EUROPEAN PARLIAMENT

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POLICY DEPARTMENT A
ECONOMIC AND SCIENTIFIC POLICY

Financial, Economic and Social Crisis

The Cost of Non-Europe in the Crisis

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POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICIES

FINANCIAL, ECONOMIC AND SOCIAL CRISIS

The Cost of Non-Europe in the Crisis

STUDY

Abstract

The aim of this study is to provide advice on the importance and impact of the EU decision-making structures on the economic crisis. The study considers what might have been different if the EU had a perfectly coordinated and efficient decision-making mechanism. The study focuses on the EU's role in crisis prevention and crisis management, identifies policy failures during these two stages of the crisis, and offers some recommendations for policy actions at EU level to prevent such crisis to reoccur.

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AUTHOR(S)

Project Manager, Managing Economist Mr Helge Sigurd Næss-Schmidt
Senior Economist Mr Svend Torp Jespersen
Analyst Mr Frederik Harhoff

RESPONSIBLE ADMINISTRATOR

Arttu Mäkipää
Policy Department Economic and Scientific Policies
European Parliament
B-1047 Brussels
E-mail: poldep-esc@europarl.europa.eu

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ABOUT THE EDITOR

To contact the Policy Department or to subscribe to its newsletter please write to: poldep-esc@europarl.europa.eu

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LIST OF ABBREVIATIONS

BIS	Bank for International Settlements
ECB	European Central Bank
ECOFIN	The Economic and Financial Affairs Council
EURIBOR	The Euro Interbank Offered Rate
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
OIS	Overnight Indexed Swap

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EXECUTIVE SUMMARY

The aim of the study is to provide advice on the importance and impact of the EU decision-making structures on the final policy and market outcome. As a consequence, the study assesses, on the basis of a counterfactual analysis, the consequences of insufficient and delayed coordination. The study uses an empirical political economy approach: it is facts- and data-based, but does not engage in economic modelling in view of the complexity of the subject matter as well as the brevity of time for drafting (January-April 2010).

The benchmark for this analysis is essentially: What might have been different, if

- the EU had a perfectly coordinated and efficient decision making mechanism
- the national recovery packages had been better coordinated,
- there had been a larger EU dimension to recovery plans.

The areas to be covered are (1) growth and unemployment: actual vs. potential, (2) public finances (deficits, debts, degree of co-ordination), (3) floating currencies vs. monetary union, (4) loss of EU competitiveness versus the global economy, and (5) competitive distortions within the internal market.

The cost of non-Europe in the crisis

Preceded by turbulence in the financial markets starting in 2007, the economic crisis manifested itself on growth and employment in the second half of 2008. The crisis is among the worst experienced by EU countries since the Second World War. A key question is whether lack of co-ordinated economic policy-making within the EU has added to its severity. This report presents some basic findings pertaining to the two potential phases that lack of co-ordination in policy-making may apply to namely (1) *preventing* the crisis in the first place and (2) *mitigating and controlling* the crisis once it started to manifest itself.

Prevention

Prevention policies have almost by definition failed. There is a substantial consensus on the origin of the crisis. While the financial crisis was the trigger, the root cause has been a combination of a long period of overly expansionary macroeconomic policies in a number of countries in conjunction with a financial system that, encouraged by lax monetary policies as well as inadequate financial supervision, led to rapid expansion of credit to households, firms and, ultimately Member States, that could ill afford it.

Macroeconomic policies

The EU countries that have seen the largest setbacks in economic activity (Spain, Ireland, the Baltic countries, Greece and Portugal) are also the countries that in the period up to the crisis recorded increasing imbalances in their economies through high wage inflation, real estate bubbles and increasing current account deficits. While there has been some complacency in recognising the risks that this represented to the individual countries as well as to the EU as a whole, it is fair to say that a number of high quality private and public economic institutions provided substantial warnings several years in advance of the crisis.

The cost of non-prevention may amount to a staggering accumulated output loss of 20%-25% of EU GDP over the next 5-7 years. There is strong evidence from previous episodes of larger setbacks in economic activity that economies only slowly recover from economic

crisis resulting from weakened financial systems and overspending in the private sector: Firms and households with stretched balance sheets need long periods of consolidation; economic resources need to shift from declining sectors such as construction into sectors that can provide a more balanced growth, and some of the investment from the boom years may to a certain extent be underutilised or even discarded. Moreover, the unemployed lose skills from extended periods of non-activity. Based upon these experiences, a recent OECD study concludes that economic activity in the EU (and other OECD countries) may only fully recover in 2017, implying a long period of underutilisation of economic resources, equivalent to the numbers referred to above[1].

The non-prevention has a clear and common EU dimension in terms of failed common policies. The essential instrument for monitoring and supervising national macroeconomic policies within the EU is the so-called "Stability and Growth pact", which commits all EU countries to submit yearly convergence programmes for vetting at the EU level. While these programmes are discussed intensively by the (ECOFIN) Council and often lead to clear policy recommendations to take corrective action, implementation is in the hands of national governments. Provisions allowing for sanctions in the case of "excessive deficits" do exist. However, these have never been used; and no mechanisms exist for stopping a country from running overheated economies that subsequently leads to major budgetary problems (as in Ireland and Spain).

Financial systems

Financial regulation and supervision has also been found lacking. The rules governing the amount of capital that banks most hold as a reserve when financing loans have arguably been too lenient: The underlying risk of providing financing to households (including mortgages) and firms (including real estate) have been underestimated. This has been compounded by the rating agencies who, by classifying inherently risky investments as relatively low-risk activities, allowed banks to undermine the strength of their balance sheets relative to the risks they undertook. While these rules are set at a global level – by the activities of the Bank of International Settlements (BIS) in Basel and its regulating committees – the EU as a whole has been involved in defining EU positions in the area and implementing its recommendations by way of directives etc. in national law.

The fragmented nature of the supervision of financial regulation – with national authorities largely in charge – has also failed to deal with the increasingly cross-border nature of banking. This has particularly been a problem for some of the EU's smaller economies such as Ireland, the Baltic countries and other of the new Member States of the community. These countries relied extensively on financing from non-domestic banks during the upswing, in some cases with lending concentrated among a few foreign banks. Once the crisis emerged, the parent company banks experienced large losses on their positions, and substantially cut back on their new lending activities in their foreign operations, which strengthened the economic problems that these countries faced in terms of access to credit.

Arguably, this problem has been compounded by the fact that under current EU rules it is the supervisory agency in the country of the parent company which has the task of overseeing the risks that such banks undertake globally. The past few years show this task was beyond their effective capacity. Iceland, while outside the EU, is the ultimate test case of the problems associated with the current set-up.

All in all, it is difficult to escape the conclusion that the instruments that the EU has put in place to ensure stable growth and financial stability failed to prevent a major economic crisis.

[1] OECD(2009a)

Mitigation and control

We find that over all, the EU's mitigation and control of the crisis has been a relative success. However, we also identify a number of weak spots, largely resulting from the institutional set-up.

While the crisis was detected quite late (in fact not until late 2008 as output started to drop), the EU and its Member States were relatively quick in adopting measures to underpin economic activities. The ECB has adopted a policy of very low interest rates as well as massive direct market interventions to provide liquidity to financial institutions. In line with conclusions drawn at the European Council in March 2009, Member States had already in 2009 adopted fiscal stimulus packages to an estimated tune of 2% to 4% of GDP for 2009 and 2010 as a whole for roughly 10 EU countries, while also largely letting automatic stabilisers work for most countries. The overall size of macroeconomic policy support has arguably been stronger than in earlier crises, e.g. in the early 1990s and early 1980s. It has, however, as a whole been smaller than in the US where the crisis is at least as severe. In any case, some ballpark estimates suggest that even substantially higher stimulus packages would still have implied substantial losses of output. Moreover, given the dire state of public finances in a number of EU countries, sizeable additional fiscal loosening carries a risk of backfiring due to the risk of higher interest rates moving forward.

Some issues have been raised both concerning the content of the fiscal stimulus packages as well as the burden sharing between EU countries.

As regards content, measures have been directed towards activities that had the largest effect within the country itself. The financial incentives to replace old cars with new cars in car producing countries are one example. At least in theory, a more common approach, recognising that Member States could benefit from support activities both in their own, other EU countries as well as the global level, might have produced fewer support mechanisms directed at individual industries. However, it would be difficult to state that this could have produced much better results than those in place. The structure of fiscal policies is very much a national prerogative and more co-ordination of content before action would, without a shred of doubt, had postponed effective action.

The burden sharing of supporting the EU economy is a more delicate issue. The debate has very much been centred around whether countries such as Germany with substantial current account surpluses should do more to boost demand, thereby allowing other countries with substantial current account deficits such as Spain to export themselves out of the crisis. The response to this view has at least three elements. The first element is that it was not lack of demand from German consumers that led to overheating in other countries in the boom years: More external demand would just have led to more overheating. The second element is that Germany's fiscal position might be less dire than others within the EU, but deficits are above levels consistent with long term sustainability. Therefore, any serious stimuli going forward would need to be consistent with fiscal consolidation. The third element is that rich countries with ageing populations such as Germany and a number of other EU countries should naturally be more inclined to run current account surpluses building up financial assets that can provide good returns to its citizens when they retire in the decades to come.

Dealing with countries facing severe economic problems and emerging problems with financing high debt and deficits burdens have arguably proven the most difficult for the EU to handle during the crisis. Within the euro zone, the EU treaty specifically prevents bailout of individual countries and there are neither other pre-arranged schemes for dealing with countries in such troubles. This is no incident but follows from the fact that the EU – at least as practice has shown – so far has had few instruments to prevent countries from building up non-sustainable budget positions. Hence, effective sanctions largely have to be delivered by financial markets.

The European Council adopted in May 2010 a support package to provide support to countries facing very costly conditions in debt markets. The implementation of that package has yet to take place, implying a combination of IMF assistance and bilateral loans from Member States, all conditional on continued budgetary vigilance by Greek authorities. The lack of a more transparent ex ante framework for crisis resolution is likely to have entailed some costs on all the parties: Partly by delaying the required adjustment in the countries facing problems, partly by delaying the implementation of support packages. Determining these costs is however a very difficult task. Moreover, we conclude that the verdict is out about the long term consequences. If Greece and others countries get back on track and regain financial market confidence, then the package is a successful story about EU solidarity as a counterpart to national responsibility and ability to deliver. If not, then the EU will again in 2-3 years face a situation where it will have to choose between providing financial support to countries with chronic fiscal problems *or* accept debt rescheduling of a member of the euro zone.

Finally, we would point to two internal market issues related to crisis management. First, the rescue packages for banks were very much organised around national lines with each Member State providing assistance to financial institutions legally headquartered within its own national boundaries. The same applies to the massive expansion of the coverage of deposit insurance schemes and provision of bank guarantees. As regards the latter, there is some evidence that the pricing of such guarantees have been distorted and created risks of uneven conditions for competition. The very national approach stems from the fact that there was no prior institutional framework for dealing with such problems and, arguably, that the EU Commission has been relatively lenient in accepting guarantee schemes that had distortional elements.

Second, rescue actions in the auto industry have also evolved along national lines, and with conditions attached to loan guarantees which apparently provided incentives to favour production in the country providing the financial support.

However, it would be very difficult to say that either of these two issues in any way has had a major impact on real economic activities to the degree that it has significantly affected overall activity levels within the EU or individual countries.

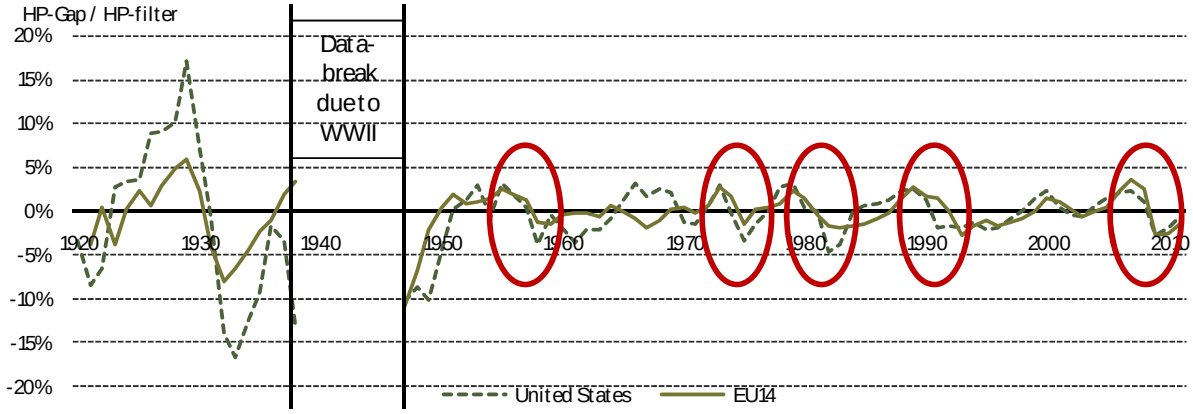
1. SCALE OF CRISIS AND POTENTIAL BENEFITS OF CO-OPERATION

Reviewing the scale of and policy response to this crisis, it is worth comparing it to earlier set-backs in global economic activity cf. Figure 1. The lines in the figure represent the level of economic activity (GDP) relative to its potential level in the countries forming (most of) the present EU as well as US. When the line is below 0, it indicates that actual economic activity is below potential or trend output levels. The figure suggests that over the last 100 years, there have been four earlier substantial recessions namely:

- The post 1929 crash.
- In 1957-58 following the Korean War.
- The first and second oil crises in early and late 1970s.
- The set-back in the early 1990s following the German unification.

The present crisis is beyond doubt less severe than the one following the 1929 crash, but at level with some of the worst post II world war recessions. For both the US and EU, actual output is roughly 3% below its trend level, at level with the early 1990 crisis. However, it is far from the catastrophic set back of the 1930s for either of these two regions. The same picture emerges if we look at the global level:[2] Industrial production fell by 13% from mid-2008 to mid-2009 with half of that loss remaining. That can be contrasted with a fall in industrial production by 2/3 in the three years after the mid-1929 crash.

Figure 1: Historic output gaps for EU14 and USA, 1920-2011



Notes: EU14 is Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and United Kingdom. The HP gap is the difference between GDP and potential GDP, which is defined as the trend from imposing a HP-filter. In the figure, the HP gap is shown as a percentage of potential GDP. From 1920 to 1991, historic Maddison data is used. Data from OECD is used from 1992.
Sources: Copenhagen Economics based on Maddison, OECD (2009b), and OECD (2008).

The severity of the crisis raises a basic question, namely whether lack of collective action by the EU has added to the costs of this crisis in the two phases of the crises

- *Prevention*, i.e. avoiding the build-up of imbalances.
- *Control and mitigation*, i.e. reducing the adverse immediate impact on employment and growth.

[2] Almunia, Bénétrix, Eichengreen, O'Rourke and Rua (2009).

We will interpret “non-Europe action” in two dimensions.

The first dimension is the failure to insure that the costs and benefits of national action were aligned with the interest of the community as a whole. *This the classical case of spill-overs*: A country may implement policies that create costs for other countries if they do not bear the full costs (“negative spill-overs”) or fail to implement policies because the benefits partly accrue to other countries and hence may attain low national priority (“positive spill-overs”). We will discuss spill-overs mainly in the context of the Stability and Growth pact and co-ordination of macroeconomic policies, primarily fiscal policy, in the course of the two phases of the crisis.

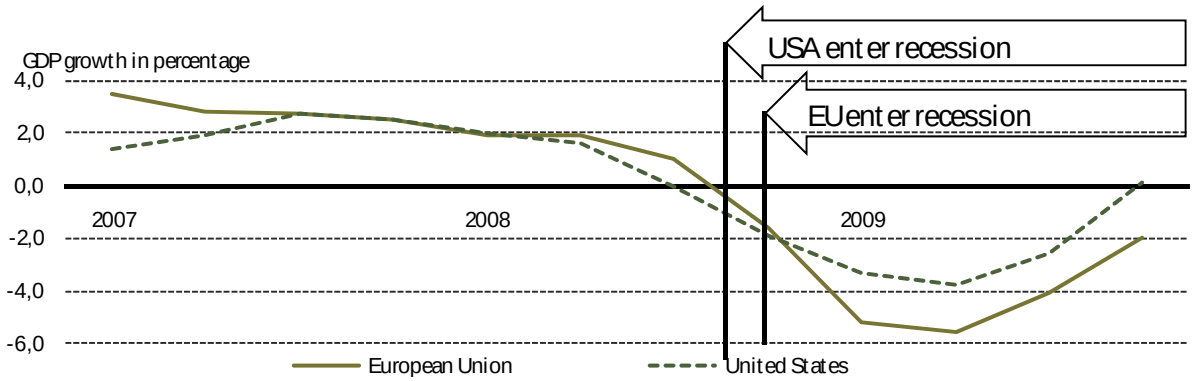
The second dimension is the failure to put in place and use instruments that recognised the necessity of an active, direct EU regulatory role to ensure stable growth and sound risk management within and across borders in the financial system. The argument here is not so much that the interests of the individual state and the EU as a whole may differ, but that the activity to be regulated has an inherent EU dimension. The prime example in the crisis has been the regulation and supervision of large financial institutions with assets and liabilities in many individual EU Member States. This is a classical case of the economics of “scale and scope”.

2. PREVENTION

2.1. Mixed picture of prescience up to the crisis

Preventive action requires early identification of risks. Hence, a key issue in terms of prevention is whether the risks of a crisis were sufficiently understood prior to the crisis and could have been addressed. Basically, we saw the crisis manifest itself by a sharp deceleration of growth during 2008 turning into negative growth in 2009 for both the EU and USA, cf. Figure 2. Annualised quarterly growth rates turned from plus 2% in early 2008 to below minus 3% by mid-2008, but have since rebounded sharply.

Figure 2: Real GDP growth in EU and USA, 2007-2009



Notes: Definition of Recession: 2 consecutive quarters of negative GDP-growth
Sources: Eurostat and Trading Economics (2010).

Even though the recession in the real economy started in late 2008, the crisis in the financial markets that preceded the recession can be traced back to at least the third quarter of 2007. The subprime crisis emerged in the US in early 2007 represented by an increased number of bankruptcy filings from subprime lenders. In August 2007 the interbank markets tightened considerably[3] after which Northern Rock, a medium-sized British bank, exposed the crisis when it was forced to approach the Bank of England for financial assistance in September 2007. Although the financial markets experienced crisis roughly a year before the real economy, the peak of the financial market crisis can be argued to be aligned with the recession in the real economy. Not only did indicators of European financial distress peak in the second half of 2008,[4] that period also saw the most prominent collection of victims of the financial crisis in the form of failures or take-overs (Lehman Brothers, AIG, Fannie Mae, Freddie Mac etc.).

The picture is mixed with regards to the ability of policy-makers and other institutions to foresee the crisis. On the one hand, there were numerous warnings about financial instability and problems emerging from high-quality and well-respected institutions inter alia:

- US Federal Reserve: Warned of risks posed by sub-prime mortgages in 2001.[5]
- BIS: Warned that main stream forecast was too sanguine about underlying imbalances in 2006,[6] and of serious imbalances in the financial sector with increasing downside risks for the real economy in early 2007.[7]

[3] The spread between the overnight interest swap (OIS) rate and the euro interbank offered rate (EURIBOR), commonly applied as a measure of financial market distress, increased from roughly 10 basis points to 60 basis points over a few days in mid-August 2007, cf. ECB (2010), p. 2.
[4] The spread between the OIS rate and the EURIBOR peaked at nearly 200 basis points in early October 2008, cf. ECB (2010), p. 2.
[5] FED(2001).

- OECD: Warned about risks associated to falling house price rises in 2006[8] and 2007.[9]

On the other hand, there was optimism just before the crisis erupted, in particular from G7 declarations as late as in mid-2007. They expressed confidence about robust, sustained economic growth becoming more balanced and enhanced by the sophistication of the financial sector cf. Table 1. Only from mid-2008, essentially after the beginning of the crisis, were concerns expressed about the world economy facing "headwinds".

Table 1: G7 and G8 statements on the global economy, 2007-2009

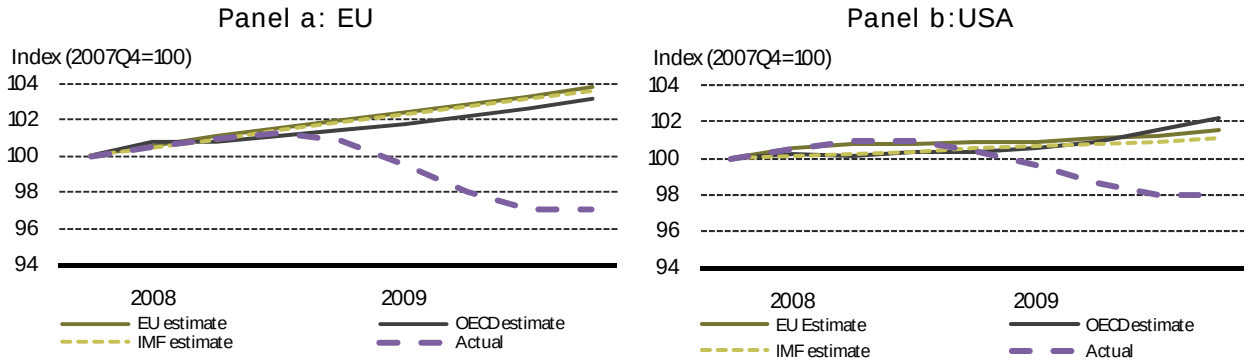
Institution	Date	Statement
G7 finance ministers and central bank governors	2009-10	"signs of a global economic recovery ", "the prospects for growth remain fragile "
G8 Finance Ministers	2009-06	"ongoing global economic and financial crisis", "the situation remains uncertain and significant risks remain to economic and financial stability"
G7 finance ministers and central bank governors	2009-02	"ongoing and severe global economic downturn and financial turmoil", "This crisis has highlighted fundamental weaknesses in the international financial system ",
G8 Finance Ministers	2008-06	"the world economy [...] now faces headwinds", "the world economy continues to face uncertainty", "recent financial turmoil has revealed the risks posed to the financial system",
G7 Finance Ministers and Central Bank Governors	2007-04	"global economy is having its strongest sustained expansion in more than 30 years and is becoming more balanced", "to help ensure the global economic expansion remains robust",
G7 Finance Ministers and Central Bank Governors	2007-04	"recent developments in global financial markets, including hedge funds, which along with the emergence of advanced financial techniques such as credit derivatives, have contributed significantly to the efficiency of the financial system.",
G7 Finance Ministers and Central Bank Governors	2007-04	"initiatives focused on issues around private pools of capital intended to strengthen market discipline, risk management, market infrastructure, information and valuation practices, are essential contributions to global financial stability"

Source: Copenhagen Economics.

Moreover, whatever the concerns expressed the EU Commission, OECD and IMF were far off in their optimism for growth relative to how the situation unfolded subsequently. As late as in 2008, all these institutions provided forecasts of steady growth for the EU and USA, with an accumulated difference in actual and projected levels of GDP of 4% by the end of 2009 for the EU and somewhat less for the US, cf. Figure 3.

[6] BIS (2006).
[7] BIS (2007).
[8] OECD (2006a).
[9] OECD (2007).

Figure 3: GDP estimates for EU and USA from the first half of 2008



Notes: The GDP level is indexed such that 100 is the level at the end of 2007. The OECD estimates for the EU covers only the euro area.
Sources: European Commission (2008), OECD (2008), IMF World Economic Outlook database from April 2008 and the OECD Economic Outlook 86 Database.

2.2. Severity of crisis linked to major prior clearly observable imbalances

In the study, we have divided the EU countries into five groups based on performance as well as structural and geographical features. The five country groups can be seen in Table 2.

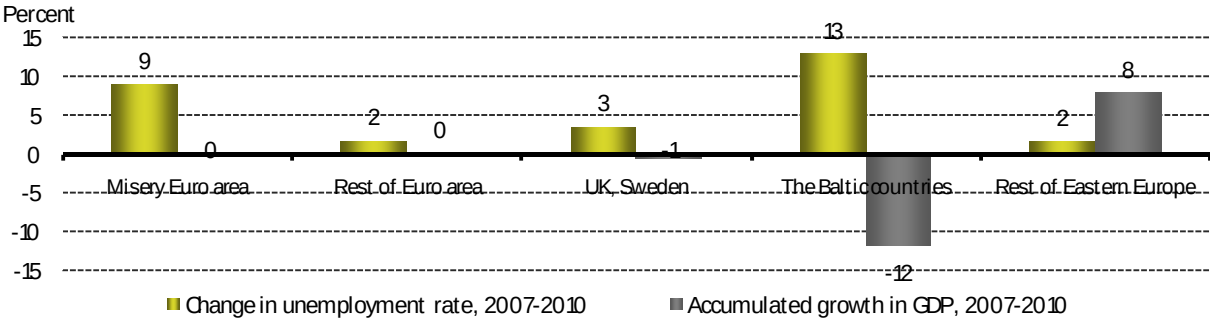
Table 2: Five groups of EU countries

"Misery Euro Area"	Ireland, Spain, Greece, Portugal
Baltic countries	Estonia, Latvia, Lithuania
Rest of Euro Area	Belgium, Germany, France, Italy, Cyprus, Luxembourg, Malta, Netherlands, Austria, Slovenia, Slovakia, Finland, Denmark
UK, Sweden	UK, Sweden
Rest of Eastern Europe	Bulgaria, Czech Republic, Hungary, Poland, Romania

Notes: Denmark is included among the euro countries as its currency is pegged to the euro.
Source: Copenhagen Economics.

Of these five groups, by far the worst hit countries are what we have called the "Misery Euro Area" and the Baltic countries cf. Figure 4. These two regions are characterised by massive increases in unemployment rates of 9 to 13 percentage points and nearly no growth in the period 2007 to 2010. These two groups of countries have performed far worse than the rest of the EU. The countries with floating exchange regimes, UK and Sweden, have had a performance that is marginally worse than the "Rest of Euro Area" while the "Rest of Eastern Europe" on average has performed relatively well (though concealing large internal differences).

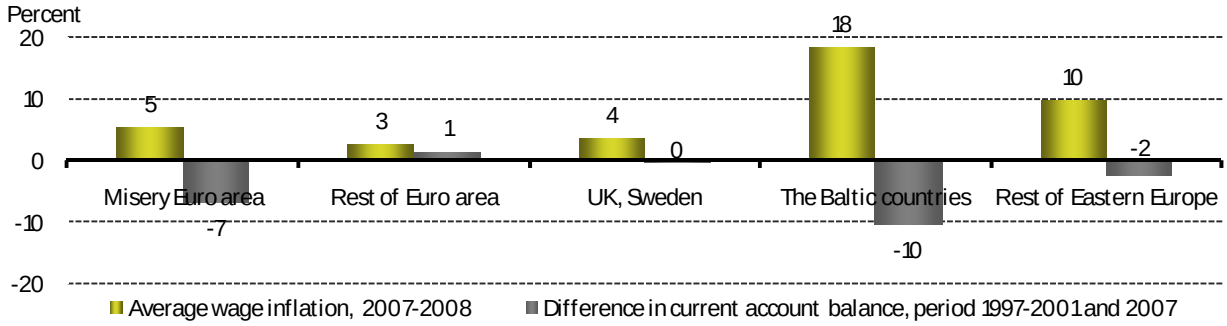
Figure 4: Accumulated increase in growth and unemployment rates in EU, 2007-2010



Notes: The accumulated growth and the unemployment figures for the country groups are calculated by weighing the individual country figures by the countries' GDP in 2007.
Sources: Copenhagen Economics based on European Commission (2009b) and Eurostat.

The countries with the worst macro performance under the crisis also exhibited increasing signals of domestic imbalances well before the crisis. There were substantial increases in net foreign lending as a result of strong domestic demand (private consumption and real estate). Moreover, well above average wage inflations were crowding out trade-exposed activities. In addition, there were substantial financial market imbalances (real estate bubble, growing bank sector exposure). Two of these potential imbalances, wage inflation and differences in current account balances, are presented for the five groups of EU countries in Figure 5.

Figure 5: Average wage inflation and current account difference in EU



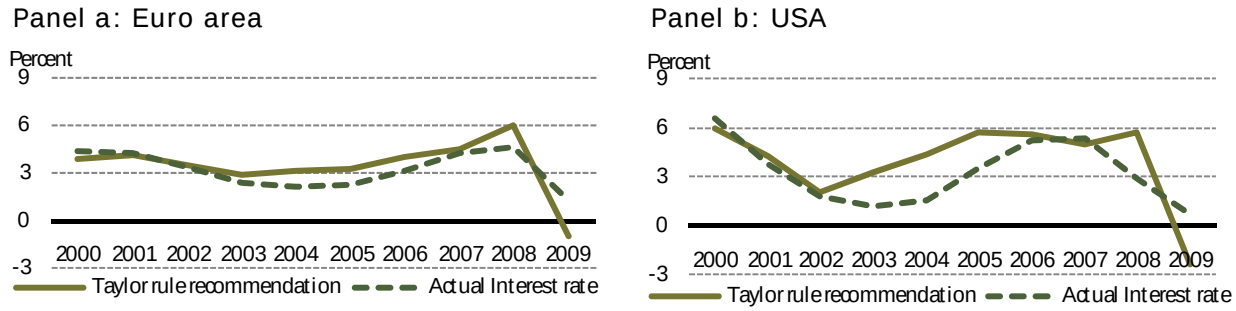
Notes: The figures for the country groups are calculated by weighing the individual country figures by the countries' GDP in 2007.
Sources: Copenhagen Economics based on European Commission (2009b) and Eurostat.

2.3. Lax monetary policy contributed to the build-up of the crisis

Real short term interest rates have been exceptionally low for nearly 10 years in the US and most of the EU. There is a relative well-developed economic consensus that monetary policy should keep inflation rates below some target and maintain output levels that are consistent with stable inflation. Following the crisis there has been an extensive discussion on whether central banks should also keep a more direct eye on financial bubbles, e.g. by raising short term interest rates, even when inflation is stable, to calm the financial markets. We will not go into a comprehensive debate on this issue but rather observe that based upon a relatively simple application of such rules, we suggest that short term policy rates have been 1-2 percentage points too low in the EU, and more in the US cf. Figure 6.

The verdict of too loose monetary policies has been confirmed by more scientific research in particular for the US,[10] but also for ECB.[11, 12] When including the financial market argument in the assessment, the verdict of too loose monetary policy that generated strong growth and indeed fuelled the financial imbalances becomes even stronger.

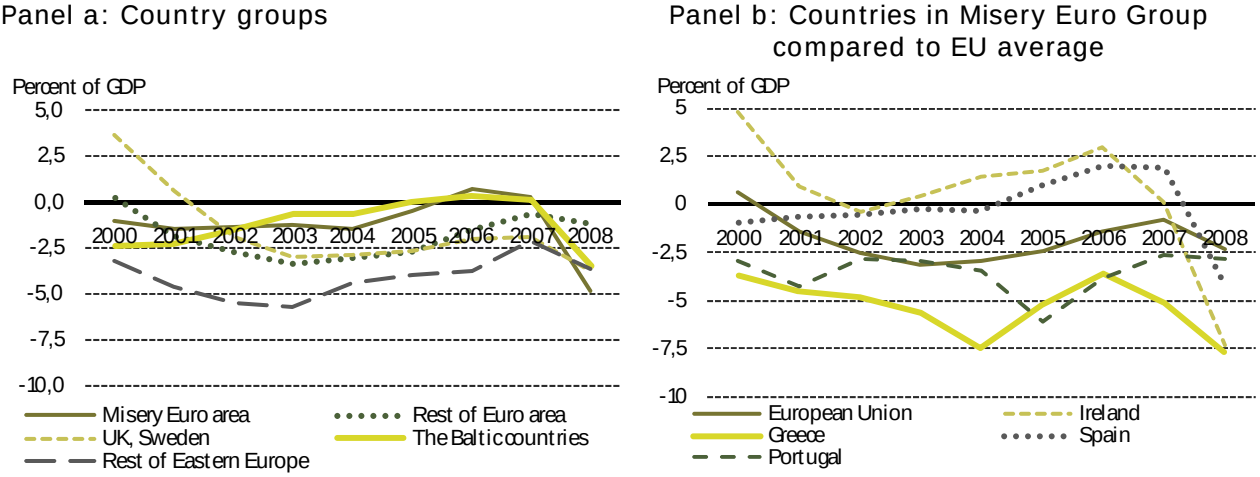
Figure 6: Taylor rule recommendations in euro area and USA, 2000-2009



Notes: Panel a compares the actual nominal official ECB refi rates with the Taylor rule recommendation for the euro area. Panel B compares the actual nominal federal funds rates with the Taylor rule recommendation for the USA. In the Taylor rule calculations, both the inflation correction parameter and the output correction parameter are set to 0.5, while the equilibrium real interest rate is set to 1%. The applied inflation rates are annual average rates of change in Harmonized Indices of Consumer Prices (HICPs). For the USA the inflation target is assumed to be 2%.
Sources: Output gap: AMECO database. Inflation target: ECB. Inflation: Eurostat. Refi rates for ECB: Eurostat. Federal funds rates: Federal Reserve Statistical Release.

With monetary policies on the loose side, fiscal policies should have leaned somewhat in the other direction in the period leading up to the crisis but they did not. Indeed, underlying fiscal positions before the crisis were not impressive in view of output levels often being above potential (cf. Figure 1), long term pressures from ageing populations, and the need to keep room for manoeuvre for a rainy day which soon materialized. Thus, most of the EU entered the recession with deficits cf. Figure 8.

Figure 7: General government financial balances in EU, 2000-2008



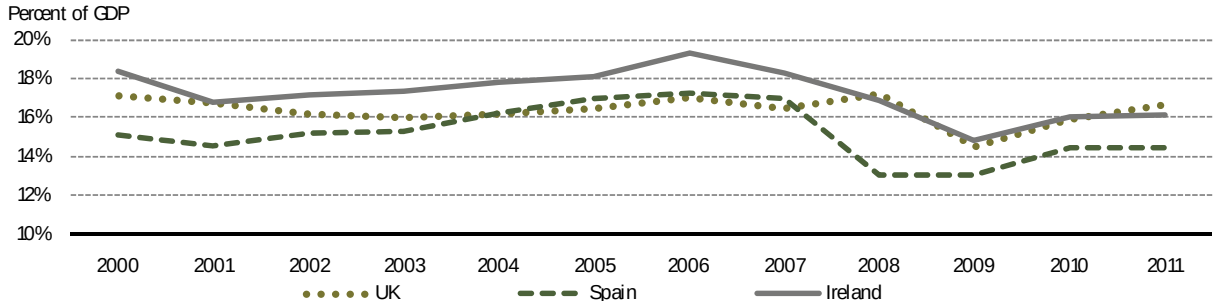
Notes: The graphs depict the actual general government balances in selected countries.
Source: Eurostat.

The budget situation was in reality unsatisfactory before going into the crisis in all the countries in the Misery Euro Area that subsequently faced severe economic problems. Countries either already had sustained major structural deficits (Greece and Portugal), cf.

[10] For example ECB (2007) and Taylor (2009).
[11] Kool (2005).
[12] Sauer and Sturm (2003).

Figure 7 panel b, or had apparent structural surpluses masking exceptionally high returns from taxes on consumption, indirect taxes and corporate taxes (Spain, Ireland as well as the UK) that were reversed when the economy deteriorated, cf. Figure 8. There is substantial recent research confirming that prior budget positions were inflated by non-sustainable income associated with the asset bubble. In the case of Ireland, there is evidence of the housing bubble inflating VAT and other indirect taxes, as well as equity prices positively affecting personal income taxes.[13] The problem with these types of correlations is that extra income of a purely temporary nature will appear permanent if not properly accounted for. This may in turn stimulate an expenditure relaxation that will aggravate the fiscal position when the economic cycle turns.[14]

Figure 8: Selected tax income in UK, Spain and Ireland, 2000-2011



Notes: The graphs depict the sum of indirect taxes, capital tax and transfer receipts and direct tax on business in percent of GDP.
Sources: OECD Economic Outlook 86 database.

Moreover, financial regulation and supervision had shown shortcomings.[15] It did not detect failing financial risk management within financial firms, leading to overstretched balance sheets and poor asset quality. It also had problems coping with banks using more complex instruments. The capital requirements in Basel II placed different asset classes with substantially different risks too much in the same class, driving banks towards holding more of the riskier assets in a race for higher (expected) returns without having to increase their capital base.

Cross-country banking "exposure" an issue for some regions

Importantly in the context of this study, cross-country banking and "exposure" proved to be an issue in the EU. This was especially the case for some of EU's smaller economies such as Ireland, the Baltic countries and other of the new Member States. Research has shown that high inflows of funds from non-domestic banks can be problematic which was exactly what happened in the aforementioned countries. Some of the findings in the research are that:

- Foreign banks in new Member States increasingly finance their local lending by loans from their parent banks rather than local deposits.[16]
- Some new Member States were reliant on a relatively concentrated group of banks in Germany, Austria and Sweden: If these banks faced serious problems, credit contraction would become an issue somewhat beyond their control which turns out to be a factor in the crisis.[17]
- High reliance on short term finance rather than long term funding placed countries such as Ireland and Baltic countries at risk.

[13] Cf. IMF (2010). Similar points are made in ECB (2009) that provides more general evidence that fiscal policies have tended to strengthen rather than dampen fluctuations in economic activity.
[14] Cf. IMF (2010).
[15] Policy assessments post crisis are uniform in underlining these points. One example is OECD (2009c).
[16] IMF (2008).
[17] IMF (2009a).

2.4. Triggering factors as opposed to underlying causes

While the defaults in the American subprime market and the ensuing turmoil in the financial markets certainly played a role in the crisis, they should probably be viewed as contributing factors rather than underlying causes. If the American subprime crisis was an underlying cause one should expect that more integration with the USA would result in a worse recession during the crisis. A simple comparison of EU's and Canada's integration with USA and their performance during the crisis suggests that this was not the case.

Table 3 shows the two areas' trade with the USA (indicator of economic integration) and amount of domestic banks' outstanding claims vis-à-vis USA (indicator of financial integration) in 2008. In 2008, Canada had trade with the US corresponding to 41.8% of GDP while the EU only had trade with the US corresponding to 3.5% of GDP, i.e. Canada had more than 10 times as much trade with the US in relative terms. When it comes to outstanding claims of domestic banks from the US, Canada also has a higher level than the EU, cf. Table 3.

Table 3: Indicators of EU's and Canada's economic integration with USA in 2008

	Trade with USA (pct. of GDP)	Outstanding claims of domestic banks vis-a-vis USA (pct. of GDP)
EU	3.5%	28.5%
Canada	41.8%	31.4%

Note: The outstanding claims are the claims as of March 2008. The trade figures are converted into USD using the EUR/USD-exchange rate of 01/01/2008.The consolidated banking statistics report banks' on-balance sheet financial claims (i.e. contractual lending) vis-à-vis the rest of the world and provide a measure of the risk exposures of lenders' national banking systems. The data cover contractual (immediate borrower) and ultimate risk lending by the head office and all its branches and subsidiaries on a worldwide consolidated basis, net of inter-office accounts. Reporting of lending in this way allows the allocation of claims to the bank entity that would bear the losses as a result of default by borrowers.
Sources: Trade: European Commission trade statistics with Canada, http://trade.ec.europa.eu/doclib/html/113363.htm. Outstanding claims: BIS, consolidated banking statistics. GDP: World Bank, World Development indicators database

It thus appears that Canada is more integrated with the US than the EU. Yet, during the crisis, Canada performed better than the EU both in terms of GDP growth and unemployment.[18] A likely explanation for the paradox is that the EU, and especially the Misery Euro Area, had built up imbalances in the years leading up to the crisis which they suffered from when turmoil arose in the financial markets. When going into the crisis, Canada had a public surplus, one-digit yearly percentage increases in real house prices and a stable current account surplus.[19] Moreover, the high quality of financial regulation and supervision in Canada implied that its banks had low levels of "toxic assets" (i.e. high risk positions) in the US and domestically relative to a number of other advanced economies including in the EU. In sum, both macro and financial sector policies put Canada in a good position to weather the crisis.[20] These facts held true only for very few European countries when the crisis erupted.

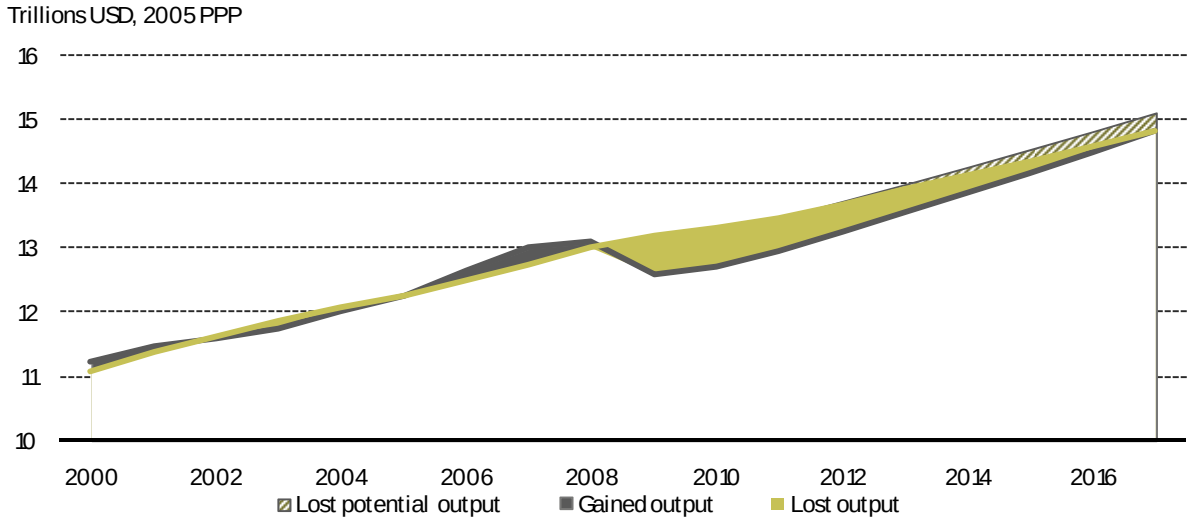
[18] In the period 2008-2010, the euro area's accumulated real GDP growth was -2.6% while the corresponding for Canada was -0.3%. The euro area's unemployment dropped 3.1% while Canada's dropped 2.6% during the period. Furthermore, Canada's situation in terms of unemployment and GDP is projected to improve much faster than the euro area's: In 2011 Canada is expected to have 3.0% growth in real GDP and a drop in unemployment of 0.6% compared to 2010, cf. OECD (2009b).
[19] Cf. OECD (2009b). Other contributing factors to Canada's moderate recession were strict capital requirements for banks and requirements of default insurance for house owners with high mortgaging.
[20] See for example IMF Article IV staff report on Canada (2009a).

2.5. Comparable crises generally led to long term economic losses

Historical evidence suggests that large output losses after a crisis are not regained quickly due to several factors. Persons being unemployed over extended periods – a situation difficult to avoid with much higher levels of unemployment – will loose some of their job relevant skills. Significant amounts of the investment that have been channelled into inter alia the construction sector; may stay idle or be used at less than full capacity as economic activity is shifted elsewhere. Empirical evidence suggests that it may take 5-7 years to get close to former levels of employment.

As a result, the crisis may imply a net loss of 20%-25% of GDP. The losses dwarf the gain of output that was derived by running somewhat above normal capacity levels prior to crisis. Based upon such an analysis, OECD has projected a very weak recovery to full utilization of full economic resources in the EU up to 2017 with a long period of substantial difference between potential and actual activity. This difference is presented as the area termed "lost output" in Figure 9 below. This area represents a total loss of nearly 20% of potential GDP in the period from 2008 to 2017. Shortly before the crisis erupted, from 2005 to 2008 the EU benefitted from producing above capacity as illustrated by the "Gained output" in Figure 9. Finally, there is a loss of out from the drop in potential GDP caused by the crisis, as represented by "Lost potential output" in Figure 9.

Figure 9: Gained and Lost output in EU, 2000-2017



Notes: EU includes EU15 and Poland. Lost potential output is the difference between medium term potential growth forecasts from OECD (2008) and OECD (2009b). Lost/gained output is the difference between potential GDP and actual/forecasted GDP.
Sources: OECD (2008) and OECD (2009b).

The loss is likely to be very unevenly spread over EU countries. For the Misery Euro Area, it will average almost 4% of GDP per year for the period 2009 to 2017, while being substantially smaller for the rest of euro zone, cf. Table 4.

Table 4: Annual loss of output relative to trend in EU, in per cent of GDP, 2005-2017

Country group	Total	Average
Misery Euro Area	-49.3	-3.9
Rest of Euro Area	-20.8	-1.6
UK, Sweden	-26.0	-2.0
Rest of Eastern Europe	-18.2	-1.4
EU	-26.0	-2.0

Note: As Baltic countries are not members of OECD they are not included in the analysis. Potential and actual calculated according to Appendix 1.A1 in OECD (2009b). Output gain is calculated as accumulated output gap from 2000 to 2008.
Source: OECD (2008) and OECD (2009b).

In addition to prospective serious losses of output, EU Member States will face higher costs from government debt. All country groups had slightly lower public debt in 2007 than forecasted, but all have since experienced significant increases in their debt estimates for 2011. Especially UK and the Misery Euro Area are projected to have massive increases in public debt compared to previous estimates, cf. Table 5. A simple calculation indicates that the social costs of increased public debt are in the range 0.1%-0.4% of GDP annually. They represent the costs associated with the need for higher tax rates to cover the debt burden and the adverse affect on labour supply that it will cause.

Table 5: Lost welfare due to higher debt levels in EU, in per cent of GDP

Country group	Increase in expected debt ratios in 2011 due to financial crisis	Social cost of increased public debt from 2011 and onwards
Misery Euro Area	38	0.4
Rest of Euro Area	18	0.2
UK, Sweden	36	0.4
Rest of Eastern Europe	14	0.1
EU	23	0.2

Notes: The increase in expected debt in 2011 is calculated as the difference between the debt estimates made by OECD in 2006 (OECD (2006b)) and 2009 (OECD (2009b)) for the year 2011. The estimates for 2011 made in 2006 represent a linear interpolation of the debt estimates in 2007 and 2012. The debt levels for the country groups are weighted with individual countries GDP. The calculation of the social cost of increased public debt from 2011 and onwards assumes an interest rate of 5% and a marginal cost of public funds of 20%. It is calculated as (the difference in debt in 2011)*0,05*0,2. Some countries are not included in the OECD estimates and are thus excluded from the calculation. These include: Cyprus, Malta, Slovenia, Slovakia, Bulgaria, Romania and the Baltic countries.
Sources: OECD (2006b), OECD (2009b) and Eurostat.

2.6. Prevention; overall evaluation

The Stability and Growth Pact

The Stability and Growth Pact is likely to be the most important preventive arm of the EU's macroeconomic policies. It focuses in practice on preventing EU countries from running excessive deficits, hence undermining the common EU economy. Members of the euro zone are subject to stricter requirements as well as potential sanctions.

The Stability and Growth pact requires the countries to have an annual government deficit of no higher than 3% and a debt of less than 60% of GDP. Once a breach of the pact is identified the Commission will issue recommendations to the country in question.

If the country does not take proper action to correct the breach the Commission has authority to issue formal notices and sanctions in the form of a requirement of a non-interest bearing deposit or a fine to Member States of the euro zone. On the contrary, the Commission can only issue recommendations to Member States that have not joined the euro.[21]

Clearly, the Stability and Growth Pact has been insufficient in practice. Countries ran budget positions that were non sustainable and provided insufficient or no cushion for a situation of crisis. It has probably also suffered from being too focused on actual deficit situations rather than mounting risks, leaving the EU Commission and ECOFIN with little room for providing strong guidance, or at the limit sanctions, for countries with actual surpluses but mounting imbalances. However, the malfunctioning may be attributed as much to the implementation of it as to badly designed rules. There is an argument for saying that the escalation of the Greek debt problem occurred partly because the ECOFIN was too passive and did not insist on better auditing of public finance figures that were clearly not aligned with reality.[22]

The Stability and Growth Pact derives its fundamental objective very much from the first dimension of the cost of non-Europe, the prevention of negative spill-over effects. Both types of breaches of the Stability and Growth Pact run the risk of increasing interest rates in the long term for the area as a whole. If Member States are prevented from building up non-sustainable debt positions then the risk of default should not arise. Hence, there is less risk that other Member States at a certain point will have to step in and provide assistance to a country facing the rising solvency risks as perceived by the financial markets. This is of course precisely the position the EU has been placed in now as the result of the poor functioning of the Stability and Growth Pact.

There are presently a number of proposals circulating to strengthen the preventive arm of EU's macroeconomic policies such as expanding the scope of the review within the Stability and Growth Pact and commit EU Member States to present their budget and economic plans for peer review before national implementation[23]

As national budget policies are very much a national prerogative under the treaty, and given the limited ability of the EU collectively to use the instruments available to sanction countries in breach of budget criteria historically, strengthening these instruments are likely to be an uphill struggle, but worth pursuing given the massive economic problems the EU is facing.

We would suggest focusing on four relatively mundane, but yet important, areas that are consistent with national autonomy over the budget process.[24] First, much stronger on-going auditing of the budget numbers, including examination of the importance of off-budget expenditures as well as contingent liabilities arising from government guarantees. Second, a better assessment of the underlying structural budget positions: the present assessment of cyclically adjusted positions relies on very mechanical relationships between levels of economic activity which, as discussed above, proved inadequate in a major downturn. In essence, we suggest that the economics of macro prudential supervision is also applied to public deficit positions, by looking harder into how taxes on consumption, capital and financial institutions are affected by major fluctuations in the economy as well as unbalanced growth patterns.

[21] Cf. EU Council (1997).
[22] Pisani and Sapir (2010).
[23] The so called "European Semester" in COM(2010)250 final.
[24] Our proposal for relatively mundane improvement of the monitoring process reflects partly our lack of faith in a process where budgets are to be submitted to the EU for approval before they are presented to the national Parliament. The time constraints will be very severe and the value added relative to much more consistent on-going control through the convergence reports limited.

Third, we recommend that forecasting of future budget positions becomes more explicit, with more critical focus on future growth rates, its determinants plus expenditure and revenue ratios. Some countries, such as the Netherlands, Canada and to a certain extent the UK, aim to isolate budget forecasts somewhat from the political process[25]. Fourth, there is a clearly a case for requiring countries getting closer to breaching the criteria in Stability and Growth pact, and/or regarded to have potentially unbalanced growth patterns, to be subject to more rigorous reporting of present and future budget positions. At the limit, prior vetting of budget *proposals* at the EU level as suggested by the EU Commission could be restricted to such countries.

Had these four elements been in place and enforced, the risks to public finance positions in for example Greece, Spain, Portugal, Ireland and UK would likely have appeared more clear and triggered a more intense debate in ECOFIN as well as at the national level on the soundness of fiscal positions prior to the crisis.

2.7. Financial regulation and supervision

Financial risks also mounted with insufficient action being taken, suggesting a role for reform. There is certainly a cost of non-Europe here as well, both regarding regulation and supervision.

It is beyond the scope of this study to elaborate on the right approach to take in this area, but we would like to underline that cross-country banking is an area that requires action and where the "spill-over" arguments are strong. The case of the complex nationalisation of the Benelux bank Fortis in 2008 as well the general debate on the "too large to fail"-paradox during the crisis, highlights the need for improved cross-country financial supervision. [26] Particularly for smaller to medium-sized EU countries, the roles of supervising domestic bank's activities in other countries and understanding the risks that can be associated with a strong concentration of non-domestic bank lending in the domestic economy, proved to be difficult and a contributing factor in the crisis. Other supervisory shortcomings that contributed to the crisis were insufficient supervision of liquidity management, diverging supervisory styles, inadequate regulatory inclusiveness and supervisory ineffectiveness that even sometimes had a counterproductive role by creating negative herd behaviour.[27]

Improved regulation – not the least in the context of revised Basel rules for capital adequacy and market transparency – plus increased co-operation between supervisory authorities and a stronger role for common EU monitoring bodies are likely to reduce the risks of a repeat of the present crisis.

Moreover, the regulatory framework and consequent supervision has very much focused on micro-level supervision. The crisis has (again) demonstrated that individual financial firm's risk exposure in a crisis situation cannot be measured by "summing up" risks associated with individual transactions in individual financial institutions in an economy running along at normal speed. Once the economy starts to deteriorate, the quality of assets as a whole may deteriorate, and price falls may be compounded as a large number of firms start to liquidate holdings at the same time to maintain adequate and legally required capital ratios.

The agreement to add a structure of macro prudential regulation and supervision – the so-called European Systemic Risk Board composed inter alia by representatives from the ECB– at the EU level should be seen in this light.

[25] IMF(2010) provides an overview of the budgetary processes mainly in OECD countries. In the Netherlands budget forecasts are provided by the Central Planning Bureau, characterized as an "independent" agency, in Canada private sector forecast are used as in input in government projections while in UK budget assumptions are submitted to the National Audit Office for review.
[26] Cf. DG Internal Policies (2010).
[27] Cf. DG Internal Policies (2010).

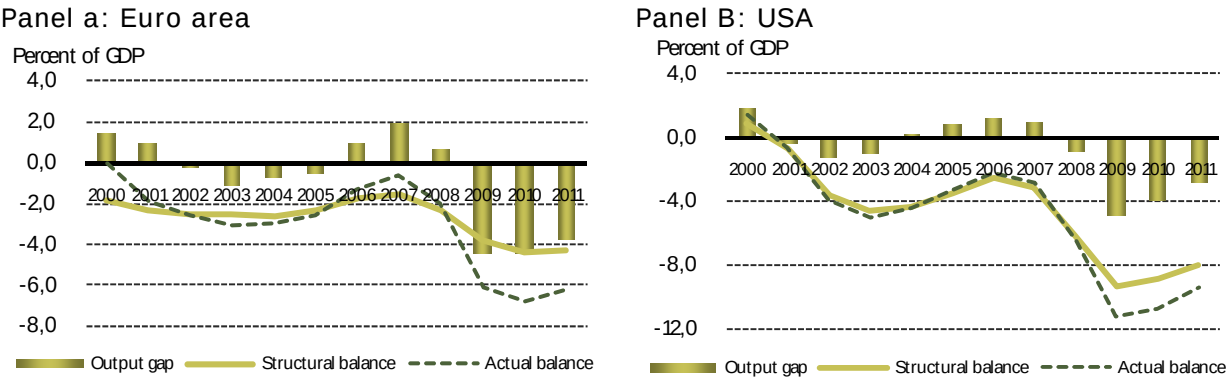
3. MITIGATION AND CONTROL POLICIES

3.1. Macro policy response: timing, doses and emerging constraints

Bearing in mind the late recognition of the seriousness of the crisis as discussed above, the formal policy action and commitment cannot be characterized as being very late. In October 2008 ECB started to ease the monetary policy, while the EU Commission called for a recovery plan. In November the EU Commission adopted its own proposal for a recovery plan (with a modest budgetary element given its limited budget in macro terms) and by December the EU Council had approved a recovery plan. In March 2009 the EU-Council formally adopted what is officially a €500 billion stimulus package.

Massive fiscal loosening followed the March commitment to fiscal action. The EU saw substantial increases in structural deficits in the EU and even larger increases in actual deficits due to the fall in revenues and increase in social benefits (automatic stabilisers). Actual average public deficits rose from 1% of GDP in 2007 to 7% in 2009 and are expected to stay high, cf. Figure 10 panel a. The loosening of fiscal policies in US has been even larger despite having faced an economic contraction at the margin smaller than in the EU. An important difference is that discretionary policy easing has played a much bigger role in the US as automatic stabilisers are smaller (lower tax rates and less generous social assistance than in the EU), cf. Figure 10 panel b.

Figure 10: Output gap, structural and actual balances in euro area and USA, 2000-2011



Sources: OECD (2009b) and OECD Economic Outlook 86 database.

The overall easing of fiscal policies over the period 2007-2010 also seems relatively strong compared to earlier, recent episodes of large economic contractions such as the early 1980s and early 1990s. The severity of the recession was stronger in the period 2007 to 2010 but the response of fiscal policies even more so, cf. Table 5. The ratio of fiscal easing to the severity of crisis was hence the largest in the present crisis.

Table 6: Fiscal easing from peak to trough during 3 EU recessions

Period	Fall in output trend growth relative to GDP	Increase in net lending as share of GDP	Fiscal easing as share of contraction
1979 to 1983	4.1	2.8	0.7
1989 to 1993	5.4	6.0	1.1
2007 to 2010	6.1	7.5	1.2

Note: The fall in output gap relative to GDP is the difference between HP-gap as percentage of potential GDP over time and is measured for EU14. The increase in net lending as a share of GDP is the difference in net lending over time and is measured for EU14, but excluding Germany.
Sources: Copenhagen Economics based on Maddison Statistics and OECD (2009b).

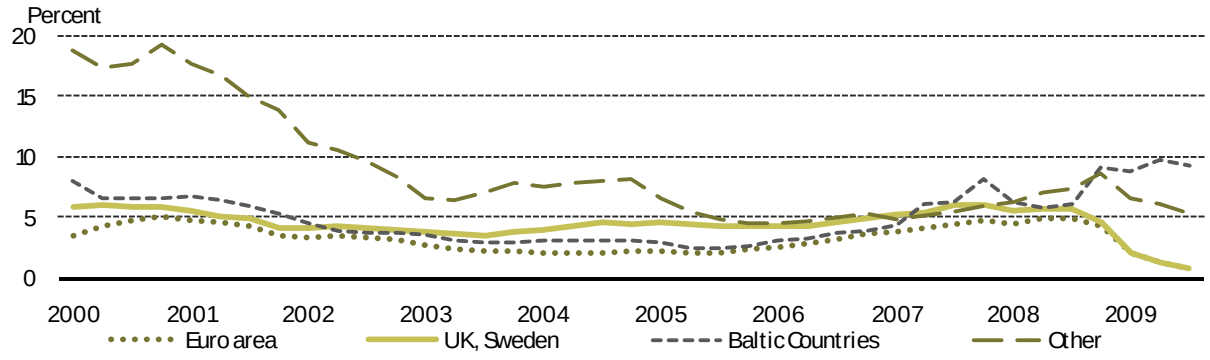
In any case, the potential for even more expansionary policies may not that be that large. A few examples may provide some perspective. If the OECD as a whole had adopted discretionary policies equivalent to a further easing equal to 2% of GDP that may have boosted overall GDP levels in the OECD area by perhaps 1%: That would still leave OECD countries with massive increases in unemployment. Had the effort been only in the euro area, then a 2% increase might increase euro area GDP by perhaps 1%. Particularly in the early phases of the recovery, the size of the fiscal easing has been roughly commensurate with the magnitude of the national crises under way from 2007 onwards and for the most part unrelated to the emerging fiscal constraints.[28]

However, fiscal constraints are starting to bite. For countries where public budgets were under pressure already at the outset of the crisis, discretionary policies were not eased at all in certain cases over the period 2007-2009 (Baltic countries and Ireland) while Spain, Greece and Portugal have been forced to consolidate their fiscal policy in 2010 – with further substantial consolidation under way.

At the same time, monetary policies have been aggressively eased from 2008 and onwards, cf. Figure 11. The ECB has aggressively lowered nominal rates with present rates being at an all-time low in the period of ECB's history, as well as in the history of the German Bundesbank. Real rates are more difficult to measure. The most appropriate measure is nominal rates against expected inflation which has remained relatively stable in the euro zone over the crisis suggesting that expected real rates have gone down as well. A simple measure, using actual inflation instead of expected inflation, suggests that the real interest rate dropped somewhat less than the nominal interest rate in the euro area from 2008 to 2009. While the short-term nominal interest rates in the euro area dropped 4.4% in the period from October 2008 to October 2009, the real interest rate only dropped by 3.0% in the same period.[29]

Other regions in the EU have been broadly on the same track though with increasing rates in Baltic states where the need to defend the peg with the euro and the emerging major crisis has forced the policy rates up.

Figure 11: Short-term nominal interest rates in EU, 2000-2009



Notes: The interest rates are nominal 3-month interest rates.
Source: Eurostat.

[28] See European Commission (2009a), graph III.2.10, p. 69.
[29] Based on Eurostat figures, comparing 3-month nominal interest rates with 3-month nominal interest rates less the HICP excluding energy and unprocessed food for the Euro area. Using these figures, the nominal interest rate dropped from 5.1% to 0.7% from October 2008 to October 2009 while the real interest rate dropped from 2.7% to -0.3%.

In addition to traditional policy easing by way of lowering short term policy rates, the ECB as well as Bank of England and the US Fed have used "unconventional" measures to support credit conditions. Essentially, this consists of providing improved funding access to the private sector and/or buying substantial amounts of the private sector's assets in an effort to provide liquidity to the banking sector as well as to prevent asset prices from falling too rapidly. Though the approaches of the three central banks have differed somewhat. Given the much larger importance of the banks for lending to the private sector in the euro area, the ECB has focused on improving access to funding to banks by lengthening the period of funding in addition to some purchases of private sector bonds[30] The Fed and the Bank of England have committed more resources to the direct buying of private sector assets – for example mortgage bonds – as a consequences of securitisation of loans being of much larger importance in the US and UK[31].

The dominance of the euro zone including pegged currencies for total economic activity and internal trade in the EU implies that effective exchange rates for most EU trade-exposed industries have been relative stable. This reflects large internal EU trade as well as the dominance of the euro zone and pegged currencies for overall activity, see Table 3 on exchange rate policies. The exception is Sweden and UK where the floating currencies have depreciated sharply, hence also with euro zone, cf. Figure 12. The EU's external exchange rate has gone up, cf. Figure 4, thus hurting competiveness for firms exposed to non-EU trade, and somewhat counteracting the effect of low policy rates.

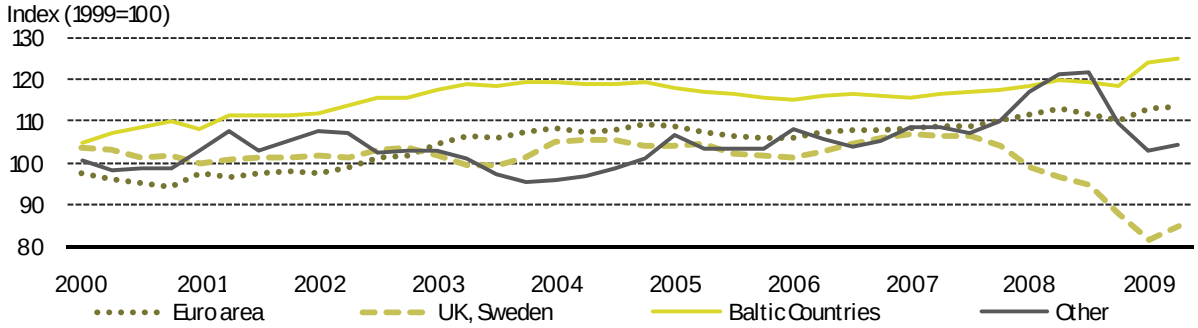
Table 7: Exchange rate policies in non-euro countries

Non Euro-Area	Operational policy target	Currency	ERM II
Bulgaria	Currency peg	Fixed	No
Czech Republic	Inflation target		No
Denmark	Currency peg	+/- 2.25 pct.	Yes
Estonia	Currency peg	+/- 1 pct.	Yes
Hungary	Currency peg. and inflation target	+/- 15 pct.	No
Latvia	Currency peg	Fixed	Yes
Lithuania	Currency peg	Fixed	Yes
Poland	Inflation target		No
Romania	Inflation target		No
Sweden	Inflation target		No
United Kingdom	Inflation target		No

Note: Ultimately the final objective of monetary policy in all EU countries is medium term price stability. However, some countries use some kind of currency peg to achieve that objective while other countries such as UK and Sweden combine a floating exchange rate regime with an inflation target.
Sources: Nationalbanken (2008), Nationalbanken (2010), Sveriges Riksbank (2010) and Bank of England (2010).

[30] IMF(2009d).
[31] IMF(2009c) provides an overview of the policy approaches to the crisis in some major regions, including the euro area.

Figure 12: Nominal effective exchange rates in EU, 2000-2009



Notes: The exchange rates are the nominal effective exchange rates with 41 trading partners. All rates are indexed such that the level in 1999 is 100. In the country groups the exchange rates of individual countries are weighed by their GDP.
Sources: Eurostat.

3.2. Burden sharing of stimulus packages

Lately there has been increasing focus on the relative efforts within EU Member States in terms of boosting demand to help the EU back to recovery.

There are at least two potentially conflicting ways of viewing this idea. The first view sees the idea from a fiscal or economic capacity to expand demand. In this view, countries with relatively low fiscal problems and healthy external current account positions should expand demand to help other countries to cope with the crisis by increasing imports. The second view is the more national perspective: Each individual country should consider how large the domestic need for stimulus is, and whether fiscal stimulus is constrained by long term consolidation plans.

In a nutshell the question is whether net exporters such as Germany and the Netherlands with "manageable" debt levels should expand domestic demand by fiscal stimulus (or other means) or rather focus inter alia on their own rising debt problems? Rather than providing a very firm view on this, we propose to put the question into some perspective, looking at the German position. First, Germany has arguably over the period 2007-2010 provided a very large stimulus package measured both as a share of GDP and relative to the size of the contraction of its economy.[32] Second, Germany is now set to see its debt to GDP ratio exceed 65% in 2008, above prudent ratios as measured by the Stability and Growth Pact. Third, in more practical terms, the actual effect of additional German stimulus in terms of spill-over is small relative to the size of the problems the other countries are facing. Indeed, given trade-links, most of the positive impact in terms of increased exports would accrue to Austria, Belgium and the Netherlands while countries in Southern Europe would see only modest gains. A rise in German public spending of 1% of GDP would lead to increases in GDP of perhaps 0.1% at most in Italy and Portugal, cf. Table 9 in annex 1.

Fourth, Germany is a rich but also ageing society which suggests that it should save for future pension burdens and invest these savings in emerging economies with a need for foreign capital. Indeed, their current account surplus of around 6% as an average for the period 2004-2008 is arguably only about 3-4 percentage point higher than what it "should" be given such underlying structural factors, cf. Table 8, and projected to fall in the coming years.

[32] According to the European Commission (2009a), graph III.2.7 and graph III.2.8, p. 67 and 68, Germany provided the fourth largest fiscal stimulus (in percent of GDP) of all European countries in 2009, and the largest fiscal stimulus in 2010.

In other words, there is nothing inherently wrong with the systematic differences in current account balances within the euro zone: the problem arises when countries systematically borrow to finance very high domestic consumption levels as opposed to boosting productive investments oriented towards the tradable sector.

Table 8: Actual and necessary current account balances in EU, 2004-2008

Country	Current account balance, average for 2004-2008	Estimated fundamental current account
Austria	2.7	1.1
Belgium	2.2	2.5
Finland	4.4	-0.3
France	-0.8	0.6
Germany	6.2	2.5
Greece	-10.7	-4.4
Ireland	-3.6	1.1
Italy	-2.2	-0.1
Netherlands	7.5	2.2
Portugal	-9.7	-5.8
Spain	-8.3	-5.7

Sources: IMF (2009), Table 4, and EuroStat.

This is not to preclude that Germany should consider policies to boost domestic demand. Indeed, if a number of key trading partners such as the US, UK etc. expand their tradable sectors, Germany may have to rely more on domestic demand to sustain production in the coming years. But it may have to do so in a manner consistent with medium term budget consolidation and with a view to building net external financial assets for an ageing population along with other countries such as Austria, Belgium and the Netherlands.

3.3. Micro-policy co-ordination: focus on banking and the auto industry

The crisis has primarily in two sectors triggered efforts by Member States to support crisis industries hosted within its own borders. The narrow focus in this section is to review whether that has been conducted in a manner harming the internal market, e.g. by way of distorting competition.

The first sector is banking with support having two key elements. The first element has been selective support in the form of public capital injections to domestic banks, threatened with either solvency or liquidity problems. Prominent cases have been the saving of UK and Belgian banks. The second element has been a massive extension of deposit insurance schemes.

Prior policy analysis internally in the EU suggested that the EU institutionally was ill prepared to deal with particularly cross-border banking crisis as well as the role of "lender-of-last resort" in a situation where banks where faced with runs on liquidity.[33] Examples of warnings are:

- 2002: "urges […] to organise a comprehensive public debate with all the relevant players about European integrated supervision, focusing on examining the feasibility of European supervision of large financial institutions with cross border and cross sector operations".[34]

[33] Bruegel (2009a).
[34] European Parliament (2002), article 49.

- 2005: "[…] require a European response that provides adequate, efficient and coordinated supervision; warns that problems could arise for the efficient operation of the market in financial instruments if such coordinated supervision were lacking".[35]
- 2006: "the current networks of national supervisors […] may not be sufficient to face a major crisis caused by a failure of markets or important cross-border financial groups".[36]

While the initial steps thus took place in a rather un-coordinated way, there is not much evidence to suggest that this has impeded a recovery in the real economy so far but some notes of caution have been aired. First, there are indications that guarantees provided to banks have been priced differently across countries leading to potential distortions to the internal market.[37] Second, many of the guaranteed issuances have been made to large financial institutions which de facto serves as a subsidy to the same financial institutions that contributed to the creation of the crisis.[38] Subsidising financial institutions that have taken excessive financial risks could create moral hazard issues in the long run. Third, there are some signs of the guaranteed issuances crowding out non-guaranteed ones.[39] Fourth, there are also indications that governments have insisted as a counterpart to guarantees that domestic actors were provided with continued loans.[40]

When it comes to the formal EU guidelines for state support for banks the EU has gradually increased the limitations for guarantee schemes. Since 1994, all Member States have been required to have a deposit guarantee scheme of at least 90% of the deposited amount, up to at least 20,000 euro per person. With Directive 2009/14/EC, the minimum coverage level was increased to 50,000 euro per person, as several Member States had already increased the level of coverage, with a further increase to 100,000 euro per person by the end of 2010. For government guarantee schemes covering bank debt, the newest guidelines makes EU authorisation conditional upon a) a limited temporal scope of schemes, and b) a remuneration to the government coming as close as possible to what would be considered a market price.[41]

As regards the auto industry, some EU countries have opted for support schemes which favour the domestic car manufacturing sector, e.g. through soft loans. The large focus on making consumers buy more cars has diverted consumption away from other goods and postponed the need for consolidation that is needed in the car industry over the longer term.[42] But given the dire state of some auto industries within the EU at the moment, it would be difficult to suggest that measures to reduce decreases in auto sales would be less effective in supporting short term employment than other measures. More problematic has been the apparent linking of public loan guarantees to individual firms with more or less explicit counterparts in the form of favouring the country providing the aid when considering how to implement restructuring of plants across the EU, almost invariably leading to subsequent job losses.

[35] European Parliament (2005), article 16.
[36] Committee on Economic and Monetary Affairs (2006), article 34.
[37] Brugel (2009a).
[38] Banca d'Italia (2009).
[39] Banca d'Italia (2009).
[40] Bruegel (2009a), p. 20.
[41] Cf. DG Competition (2008), p. 1.
[42] OECD (2009b) has a chapter that focuses inter alia on the long term need for consolidation in this sector which faces secular decline in sales revenues in the EU area.

3.4. Crisis resolution mechanisms

Formal EU mechanisms to help out EU members with emerging macroeconomic problems are relatively week. Essentially, the EU is not designed for IMF style stabilisation programmes; indeed, within the euro area there is a deliberate no-bailout clause.[43] This is an issue that has dramatically been put at the forefront in EU economic policy management since the risks of sovereign debt default have become more acute in financial markets in the course of 2010.

It is worth pointing out that no international system that provides its component members with substantial fiscal freedom will ever have a rule of "automatic" solidarity. IMF support is conditional on "structural adjustment", which typically involve substantial budget adjustments, and support levels are capped as a multiple of the Member States' capital with IMF. Neither do states nor cities in the US have rights to automatic assistance from the federal or other levels.

Nonetheless, the difficulties that the EU has faced in dealing with the Greek financial crisis suggest that somewhat more formal procedures might be needed. Indeed, they have been developed in real time as this study has been undertaken.

The lack of up-front crisis resolution mechanisms has added to the seriousness of the crisis in Greece as well as other countries that see their interest rate premium rising to levels that are likely to be non-sustainable over the long term. The very unclear endgame – and perhaps exaggerated expectations of the level of support that the euro zone countries would ultimately provide – might have delayed the required political will to act in the countries facing the crisis and which have until recently been enjoying very low interest rates, largely as a result of being inside the euro area. Moreover, the lack of a an agreed operational structure for an EU involvement in the required national adjustment – including uncertainty over the respective roles of IMF, the EU Commission, ECB and individual Member States and the interest rate that should be charged for official EU loans to Member States – may again have delayed the actual implementation of rescue package.

However, on May 10th 2010 the EU adopted a comprehensive financial stabilisation mechanism with a total volume of up to € 500 billion. The mechanism involves:

- A € 60 billion increase in the EU balance of payments facility set up to help countries with severe public finance problems; and
- € 440 billion worth of euro zone-backed loan guarantees available on conditions to financially distressed EU countries and expiring after three years.

On top of these two facilities come two additional initiatives to stabilise the situation:

- IMF loans of up to € 250 billion; and
- An ECB-programme to purchase euro zone government bonds designed to reduce the stress in European financial markets.

The first part of the EU initiative (increasing the balance of payments facility) was put into force by invoking article 122,2 that allows the EU to grant financial assistance when Member States are threatened by "exceptional occurrences beyond its control".

[43] The Lisbon treaty article 125 reads: " The Union shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project. A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of another Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project."

The second initiative (euro zone-backed loan guarantees) is provided on an intergovernmental basis and is thus formally an initiative of the participating Member States, not the EU as a whole. In this way the EU has, at least legally, avoided an actual bailout, but the problematic issues regarding the initiatives remain just the same as if it had been a bailout.

In the short term the financial stabilisation mechanism has worked. Following the announcement of the package, both Greek, Portuguese, Irish and Italian bond yields fell considerably.

However, while the overall package offers substantial respite for the targeted countries, the verdict is still out on its ability to deliver a solid, longer term solution. Countries like Greece will, despite efforts to balance public finances, with all likelihood still be in financial distress when the loans expire in three years. Financial markets may judge the resulting debt burden to be non-sustainable from a political perspective, and hence start pricing in the risk of default, leading again to very high interest rates. A *possible* scenario to come in three years time *may* thus be that some Member States require repeated financial support in the form of either new or prolonged EU initiatives.

An alternative solution might have been to have rescheduled the debt of the most financially distressed EU countries. The current initiative could set out an expensive long-lived course before recovery picks up in the stricken countries.

In any case, the upshot is that the EU will face a moment of truth once the package expires. Either supported countries have put themselves on a sustainable course, regaining the trust of financial markets and hence being able to tap funds at affordable conditions. That will be a story of successful joint action followed by structural national reforms and budget consolidation.

Or they have not. In that case, the EU faces the same question again. The possibilities will once again be either to opt for a new official loan package or an orderly debt rescheduling with creditors bearing a substantial part of the adjustment burden. The choice to be made is central to the basic construction. If the EU again steps in, then financial markets may well consider that the EU operates with a de facto bailout provision, creating a serious moral hazard problem relative to the enforcement of fiscal discipline.

The stabilisation mechanism has hence served to highlight the weaknesses of the current Stability and Growth Pact. Its sanctions of non-interest bearing deposits or fines are hardly helpful or effective when countries are facing severe financial difficulties. The new stabilisation mechanism is in that respect a step forward: The loans (both the euro zone-backed and the IMF) are subject to conditions imposed by the IMF, an institution that has vast experience in imposing budgetary discipline.

3.5. On the way to the exit: some priorities

The EU Council formally adopted an exit strategy in December 2009. Essentially, this is about unwinding both the substantial stimulus to the economies undertaken as well as the specific interventions to support specific industries, none the least financial markets.

On macro policies the emphasis was that the withdrawing should be state-, not time-, contingent, i.e. avoiding choking off the recovery by removing the medicine before the patient has sufficiently recovered. That may happen at different speeds and with different timing across EU Member States.

At the same time, the need for medium and long term consolidation that was apparent even before the crisis emerged is now even more urgent. Here the emphasis is on measures that are likely to boost long term growth perspectives. Obviously, reform of labour markets and pension systems are prime candidates: Properly designed, they reduce deficits and increase growth potential at the same time. Moreover, they may be very helpful in restoring confidence in financial markets even before they start to bite, particularly if they are designed to have a clear and credible impact on public finances within a 3-5 year horizon.

In particular, for the financial sector it is important that unwinding is co-coordinated. This applies in particular to scaling down the bank guarantees in place or at least to remove the distortions to the internal market from different pricing of risks. Banks placed in countries that reduce such guarantees at more rapid speed than others, would see their competitors in other countries having a comparative advantages in providing loans.

Also for quantitative easing programs, co-ordination is important. The ECB can assure that this functions in an orderly manner within the euro area, by virtue of covering a large group of countries and providing equal conditions to financial institutions based on the merit of the assets provided, not nationality of the asset or bank. The co-ordination problems mainly arise vis-à-vis the Bank of England which is important given the role of the City of London for international banking and vis-à-vis the Federal Reserve Bank as well as other central banks within the EU.

A final point about the exit strategy is to get the mix of prevention and control mechanism instruments right and internally consistent. We argued in our section on crisis control mechanisms that a relatively weak mechanism for enforcing fiscal discipline requires that expectations of automatic bailout must not be created. This is indeed also a very important part of the EU's exit strategy as a whole: The EU must provide a strong signal to the markets that individual Member States debt positions are ultimately their own responsibility. Collective action by EU Member States is essentially to be seen as bridging finance and strongly conditional on national adjustment that allows them to regain confidence in financial markets. If this signal can be transmitted and implemented in practice; then the EU may emerge from the crisis strengthened, not weakened, by the experience.

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ANNEX

Annex 1: Effect of extra fiscal stimulus

Table 9: Effect of German fiscal stimulus corresponding to 1% of Germany's GDP

Nature of shock	Temporary	Temporary	Permanent	Temporary	Temporary	Temporary	Temporary
Type of shock	Spending increase	Tax cut	Spending increase	Spending increase	Spending increase	Spending increase	Tax cut
Monetary policy reaction?	No	No	No	Yes	Yes	No	No
Source	Beetsma, Giulidori, Klaassen (2005), p. 23	Beetsma, Giulidori, Klaassen (2005), p. 23	Barrell, Holland, Liadze and Pomerantz (2007), p. 29	Gros and Hobza (2001)[1]	Cwik and Wieland (2009), p. 4 and 16[2]	OECD (2010), p. 138	OECD (2010), p. 138[4]
First-year effects on countries (as pct. of own-country GDP)							
Germany				0.41	0.97	0.4[3]	0.2[4]
Austria	0.232	0.05	0.059	0.01			
Belgium	0.237	0.051	0.05	0.07			
Finland	0.079	0.017	-0.002	-0.05			
France	0.058	0.013	-0.008	-0.01	0.05		
Ireland	0.111	0.024	-0.015	0.01			
Italy	0.057	0.012	-0.001	-0.01	-0.02		
Netherlands	0.228	0.049	0.08	0.05			
Portugal	0.091	0.02	0.039	-0.05			
Sweden	0.072	0.015	-0.017				
UK	0.054	0.012	0.03				

[1]: The figures are averages of results in 3 different models, namely the QUEST, Marmotte and NiGEM models.
[2]: The figures report the effect in the 4th quarter of 2009 for a German fiscal stimulus in 2009. They are scaled upwards from a German fiscal expenditure stimulus of 0,72% of GDP in 2009, such that the figures reported here correspond to the effects of a 1% increase in German expenditure.
[3]: The estimate is for government consumption. OECD estimates the effect to be in the range 0.3-0.8, depending on which type of spending increase is used to stimulate the economy.
[4]: The estimate is for reductions in personal income tax. OECD estimates the effect to be in the range 0.2-0.5, depending on which type of tax cut is used to stimulate the economy.
Sources: As listed in the table.

Table 10: Effects on GDP from a coordinated EU fiscal stimulus corresponding to 1% of GDP

	No spill over				Spill over of 50%			
	Year 1		Year 2		Year 1		Year 2	
	Low	High	Low	High	Low	High	Low	High
Germany	0.1	0.8	0.2	1.2	0.2	1.1	0.3	1.7
France	0.2	0.8	0.2	1.2	0.3	1.2	0.3	1.8
Italy	0.2	0.8	0.2	1.2	0.3	1.2	0.3	1.8
United Kingdom	0.2	0.8	0.2	1.2	0.3	1.2	0.3	1.8
Austria	0.1	0.7	0.2	1.1	0.2	1.1	0.3	1.8
Belgium	0.1	0.7	0.1	1.1	0.2	1.1	0.2	1.8
Czech Republic	0.1	0.7	0.1	1.1	0.2	1.1	0.2	1.8
Denmark	0.1	0.7	0.2	1.1	0.2	1.1	0.3	1.8
Finland	0.1	0.8	0.2	1.2	0.2	1.2	0.3	1.9
Greece	0.1	0.8	0.2	1.2	0.2	1.2	0.3	1.9
Hungary	0.1	0.7	0.1	1.1	0.2	1.1	0.2	1.8
Ireland	0.1	0.7	0.1	1.1	0.2	1.1	0.2	1.8
Netherlands	0.1	0.7	0.1	1.1	0.2	1.1	0.2	1.7
Poland	0.1	0.8	0.2	1.2	0.2	1.2	0.3	1.9
Portugal	0.1	0.8	0.2	1.2	0.2	1.2	0.3	1.9
Slovakia	0.1	0.7	0.1	1.1	0.2	1.1	0.2	1.8
Spain	0.1	0.8	0.2	1.2	0.2	1.2	0.3	1.8
Sweden	0.1	0.7	0.2	1.1	0.2	1.1	0.3	1.8

Notes: The table displays approximate ranges of the effect on own-country GDP following a coordinated fiscal stimulus in EU corresponding to 1% of GDP. The calculation is based on the multipliers used to evaluate fiscal packages, as reported by OECD. The lowest effects stem from fiscal stimulus in the form of cuts in indirect taxes while the highest stem from fiscal stimulus in the form of government investment. The calculation disregards potential responses in fiscal or monetary policies. The OECD multipliers account for the openness of the economies as well as the effect on saving propensities but no additional account is taken of these factors in the calculation. Further, the calculation assumes that all spill over from a given country are shared equally among the remaining EU countries.
Sources: Copenhagen Economics and OECD Economic Outlook (2010), appendix A.3.2., p. 138.

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