 896	8.412
En milliands d'ourso PPA 2010	2 061	1 921	1869	500	1.281	10,710	11 144	0.216
In delian per title	34 383	33.238	43 109	16-675	29 972	46.510	101 196	35 175
En point de PES	80,1	81,7	118,7	12,4	78,7	19,1	213,4	83,5
Variation per rapport a 2007	154	19,9	15,1	16,5	14,0	33,3	46.3	16.6
0	ette publ	lique de re	anché est	lesde au 3	1 décemb	re 2011		
to relliants d'euros	1 108	1.919	1.571	598	1 536	7.297	6727	4550
En milliante de dollars	1,982	1.762	2 129	796	1.797	9 890	9116	6 168
En milliands of euron PPA 2010	1 103	1 416	1.598	490	1809	9 890	11.568	4518
En point de PSS	45.7	65,0	99,0	51,4	35,4	64,8	150,8	62,7
In didlers per title	16 368	27.985	25 116	16 572	28 786	50.676	77.505	24322
		aractérist	iques de l	a dette de	marché			
Taux d'intinit moyen sur la dette en 2011	nd	1,1	nd	4,0	2,1	1,1	1,0	nd
Taux-d'intrielt moyen sur les émissions en 2011	nd	nd	3,5	nd	2,8	nd.	63	nd
Taux d'intérêt moyen sur les émissions en 2012	0.5	1.5	4.1	5,0	2,0	1,4	0,5	2.9
Taux d'intérêt sur les émissions à 16 ans en 2012	2,8	3.2	-63	5,3	2,3	2,2	U	43

Tableau 3. Évolution de la situation des chômeurs entre 2007 et 2010

Evolution entre 2007 et 2010	Allemagne	Espagne	France	Italie	RU
chōmage	-1,6	11,9	1,3	2,4	2,6
chômage de longue durée	-1,5	5,7	0,5	1,2	1,3
chōmage non indemnisë	-0,3	5,7	0,5	2,0	4,3

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 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 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 intertwined, 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 restriction (an indirect effect). The magnitude of these effects depends on several factors. The direct effects are mainly linked to negative impulses within 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 undertaking 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, 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, needs 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, which 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 up to now been little affected by the threats to downgrade the sovereign debt of the euro zone countries. Even though the financing need 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 programs 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 also 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 ECB action. 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 fueling 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, thereby renewing growth, followed by an adjustment of public finances.