

Economic Crisis in Europe: Causes, Consequences and Responses

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FOREWORD

The European economy is in the midst of the deepest recession since the 1930s, with real GDP projected to shrink by some 4% in 2009, the sharpest contraction in the history of the European Union. Although signs of improvement have appeared recently, recovery remains uncertain and fragile. The EU's response to the downturn has been swift and decisive. Aside from intervention to stabilise, restore and reform the banking sector, the European Economic Recovery Plan (EERP) was launched in December 2008. The objective of the EERP is to restore confidence and bolster demand through a coordinated injection of purchasing power into the economy complemented by strategic investments and measures to shore up business and labour markets. The overall fiscal stimulus, including the effects of automatic stabilisers, amounts to 5% of GDP in the EU.

According to the Commission's analysis, unless policies take up the new challenges, potential GDP in the EU could fall to a permanently lower trajectory, due to several factors. First, protracted spells of unemployment in the workforce tend to lead to a permanent loss of skills. Second, the stock of equipment and infrastructure will decrease and become obsolete due to lower investment. Third, innovation may be hampered as spending on research and development is one of the first outlays that businesses cut back on during a recession. Member States have implemented a range of measures to provide temporary support to labour markets, boost investment in public infrastructure and support companies. To ensure that the recovery takes hold and to maintain the EU's growth potential in the long-run, the focus must increasingly shift from short-term demand management to supply-side structural measures. Failing to do so could impede the restructuring process or create harmful distortions to the Internal Market. Moreover, while clearly necessary, the bold fiscal stimulus comes at a cost. On the current course, public debt in the euro area is projected to reach 100% of GDP by 2014. The Stability and Growth Pact provides the flexibility for the necessary fiscal stimulus in this severe downturn, but consolidation is inevitable once the recovery takes hold and the risk of an economic relapse has diminished sufficiently. While respecting obligations under the Treaty and the Stability and Growth Pact, a differentiated approach across countries is appropriate, taking into account the pace of recovery, fiscal positions and debt levels, as well as the projected costs of ageing, external imbalances and risks in the financial sector.

Preparing exit strategies now, not only for fiscal stimulus, but also for government support for the financial sector and hard-hit industries, will enhance the effectiveness of these measures in the short term, as this depends upon clarity regarding the pace with which such measures will be withdrawn. Since financial markets, businesses and consumers are forward-looking, expectations are factored into decision making today. The precise timing of exit strategies will depend on the strength of the recovery, the exposure of Member States to the crisis and prevailing internal and external imbalances. Part of the fiscal stimulus stemming from the EERP will taper off in 2011, but needs to be followed up by sizeable fiscal consolidation in following years to reverse the unsustainable debt build-up. In the financial sector, government guarantees and holdings in financial institutions will need to be gradually unwound as the private sector gains strength, while carefully balancing financial stability with competitiveness considerations. Close coordination will be important. 'Vertical' coordination between the various strands of economic policy (fiscal, structural, financial) will ensure that the withdrawal of government measures is properly sequenced -- an important consideration as turning points may differ across policy areas. 'Horizontal' coordination between Member States will help them to avoid or manage cross-border economic spillover effects, to benefit from shared learning and to leverage relationships with the outside world. Moreover, within the euro area, close coordination will ensure that Member States' growth trajectories do not diverge as the economy recovers. Addressing the underlying causes of diverging competitiveness must be an integral part of any exit strategy. The exit strategy should also ensure that Europe maintains its place at the frontier of the low-carbon revolution by investing in renewable energies, low carbon technologies and "green" infrastructure. The aim of this study is to provide the analytical underpinning of such a coordinated exit strategy.

Marco Buti

Director-General, DG Economic and Financial Affairs, European Commission

ABBREVIATIONS AND SYMBOLS USED

Member States

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	The Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

EA-16	European Union, Member States having adopted the single currency (BE, DE, EL, SI, SK, ES, FR, IE, IT, CY, LU, MT, NL, AT, PT and FI)
EU-10	European Union Member States that joined the EU on 1 May 2004 (CZ, EE, CY, LT, LV, HU, MT, PL, SI, SK)
EU-15	European Union, 15 Member States before 1 May 2004 (BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE and UK)
EU-25	European Union, 25 Member States before 1 January 2007
EU-27	European Union, 27 Member States

Currencies

EUR	euro
BGN	New Bulgarian lev
CZK	Czech koruna
DKK	Danish krone
EEK	Estonian kroon
GBP	Pound sterling
HUF	Hungarian forint
JPY	Japanese yen
LTL	Lithuanian litas
LVL	Latvian lats
PLN	New Polish zloty
RON	New Romanian leu
SEK	Swedish krona

SKK	Slovak koruna
USD	US dollar

Other abbreviations

BEPG	Broad Economic Policy Guidelines
CESR	Committee of European Securities Regulators
EA	Euro area
ECB	European Central Bank
ECOFIN	European Council of Economics and Finance Ministers
EDP	Excessive deficit procedure
EMU	Economic and monetary union
ERM II	Exchange Rate Mechanism, mark II
ESCB	European System of Central Banks
Eurostat	Statistical Office of the European Communities
FDI	Foreign direct investment
GDP	Gross domestic product
GDPpc	Gross Domestic Product per capita
GLS	Generalised least squares
HICP	Harmonised index of consumer prices
HP	Hodrick-Prescott filter
ICT	Information and communications technology
IP	Industrial Production
MiFID	Market in Financial Instruments Directive
NAWRU	Non accelerating wage inflation rate of unemployment
NEER	Nominal effective exchange rate
NMS	New Member States
OCA	Optimum currency area
OLS	Ordinary least squares
R&D	Research and development
RAMS	Recently Acceded Member States
REER	Real effective exchange rate
SGP	Stability and Growth Pact
TFP	Total factor productivity
ULC	Unit labour costs
VA	Value added
VAT	Value added tax

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EXECUTIVE SUMMARY

1. A CRISIS OF HISTORIC PROPORTIONS

The financial crisis that hit the global economy since the summer of 2007 is without precedent in post-war economic history. Although its size and extent are exceptional, the crisis has many features in common with similar financial-stress driven recession episodes in the past. The crisis was preceded by long period of rapid credit growth, low risk premiums, abundant availability of liquidity, strong leveraging, soaring asset prices and the development of bubbles in the real estate sector. Over-stretched leveraging positions rendered financial institutions extremely vulnerable to corrections in asset markets. As a result a turn-around in a relatively small corner of the financial system (the US subprime market) was sufficient to topple the whole structure. Such episodes have happened before (e.g. Japan and the Nordic countries in the early 1990s, the Asian crisis in the late-1990s). However, this time is different, with the crisis being global akin to the events that triggered the Great Depression of the 1930s.

While it may be appropriate to consider the Great Depression as the best benchmark in terms of its financial triggers, it has also served as a great lesson. At present, governments and central banks are well aware of the need to avoid the policy mistakes that were common at the time, both in the EU and elsewhere. Large-scale bank runs have been avoided, monetary policy has been eased aggressively, and governments have released substantial fiscal stimulus. Unlike the experience during the Great Depression, countries in Europe or elsewhere have not resorted to protectionism at the scale of the 1930s. It demonstrates the importance of EU coordination, even if this crisis provides an opportunity for further progress in this regard.

In its early stages, the crisis manifested itself as an acute liquidity shortage among financial institutions as they experienced ever stiffer market conditions for rolling over their (typically short-term) debt. In this phase, concerns over the solvency of financial institutions were increasing, but a systemic collapse was deemed unlikely. This perception dramatically changed when a major US investment bank (Lehman Brothers) defaulted in September 2008. Confidence collapsed, investors

massively liquidated their positions and stock markets went into a tailspin. From then onward the EU economy entered the steepest downturn on record since the 1930s. The transmission of financial distress to the real economy evolved at record speed, with credit restraint and sagging confidence hitting business investment and household demand, notably for consumer durables and housing. The cross-border transmission was also extremely rapid, due to the tight connections within the financial system itself and also the strongly integrated supply chains in global product markets. EU real GDP is projected to shrink by some 4% in 2009, the sharpest contraction in its history. And although signs of an incipient recovery abound, this is expected to be rather sluggish as demand will remain depressed due to deleveraging across the economy as well as painful adjustments in the industrial structure. Unless policies change considerably, potential output growth will suffer, as parts of the capital stock are obsolete and increased risk aversion will weigh on capital formation and R&D.

The ongoing recession is thus likely to leave deep and long-lasting traces on economic performance and entail social hardship of many kinds. Job losses can be contained for some time by flexible unemployment benefit arrangements, but eventually the impact of rapidly rising unemployment will be felt, with downturns in housing markets occurring simultaneously affecting (notably highly-indebted) households. The fiscal positions of governments will continue to deteriorate, not only for cyclical reasons, but also in a structural manner as tax bases shrink on a permanent basis and contingent liabilities of governments stemming from bank rescues may materialise. An open question is whether the crisis will weaken the incentives for structural reform and thereby adversely affect potential growth further, or whether it will provide an opportunity to undertake far-reaching policy actions.

2. VAST POLICY CHALLENGES

The current crisis has demonstrated the importance of a coordinated framework for crisis management. It should contain the following building blocks:

- *Crisis prevention* to prevent a repeat in the future. This should be mapped onto a collective

judgment as to what the principal causes of the crisis were and how changes in macroeconomic, regulatory and supervisory policy frameworks could help prevent their recurrence. Policies to boost potential economic growth and competitiveness could also bolster the resilience to future crises.

- *Crisis control and mitigation* to minimise the damage by preventing systemic defaults or by containing the output loss and easing the social hardship stemming from recession. Its main objective is thus to stabilise the financial system and the real economy in the short run. It must be coordinated across the EU in order to strike the right balance between national preoccupations and spillover effects affecting other Member States.
- *Crisis resolution* to bring crises to a lasting close, and at the lowest possible cost for the taxpayer while containing systemic risk and securing consumer protection. This requires reversing temporary support measures as well action to restore economies to sustainable growth and fiscal paths. Inter alia, this includes policies to restore banks' balance sheets, the restructuring of the sector and an orderly policy 'exit'. An orderly exit strategy from expansionary macroeconomic policies is also an essential part of crisis resolution.

The beginnings of such a framework are emerging, building on existing institutions and legislation, and complemented by new initiatives. But of course policy makers in Europe have had no choice but to employ the existing mechanisms and procedures. A framework for financial crisis prevention appeared, with hindsight, to be underdeveloped – otherwise the crisis would most likely not have happened. The same held true to some extent for the EU framework for crisis control and mitigation, at least at the initial stages of the crisis.

Quite naturally, most EU policy efforts to date have been in the pursuit of *crisis control and mitigation*. But first steps have also been taken to redesign financial regulation and supervision – both in Europe and elsewhere – with a view to *crisis prevention*. By contrast, the adoption of *crisis resolution* policies has not begun in earnest

yet. This is now becoming urgent – not least because it should underpin the effectiveness of control policies via its impact on confidence.

2.1. Crisis control and mitigation

Aware of the risk of financial and economic meltdown central banks and governments in the European Union embarked on massive and coordinated policy action. Financial rescue policies have focused on restoring liquidity and capital of banks and the provision of guarantees so as to get the financial system functioning again. Deposit guarantees were raised. Central banks cut policy interest rates to unprecedented lows and gave financial institutions access to lender-of-last-resort facilities. Governments provided liquidity facilities to financial institutions in distress as well, along with state guarantees on their liabilities, soon followed by capital injections and impaired asset relief. Based on the coordinated European Economy recovery Plan (EERP), a discretionary fiscal stimulus of some 2% of GDP was released – of which two-thirds to be implemented in 2009 and the remainder in 2010 – so as to hold up demand and ease social hardship. These measures largely respected agreed principles of being timely and targeted, although there are concerns that in some cases measures were not of a temporary nature and therefore not easily reversed. In addition, the Stability and Growth Pact was applied in a flexible and supportive manner, so that in most Member States the automatic fiscal stabilisers were allowed to operate unfettered. The dispersion of fiscal stimulus across Member States has been substantial, but this is generally – and appropriately – in line with differences in terms of their needs and their fiscal room for manoeuvre. In addition, to avoid unnecessary and irreversible destruction of (human and entrepreneurial) capital, support has been provided to hard-hit but viable industries while part-time unemployment claims were allowed on a temporary basis, with the EU taking the lead in developing guidelines on the design of labour market policies during the crisis. The EU has played an important role to provide guidance as to how state aid policies – including to the financial sector – could be shaped so as to pay respect to competition rules. Moreover, the EU has provided balance-of payments assistance jointly with the IMF and World Bank to Member States in Central and Eastern Europe, as these have been exposed to reversals of international capital flows.

Finally, direct EU support to economic activity was provided through substantially increased loan support from the European Investment Bank and the accelerated disbursement of structural funds.

These crisis control policies are largely achieving their objectives. Although banks' balance sheets are still vulnerable to higher mortgage and credit default risk, there have been no defaults of major financial institutions in Europe and stock markets have been recovering. With short-term interest rates near the zero mark and 'non-conventional' monetary policies boosting liquidity, stress in interbank credit markets has receded. Fiscal stimulus proves relatively effective owing to the liquidity and credit constraints facing households and businesses in the current environment. Economic contraction has been stemmed and the number of job losses contained relative to the size of the economic contraction.

2.2. Crisis resolution

While there is still major uncertainty surrounding the pace of economic recovery, it is now essential that exit strategies of crisis control policies be designed, and committed to. This is necessary both to ensure that current actions have the desired effects and to secure macroeconomic stability. Having an exit strategy does not involve announcing a fixed calendar for the next moves, but rather defines those moves, including their direction and the conditions that must be satisfied for making them. Exit strategies need to be in place for financial, macroeconomic and structural policies alike:

- *Financial policies.* An immediate priority is to restore the viability of the banking sector. Otherwise a vicious circle of weak growth, more financial sector distress and ever stiffer credit constraints would inhibit economic recovery. Clear commitments to restructure and consolidate the banking sector should be put in place now if a Japan-like lost decade is to be avoided in Europe. Governments may hope that the financial system will grow out of its problems and that the exit from banking support would be relatively smooth. But as long as there remains a lack of transparency as to the value of banks' assets and their vulnerability to economic and financial developments, uncertainty remains. In this
- *Macroeconomic policies.* Macroeconomic stimulus – both monetary and fiscal – has been employed extensively. The challenge for central banks and governments now is to continue to provide support to the economy and the financial sector without compromising their stability-oriented objectives in the medium term. While withdrawal of monetary stimulus still looks some way off, central banks in the EU are determined to unwind the supportive stance of monetary policies once inflation pressure begins to emerge. At that point a credible exit strategy for fiscal policy must be firmly in place in order to pre-empt pressure on governments to postpone or call off the consolidation of public finances. The fiscal exit strategy should spell out the conditions for stimulus withdrawal and must be credible, i.e. based on pre-committed reforms of entitlements programmes and anchored in national fiscal frameworks. The withdrawal of fiscal stimulus under the EERP will be quasi automatic in 2010-11, but needs to be followed up by very substantial – though differentiated across Member States – fiscal consolidation to reverse the adverse trends in public debt. An appropriate mix of expenditure restraint and tax increases must be pursued, even if this is challenging in an environment where distributional conflicts are likely to arise. The quality of public finances, including its impact on work incentives and economic efficiency at large, is an overarching concern.
- *Structural policies.* Even prior to the financial crisis, potential output growth was expected to roughly halve to as little as around 1% by the

context, the reluctance of many banks to reveal the true state of their balance sheets or to exploit the extremely favourable earning conditions induced by the policy support to repair their balance sheets is of concern. It is important as well that financial repair be done at the lowest possible long-term cost for the tax payer, not only to win political support, but also to secure the sustainability of public finances and avoid a long-lasting increase in the tax burden. Financial repair is thus essential to secure a satisfactory rate of potential growth – not least also because innovation depends on the availability of risk financing.

2020s due to the ageing population. But such low potential growth rates are likely to be recorded already in the years ahead in the wake of the crisis. As noted, it is important to decisively repair the longer-term viability of the banking sector so as to boost productivity and potential growth. But this will not suffice and efforts are also needed in the area of structural policy proper. A sound strategy should include the exit from temporary measures supporting particular sectors and the preservation of jobs, and resist the adoption or expansion of schemes to withdraw labour supply. Beyond these defensive objectives, structural policies should include a review of social protection systems with the emphasis on the prevention of persistent unemployment and the promotion of a longer work life. Further labour market reform in line with a flexicurity-based approach may also help avoid the experiences of past crises when hysteresis effects led to sustained period of very high unemployment and the permanent exclusion of some from the labour force. Product market reforms in line with the priorities of the Lisbon strategy (implementation of the single market programme especially in the area of services, measures to reduce administrative burden and to promote R&D and innovation) will also be key to raising productivity and creating new employment opportunities. The transition to a low-carbon economy should be pursued through the integration of environmental objectives and instruments in structural policy choices, notably taxation. In all these areas, policies that carry a low budgetary cost should be prioritised.

2.3. Crisis prevention

A broad consensus is emerging that the ultimate causes of the crisis reside in the functioning of financial markets as well as macroeconomic developments. Before the crisis broke there was a strong belief that macroeconomic instability had been eradicated. Low and stable inflation with sustained economic growth (the Great Moderation) were deemed to be lasting features of the developed economies. It was not sufficiently appreciated that this owed much to the global disinflation associated with the favourable supply conditions stemming from the integration of surplus labour of the emerging economies, in

particular in China, into the world economy. This prompted accommodative monetary and fiscal policies. Buoyant financial conditions also had microeconomic roots and these tended to interact with the favourable macroeconomic environment. The list of contributing factors is long, including the development of complex – but poorly supervised – financial products and excessive short-term risk-taking.

Crisis prevention policies should tackle these deficiencies in order to avoid repetition in the future. There are again agendas for financial, macroeconomic and structural policies:

- *Financial policies.* The agenda for regulation and supervision of financial markets in the EU is vast. A number of initiatives have been taken already, while in some areas major efforts are still needed. Action plans have been put forward by the EU to strengthen the regulatory framework in line with the G20 regulatory agenda. With the majority of financial assets held by cross-border banks, an ambitious reform of the European system of supervision, based on the recommendations made by the High-Level Group chaired by Mr Jacques de Larosière, is under discussion. Initiatives to achieve better remuneration policies, regulatory coverage of hedge funds and private equity funds are being considered but have yet to be legislated. In many other areas progress is lagging. Regulation to ensure that enough provisions and capital be put aside to cope with difficult times needs to be developed, with accounting frameworks to evolve in the same direction. A certain degree of commonality and consistency across the rule books in Member States is important and a single regulatory rule book, as soon as feasible, desirable. It is essential that a robust and effective bank stabilisation and resolution framework is developed to govern what happens when supervision fails, including effective deposit protection. Consistency and coherence across the EU in dealing with problems in such institutions is a key requisite of a much improved operational and regulatory framework within the EU.
- *Macroeconomic policies.* Governments in many EU Member States ran a relatively

accommodative fiscal policy in the 'good times' that preceded the crisis. Although this cannot be seen as the main culprit of the crisis, such behaviour limits the fiscal room for manoeuvre to respond to the crisis and can be a factor in producing a future one – by undermining the longer-term sustainability of public finances in the face of aging populations. Policy agendas to prevent such behaviour should thus be prominent, and call for a stronger coordinating role for the EU alongside the adoption of credible national medium-term frameworks. Intra-area adjustment in the Economic and Monetary Union (which constitutes two-thirds of the EU) will need to become smoother in order to prevent imbalances and the associated vulnerabilities from building up. This reinforces earlier calls, such as in the Commission's EMU@10 report (European Commission, 2008a), to broaden and deepen the EU surveillance to include intra-area competitiveness positions.

- *Structural policies.* Structural reform is among the most powerful crisis prevention policies in the longer run. By boosting potential growth and productivity it eases the fiscal burden, facilitates deleveraging and balance sheet restructuring, improves the political economy conditions for correcting cross-country imbalances, makes income redistribution issues less onerous and eases the terms of the inflation-output trade-off. Further financial development and integration can help to improve the effectiveness of and the political incentives for structural reform.

3. A STRONG CALL ON EU COORDINATION

The rationale for EU coordination of policy in the face of the financial crisis is strong at all three stages – control and mitigation, resolution and prevention:

- At the *crisis control and mitigation* stage, EU policy makers became acutely aware that financial assistance by home countries of their financial institutions and unilateral extensions of deposit guarantees entail large and potentially disrupting spillover effects. This led to emergency summits of the European Council

at the Heads of State Level in the autumn of 2008 – for the first time in history also of the Eurogroup – to coordinate these moves. The Commission's role at that stage was to provide guidance so as to ensure that financial rescues attain their objectives with minimal competition distortions and negative spillovers. Fiscal stimulus also has cross-border spillover effects, through trade and financial markets. Spillover effects are even stronger in the euro area via the transmission of monetary policy responses. The EERP adopted in November 2008, which has defined an effective framework for coordination of fiscal stimulus and crisis control policies at large, was motivated by the recognition of these spillovers.

- At the *crisis resolution* stage a coordinated approach is necessary to ensure an orderly exit of crisis control policies across Member States. It would not be envisaged that all Member State governments exit at the same time (as this would be dictated by the national specific circumstances). But it would be important that state aid for financial institutions (or other severely affected industries) not persist for longer than is necessary in view of its implications for competition and the functioning of the EU Single Market. National strategies for a return to fiscal sustainability should be coordinated as well, for which a framework exists in the form of the Stability and Growth Pact which was designed to tackle spillover risks from the outset. The rationales for the coordination of structural policies have been spelled out in the Lisbon Strategy and apply also to the exits from temporary intervention in product and labour markets in the face of the crisis.
- At the *crisis prevention* stage the rationale for EU coordination is rather straightforward in view of the high degree of financial and economic integration. For example, regulatory reform geared to crisis prevention, if not coordinated, can lead to regulatory arbitrage that will affect location choices of institutions and may change the direction of international capital flows. Moreover, with many financial institutions operating cross border there is a

clear case for exchange of information and burden sharing in case of defaults.

The financial crisis has clearly strengthened the case for economic policy coordination in the EU. By coordinating their crisis policies Member States heighten the credibility of the measures taken, and thus help restore confidence and support the recovery in the short term. Coordination can also be crucial to fend off protectionism and thus serves as a safeguard of the Single Market. Moreover, coordination is necessary to ensure a smooth functioning of the euro area where spillovers of national policies are particularly strong. And coordination provides incentives at the national level to implement growth friendly economic policies and to orchestrate a return to fiscal sustainability. Last but not least, coordination of external policies can contribute to a more rapid global solution of the financial crisis and global recovery.

EU frameworks for coordination already exist in many areas and could be developed further in some. In several areas the EU has a direct responsibility and thus is the highest authority in its jurisdiction. This is the case for notably monetary policy in the euro area, competition policy and trade negotiations in the framework of the DOHA Round. This is now proving more useful than ever. In other areas, 'bottom-up' EU coordination frameworks have been developed and should be exploited to the full.

The pursuit of the regulatory and supervisory agenda implies the set-up of a new EU coordination framework which was long overdue in view of the integration of financial systems. An important framework for coordination of fiscal policies exists under the aegis of the Stability and Growth Pact. The revamped Lisbon strategy should serve as the main framework for coordination of structural policies in the EU. The balance of payment assistance provided by the EU is another area where a coordination framework has been established recently, and which could be exploited also for the coordination of policies in the pursuit of economic convergence.

At the global level, finally, the EU can offer a framework for the coordination of positions in e.g. the G20 or the IMF. With the US adopting its own exit strategy, pressure to raise demand elsewhere will be mounting. The adjustment requires that emerging countries such as China reduce their national saving surplus and changed their exchange rate policy. The EU will be more effective if it also considers how policies can contribute to more balanced growth worldwide, by considering bolstering progress with structural reforms so as to raise potential output. In addition, the EU would facilitate the pursuit of this agenda by leveraging the euro and participating on the basis of a single position.

Part I

Anatomy of the crisis

1. ROOT CAUSES OF THE CRISIS

1.1. INTRODUCTION

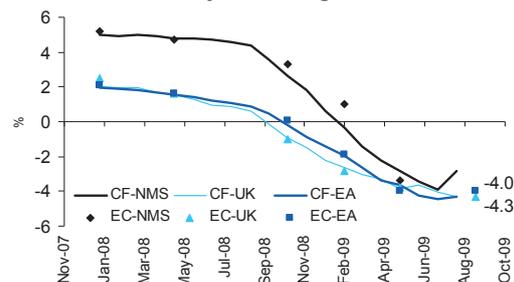
The depth and breath of the current global financial crisis is unprecedented in post-war economic history. It has several features in common with similar financial-stress driven crisis episodes. It was preceded by relatively long period of rapid credit growth, low risk premiums, abundant availability of liquidity, strong leveraging, soaring asset prices and the development of bubbles in the real estate sector. Stretched leveraged positions and maturity mismatches rendered financial institutions very vulnerable to corrections in asset markets, deteriorating loan performance and disturbances in the wholesale funding markets. Such episodes have happened before and the examples are abundant (e.g. Japan and the Nordic countries in the early 1990s, the Asian crisis in the late-1990s). But the key difference between these earlier episodes and the current crisis is its global dimension.

When the crisis broke in the late summer of 2007, uncertainty among banks about the creditworthiness of their counterparts evaporated as they had heavily invested in often very complex and opaque and overpriced financial products. As a result, the interbank market virtually closed and risk premiums on interbank loans soared. Banks faced a serious liquidity problem, as they experienced major difficulties to rollover their short-term debt. At that stage, policymakers still perceived the crisis primarily as a liquidity problem. Concerns over the solvency of individual financial institutions also emerged, but systemic collapse was deemed unlikely. It was also widely believed that the European economy, unlike the US economy, would be largely immune to the financial turbulence. This belief was fed by perceptions that the real economy, though slowing, was thriving on strong fundamentals such as rapid export growth and sound financial positions of households and businesses.

These perceptions dramatically changed in September 2008, associated with the rescue of Fannie Mae and Freddy Mac, the bankruptcy of Lehman Brothers and fears of the insurance giant AIG (which was eventually bailed out) taking down major US and EU financial institutions in its

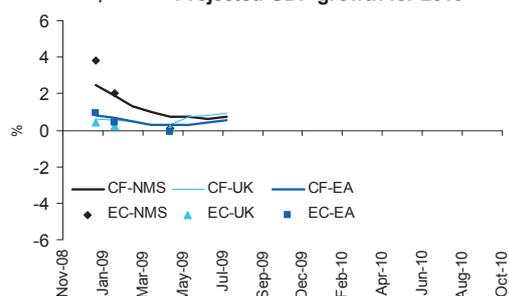
wake. Panic broke in stock markets, market valuations of financial institutions evaporated, investors rushed for the few safe havens that were seen to be left (e.g. sovereign bonds), and complete meltdown of the financial system became a genuine threat. The crisis thus began to feed onto itself, with banks forced to restrain credit, economic activity plummeting, loan books deteriorating, banks cutting down credit further, and so on. The downturn in asset markets snowballed rapidly across the world. As trade credit became scarce and expensive, world trade plummeted and industrial firms saw their sales drop and inventories pile up. Confidence of both consumers and businesses fell to unprecedented lows.

Graph I.1.1: Projected GDP growth for 2009



Sources: European Commission, Consensus Forecasts

Graph I.1.2: Projected GDP growth for 2010



Sources: European Commission, Consensus Forecasts

This set chain of events set the scene for the deepest recession in Europe since the 1930s. Projections for economic growth were revised downward at a record pace (Graphs I.1.1 and I.1.2). Although the contraction now seems to have bottomed, GDP is projected to fall in 2009 by the order of 4% in the euro area and the European Union as whole – with a modest pick up in activity expected in 2010.

The situation would undoubtedly have been much more serious, had central banks, governments and supra-national authorities, in Europe and elsewhere, not responded forcefully (see Part III of this report). Policy interest rates have been cut sharply, banks have almost unlimited access to lender-of-last-resort facilities with their central banks, whose balance sheets expanded massively, and have been granted new capital or guarantees from their governments. Guarantees for savings deposits have been introduced or raised, and governments provided substantial fiscal stimulus. These actions give, however, rise to new challenges, notably the need to orchestrate a coordinated exit from the policy stimulus in the years ahead, along with the need to establish new EU and global frameworks for the prevention and resolution of financial crises and the management of systemic risk (see Part III).

1.2. A CHRONOLOGY OF THE MAIN EVENTS

The heavy exposure of a number of EU countries to the US subprime problem was clearly revealed in the summer of 2007 when BNP Paribas froze redemptions for three investment funds, citing its inability to value structured products.⁽¹⁾ As a result, counterparty risk between banks increased dramatically, as reflected in soaring rates charged by banks to each other for short-term loans (as indicated by the spreads -- see Graph I.1.3).⁽²⁾ At

that point most observers were not yet alerted that systemic crisis would be a threat, but this began to change in the spring of 2008 with the failures of Bear Stearns in the United States and the European banks Northern Rock and Landesbank Sachsen. About half a year later, the list of (almost) failed banks had grown long enough to ring the alarm bells that systemic meltdown was around the corner: Lehman Brothers, Fannie Mae and Freddie Mac, AIG, Washington Mutual, Wachovia, Fortis, the banks of Iceland, Bradford & Bingley, Dexia, ABN-AMRO and Hypo Real Estate. The damage would have been devastating had it not been for the numerous rescue operations of governments.

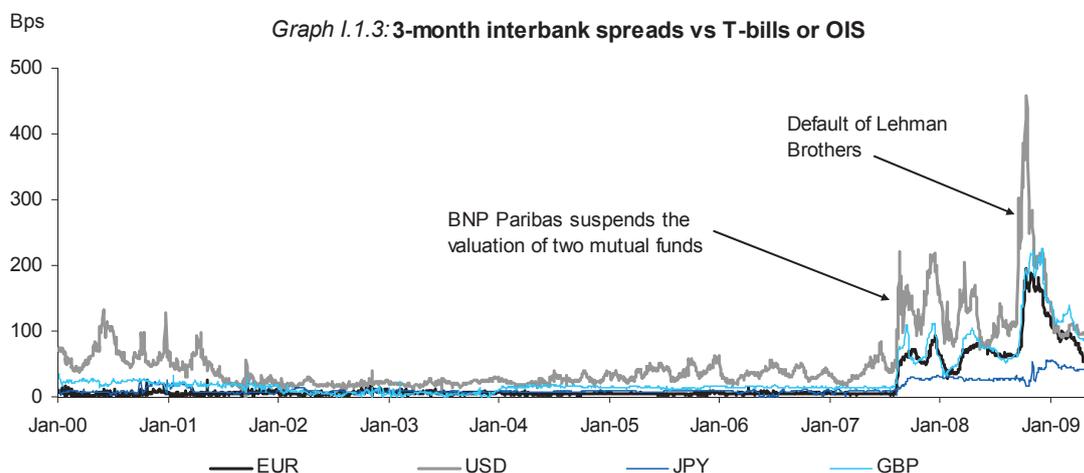
When in September 2008 Lehman Brothers had filed for bankruptcy the TED spreads jumped to an unprecedented high. This made investors even more wary about the risk in bank portfolios, and it became more difficult for banks to raise capital via deposits and shares. Institutions seen at risk could no longer finance themselves and had to sell assets at 'fire sale prices' and restrict their lending. The prices of similar assets fell and this reduced capital and lending further, and so on. An adverse 'feedback loop' set in, whereby the economic downturn increased the credit risk, thus eroding bank capital further.

The main response of the major central banks – in the United States as well as in Europe (see Chapter III.1 for further detail) – has been to cut official

⁽¹⁾ See Brunnermeier (2009).

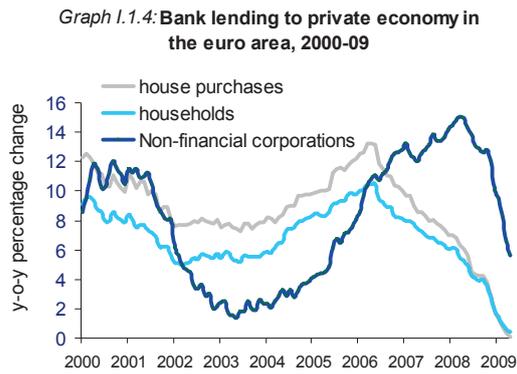
⁽²⁾ Credit default swaps, the insurance premium on banks' portfolios, soared in concert. The bulk of this rise can be

attributed to a common systemic factor (see for evidence Eichengreen et al. 2009).



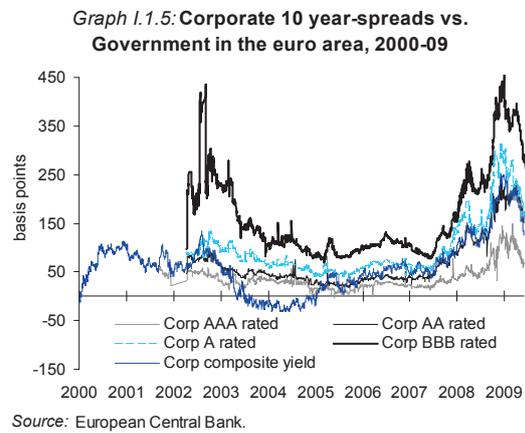
Sources: Reuters EcoWin.

interest rates to historical lows so as to contain funding cost of banks. They also provided additional liquidity against collateral in order to ensure that financial institutions do not need to resort to fire sales. These measures, which have resulted in a massive expansion of central banks' balance sheets, have been largely successful as three-months interbank spreads came down from their highs in the autumn of 2008. However, bank lending to the non-financial corporate sector continued to taper off (Graph I.1.4). Credit stocks have, so far, not contracted, but this may merely reflect that corporate borrowers have been forced to maximise the use of existing bank credit lines as their access to capital markets was virtually cut off (risk spreads on corporate bonds have soared, see Graph I.1.5).



Governments soon discovered that the provision of liquidity, while essential, was not sufficient to restore a normal functioning of the banking system since there was also a deeper problem of (potential) insolvency associated with under-capitalisation. The write-downs of banks are estimated to be over 300 billion US dollars in the United Kingdom (over 10% of GDP) and in the range of over EUR 500 to 800 billion (up to 10% of GDP) in the euro area (see Box I.1.1). In October 2008, in Washington and Paris, major countries agreed to put in place financial programmes to ensure capital losses of banks would be counteracted. Governments initially proceeded to provide new capital or guarantees on toxic assets. Subsequently the focus shifted to asset relief, with toxic assets exchanged for cash or safe assets such as government bonds. The price of the toxic assets was generally fixed between the fire sales price and the price at maturity to give

institutions incentives to sell to the government while giving taxpayers a reasonable expectation that they will benefit in the long run. Financial institutions which at the (new) market prices of toxic assets would be insolvent were recapitalised by the government. All these measures were aiming at keeping financial institutions afloat and providing them with the necessary breathing space to prevent a disorderly deleveraging. The verdict as to whether these programmes are sufficient is mixed (Chapter III.1), but the order of asset relief provided seem to be roughly in line with banks' needs (see again Box I.1.1).



1.3. GLOBAL FORCES BEHIND THE CRISIS

The proximate cause of the financial crisis is the bursting of the property bubble in the United States and the ensuing contamination of balance sheets of financial institutions around the world. But this observation does not explain why a property bubble developed in the first place and why its bursting has had such a devastating impact also in Europe. One needs to consider the factors that resulted in excessive leveraged positions, both in the United States and in Europe. These comprise both macroeconomic and developments in the functioning of financial markets. ⁽³⁾

⁽³⁾ See for instance Blanchard (2009), Bosworth and Flaaen (2009), Furceri and Mourougane (2009), Gaspar and Schinasi (2009) and Haugh et al. (2009).

Box 1.1.1: Estimates of financial market losses

Estimates of financial sector losses are essential to inform policymakers about the severity of financial sector distress and the possible costs of rescue packages. There are several estimates quantifying the impact of the crisis on the financial sector, most recently those by the Federal Reserve in the framework of its Supervisory Capital Assessment Program, widely referred to as the "stress test". Using different methodologies, these estimates generally cover write-downs on loans and debt securities and are usually referred to as estimates of losses.

The estimated losses during the past one and a half years or so have shown a steep increase, reflecting the uncertainty regarding the nature and the extent of the crisis. IMF (2008a) and Hatzius (2008) estimated the losses to US banks to about USD 945 in April 2008 and up to USD 868 million in September 2008, respectively. This is at the lower end of predictions by RGE monitor in February the same year which saw losses in the range of USD 1 to 2 billion. The April 2009 IMF Global Financial Stability Report (IMF 2009a) puts loan and securities losses originated in Europe (euro area and UK) at USD 1193 billion and those originated in the United States at USD 2712 billion. However, the *incidence* of these losses by region is more relevant in order to judge the necessity and the extent of policy intervention. The IMF estimates write-downs of USD 316 billion for banks in the United Kingdom and USD 1109 billion (EUR 834 billion) for the euro area. The ECB's loss estimate for the euro area at EUR 488 billion is substantially lower than this IMF estimate, with the discrepancy largely due to the different assumptions about banks' losses on debt securities.

Bank level estimates can be used in stress tests to evaluate capital adequacy of individual institutions and the banking sector at large. For example the Fed's Supervisory Capital Assessment Program found that 10 of the 19 banks examined needed to raise capital of USD 75 billion. Loss estimates can also inform policymakers about the effects of losses on bank lending and the magnitude of intervention needed to pre-empt this. Such calculations require additional assumptions about the capital banks can raise or generate through their profits as well as the amount of deleveraging needed.

As an illustration the table below presents four scenarios that differ in their hypothetical recapitalisation rate and their deleveraging effects. The IMF and ECB estimates of total write-downs for euro area banks are taken as starting points. Net write-downs are calculated, which reflect losses that are not likely to be covered either by raising capital or by tax deductions. Depending on the scenario net losses range between 219 and 406 billion EUR using the IMF estimate, and roughly half of that based on the ECB estimate. Such magnitudes would imply balance sheets decreases amounting to 7.3% in the mildest scenario and 30.8% in the worst case scenario (period between August 2007 and end of 2010). Capital recovery rates and deleveraging play a crucial role in determining the magnitude of the balance sheet effect. Governments' capital injections in the euro area have been broadly in line with the magnitude of these illustrative balance sheet effects, committing 226 billion EUR, half of which has been spent (see Chapter III.1).

Table 1:

Balance-sheet effects of write-downs in the euro area*

Scenario	(1)	(2)	(3)	(4)
Capital	1760	1760	1760	1760
Assets	31538	31538	31538	31538
Estimated write-downs				
IMF	834	834	834	834
ECB	488	488	488	488
Recapitalisation rate	65%	65%	50%	35%
Net write-downs				
IMF	219	219	313	407
ECB	128	128	183	238
Decrease in balance sheet (leverage constant)				
IMF	-12.4%	-12.4%	-17.8%	-23.1%
ECB	-7.3%	-7.3%	-10.4%	-13.5%
Change in leverage ratio				
	0%	-5%	-5%	-10%
Decrease in balance sheet (with deleveraging)				
IMF	-12.4%	-16.8%	-21.9%	-30.8%
ECB	-7.3%	-11.9%	-14.9%	-22.2%

* Billion EUR, EUR/USD exchange rate 1.33.

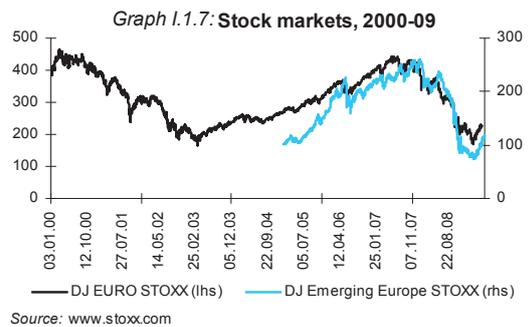
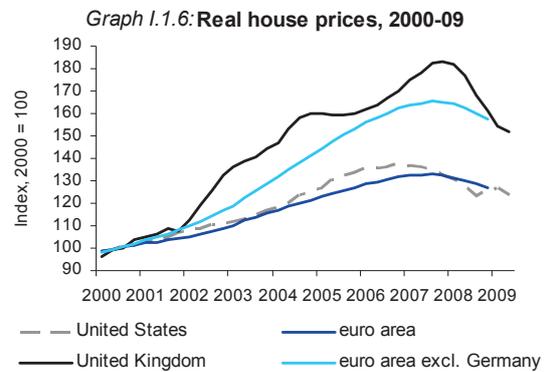
Source: European Commission

As noted, most major financial crises in the past were preceded by a sustained period of buoyant credit growth and low risk premiums, and this time is no exception. Rampant optimism was fuelled by a belief that macroeconomic instability was eradicated. The 'Great Moderation', with low and stable inflation and sustained growth, was conducive to a perception of low risk and high return on capital. In part these developments were underpinned by genuine structural changes in the economic environment, including growing opportunities for international risk sharing, greater stability in policy making and a greater share of (less cyclical) services in economic activity.

Persistent global imbalances also played an important role. The net saving surpluses of China, Japan and the oil producing economies kept bond yields low in the United States, whose deep and liquid capital market attracted the associated capital flows. And notwithstanding rising commodity prices, inflation was muted by favourable supply conditions associated with a strong expansion in labour transferred into the export sector out of rural employment in the emerging market economies (notably China). This enabled US monetary policy to be accommodative amid economic boom conditions. In addition, it may have been kept too loose too long in the wake of the dotcom slump, with the federal funds rate persistently below the 'Taylor rate', i.e. the level consistent with a neutral monetary policy stance (Taylor 2009). Monetary policy in Japan was also accommodative as it struggled with the aftermath of its late-1980s 'bubble economy', which entailed so-called 'carry trades' (loans in Japan invested in financial products abroad). This contributed to rapid increases in asset prices, notably of stocks and real estate – not only in the United States but also in Europe (Graphs I.1.6 and I.1.7).

A priori it may not be obvious that excess global liquidity would lead to rapid increases in asset prices also in Europe, but in a world with open capital accounts this is unavoidable. To sum up, there are three main transmission channels. First, upward pressure on European exchange rates vis-à-vis the US dollar and currencies with de facto pegs to the US dollar (which includes *inter alia* the Chinese currency and up to 2004 also the Japanese currency), reduced imported inflation and allowed an easier stance of monetary policy. Second, so-called "carry trades" whereby investors

borrow in currencies with low interest rates and invest in higher yielding currencies while mostly disregarding exchange rate risk, implied the spillover of global liquidity in European financial markets. ⁽⁴⁾ Third, and perhaps most importantly, large capital flows made possible by the integration of financial markets were diverted towards real estate markets in several countries, notably those that saw rapid increases in per capita income from comparatively low initial levels. So it is not surprising that money stocks and real estate prices soared in tandem also in Europe, without entailing any upward tendency in inflation of consumer prices to speak of. ⁽⁵⁾



Aside from the issue whether US monetary policy in the run up to the crisis was too loose relative to the buoyancy of economic activity, there is a broader issue as to whether monetary policy should lean against asset price growth so as to prevent bubble formation. Monetary policy could be blamed – at both sides of the Atlantic – for

⁽⁴⁾ See for empirical evidence confirming these two channels Berger and Hajes (2009).
⁽⁵⁾ See for empirical evidence Boone and Van den Noord (2008) and Dreger and Wolters (2009).

acting too narrowly and not reacting sufficiently strongly to indications of growing financial vulnerability. The same holds true for fiscal policy, which may be too narrowly focused on the regular business cycle as opposed to the asset cycle (see Chapter III.1). Stronger emphasis of macroeconomic policy making on macro-financial risk could thus provide stabilisation benefits. This might require explicit concerns for macro-financial stability to be included in central banks' mandates. Macro-prudential tools could potentially help tackle problems in financial markets and might help limit the need for very aggressive monetary policy reactions.⁽⁶⁾

Buoyant financial conditions also had micro-economic roots and the list of contributing factors is long. The 'originate and distribute' model, whereby loans were extended and subsequently packaged ('securitised') and sold in the market, meant that the creditworthiness of the borrower was no longer assessed by the originator of the loan. Moreover, technological change allowed the development of new complex financial products backed by mortgage securities, and credit rating agencies often misjudged the risk associated with these new instruments and attributed unduly triple-A ratings. As a result, risk inherent to these products was underestimated which made them look more attractive for investors than warranted. Credit rating agencies were also susceptible to conflicts of interests as they help developing new products and then rate them, both for a fee. Meanwhile compensation schemes in banks encouraged excessive short-term risk-taking while ignoring the longer term consequences of their actions. In addition, banks investing in the new products often removed them from their balance sheet to Special Purpose Vehicles (SPVs) so to free up capital. The SPVs in turn were financed with short-term money market loans, which entailed the risk of maturity mismatches. And while the banks nominally had freed up capital by removing assets off balance sheet, they had provided credit guarantees to their SPV's. Weaknesses in supervision and regulation led to a neglect of these off-balance sheet activities in many countries. In addition, in part due to a merger and acquisition frenzy, banks had grown enormously in some cases and were deemed to

have become too big and too interconnected to fail, which added to moral hazard.

As a result of these macroeconomic and micro-economic developments financial institutions were induced to finance their portfolios with less and less capital. The result was a combination of inflation of asset prices and an underlying (but obscured by securitisation and credit default swaps) deterioration of credit quality. With all parties buying on credit, all also found themselves making capital gains, which reinforced the process. A bubble formed in a range of intertwined asset markets, including the housing market and the market for mortgage backed securities. The large American investment banks attained leverage ratios of 20 to 30, but some large European banks were even more highly leveraged. Leveraging had become attractive also because credit default swaps, which provide insurance against credit default, were clearly underpriced.

With leverage so high, a decline in portfolio values by only a couple of per cents can suffice to render a financial institution insolvent. Moreover, the mismatch between the generally longer maturity of portfolios and the short maturity of money market loans risked leading to acute liquidity shortages if supply in money markets stalled. Special Purpose Vehicles (SPVs) then called on the guaranteed credit lines with their originating banks, which then ran into liquidity problems too. The cost of credit default swaps also rapidly increased. This explains how problems in a small corner of US financial markets (subprime mortgages accounted for only 3% of US financial assets) could infect the entire global banking system and set off an explosive spiral of falling asset prices and bank losses.

⁽⁶⁾ See for a detailed discussion IMF (2009b).

2. THE CRISIS FROM A HISTORICAL PERSPECTIVE

2.1. INTRODUCTION

A perfect storm. This is one metaphor used to describe the present global crisis. No other economic downturn after World War II has been as severe as today's recession. Although a large number of crises have occurred in recent decades around the globe, almost all of them have remained national or regional events – without a global impact.

So this time is different - the crisis of today has no recent match.⁽⁷⁾ To find a downturn of similar depth and extent, the record of the 1930s has to be evoked. Actually, a new interest in the depression of the 1930s, commonly classified as the Great Depression, has emerged as a result of today's crisis. By now, it is commonly used as a benchmark for assessing the current global downturn.

The purpose of this chapter is to give a historical perspective to the present crisis. In the first section, the similarities and differences between the 1930s depression and the present crisis concerning the geographical origins, causes, duration and impact of the two crises are outlined. As both depressions were global, the transmission mechanism and the channels propagating the crisis across countries are analysed. Next, the similarities and differences in the policy responses then and now are mapped. Finally, a set of policy lessons for today are extracted from the past.

A word a warning should be issued before making comparisons across time. Although the statistical data from previous epochs are far from complete, historical national accounts research and the statistics compiled by the League of Nations offer comprehensive evidence for this chapter.⁽⁸⁾ Of course, any historical comparisons should be treated with caution. There are fundamental differences with earlier epochs concerning the structure of the economy, degree of globalisation, nature of financial innovation, state of technology, institutions, economic thinking and policies.

⁽⁷⁾ The present crisis has not yet got a commonly accepted name. The Great Recession has been proposed. It remains to be seen if this term will catch on.

⁽⁸⁾ See for example Smits, Woltjer and Ma (2009).

Paying due attention to them is important when drawing lessons.

2.2. GREAT CRISES IN THE PAST

The current crisis is the deepest, most synchronous across countries and most global one since the Great Depression of the 1930s. It marks the return of macroeconomic fluctuations of an amplitude not seen since the interwar period and has sparked renewed interest in the experience of the Great Depression.⁽⁹⁾ While the remainder of this contribution emphasises comparisons with the 1930s, it is also instructive to note that in some ways the current crisis also resembles the leverage crises of the classical pre-World War I gold standard in 1873, 1893 and in particular the 1907 financial panic.

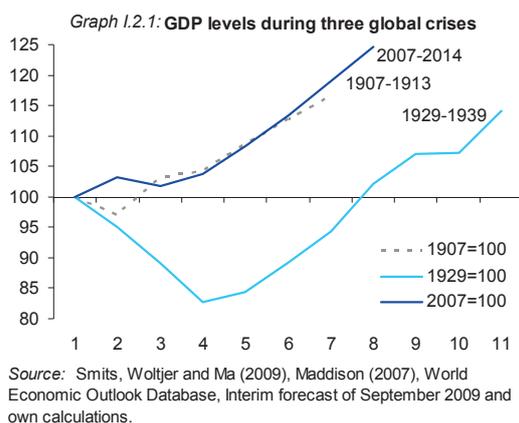
There are clear similarities between the 1907-08, 1929-35 and 2007-2009 crises in terms of initial conditions and geographical origin. They all occurred after a sustained boom, characterised by money and credit expansion, rising asset prices and high-running investor confidence and over-optimistic risk-taking. All were triggered in first instance by events in the US, although the underlying causes and imbalances were more complex and more global, and all spread internationally to deeply affect the world economy.

In all three episodes, distress in the financial sectors with worldwide repercussions was a key transmission channel to the real economy, alongside sharp contractions in world trade. And in each of the cases, the financial distress at the root of the crisis was followed by a deep recession in the real economy.

The 1907 financial panic bears some resemblance to the recent crisis although some countries in Europe managed to largely avoid financial distress. This concerns the build-up of credit and rise in asset prices in the run-up to the crisis, driven

⁽⁹⁾ See for example Eichengreen and O'Rourke (2009), Helbling (2009) and Romer (2009). The literature on the Great Depression is immense. For the US record see for example Bernanke (2000), Bordo, Goldin and White (1998) and chapter 7 in Friedman and Schwartz (1963). A global view is painted in Eichengreen (1992) and James (2001). A recent short survey is Garside (2007).

by an insufficiently supervised financial sector reminiscent of the largely uncontrolled expansion of the 'shadow' banking system in recent years, and the important role of liquidity scarcity at the peak of the panic. Also in 1907, in the heyday of the classical gold standard and the first period of globalisation, countries were closely connected through international trade and finance. Hence, events in US financial markets were transmitted rapidly to other economies. World trade and capital flows were affected negatively, and the world economy entered a sharp but relatively short-lived recession, followed by a strong recovery. See Graph I.2.1 comparing the crisis of 1907-08, the Great Depression of the 1930s and the present crisis.

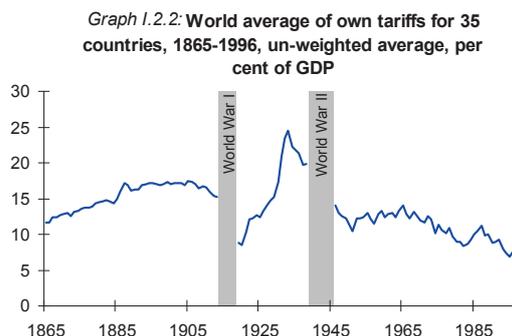


In the run up to the crisis and depression in the 1930s, several of these characteristics were shared. However, there were also key differences, notably as regards the lesser degree of financial and trade integration at the outset. By the late 1920s, the world economy had not overcome the enormous disruptions and destruction of trade and financial linkages resulting from the First World War, even though the maturing of technologies such as electricity and the combustion engine had led to structural transformations and a strong boost to productivity.⁽¹⁰⁾

The degree of global economic integration and the size of international capital flows had fallen back significantly. The gradual return to a gold-exchange standard in the 1920s after the First World War had been insufficient to restore the credibility and the functioning of the international

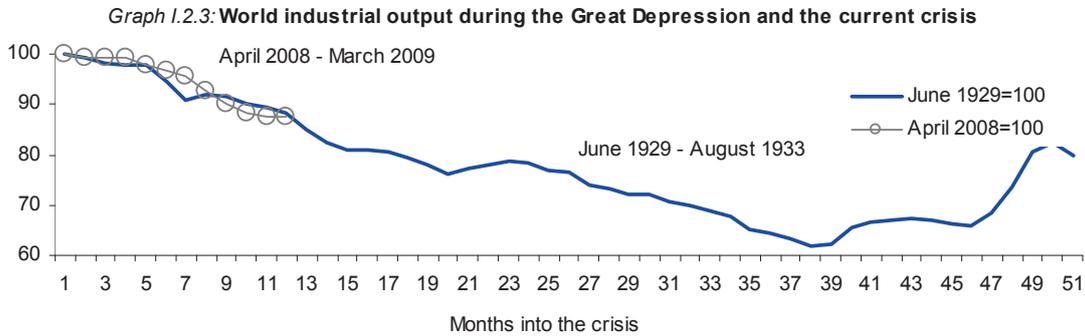
financial order to pre-1914 conditions (see Box I.2.1). The controversies surrounding the German reparations as set out in the Versailles Treaty and modified in the 1920s were a main source of international and financial tensions.

The recession of the early 1930s deepened dramatically due to massive failures of banks in the US and Europe and inadequate policy responses. A rise in the extent of protectionism (Graph I.2.2) and asymmetric exchange rate adjustments wrecked havoc on world trade (Graphs I.2.4 and I.2.5) and international capital flows (Box I.2.1). Through such multiple transmission mechanisms, the crisis, which first emerged in the United States in 1929-30, turned into a global depression, with several consecutive years of sharp losses in GDP and industrial production before stabilisation and fragile recovery set in around 1933 (Graphs I.2.1 and I.2.3).

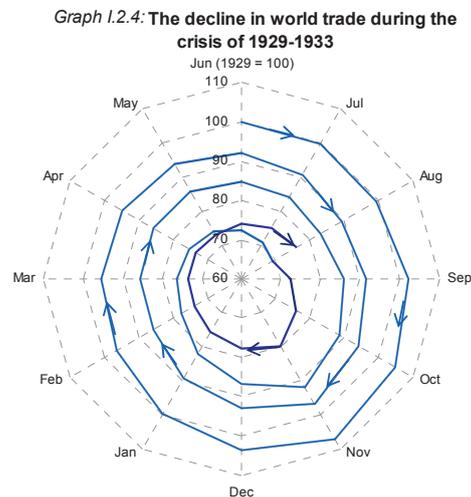


High frequency statistics suggest that the unfolding of the recession in the 1930s was somewhat more stretched-out and its spreading across major economies slower compared to the current crisis. Today's collapse in trade, the fall in asset prices and the downturn in the real economy are fast and synchronous to a degree with few historical parallels.

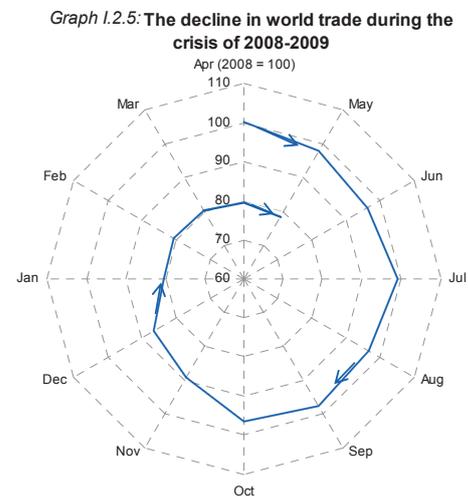
⁽¹⁰⁾ Albers and De Jong (1994).



Source: League of Nations Monthly Bulletin of Statistics from Eichengreen and O'Rourke (2009) and ECFIN database.



Notes: Light blue from Jun-1929 to Jul-1932 (minimum Jun-1929); dark blue from Aug-1932. Source: League of Nations Monthly Bulletin of Statistics from Eichengreen and O'Rourke (2009).



Notes: Light blue from Jun-1929 to Jul-1932 (minimum Jun-1929); dark blue from Aug-1932. Source: League of Nations Monthly Bulletin of Statistics from Eichengreen and O'Rourke (2009).

Based on the latest indicators and forecasts, the negative impact of the Great Depression appears more severe and longer lasting than the impact of the present crisis (Graph I.2.1). Also, partly due to the political context, the degree of decoupling in some regions of the world (parts of Asia, the Soviet Union, and South America to a degree) was larger in the 1930s.⁽¹¹⁾ Perhaps surprisingly, whereas in the 1930s core and peripheral countries in the world economy tended to be affected to a similar order of magnitude, in the current crisis, the most negative impacts on the real economy seem to occur not necessarily in the countries at the origin of the crisis, but in some emerging economies whose growth has been highly dependent on inflows of foreign capital, emerging

⁽¹¹⁾ Presently, only a few large countries with large buffers (notably China), manage to partly decouple.

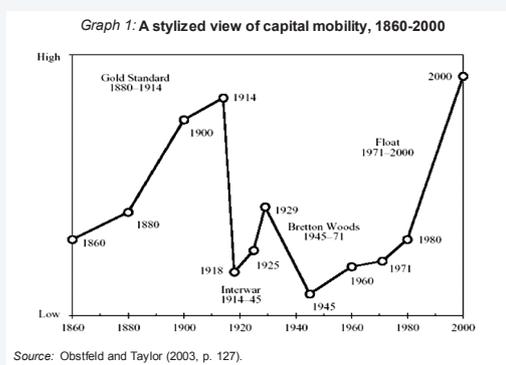
Europe today being the best example (see Chapter II.1).

Another crucial difference is that the 1930s were characterised by strong and persistent decreases in the overall price level, causing a sharp deflationary impulse predicated by the restrictive policies pursued. Despite a strong fall in inflationary pressures, such a deflationary shock is likely to be avoided in the current crisis.

Finally, the 1930s witnessed mass unemployment to an unprecedented scale, both in the US where the unemployment rate approached 38% in 1933 and in Europe where it reached as much as 43% in Germany and more than 30% in some other countries. Despite the further increases in unemployment forecast for 2010 (see Chapter II.3), it appears that a similar increase in unemployment and fall in resource utilisation can

Box I.2.1: Capital flows and the crisis of 1929-1933 and 2008-2009

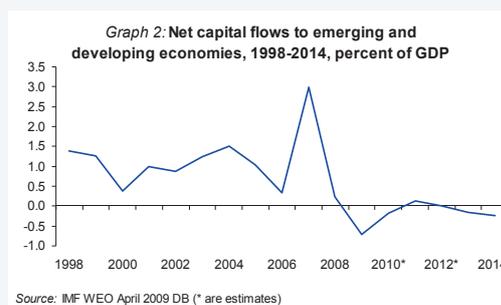
Capital mobility was high and rising during the classical gold standard prior to 1914. An international capital market with its centre in London flourished during this first period of globalisation. See Graph 1 which presents a stylized view of the modern history of capital mobility as full data on capital flows are difficult to find.



World War I interrupted international capital flows severely. By 1929 the international capital market had not returned to the pre-war levels. The Great Depression in the 1930s contributed to a decline in cross-border capital flows as countries took measures to reduce capital outflows to protect their foreign reserves. Following the 1931 currency crisis, Germany and Hungary for example banned capital outflows and imposed controls on payments for imports (Eichengreen and Irwin, 2009).

As a result the international capital market collapsed during the Great Depression. This was one channel through which the depression spread across the world.

During the present crisis there has hardly been any government intervention to arrest the flow of capital across borders. However, the contraction of demand and output has brought about a sharp decline in international capital flows. A very similar picture appears concerning net capital flows to emerging and developing countries in Graph 2. Private portfolio investment capital is actually projected to flow out of emerging and developing countries already in 2009.



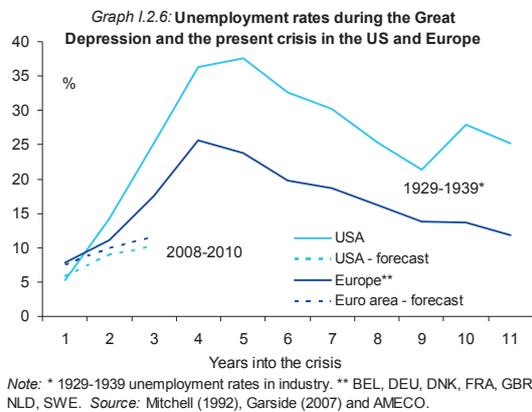
Once the recovery from the present crisis sets in, cross-border capital flows are likely to expand again. However, it remains to be seen if the present crisis will have any long-term effects on international financial integration.

be avoided today due to the workings of automatic stabilisers and the stronger counter-cyclical policies currently pursued on a world wide scale (see Graph I.2.6).

The current downturn is clearly the most severe since the 1930s, but so far less severe in terms of decline of production. As regards the degree of sudden financial stress, and the sharpness of the fall in world trade, asset prices and economic activity, the current crisis has developed faster than during the Great Depression.

As seen from Graphs I.2.4 and I.2.5, the decline in world trade is larger now than in the 1930s.⁽¹²⁾ But despite a sharper initial fall in 2008-2009, stabilisation and recovery promise to be quicker in the current crisis than in the 1930s. If the latest Commission forecasts (European Commission 2009a and 2009b) are broadly confirmed, this will be a crucial difference with the interwar years.

⁽¹²⁾ See Francois and Woerz (2009) for a brief analysis of the present decline in trade.



Still, substantial negative risks surround the outlook. They relate to the risks from the larger degree of financial leverage than in the 1930s, the workout of debt overhangs and the resolution of global imbalances that were among the underlying factors shaping the transmission and depth of the current crisis (see Chapter II.4).

2.3. THE POLICY RESPONSE THEN AND NOW

There is a broad agreement among economists and economic historians that a contractionary macroeconomic policy response was the major factor contributing to the gravity and duration of the global depression in the 1930s. The contractionary policy measures taken by US and European governments in the early 1930s can only be understood by reference to the prevailing policy thinking based on the workings of the gold-exchange standard system of the late 1920s.

Before 1914 the world monetary system was based on gold. The classical gold standard was a period of high growth, stable and low inflation, large movements of capital and labour across borders and exchange rate stability. After World War I, there was an international attempt to restore the gold standard, following the negative experience of high inflation and in some countries hyperinflation across European countries during the war and immediately after the war. By 1929, more than 40 countries were back on the gold. However, the interwar reconstructed gold-exchange standard never performed as smoothly as the classical gold standard due to imbalances in the world economy caused by the First World War and the contractionary behaviour of France and the

US – gold surplus countries, which sterilised gold inflows, in this way forcing a decline in the world money stock.

The defence of the fixed rate to gold was the fundamental element of the ideology of central bankers in Europe. They focused on external stability, protecting gold parities, as their prime policy goal, believing it was not their task to manipulate interest rates to influence domestic economic prosperity. Governments were persistent in their restrictive fiscal stance, reluctant to expand expenditures. In this way, the interwar gold standard became a mechanism to spread and deepen the depression across the world.

The rules of the gold standard forced participating countries to set interest rates according to the rates in the centre and to keep balanced national budgets to maintain a restrictive fiscal stance for fear of losing gold reserves. Thus, when the Federal Reserve Board started to tighten its monetary policy in 1929 - with the aim to constrain the inflationary stock-market speculation, it imposed deflationary pressures on the rest of the world. This policy of the US central bank can be perceived as the origin of the Great Depression.

The main reason why the downturn in economic activity in the US in 1929 turned into a deep recession, first in the United States and then later in the rest of the world, was that the authorities allowed the development of a prolonged crisis in the US banking and financial system by not taking sufficient expansionary measures in due time. The actions of the Federal Reserve System were simply contractionary; making the decline deeper than otherwise would have been the case. The crisis in the US financial system spread eventually to the real economy, contributing to falling production and employment and to deflation, making the crisis in the financial sector deeper via adverse feedback loops. The US crisis spread eventually to the rest of the world through the workings of the gold-exchange standard.

By the summer of 1931, the European economy was under severe stress from falling prices, lack of demand and accelerating unemployment and events in the US. This had a substantial negative impact on the banking system, in particular in Austria and Germany, where banks had close relations with industry. Deflationary pressure,

rising indebtedness and uncertain prospects of manufacturing industry threatened the solvency of many European banks. The collapse of *Creditanstalt* in May 1931 – the biggest bank in Austria – became symbolic of the situation in the banking sector at that time. Germany's commercial banks were soon facing a confidence crisis. The critical situation of the banking sector in Germany spilled over to other countries.

In September 1931 Great Britain was the first country deciding to abandon the gold standard. The value of sterling fell immediately by 30%. Some 15 other countries left the gold standard soon afterwards, mostly the ones with close links with the British economy like Portugal, the Nordic countries and British colonies. Other European countries – Belgium, the Netherlands and France – remained on the gold standard until late 1936. Consequently, it took much longer for them to get out of the recession than for countries that left gold earlier. ⁽¹³⁾

In April 1933, President Roosevelt took the US off the gold standard, paving way for a recovery in the US. The years 1934-36 witnessed remarkable growth of the US economy. However, when a large fiscal stimulus introduced in 1936 was withdrawn in 1937 and monetary policy was tightened for fear of looming inflation, the economic situation worsened dramatically. These policies were soon reversed but this early recourse to restrictive monetary and fiscal policies added two years to the Great Depression in the US.

Another contractionary policy response was the sharp rise in the degree of protection of domestic economies via raised tariffs, the creation of economic blocks, the use of import quotas, exchange controls and bilateral agreements (Graph I.2.2). In June 1930, the US Senate passed the Hawley-Smoot Tariff Act, which raised US import duties to record high levels. This step triggered retaliatory moves in other countries. Even Great Britain – after 85 years of promoting free trade – retreated into protection in the autumn of 1931, forming a trade block with its traditional trade partners.

⁽¹³⁾ Countries that left the gold standard early were better protected against the deflationary impact of the global economy. Thus, their recovery came at an earlier stage. See for example the comparison between the US and the Swedish record in Jonung (1981).

The world average own tariff (unweighted) for 35 countries rose from about 8% in the beginning of 1920s to almost 25% in 1934. Graph I.2.2 demonstrates that the interwar years were remarkably different from the pre-World War I classical gold standard and the post- World War II years.

Turning to the recession of today, the scale and speed of the present expansionary policy response (see Part III) is conceivably the most striking feature distinguishing the current crisis from the Great Depression of the 1930s. Apart from massive liquidity injections into the financial system, several major financial institutions have not been allowed to fail by means of direct recapitalisation or partial nationalisation. All these measures have helped avoid a financial meltdown.

Monetary policy has been extremely expansionary due to swift policy rate cuts across the world and with policy rates now close to zero. This is a major difference to the 1930s when central bank policy responded in a contractionary way during the early 1930s in order to maintain the gold standard world. Thanks to deflation, real rates were very high. In sharp contrast to the 1930s, fiscal policies in the current crisis have been unprecedented expansionary in the US (the Geithner plan), in the EU (the EERP) and in other countries. Budget deficits as a share of GDP and government debt have soared at an extent unmatched in peacetime.

World War II served as the final exit strategy – following the 1937-38 recession - out of the Great Depression - sadly to say. The mobilisation effort brought about full employment not only in the US but throughout the world. Today proper exit strategies have yet to be formulated and implemented (see Chapter III.4). These exit strategies are crucial to preclude a double-dip growth scenario if the stimuli are withdrawn too early on the one hand, like the 1937-38 downturn in the US, and to evade public debt escalation and the return of high inflation if expansionary policies are in place too long on the other.

The weak and often counterproductive policy response during the Great Depression was partly due to the lack of international cooperation and coordination on economic matters. The ability and willingness of governments to act jointly on a multilateral basis on monetary and financial issues

was significantly lower than prior to the First World War.⁽¹⁴⁾ In addition, no consensus existed among the major countries and within the economics profession on the appropriate financial, monetary and fiscal responses to the rapidly spreading depression in the early 1930s.⁽¹⁵⁾

In the interwar period, multilateral institutions for economic cooperation were weak and unsuccessful compared to today. The League of Nations, founded in 1919, and the Bank for International Settlements (BIS), founded in 1930, played no role in dealing with the economic crisis. The lack of international cooperation and international institutions in the 1930s stands in stark contrast to present conditions. Institutions such as the World Trade Organisation (WTO), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the G20 and the European Union are involved in the design of policy measures to reduce the impact of the present crisis. The IMF and the WTO were actually formed after the Second World War as a result of the devastating experience of the interwar period.

Today's international institutions facilitate coordination by monitoring and reporting developments and policies across the world in a comparable way, aided by the gathering and publishing of economic data. Today, policy-makers meet regularly to discuss and form consensus views about appropriate measures, at the same time learning to understand economic interdependence and to appreciate coordination.

Admittedly, in the current crisis, the framework of multilateral institutions has clearly not been able to prevent protectionist measures altogether or to bring about the best coordination regarding macroeconomic stimulus and financial system support measures. Still, the contrast with the Great Depression is striking.

A main difference in the economic and political landscape of Europe between the 1930s and the present crisis is the emergence of close cooperation among countries in Europe as institutionalised in the European Union with a common market and a single European currency, the euro. In a historical perspective, the euro is a unique contribution to the integration process of Europe. There was no organisation like this in the 1930s. Instead the European continent was split up in a large number of countries with failed attempts of policy coordination and with rising nationalistic tension among them. As the depression in the 1930s deepened, the economic balkanisation of Europe increased, leading to devastating economic and political outcomes.

2.4. LESSONS FROM THE PAST

By now, based on the record of the 1930s as summarized above, a set of policy lessons from the 1930s have emerged fairly well supported by a consensus within the economics profession.⁽¹⁶⁾ These lessons are highlighted below. Before summarising them, an important qualification should be made. Today the events during the 1920s and 1930s, covering the depression from its start to its end, are the subject of a considerable research effort. Although researchers do not agree on all aspects, they can look back on the whole process. In contrast, the world is still in the midst of the current global crisis. Although the world economy seems to have bottomed out it is still not clear when and how recovery will take hold. For this reason any comparison between the two crises must remain incomplete. Still, there is much insight to gain by comparing the crisis of today with the evidence from the interwar period. With this caveat in mind, a comparison between today's global crisis and the Great Depression of the 1930s reveals a number of key policy lessons.

Lesson 1. Maintain the financial system – avoid financial meltdown. The record of the 1930s demonstrates that in case of a financial crisis, the financial system should be supported by government actions in order to prevent a collapse

⁽¹⁴⁾ See Eichengreen (1992, p. 8-12) and Eichengreen (1996, p. 34-35).

⁽¹⁵⁾ The subject of economics had not yet developed theories of economic policies to manage depressions. The Great Depression became the source of inspiration for a new branch of economics, macroeconomics, initially based on the work by John Maynard Keynes, later known as the Keynesian revolution in economics.

⁽¹⁶⁾ There is still a substantial academic debate about the causes, consequences and cures of the Great Depression. However, this debate should not prevent us from presenting the main areas of agreement as summarized here.

of the credit allocation mechanism and to maintain public confidence in the banking system. The crisis in the US financial system in the early 1930s spread eventually to the real economy, both at home and abroad, contributing to falling output and employment and to deflation, making the crisis in the financial sector deeper via adverse feedback loops.

Lesson 2. Maintain aggregate demand - avoid deflation. The Great Depression shows that it is crucial to support aggregate demand and avoid deflation by means of expansionary monetary and fiscal policies. The role of monetary policy is to provide ample liquidity to the system by lowering interest rates and use, if needed, unconventional methods once rates are close to zero. Fiscal policies should aim at supporting aggregate demand.⁽¹⁷⁾ Exit timely is crucial: too early exit before the underlying recovery sets in, would create a risk of extending the crisis, causing a double-dip scenario as in the US in the second half of the 1930s. Too late exit could lead to inefficient allocation of resources and inflationary pressures, as was the case in the 1970, after the first oil shock.

Lesson 3. Maintain international trade – avoid protectionism. The Great Depression set off a series of protectionist measures on a global scale. The degree of protectionism was higher than during any other period of modern trade. These measures contributed to the fall in world trade as well as in world production in the early 1930s. The policy lesson from this experience is straightforward: protectionism should be avoided.

Lesson 4. Maintain international finance – avoid capital account restrictions. The Great Depression contributed to a breakdown of the flow of capital across borders, driven by the problems facing the US and European financial systems and the lack of international cooperation. Capital exports declined. Several countries introduced controls of cross-border capital flows. These events made the

depression deeper. The policy lesson here is that the free flow of capital should be maintained during the present crisis.

Lesson 5. Maintain internationalism – avoid nationalism. It is proper to view the Great Depression as the end of the first period of globalisation. It is true that the outbreak of war in 1914 closed borders and destroyed the order that had been established during the classical gold standard. When peace returned, the 1920s saw the return to an international order that was a continuation of the classical gold standard or at least an attempt to go back to such an arrangement.

The depression of the 1930s signalled the end of this liberal regime based on openness and internationalism. The crisis set off a wave of policies aimed at closing societies and inducing a nationalist bias in the design of economic policies. The international movements of goods, services, capital and labour (migration) declined severely when countries concentrated first of all on solving their domestic problems with domestic policy measures. Germany and the Soviet Union were extreme examples of countries carrying out unilateral policies. The policy lesson is straightforward: the international system of economic cooperation should be maintained and made stronger. Various institutions for global cooperation should be strengthened such as the WTO and the G20. With an international system for economic governance, it will be easier to carry out the lessons concerning expansionary policies, trade and finance described above.

Have the five lessons above been absorbed into the policy response to the current crisis? While the jury is still out on some of the lessons, the present answer must be a positive one. All of the above lessons from the 1930s seem well learnt today as seen from the following chapters in this report. The financial sectors in most countries are given strong government support, aggregate demand is maintained through expansionary monetary and fiscal policies, protectionism is so far kept at bay, there has been very little of protectionist revival⁽¹⁸⁾ – far from anything of the scale of the

⁽¹⁷⁾ The evidence about the impact of fiscal policies in the 1930s is scant as few countries deliberately tried such measures. Sweden is one exception where the government openly carried out an expansionary fiscal policy in 1933-34 based on an explicit theory of countercyclical stabilization policy. This fiscal program, although a theoretical breakthrough, had a minor effect as it was small and was of short duration. See Jonung (1979).

⁽¹⁸⁾ Although there has been little open protectionist revival during the present crisis, anti-dumping procedures, export subsidies have been resorted to in some countries and "buy-national" clauses have been introduced in stimulus packages. These measures are all permitted within the

1930s, the international flow of capital is not hindered by government actions, although criticism has been aimed at the role of global finance in the present crisis, and international cooperation has been strengthened by the present crisis. The present crisis has – in contrast to the 1930s – fostered closer international cooperation. G20 is such an example. China- and Japan-bashing has been kept at bay in the US. The world appears more inter-connected today than in the 1930s.

Most important, the EU is now providing a shelter for the forces of depression in Europe. The EU, through its internal market, its single currency and its institutionalised system of economic, social and political cooperation, should be viewed as a construction that incorporates the lessons from the 1930s. Within the EU, the flow of goods and services, of capital and labour remains free – with no discernable interruptions created by the present crisis. This is a remarkable difference to the interwar years that strongly suggests that Europe will manage the present crisis in a much better way than in the 1930s.

All this is a source of comfort during the present crisis. Of course, today's crisis will eventually give rise to its own lessons. But these lessons are likely to be enforcing the lessons from the crises of the past. Although, the economic and political system as well as the policy thinking of the economics profession evolves over time, the fundamental mechanisms causing and transmitting crises appears to remain the same, allowing confidence in the policy lessons learnt from the past.

WTO framework: discriminatory but also transparent. Nonetheless, learning from the past, the safeguarding of the multilateral discipline, monitoring closely any discriminatory policy and possibly complementing the existing set of rules especially in areas not fully covered such as international financial sector regulation, government procurement and services trade is a vital policy concern. See various contributions in Baldwin and Evenett (2009).

Part II

Economic consequences of the crisis

1. IMPACT ON ACTUAL AND POTENTIAL GROWTH

1.1. INTRODUCTION

The financial crisis has had a pervasive impact on the real economy of the EU, and this in turn led to adverse feedback effects on loan books, asset valuations and credit supply. But some EU countries have been more vulnerable than others, reflecting *inter alia* differences in current account positions, exposure to real estate bubbles or the presence of a large financial centre. Not only actual economic activity has been affected by the crisis, also potential output (the level of output consistent with full utilisation of the available production factors labour, capital and technology) is likely to have been affected, and this has major implications for the longer-term growth outlook and the fiscal situation. Against this backdrop this chapter first takes stock of the transmission channels of the financial crisis onto actual economic activity (and back) and subsequently examines the impact on potential output.

1.2. THE IMPACT ON ECONOMIC ACTIVITY

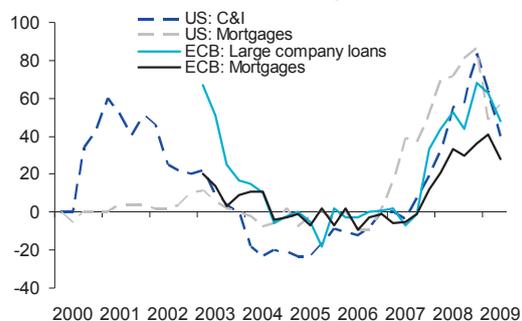
The financial crisis strongly affected the EU economy from the autumn of 2008 onward. There are essential three transmission channels:

- *via the connections within the financial system itself.* Although initially the losses mostly originated in the United States, the write-downs of banks are estimated to be considerably larger in Europe, notably in the UK and the euro area, than in the United States (see Chapter I.1). According to model simulations these losses may be expected to produce a large contraction in economic activity (Box II.1.1). Moreover, in the process of deleveraging, banks drastically reduced their exposure to emerging markets, closing credit lines and repatriating capital. Hence the crisis snowballed further by restraining funding in countries (especially the emerging European economies) whose financial systems had been little affected initially.
- *via wealth and confidence effects on demand.* As lending standards stiffened (Graph II.1.1), and households suffered declines in their wealth, in the wake of drops in asset prices

(stocks and housing in particular), saving increased and demand for consumer durables (notably cars) and residential investment plummeted. This was amplified by the inventory cycle, with involuntary stock building prompting further production cuts in manufacturing. All this had an adverse feedback effect onto financial markets.

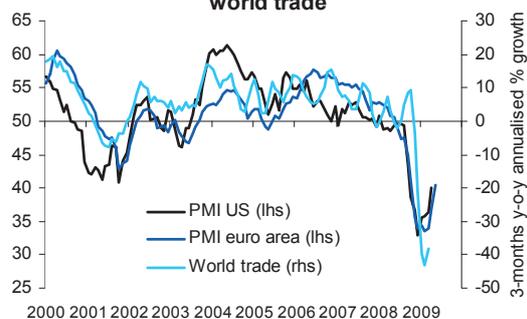
- *via global trade.* World trade collapsed in the final quarter of 2008 as business investment and demand for consumer durables -- both strongly credit dependent and trade intensive -- had plummeted (Graph II.1.2). The trade squeeze was deeper than might be expected on the basis of historical relationships, possible due to the composition of the demand shock (mostly affecting trade intensive capital goods and consumer durables), the unavailability of trade finance and a faster impact of activity on trade as a result of globalisation and the prevalence of global supply chains.

Graph II.1.1: Bank lending standards



Note: An index > 100 points to tightening standards. Source: ECB

Graph II.1.2: Manufacturing PMI and world trade



Sources: Reuters EcoWin, Institute for Supply Management

Box II.1.1: Impact of credit losses on the real economy

The 'originate and distribute model' in financial markets that emerged since the beginning of this decade has led to an under-pricing of credit risks and excessive risk taking (Hellwig, 2008). This bias surfaced in mid-2007 with the (unexpected) increase in mortgage defaults and foreclosures.

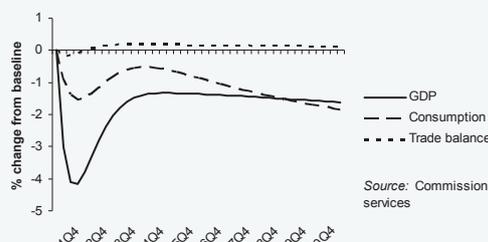
The credit losses of banks are seen as the primary reason for the problems the banking system has been facing and its impact on economic activity. The sequence of events can be described as follows. Households and firms default on some of their loans. The credit losses reduce bank equity and increase the leverage position of banks (the leverage effect is positively related to the initial leverage position of banks). Both risk-averse households and banks acting on the interbank market, condition their supply of funds to banks on the leverage position of the investment bank. Bank equity depletion leads to an adverse shift in the supply curve for bank funding with the consequence that the bank has to pay a risk premium on interbank loans and deposits, which is a positive function of leverage.

In addition, the price for raising new bank capital at the stock market also increases, as investors learn about the increased riskiness of their investment in bank capital and demand a compensation for the expected equity losses associated with defaulting loans. This adds to the increase in funding costs for banks, which they shift onto investors by increasing loan interest rates. Because of higher risk aversion on the part of savers, the interest rate on the safe asset (government bonds) is falling. Credit losses deplete bank equity, which has an adverse effect on credit supply and the real economy. These channels can be incorporated in a DSGE model with a banking sector. The model used here adds two financial accelerator mechanisms to the standard DSGE model. The first ties borrowing of entrepreneurs to their net worth (i.e. imposes a collateral constraint on borrowing). The second introduces heterogeneity in the funding of banks by distinguishing three sources of bank funding: interbank lending, households who predominantly invest in bank equity and risk-averse households who invest in deposits. This exercise is closely related to a number of recent papers (Greenlaw et al 2008 and Hatzius 2008), which assess the impact of mortgage market credit losses on real GDP, taking into account the response of the banking

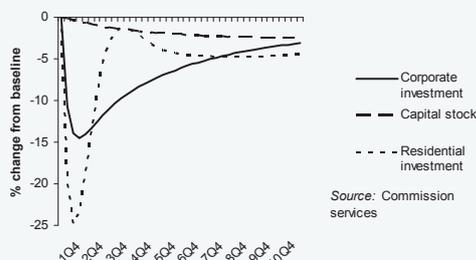
sector. These papers are, however, not based on formal models of the banking sector but draw heavily on empirical evidence/regularities of bank balance sheet adjustments and estimated links between credit growth and the growth of GDP.

The simulations reported in the figures below assume write-downs amount to 2.7 trn. USD in the US and 1.2 trn. USD in the EU (Euro area+UK). Total credit losses in 2008 would thus amount to about 19.1% of US GDP and 7.3% of EU GDP, while falls in house prices constitute an additional adverse shock to the economy. Parameters determining the risk premia for households and the interbank market were chosen such that the model can roughly match the observed orders of magnitude of the bond spread and the spreads in the interbank market. The impact on economic activity and the constellation of relevant interest rates, although merely illustrative, is very significant. Other studies using econometric techniques find broadly similar effects (see European Commission 2008b).

Graph 1: GDP, Consumption, Trade balance (as % of GDP)

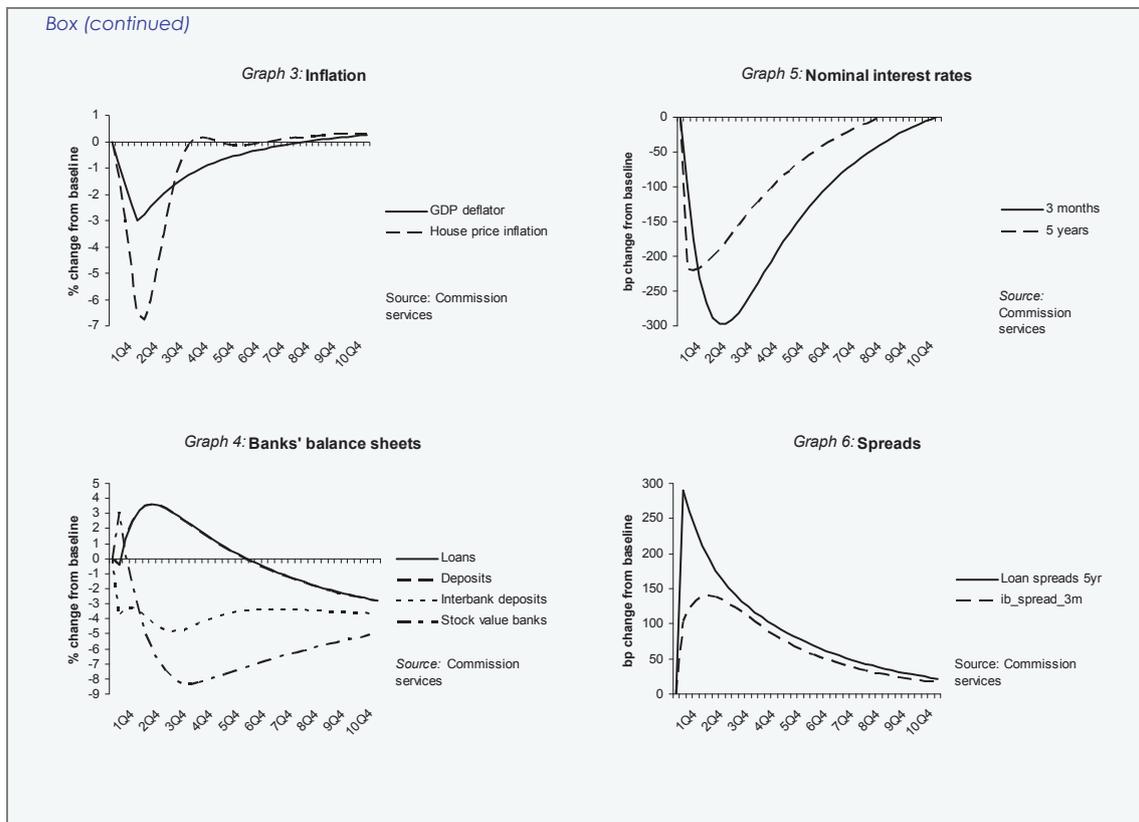


Graph 2: Investment, Capital stock



(Continued on the next page)

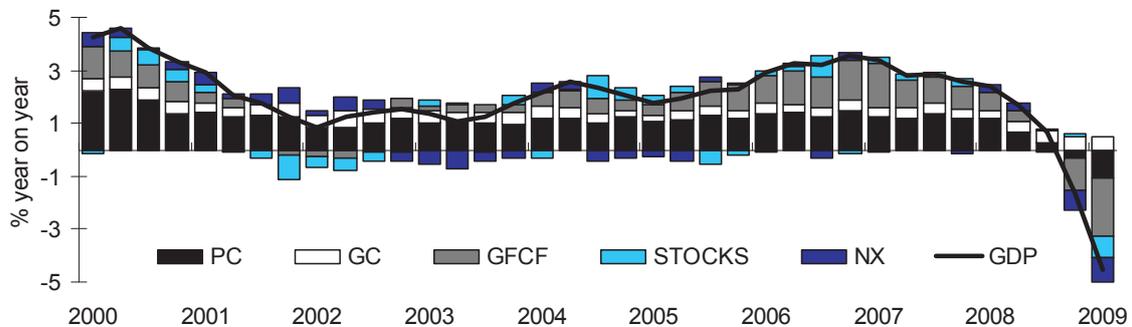
Box (continued)



With real GDP expected to contract this year by around 4% on average in the EU, this recession is clearly deeper than any recession since World War II, as noted in Chapter I.2. In general recessions that follow financial market stress tend to be more severe than 'ordinary' recessions, mostly because these are associated with house price busts and drawn-out contractions in construction activity (Claessens *et al.* 2009, Reinhart and Rogoff 2008). The decline in consumption during recessions associated with house price busts also tends to be much larger, reflecting the adverse effects of the loss of household wealth. Output losses following banking crises are two to three times greater and it takes on average twice as long for output to recover back to its potential level (Haugh *et al.* 2009). But also in comparison with other financial and real-estate crisis driven recessions in the post-war period it is relatively severe (Box II.1.2) In fact, as explained in Chapter I.2, the Great Depression in the 1930s is a relevant benchmark.

In terms of the contributions of demand components, the downturn is mainly driven by a virtual collapse in fixed capital formation, with second order, but sizable, contributions of contractions in household consumption, stock formation and net exports (Graph II.1.3). The comparatively small contribution of net exports conceals sizeable contractions in gross imports and exports associated with the collapse in global trade. The negative contribution of stock formation is likely to be reversed in the remainder of 2009 as stock to sales ratios fall and this may also have a positive bearing on (net) exports as trade and inventories formation are correlated. It is not clear, however, what mechanism could result in a boost to investment or private consumption given that deleveraging among households and the (financial and non-financial) corporate sector is continuing.

Graph II.1.3: Quarterly growth rates in the EU



Source: European Commission

Accordingly, the Commission forecasts (European Commission, 2009a and 2009b) that the recovery will be relatively sluggish, with economic growth flat in 2010 (Table II.1.1).⁽¹⁹⁾

Table II.1.1:

Main features of the Commission forecast

	2008	2009	2010
GDP (% growth)	0.9	-4.0	-0.1
Private consumption (% growth)	0.9	-1.5	-0.4
Public consumption (% growth)	0.9	-1.5	-0.4
Total investment (% growth)	0.1	-10.5	-2.9
Unemployment rate (%)	7.0	9.4	10.9
Inflation (HICP, %)	3.7	0.9	1.3

Source: European Commission Spring Forecast

Private consumption is projected to at best stabilise while business investment would continue to contract, albeit at a slower pace.

1.3. A SYMMETRIC SHOCK WITH ASYMMETRIC IMPLICATIONS

The financial crisis has hit the various Member States to a different degree. Ireland, the Baltic countries, Hungary and Germany are likely to post contractions this year well exceeding the EU average of -4% (Table II.1.2). By contrast, Bulgaria, Poland, Greece, Cyprus and Malta seem to be much less affected than the average.

The extent to which the financial crisis has been affecting the individual Member States of the European Union strongly depends on their initial conditions and the associated vulnerabilities. These can be grouped in three categories, specifically:

Table II.1.2:

The Commission forecast by country

GDP (% growth)	2008	2009	2010
Belgium	1.2	-3.5	-0.2
Germany	1.3	-5.4	0.3
Ireland	-2.3	-9.0	-2.6
Greece	2.9	-0.9	0.1
Spain	1.2	-3.2	-1.0
France	0.7	-3.0	-0.2
Italy	-1.0	-4.4	0.1
Cyprus	3.7	0.3	0.7
Luxembourg	-0.9	-3.0	0.1
Malta	1.6	-0.9	0.2
Netherlands	2.1	-3.5	-0.4
Austria	1.8	-4.0	-0.1
Portugal	0.0	-3.7	-0.8
Slovenia	3.5	-3.4	0.7
Slovakia	6.4	-2.6	0.7
Finland	0.9	-4.7	0.2
Euro area	0.8	-4.0	-0.1
Bulgaria	6.0	-1.6	-0.1
Czech Republic	0.2	-2.7	0.3
Denmark	-1.1	-3.3	0.3
Estonia	-3.6	-10.3	-0.8
Latvia	-4.6	-13.1	-3.2
Lithuania	3.0	-11.0	-4.7
Hungary	0.5	-6.3	-0.3
Poland	4.8	-1.4	0.8
Romania	7.1	-4.0	0.0
Sweden	-0.2	-4.0	0.8
United Kingdom	0.7	-3.8	0.1
European Union	0.9	-4.0	-0.1
United States	1.1	-2.9	0.9
Japan	-0.7	-5.3	0.1

Source: European Commission Spring Forecast

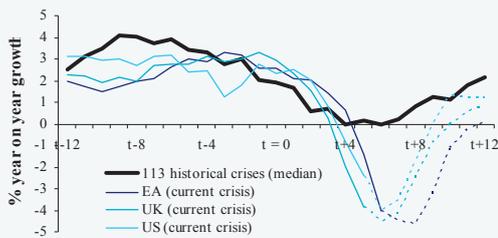
⁽¹⁹⁾ The forecast numbers for individual countries shown in Table II.1.2 has been revised for 2009 recently in the Commissions September Interim Forecast (European Commission, 2009b). Specifically, the numbers for DE, ES, FR, IT, NL, EA, PL, UK now read -5.1, -3.7, -2.1, -5.0, -4.5, -4.0, 1.0 and -4.3%, respectively.

Box II.1.2: The growth impact of the current and previous crises

The four graphs below compare the quarterly year-on-year growth rates of GDP, consumption and investment for the euro area, the United Kingdom and the United States to their median values for 113 historical episodes of financial stress between 1980 and 2008, as compiled by IMF (2008b). The graphs cover a period of twelve quarters before and twelve quarters after the beginning of a financial stress episode, with "t = 0" denoting the beginning of each crisis. The current crisis is assumed to start in the third quarter of 2007 for the euro area and the fourth quarter of 2007 for the United Kingdom and the United States.

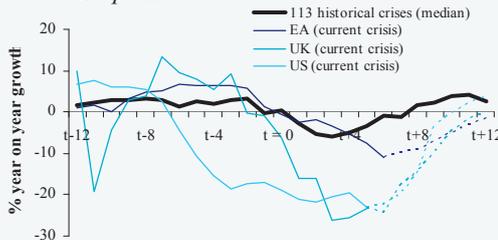
The projected trough in the contraction of GDP – at around -4.5% – is well below the average of historical crises.

Graph 1: GDP



Note: y-o-y growth rates during twelve quarters before and after the beginning (0) of a financial stress episode. Dotted lines refer to forecasts. Sources: IMF, OECD, European Commission.

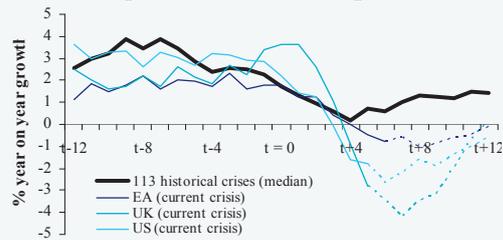
Graph 2: Residential investment



Note: y-o-y growth rates during twelve quarters before and after the beginning (0) of a financial stress episode. Dotted lines refer to forecasts. Sources: IMF, OECD, European Commission.

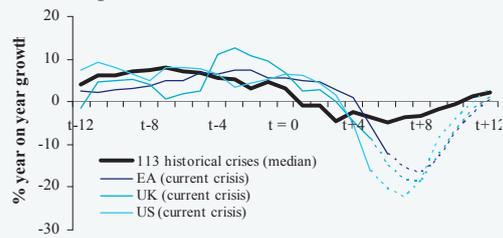
In the current crisis growth of GDP and private domestic demand components (household consumption, residential investment and business fixed investment) have slumped much faster than in earlier crises.

Graph 3: Private consumption



Note: y-o-y growth rates during twelve quarters before and after the beginning (0) of a financial stress episode. Dotted lines refer to forecasts. Sources: IMF, OECD, European Commission.

Graph 4: Fixed business investment

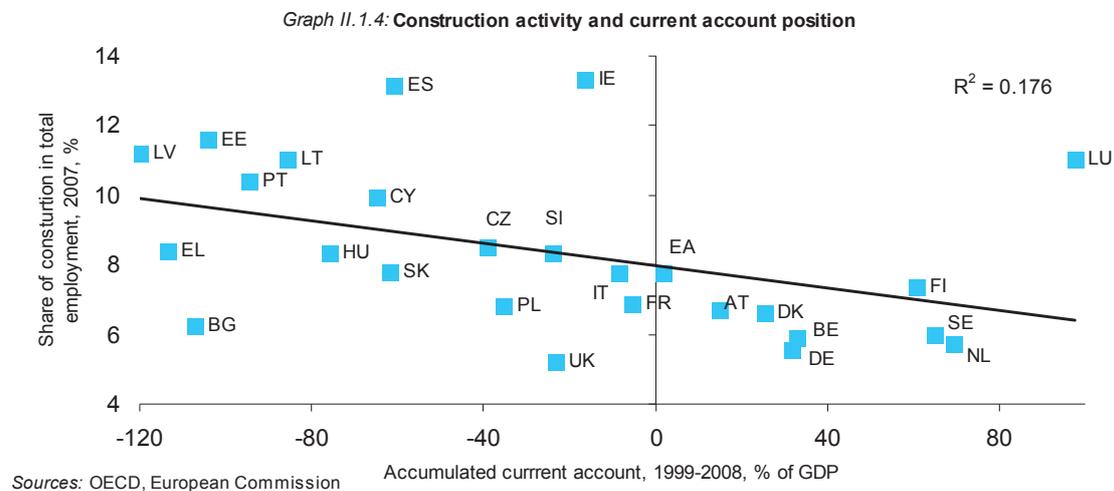


Note: y-o-y growth rates during twelve quarters before and after the beginning (0) of a financial stress episode. Dotted lines refer to forecasts. Sources: IMF, OECD, European Commission.

During previous episodes, consumption growth rebounded on average in the 4th quarter after the beginning of a crisis, which is considerably faster than projected for the current crisis. In earlier crises housing investment was also less affected than in the current one, underscoring the root cause of the current crisis and the particular vulnerability of the US and the UK economy to gyrations in the housing market. A similar picture holds for non-residential business investment, which is projected to undershoot the decline of previous financial episodes but to recover more rapidly.

- *The extent to which housing markets had been overvalued and construction industries oversized.* Strong real house price increases have been observed in the past ten years or so

in the United Kingdom, France, Ireland, Spain and the Baltic countries, and in some cases this has been associated with buoyant construction activity – with the striking exception of the

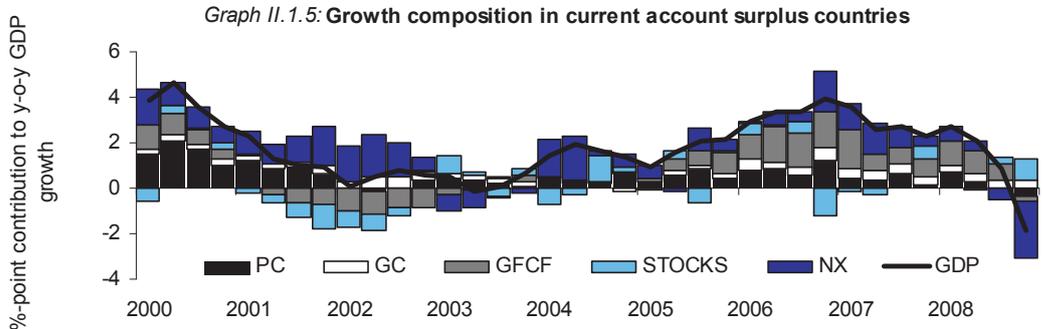


United Kingdom where strict zoning laws prevail. The greater the dependency of the economy on housing activity, including the dependency on wealth effects of house price increases on consumption, the greater the sensitivity of domestic demand to the financial-market shock. Some Member States in Central and Eastern Europe have been particularly hard hit through this wealth channel, notably the Baltic countries.

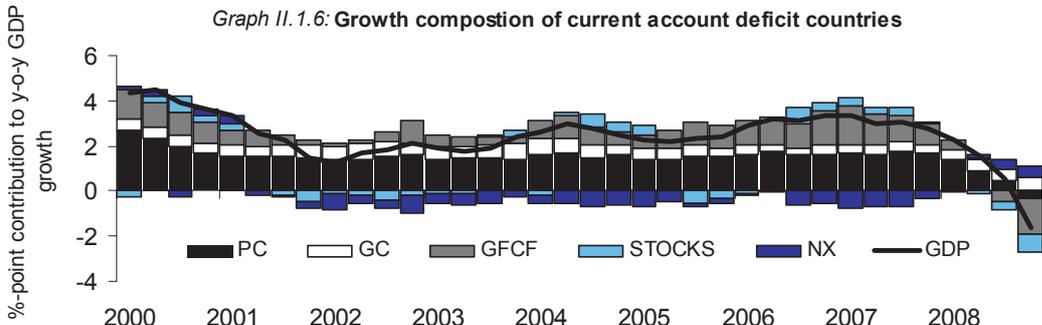
- *The export dependency of the economy and the current account position.* Countries where export demand has been strong and/or which have registered current account surpluses are more exposed to the sharp contraction of world trade (e.g. Germany, the Netherlands, and Austria). Countries which have been running large surpluses are also more likely to be exposed to adverse balance sheet effects of corrections in international financial asset markets. Conversely, countries which have been running large current account deficits may face a risk of reversals of capital flows. Some Member States in Central and Eastern Europe are in this category. In some of these cases, the sudden stops in foreign financing forced governments to make a call on balance of payment assistance from the EU, IMF and the World Bank.
- *The size of the financial sector and/or its exposure to risky assets.* Countries which house large financial centres, such as the United Kingdom, Ireland and Luxembourg, are

obviously exposed to financial turbulence. Conversely, countries which are the home base of cross-border banking activities in emerging economies in Central and Eastern Europe are also likely to be more strongly affected. The exposure for European banks to emerging market risk is fairly concentrated in a few countries (notably Austria, Belgium and Sweden – with the latter mostly exposed to the Baltic economies, see Árvai et al. 2009).

These initial conditions are to some extent correlated. Oversized construction industries and high real house prices tend to go together and these in turn are associated with current account deficit positions, since housing booms in many cases have been largely externally financed (Graph II.1.4). Countries which have been running current account deficits usually have accumulated net external liabilities and this is likely to be reflected in high debt-to-GDP ratios of households and businesses. These are the countries that are likely to have seen domestic (investment and consumer) demand plummet most in the face of the crisis. Conversely, countries that have been running current account surpluses are susceptible to having shown a strong dependency on export demand and are thus more prone to falls in net exports in the face of the crisis. Exposure to toxic financial assets also naturally goes together with large capital outflows and current account surplus positions.



Note: weighted average of EU countries whose cumulative current account position over the period 1999-2008 exceeded that of the euro area. Source: European Commission



Note: weighted average of EU countries whose cumulative current account position over the period 1999-2008 was below that of the euro area. Source: European Commission

Graphs II.1.5 and II.1.6 suggest that current account deficit countries indeed have seen their domestic demand strongly contract (especially private investment), whereas surplus countries have experienced a sharp contraction in net exports. So, apparently surplus countries have been hit comparatively strongly by the global trade shock, while deficit countries were hit more by the decline in the demand for housing and other credit sensitive items (consumer durables) at home. This suggests that the crisis may well be prompting adjustment of current account imbalances within the European Union, although further developments have to be awaited before drawing any strong conclusions.

important determinant of the gauge of economic slack – i.e. the output gap – in the short run, which in turn defines the room for short-term policy stimulus beyond which inflation pressures are likely to emerge. Conversely, if the level of potential output is underestimated, the risk of deflation – and the associated case for policy stimulus – will be understated. Potential output is, finally, an important determinant of the 'structural' or cyclically-adjusted fiscal position: the lower potential output, the smaller will be the (negative) output gap and hence the larger will be the structural (or lasting) component of the budget deficit.

1.4. THE IMPACT OF THE CRISIS ON POTENTIAL GROWTH

Gauging the impact of the crisis on potential growth is important because this is a main determinant of the development of the standards of living in the medium and longer run. It is also an

1.4.1. Empirical evidence

Projections for potential economic growth prior to the crisis typically predicted a slowdown in potential growth in the European Union from 2% per annum in the next decade to just over 1% from 2020 onwards, due to ageing populations (European Commission 2009c). This slowdown is widely perceived to require an adjustment of fiscal

positions towards close to balance, as stimulated also in the Stability and Growth Pact – the set of fiscal rules to which EU Member States have committed.

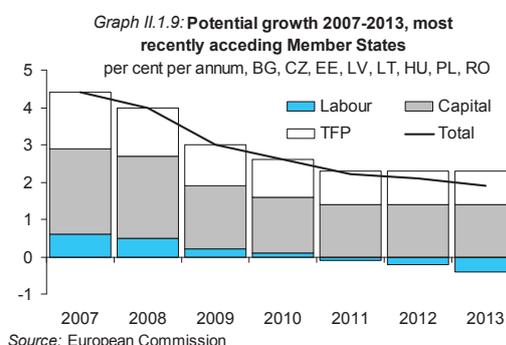
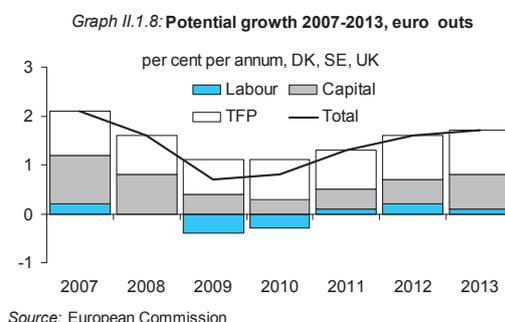
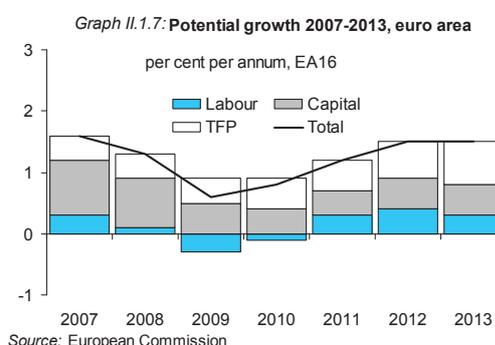
However, it is difficult to imagine that this crisis would not have a long-lasting impact on the potential growth rate already in the immediate future, thus before ageing kicks in. Financial crises weaken investment opportunities as demand prospects are likely to be poor, the real cost of borrowing high and credit in short supply. In addition, part of the increase in unemployment may prove to be structural, as displaced workers may find it hard to return to the labour market as industrial structuring takes hold, not least since wages are sticky downward.

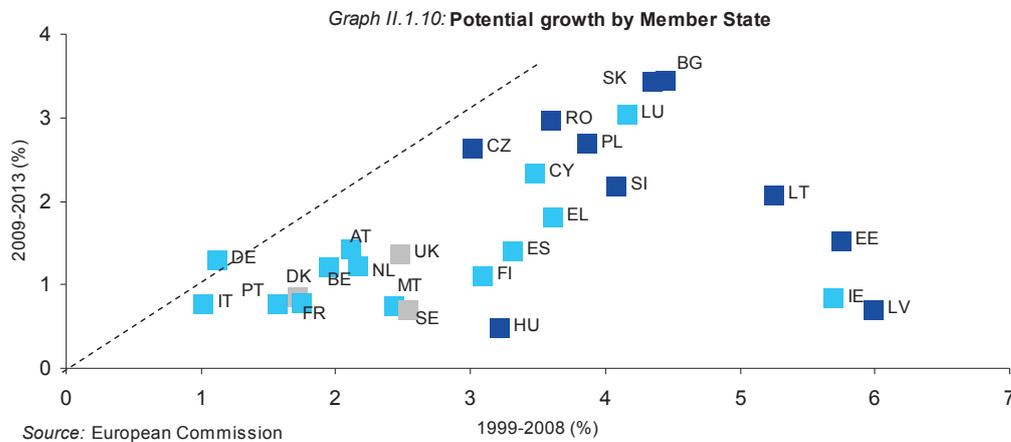
A range of industries, including the financial sector itself, but also the construction and car industries, will have to 'right-size' after their disproportionate expansion fuelled by the credit frenzy. Moreover, productivity growth may be affected by the crisis, although the net impact is ambiguous. The development in R&D activity is generally found to be pro-cyclical, hence innovation may falter. But, on the other hand, since large chunks of the capital stock may become obsolete, the least efficient parts are likely to disappear and this could have a favourable impact on productivity.

Recent studies suggest that past episodes of financial distress result in sizeable output losses which are generally not recovered (Cerra and Saxena, 2008). Furceri and Mourougane (2009), based on a country-panel regression analysis, estimate the impact on potential output to be in the range of 1.3 to 3.8%, with the upper estimate corresponding to deep and severe financial crisis. This estimate is in the ball park of estimates emerging from econometric work by the European Commission and simulations with its QUEST model (see Boxes II.1.3 and II.1.4), which puts the potential output loss roughly in the 2 to 4% range.

Importantly, such estimates refer to *cumulative* losses in potential output over the medium to long run (up to ten years), with the loss in potential output *growth* in any year *during* this period estimated in the range of ½ to 1%. This would imply a significant downward revision from earlier estimates, in the case of the euro area by up to one half from the 2% potential output growth projected

for the period 2009-2020 in European Commission (2008). As shown in Graph II.1.7, potential growth in the euro area is now estimated by the Commission to dip below 1% per year in 2009 and 2010, and to recover to only around 1½ % in subsequent years. A similar picture emerges for the euro-area older Member States (Graph II.1.8), while the most recently acceding Member States would see a permanent reduction in potential growth as the impact of the crisis on capital formation is particularly pronounced.





The decline in potential output growth projected for the years ahead is dramatic for some individual Member States (Graph II.1.9). In the Baltic States potential output growth would plummet from the 5-6% range to a mere 1-2% or so and in Hungary the decline would be from the 3-4% range to less than 1%. Conversely, among the largest Member States in the euro area notably Germany and Italy would be comparatively little affected, but at around 1% per annum their potential growth rates were obviously already relatively low.

1.4.2. Crisis and structural reform

The crisis may weaken the incentives for structural reform through a range of channels, and thereby adversely affect potential growth and the resilience of economies to recover – factors which are not incorporated in the above projections (Graph II.1.10). A slowdown or reversal in structural reform, if not outright protectionism, would lead to further losses in potential output. Although past country experiences suggest that economic crises can promote reforms by revealing the lack of sustainability of current policies and institutions (Drazen, 2000 and Drazen and Easterly, 2001, Duval and Elmeskov, 2005), the political opposition to reform may actually harden in this crisis: the risk of 'populism' is spreading and protectionist instincts may appear to have been merely dormant. Moreover, stiffer credit market conditions may mute the transmission channel from reform to 'permanent' income and wealth (Buti et al 2009).

As well, although mounting budgetary pressures may increase the perceived urgency of reforms so

as to restore fiscal soundness, resistance against fiscal consolidation may build up. Moreover, fiscal consolidation – which is inevitable to restore public finances once the recovery is firm (see next section) – may dent the political capital available for introducing structural reforms.

Considering the potentially most damaging policies, simulations with QUEST (not reported here, but available in European Commission 2009d), suggest that:

- Trade protection, leading to a 1 percentage point increase in the mark-up of the tradable industries (due to reduced international competition) would imply a 1% loss in potential output.
- Measures to reduce labour market participation, like delaying the entry of younger workers, using disability or early retirement schemes, reduces potential output directly, but also indirectly through higher (distortive) taxes. According to QUEST a 1 percentage point cut in the employment rate reduces potential output by 0.4% in the first two years and 1% in the long run.
- A prolonged crisis may make policy makers more inclined to pursue unsustainable fiscal policies, which ultimately lead to higher taxes and risk premiums on government bond yields. QUEST estimates an increase in public consumption of 1% of GDP to cut potential output in the range of 0.6 to 1.6% after ten years depending on the increase in sovereign bond yields.

Box II.1.3: Financial crisis and potential growth: econometric evidence

The table below reports potential growth equations estimated on an annual panel data set covering EU and OECD countries from 1970 to 2007. A dummy is used to capture banking crises, based on information provided by the Laeven and Valencia (2008) database. Additional information on crisis duration is derived from Demirgüç-Kunt and Detragiache (2005) and Reinhard and Rogoff (2008). In case of missing or conflicting information the end year is defined as the year in which private credit bottomed out. The average duration of banking crises on this measure is 3.9 years. In column (1) an autoregressive specification akin to Cerra and Saxena (2008) and Furceri and Mourougane (2009) is presented, incorporating a dummy for the first year of a banking crisis. Both explanatory variables are lagged four times. In column (2) the banking crisis dummy is interacted with the duration of the crisis to capture the average impact per crisis year. Dummies for the two years after the end of a crisis years are added to account for post-crisis effects on potential growth. In column (3), standard control variables (lagged real per-capita income in purchasing power parities, population growth, gross fixed capital investment, openness to trade and an index of the quality of regulation) are added.

From the regressions can be inferred that significantly negative potential growth effects last for three years from the onset of the crisis. The effect peaks in the second crisis year and is on average -0.5 percentage points per crisis year. There are, moreover, additional negative potential growth effects that extend beyond the crisis episodes as lower potential growth feeds onto itself (autoregressive effect). Furthermore, potential growth does not rebound after the end of the crisis, which implies a permanent loss in the *level* of potential output even if potential *growth rates* are eventually broadly restored. These effects remain statistically significant if control variables are included. The results may depend on the specific definition of banking crisis. Restricting the dummy to severe banking crises may yield larger absolute coefficient values. Reverse causation cannot be excluded (i.e., banking crises can cause or be caused by recessions) which implies a possible bias in regression coefficients. For further details see Boewer and Turrini (2009).

Table 1:
Crisis and potential growth regression results

Dependent variable: Potential growth per capita	(1)		(2)		(3)	
	Coeff.	(t-stat)	Coeff.	(t-stat)	Coeff.	(t-stat)
Potential growth per capita						
<i>Lag 1</i>	0.46***	(4.71)	0.46***	(4.78)	0.36***	(3.58)
<i>Lag 2</i>	0.15**	(2.09)	0.16**	(2.29)	0.15**	(2.09)
<i>Lag 3</i>	0.15**	(2.58)	0.16***	(2.69)	0.17***	(2.82)
<i>Lag 4</i>	-0.09*	(-1.87)	-0.09*	(-1.81)	0.01	(0.05)
Beginning of crisis (dummy)	-0.41**	(-2.07)				
<i>Lag 1</i>	-0.71***	(-4.07)				
<i>Lag 2</i>	-0.63***	(-3.72)				
<i>Lag 3</i>	0.08	(0.27)				
<i>Lag 4</i>	-0.18	(-0.66)				
Average year of crisis (dummy)			-0.48***	(-4.42)	-0.27***	(-2.16)
First post-crisis year (dummy)			-0.03	(-0.10)	0.03	(0.11)
Second post-crisis year (dummy)			0.64	(1.31)	0.64	(1.48)
Log per capita GDP (lagged)					-0.91***	(-3.36)
Population growth (lagged)					-0.57***	(-4.22)
Gross capital formation					0.04**	(2.31)
Openness (lagged)					0.01***	(3.78)
Quality of regulation					0.26***	(4.46)
Sample size/ R ²	793	0.81	793	0.82	617	0.83

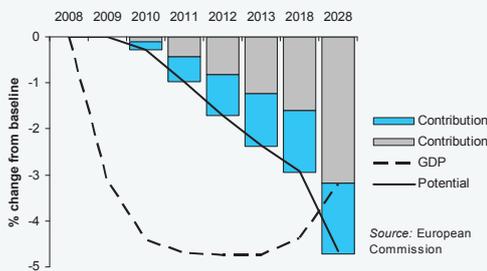
Notes: OLS, t-statistics based on robust standard errors. Time fixed effects and constant terms included. Banking crisis dummies equals 1 if the country was in banking crisis according to the extended Laeven and Valencia (2008) database; the severe banking crisis dummy applies if the fall in credit-to-GDP three years after a crisis year exceeded the average fall according to the Laeven and Valencia (2008) criterion. Other sources: Potential growth: AMECO, OECD; Population growth (%) (WDI). Openness: Sum of imports and exports on GDP (%) Penn World Tables; Quality of regulation: Fraser Institute.

Box II. 1.4: Financial crisis and potential growth: evidence from simulations with QUEST

The main channels through which the financial crisis affects potential output are via smaller contributions of growth in the capital stock and the effective supply of labour. The smaller contribution from capital formation results from increases in risk premia on loans to firms and households, from more cautious lending behaviour of banks and from a correction of overinvestment after the preceding economic boom. The smaller contribution from labour stems from an increase in the NAIRU (Non-Accelerating Inflation Rate of Unemployment) -- a measure of structural unemployment. The latter increases if wages fail to adjust downward to offset the adverse impact of the higher cost of capital on employment.

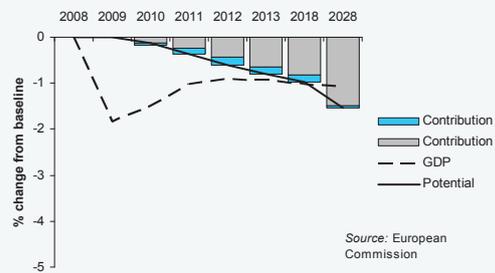
Simulations have been run with the Commission's QUEST model, which is shocked by an increase in risk premia in the arbitrage conditions determining corporate and housing investment as well as house prices by 200 basis points for a period of three years (2009-2011). As can be seen from Graph 1, the downturn in output is accompanied by a decline in the contributions of capital and labour to potential GDP. Initially these contributions are roughly equal, but in the medium term the negative contribution from capital dominates. Even so, the negative contribution from labour is persistent. Actual output declines immediately and takes many years to recover. It shows an L-shaped pattern. The cumulative impact on potential output after ten years is around -4% (relative to the baseline).

Graph 1: Financial crisis and potential output, with rigid wages and prices



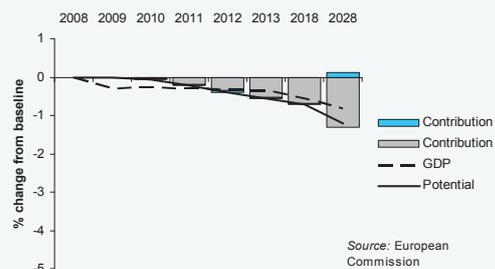
Removing labour market frictions from the model leads to a more rapid downward adjustment of wages and a smaller negative contribution of labour to potential output (Graph 2). Actual output now portrays a 'V-shaped' pattern, due to a short-lived decline in aggregate demand in response to the fall in real wages. The cumulative impact on potential output is smaller than in the first simulation.

Graph 2: Financial crisis and potential output with flexible wages and rigid prices



If both wages and price are flexible (Graph 3) the adjustment to the adverse financial market shock is accompanied by a milder initial decrease in real wages and therefore the adjustment in actual output is smoother.

Graph 3: Financial crisis and potential output with flexible wages and prices



Under this scenario there would again be a smaller decline in potential output relative to baseline, and of the same order of magnitude as in the second simulation.

2. IMPACT ON LABOUR MARKET AND EMPLOYMENT

2.1. INTRODUCTION

Labour markets in the EU started to weaken considerably in the second half of 2008, deteriorating further in the course of 2009. Increased internal flexibility (flexible working time arrangements, temporary closures etc.), coupled with nominal wage concessions in return for employment stability in some firms and industries appears to have prevented, though perhaps only delayed, more significant labour shedding so far.

Even so, the EU unemployment rate has soared by more than 2 percentage points, and a further sharp increase is likely in the quarters ahead. The employment adjustment to the decline in economic activity is as yet far from complete, and more pronounced labour-shedding will occur as labour hoarding gradually unwinds. Accordingly, the Commission's latest spring forecast (European Commission 2009a) indicates that, on current policies, employment would contract by 2½ % this year and a further 1½ % in 2010. The unemployment rate is forecast to increase to close to 11% in the EU by 2010 (and 11½ % in the euro area).

The present chapter takes stock of labour market developments since the onset of the and examines the evidence on further job losses possibly being in the pipeline.

2.2. RECENT DEVELOPMENTS

Until the financial crisis broke in the summer of 2007 the EU labour markets had performed relatively well. The employment rate, at about 68% of the workforce, was approaching the Lisbon target of 70%, owing largely to significant increases in the employment rates of women and older workers. ⁽²⁰⁾ Unemployment had declined to a rate of about 7%, despite a very substantial increase in the labour force, especially of non-EU nationals and women. Importantly, the decline in the unemployment rate had not led to a notable acceleration in inflation, implying that the level of unemployment at which labour shortages start to produce wage pressures (i.e. structural unemployment) had declined.

These improvements had been spurred by reforms to enhance the flexibility of the labour market and raise the potential labour supply. ⁽²¹⁾ The reforms usually included a combination of cuts in income taxes targeted at low-incomes and a redirection of active labour market policies towards more effective job search and early activation. Measures to stimulate the supply side of the labour market and improve the matching of job seekers with vacancies were at the centre of policies in a majority of countries. Importantly, however, in many countries the increase in flexibility of the labour market was achieved by easing the access to non-standard forms of work.

⁽²⁰⁾ Between 2000 and 2008 the female and older workers employment rates increased by about 5.5pp and 9pp respectively.

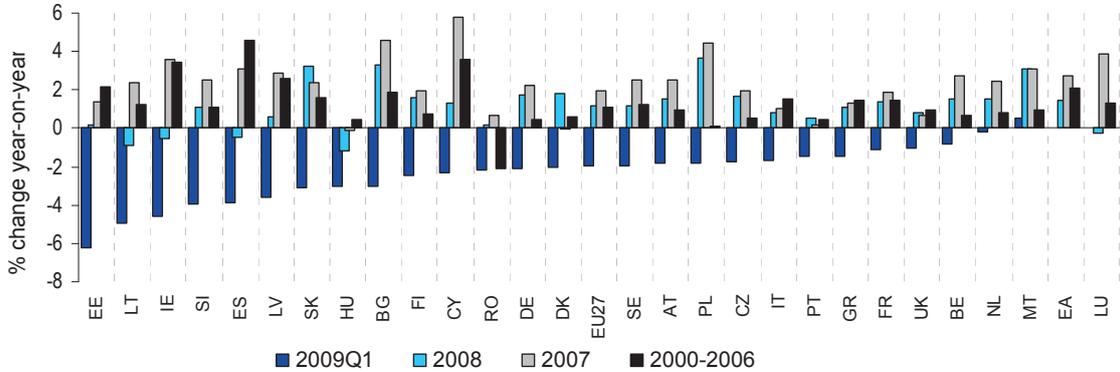
⁽²¹⁾ See European Commission (2007).

Graph II.2.1: Unemployment rates in the European Union



Source: Commission services.

Graph II.2.2: Employment growth in the European Union



Source: Commission services.

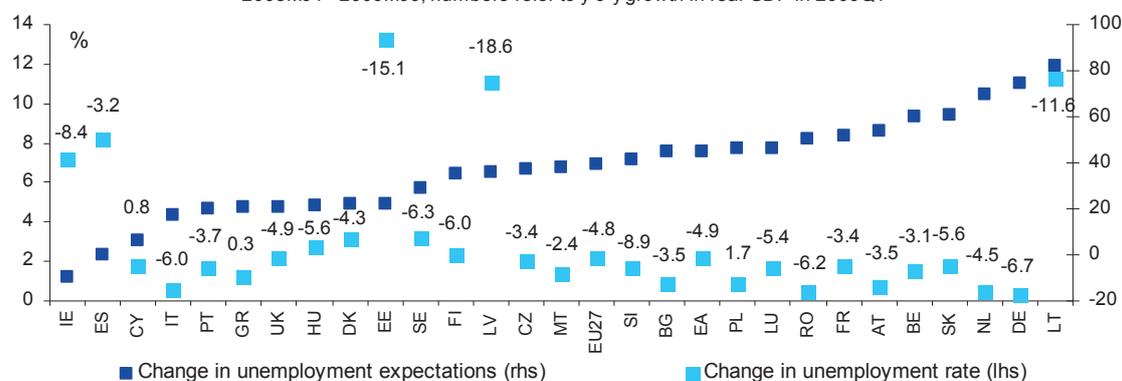
Labour markets in the EU started to weaken in the second half of 2008 and deteriorated further in the course of 2009. In the second quarter of 2009 the unemployment rate had increased by 2.2 percentage points from its 6.7% low a year earlier. The sharpest increases in unemployment have been registered in countries facing the largest downturns in activity, notably the Baltic countries, Ireland and Spain (Graph II.2.1). Almost three years of progress since mid-2005 in bringing the unemployment rate down from 9 had been all but wiped out in about a year. According to the 2009 Commission's spring forecast the unemployment rate is expected to increase to close to 11% in the EU by 2010 (11½ % in the euro area).

On current policies, employment is forecast to decline substantially over the next two years, by 2½ % in both the EU and the euro area this year and a further 1½ % in 2010. After 9½ million jobs had been created in the EU in the period 2006-2008, employment is thus expected to fall by some 8½ million during 2009-2010. In the early phases of the crisis, the bulk of job losses were concentrated in just a handful of Member States, largely as a result of pre-existing weaknesses as well as a larger exposure to the direct consequences of the shocks (e.g. adjustments in the financial sector and housing markets, relative exposure to international trade). However, as the crisis subsequently put a widespread brake on domestic demand across the whole of the EU, at a time when external demand was already fading, employment has been falling in all Member States since the first quarter of 2008 (Graph II.2.2).

The socio-economic groups with relatively loose work contracts (i.e. temporary contracts and self-employed) and the low and medium skilled have borne much of the brunt of the recession so far. A considerable increase in unemployment is registered among craft workers and those previously employed in elementary occupations, largely working in services. Women are less affected than men, given that the crisis hit first and foremost sectors where male employment is relatively high (car industry, construction). Even so, in the first quarter of 2009 a decline in female employment was registered for the first time since the fourth quarter of 2005.

As noted, increased internal flexibility (flexible working time arrangements, short-time working schemes, temporary closures etc.), coupled with nominal wage concessions in return for employment stability in some firms/industries, may have prevented, though perhaps only delayed, more significant labour shedding so far (with short-time working and temporary closures in the car industry as the most prominent example). Given the decline in output, this has led to significant increases in unit labour costs which are unlikely to be sustainable for an extended period of time. The increase in unemployment has so far been limited also by a contraction of the labour force (which declined by 0.3% in the fourth quarter of 2008 and 0.5% in the first quarter of 2009), which may be due to discouraged worker effects. These effects have been mostly reflected in developments in the number of non-national workers (constituting about 5% of the total labour force in the EU), whose growth rate almost halved from more than 7% over the last three years to a

Graph II.2.3: Unemployment and unemployment expectations
2008M04 - 2009M06, numbers refer to y-o-y growth in real GDP in 2009Q1



Source: Commission services

mere 4% on a year on year basis in the first quarter of 2009. Owing to recent reforms in many countries – aimed at increasing the flexibility of the labour market and tightening eligibility conditions for access to non-employment and early retirement benefits – a large reduction in the labour supply of nationals is not likely to occur though. This implies that further job losses are likely to be largely reflected in a higher unemployment rate.

A major challenge stems from the risk that unemployment may not easily revert to pre-crisis levels once the recovery sets in, since the exit probabilities from unemployment are bound to fall and the average duration of unemployment spells are set to go up at this juncture. In this respect, there is a concern that, if not adequately addressed by policy measures, skills erosion of the unemployed may contribute to unemployment persistency (hysteresis). Together with long-lasting effects on potential growth, this could threaten the European model(s) of social welfare, which are already strained by ageing populations.

2.3. LABOUR MARKET EXPECTATIONS

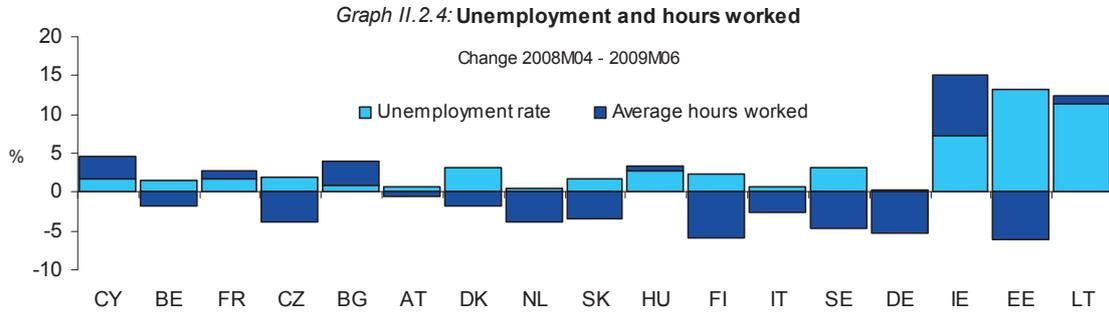
Both households' and employers' expectations with regard to the state of the labour market have been deteriorating rapidly, reaching in March 2009 unprecedented levels of pessimism. Although expectations have been recovering somewhat recently owing to improvements in Germany and France, fears of unemployment remain high and employers' intentions with regard to hiring are well below thresholds indicating expansion. At first

sight it seems puzzling that such poor expectations have so far not been reflected in an equivalent increase in unemployment.

Graph II.2.3 displays the change in unemployment rate together with the change in consumers' perceptions on unemployment for the next twelve months since April 2008; countries have been grouped in descending order in terms of GDP growth (in parentheses). If one considers the amount of output lost, the increase in the unemployment rate has been extraordinarily mild in most Member States. Exceptions are the Baltic States and Ireland on one side, with a large increase in unemployment rate in response to a massive output loss, and Spain on the other, where, conversely, mass unemployment is arising despite a relatively small fall in GDP.⁽²²⁾ Among countries with an output loss higher than the EU average in the first quarter of 2009 on the same quarter a year earlier (-4.8%), the rise in the unemployment rate over the period is remarkably small in Germany, Italy and the Netherlands.

As noted above, the limited increase in unemployment observed so far for several European countries may be a sign of labour hoarding during the recession months. This appears to be confirmed by the development in average hours worked per person on the payroll which has been falling in most countries. Graph II.2.4 plots the change in the average number of hours worked and the rise in

⁽²²⁾ In Spain, the largest decline in employment was registered in 2008q2. During the first two quarters of 2009 the decline in employment decelerated.



Source: Commission services

unemployment since the start of the second quarter of 2009; countries are grouped in ascending order of output loss. It is evident that where the fall in GDP large, but the rise in the unemployment rate small, the fall in hours worked is relatively substantial, which is suggestive of labour hoarding.⁽²³⁾

To some extent these outcomes are policy induced. To minimise the risk of mass unemployment many countries have extensively used or introduced government sponsored schemes available to employers to supplement wages of employees working reduced hours (short working arrangements or part time unemployment). These schemes give firms the possibility of reducing their activity in case of a short-term fall in industrial orders or exceptional circumstances, while allowing employees to keep their contractual relationship. So far, these schemes have proved effective in containing wasteful labour shedding. Yet, companies may become massively over-staffed, hence to remain effective these short-time measures would need to be complemented by measures supporting the employability and the easing of labour market transitions. Moreover, given the depth of and nature of the crisis, it is very likely that considerable restructuring will be necessary as the economy recovers from

⁽²³⁾ Labour hoarding refers to the phenomenon that firms may decide not to adjust employment in line with transitory fluctuations in the demand of their products for different reasons. Firstly, firms may face costs in the adjustment of the workforce because of hiring and firing costs associated to training costs and to the regulation of labour. Secondly, firms may prefer to adjust the labour input at the extensive (i.e. hours worked) rather than at the intensive margin (i.e. workforce) to be able to increase its utilisation with no major recruiting, especially of scarce and expensive skilled-labour, when the recovery comes, thus keeping wages increase muted.

the crisis (e.g. construction, financial services and automotive industry). This suggests that there might well be a trade-off between less unemployment today and more redundancies at a later stage.

While it is too early to draw strong conclusions, a concern remains that the deterioration in consumers' and employers' perceptions may be telling about the true state of the labour market in countries that have made large use of these schemes. This is suggestive of a larger increase in unemployment in the months ahead, particularly if the recovery does not kick in strongly. Against this backdrop the next section reviews the degree of similarity of the labour market adjustment during this recession and previous recessions since the 1990s.

2.4. A COMPARISON WITH RECENT RECESSIONS

Looking at previous recessions can help detect to what extent current labour market adjustments run in parallel with earlier recessions.⁽²⁴⁾ Due to data limitations only the largest European countries – France, Germany, Italy and the UK, representing altogether about 70% of total employment in the EU – are considered. The evolution of the unemployment rate and consumers' unemployment expectations are considered. From this comparison (Graphs II.2.5 to II.2.12) the following can be inferred:

⁽²⁴⁾ Recessions are identified as two consecutive negative quarters of GDP growth. Total hour worked are from the ECFIN TRIMECO database. Employment is based on National Accounts definition (Source Eurostat; only for France employment data from INSEE).

- The period of weak labour market developments in the wake of a recession can be protracted. During the recession of the early 1990s GDP contracted for about five quarters in Italy and the UK and two quarters in Germany and France. However, the unemployment rate had returned to pre-recession levels more than 30 months after the onset of the recession in Italy and the UK and after about 20 months in France and Germany.
- There appears to be a divide between France and the UK on the one hand and Germany and Italy on the other hand in the current recession that was less obvious in previous recessions. In this recession the adverse development in unemployment in the UK and France is well in line with consumers' expectations, while in Germany and Italy the expectations by far outstrip the actual developments.
- In contrast, between 1995 and 2005 the use of the *chômage partiel* declined continuously in France, affecting on average 1% of the establishments or 2% of employees (Calavrezo et al. 2009). During the recession the proportion of workers in a *chômage partiel* scheme increased from 0.1% in 2008q1 to 0.7% in 2009q1, but remained below the historical average.

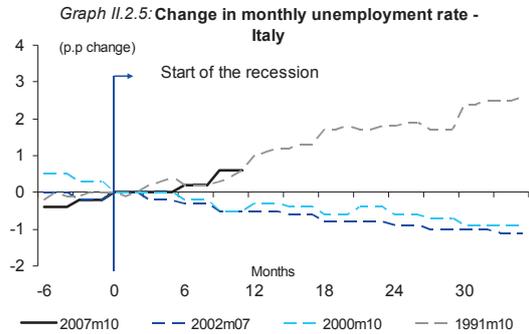
Thus, whatever the cause of labour hoarding, the loose link between consumers' and employers' perceptions and the actual state of the labour market observed for Germany and Italy does not remain unexplained once the labour market adjustment at the 'intensive margin' (average hours worked) is taken into account.

Summing up, the turnaround in labour market developments since the fourth quarter of 2008 has been very sharp. Employment is falling, and unemployment rising. However, the unemployment and employment responses have been relatively mild so far in comparison with earlier recession episodes, even if the output shock is extraordinary severe. The explanation is that there has been a strong reduction in average hours worked per person, except for workers with atypical labour contracts who are being laid off to a larger extent. There is also less of an associated discouraged worker effect than usual: job losers become active job seekers. The atypical working hours' response seems puzzling. Policy measures explain this to some extent, however: governments in various Member States have granted part-time unemployment compensation and allowed temporary plant closures. Another potential puzzle is that while the increase in unemployment looks relatively mild, unemployment expectations of households have worsened rapidly, also in comparison with previous recessions. This can be understood to some extent if one considers that unemployment expectations so far have materialised in part through shorter working hours which do not show up in unemployment statistics. But this is probably not a sustainable situation and more lay-offs are likely to be in the pipeline.

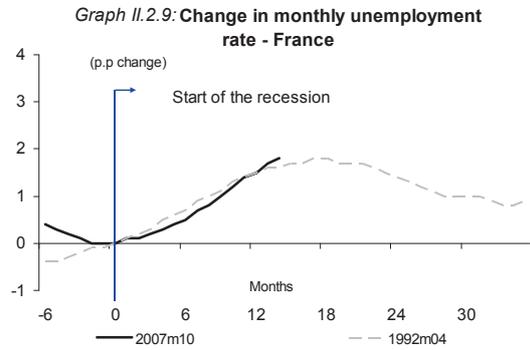
The latter feature can probably be explained to some extent by the different incidence of labour hoarding. Labour hoarding and an associate underutilisation of labour (hidden unemployment) may adversely reflect expectations but does not show up in unemployment statistics. Labour hoarding, in turn, might be related to differences in labour market regulation. In all three continental Member States government sponsored schemes are available to employers to supplement wages of workers working at reduced hours: the *Cassa Integrazione Guadagni* in Italy, the *Chômage technique* in France, or the *Kurzarbeitergeld* in Germany). But their incidence is quite different in Germany and Italy in comparison with France:

- In Italy the number of hours of wage supplementation (CIG) was around 20 per thousand of hours worked between January 2002 and July 2008. ⁽²⁵⁾ It rapidly picked up in November of 2008 to reach in April 2009 the highest-ever proportion since 2000 (110 per thousand of hours worked in industry). In the second quarter of 2009 about 10% of full-time equivalents workers were on wage supplementation schemes. Similarly, in Germany the use of short-time employment picked-up swiftly reaching in March 2009 the highest level since the 1992-1993 recessions.

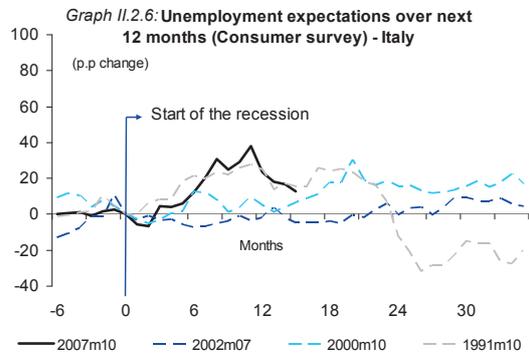
⁽²⁵⁾ Bank of Italy (2009).



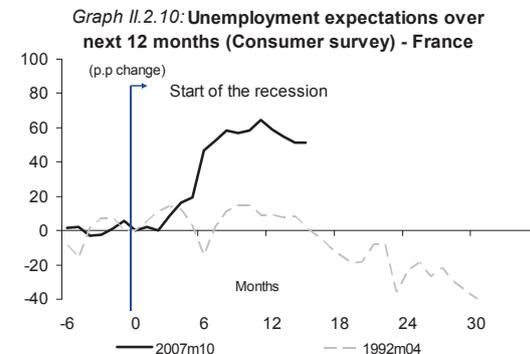
Source: Commission services



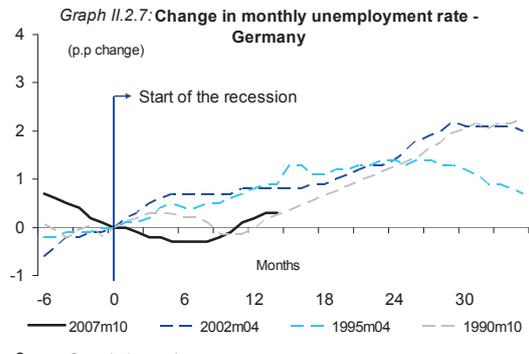
Source: Commission services



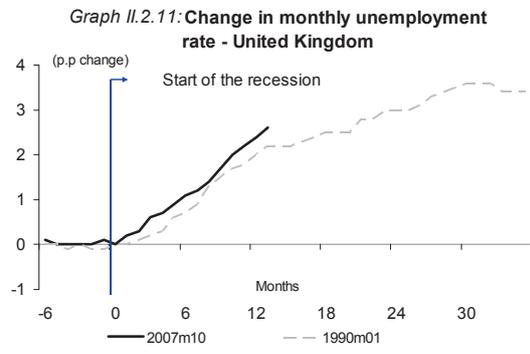
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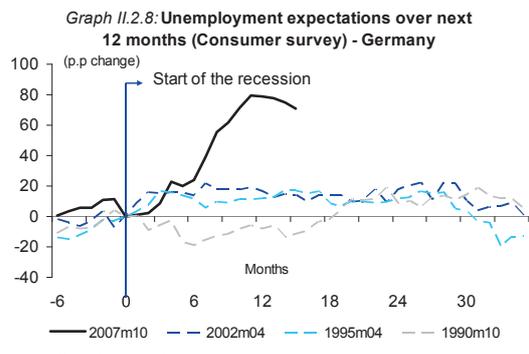
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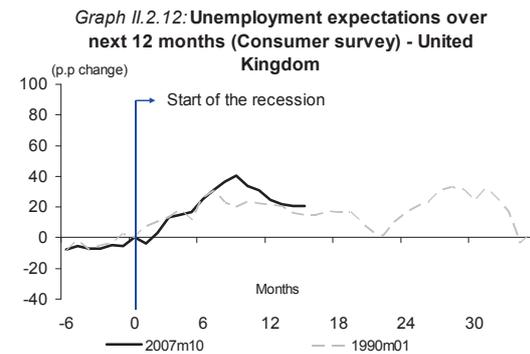
Source: Commission services



Source: Commission services



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Source: Commission services

3. IMPACT ON BUDGETARY POSITIONS

3.1. INTRODUCTION

The fiscal costs of the financial crisis will be enormous. A sharp deterioration in public finances is now taking place. The decline in potential growth due to the crisis may add further pressure on public finances, and contingent liabilities related to financial rescues and interventions in other areas add further sustainability risk. Part of the improvement of fiscal positions in recent years was associated *inter alia* with growth of tax rich activity in housing and construction markets. The unwinding of these windfalls in the wake of the crisis, along with the fiscal stimulus adopted by EU governments as part of the EU strategy for coordinated action, is likely to weigh heavily on the fiscal challenges even before the budgetary cost of ageing kicks in (which will act as a source of fiscal stress in its own right).

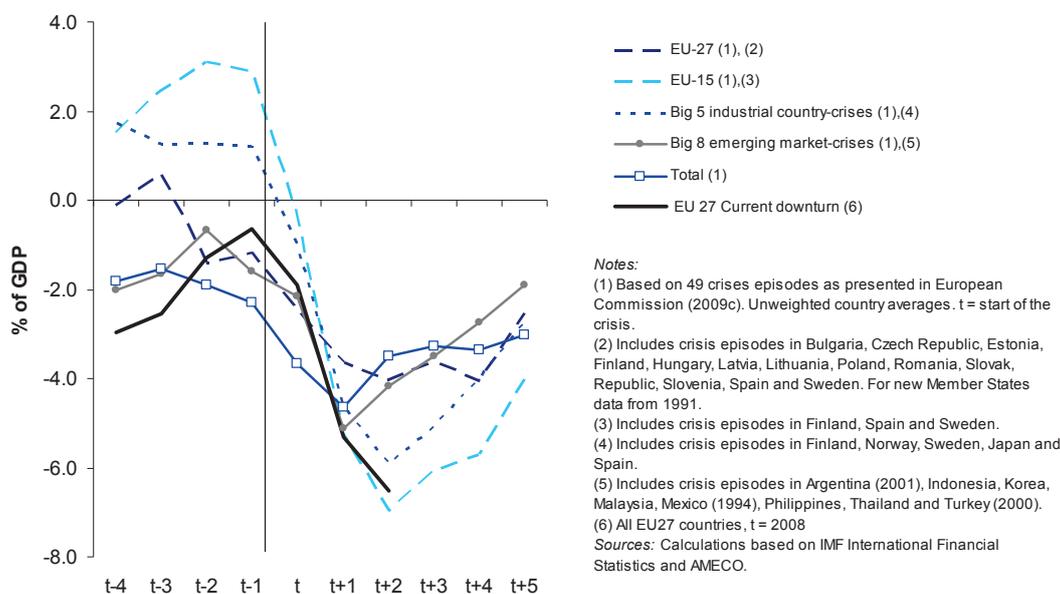
Against this backdrop, this chapter takes stock of the short-run fiscal developments and analyses the forces that have shaped them. It also looks at the implications for interest rate differentials.

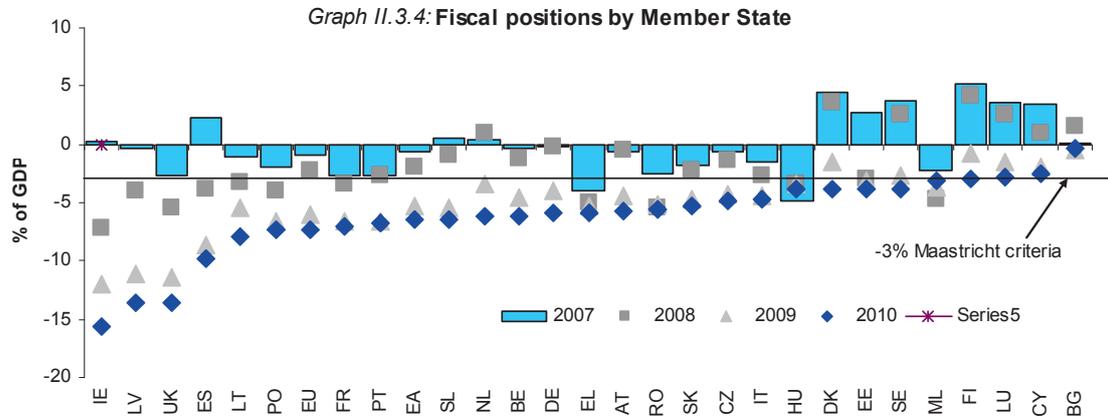
3.2. TRACKING DEVELOPMENTS IN FISCAL DEFICITS

It is useful to track the current fiscal developments against previous banking and financial crisis episodes. Graph II.3.1 shows that the pace of deterioration of fiscal positions in the EU is comparable to earlier financial crisis episodes, with the fiscal deficit on average set to increase from less than 1% of GDP in 2007 to an estimated 7% of GDP by 2010. Similarly, the deterioration in the fiscal deficit as a share of GDP averaged about 7 percentage points for the major financial crises in the early-1990s in Finland, Norway, Sweden, Spain and Japan.

The distribution of the increases in fiscal deficits, however, is uneven, even though fiscal positions have deteriorated virtually everywhere in the EU (Graph II.3.2). Generally speaking, countries that had comparatively solid fiscal positions at the onset of the crisis are likely to remain below or close to the 3% of GDP mark this year and next. But otherwise there will be an almost universal breach of the 3% mark next year, if not already this year. By far the sharpest (projected) deficit increases – rising to two-digit levels as a percent of GDP – will occur in Latvia, the United Kingdom, Ireland and Spain.

Graph II.3.1: Tracking the fiscal position against previous banking crises

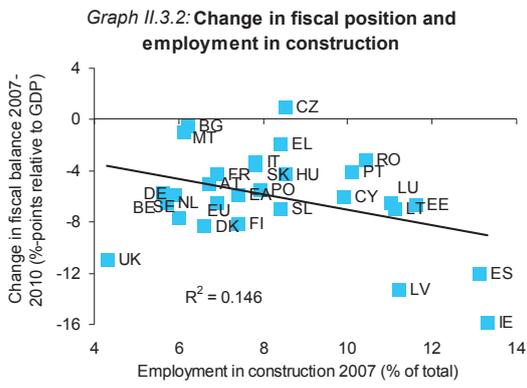




Source: European Commission

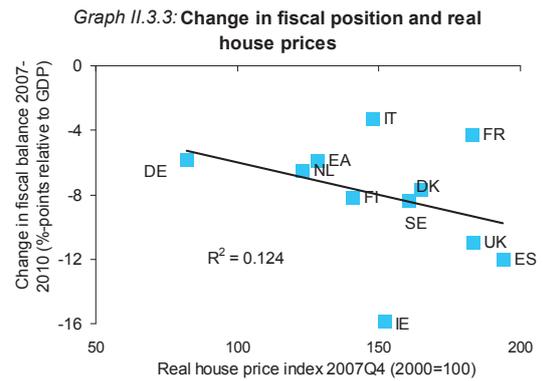
It is no coincidence that these countries' fiscal positions are being disproportionately hit, given that some of the mechanisms that shaped the crisis were particularly prevalent there. The United Kingdom and Ireland are important financial centres and all four countries have also seen major housing booms. Credit growth and soaring asset prices, in particular housing prices, tend to buoy government revenues during the boom and to result in large shortfalls in the subsequent slump.

It distinguishes between a direct channel (transaction taxes and tax revenues stemming from construction activity) and an indirect channel that runs through the wealth and collateral effects on consumption and investment. It suggests that tax revenues grew strongly in response to the asset boom, although its impact on the fiscal position was muted since expenditure adjusted upward. In the downturn, revenues have responded equally heftily, in the opposite direction, but this has so far not been offset by adjustments in expenditure, which explains the sharp deterioration in fiscal positions.



Sources: European Commission, OECD

Graphs II.3.2 and II.3.3 illustrate the link between fiscal shortfalls and housing and suggests that countries which had comparatively large construction sectors and/or elevated real house prices in 2007 have also registered the most rapid deterioration in their fiscal positions. A more formal analysis of the relationship between asset price and associated developments and fiscal outcomes is reported in European Commission (2009c).



Sources: European Commission, OECD

Regression analysis in the same report shows that the main determinants of the revenue windfalls (or shortfalls) reside in growth surprises (i.e. errors in growth projections). But after controlling for these growth surprises, house price developments explain a significant share of the windfalls in Ireland, Spain and the United Kingdom. Deteriorating trade balances associated with rapid

growth in imports and weak exports in the run up to the crisis also yielded windfalls in several countries, reflecting that imports are part of the VAT tax base whereas exports are not. Both internal and external imbalances thus exacerbate the cyclical swings in the fiscal balance.

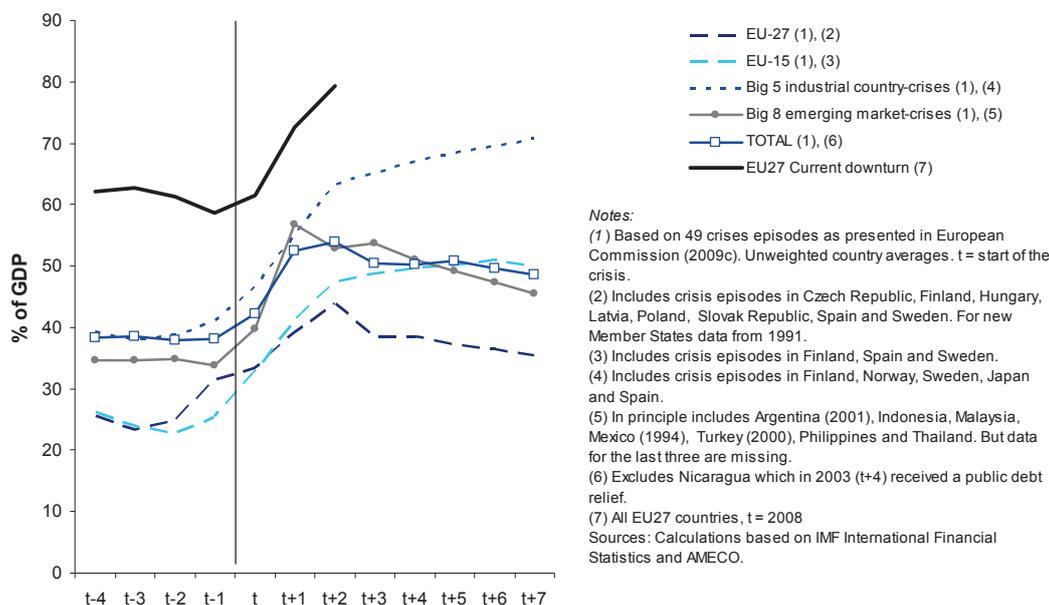
Obviously it would be wrong to attribute the entire increase in fiscal deficits since the onset of the crisis to the induced evolution of public expenditure and revenue, for example due to shrinking demand for housing, higher cost of unemployment insurance or other 'automatic' responses. In addition, governments have adopted fiscal stimulus measures under the aegis of the European Economic Recovery Plan (EERP), as will be discussed in more detail in Chapter III.1 of this report. This fiscal stimulus is estimated to amount to up to 2% of GDP on average in the EU for the period 2009-2010. With the rise in the fiscal deficit over that period estimated to average about 5% of GDP (see Graph II.3.4), the induced budgetary developments thus amount to around 3%. Part of this induced fiscal expansion is likely to be permanent, given that some of the output loss is also likely to be permanent, as discussed in Chapter II.1.

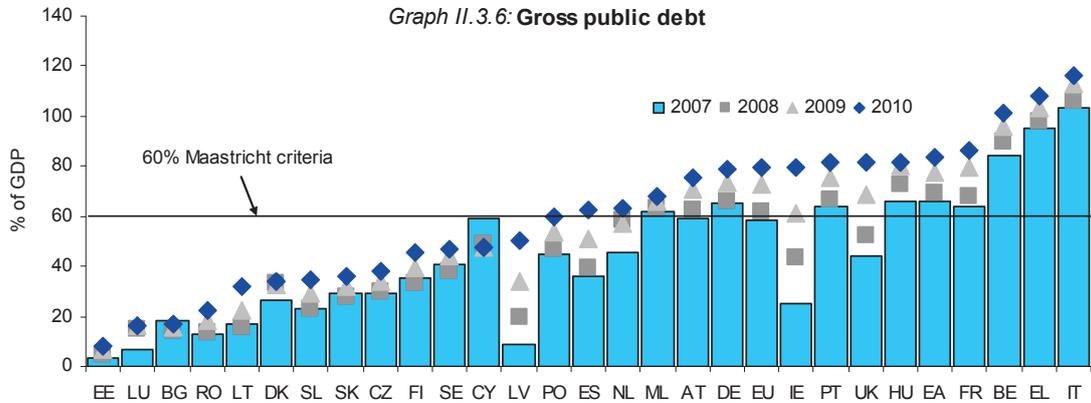
3.3. TRACKING PUBLIC DEBT DEVELOPMENTS

An issue of major concern is that public indebtedness is rapidly increasing. This is the case not only because fiscal deficits are (normally) debt financed, but also because governments have implemented capital injections in distressed banks and granted guarantees that are debt financed (the latter only if and once guarantees are exercised) and yet do not show up in the budget balance since they do not entail public expenditure on goods and services in a national accounting sense.

As indicated in Graph II.3.5, by historical standards the expected increase in public debt – about 20% of GDP from end 2007 to end 2010 – is typical for a financial crisis episode. However, what is concerning is that the jumping-off point is considerably higher (by up to 30 percentage points), and that the debt increase coincides with the onset of the ageing bulge in public (health, pension) expenditure. As discussed in more detail below, a sharp deterioration of the sustainability of public finances can be expected even before the budgetary cost of ageing is taken into account, with the likely decline in long-term growth due to the crisis along with contingent liabilities related to financial rescues adding further pressure.

Graph II.3.5: Tracking general government debt against previous banking crises





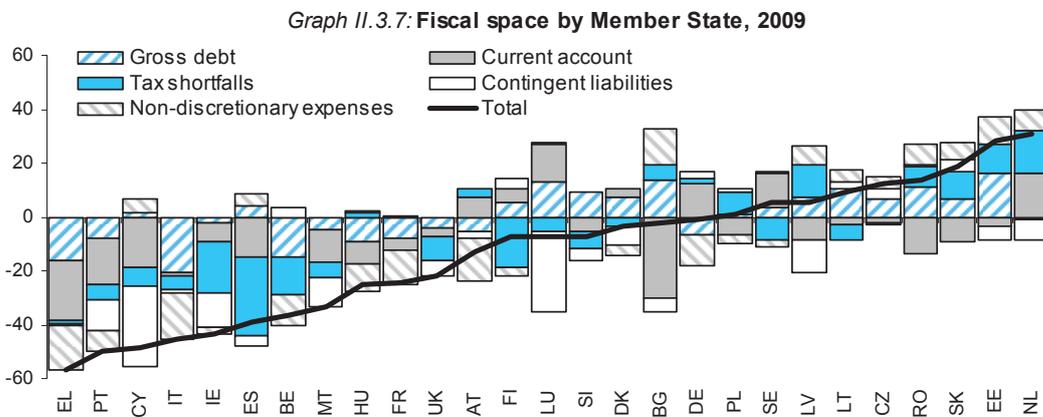
Source: European Commission

As depicted in Graph II.3.6, the largest increases in public debt are projected for those Member States which also record the sharpest increases in fiscal deficits, i.e. the United Kingdom, Spain, Ireland and Latvia. However, owing to their more favourable starting points, these are not the Member States that are projected to post the highest rate of public indebtedness, which remain Italy, Belgium and Greece.

3.4. FISCAL STRESS AND SOVEREIGN RISK SPREADS

One of the striking features of this financial crisis episode has been the substantial widening in sovereign risk spreads and the downgrading of the credit ratings of some Member States. This may

mirror concerns about the fiscal solvency in the face of the financial crisis, as EU governments have committed large resources to guarantee, recapitalise and resolve financial institutions and to offer also far-reaching deposit guarantees than in the past (see Chapter III.1). Widening risk spreads can be regarded as indicative of the insurance premium financial market participants demand to the sovereign borrowers that are providing these guarantees. Discrimination among sovereign issuers may also reflect a flight to safety and liquidity, resulting in a decline in the yields of the most liquid sovereign bond markets (such as benchmark Bunds). Either way, spreads are widening and may expose the worst affected Member States to a vicious circle of higher debt and higher interest rates.

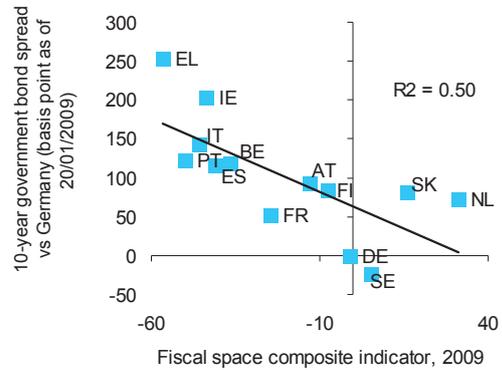


Note: Contingent liabilities represent the potential level of problematic banking assets to the extent these are likely to affect public finances; tax shortfalls are estimated assuming that corporate and property tax proceeds return to their pre-bubble ratio to GDP; non-discretionary expenses are the sum of interest payments on debt and social benefit payments as a per cent of GDP. All five indicators are normalised around their 1999 EU averages. For details, see European Commission (2009c).
 Source: European Commission

The 'fiscal space' (Graph II.3.7) available to Member States may be an important determinant of their exposure to risk re-pricing and hence their ability to pursue fiscal stimulus, to let automatic stabilisers operate and/or to implement bank rescues.

The fiscal space indicator used here comprises five elements: the initial public debt, the contingent liabilities vis-à-vis the financial sector, the expected revenue shortfalls stemming from the unwinding of the real estate and construction boom, the current account position and the share of discretionary (as opposed to entitlement) expenditure in the government budget (see for further explanation the note included in Graph II.3.7). According to this measure, which was developed in European Commission (2009c), the fiscal space is very different across Member States, although it should be underscored that the indicator is an imperfect gauge of fiscal space and for illustrative purposes only.

Graph II.3.8: Fiscal space and risk premia on government bond yields



Source: European Commission

These differences in the fiscal space indicator are indeed mirrored in the yield spreads (Graph II.3.8), at least in the euro area where there are *a priori* no cross-country differences in the exchange rate risk premium.

4. IMPACT ON GLOBAL IMBALANCES

4.1. INTRODUCTION

Persistent 'global imbalances' are seen as one of the culprits of the financial and economic crisis. The persistent and large current account surpluses in the emerging Asian and oil producing economies have served to finance the US current account deficit at favourable terms, which, coupled with quasi-fixed exchange rate against the dollar, further added to lax financial conditions. The emerging economies in Asia – in particular China – and oil exporters are disposed to assume their role as US creditor owing to their large national saving surpluses – with the open and deep financial markets in the United States attracting large capital inflows. These easy financial conditions have spilled over to the EU economy via arbitrage-driven capital flows.

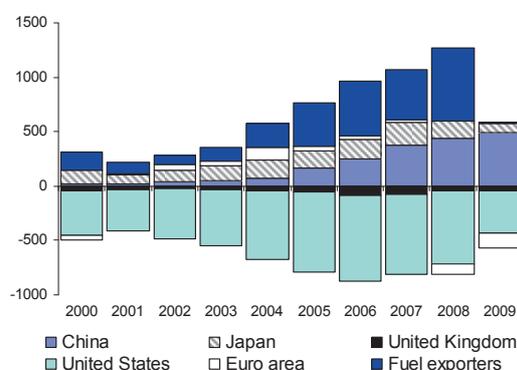
An important issue is if the financial and economic crisis in turn has helped to ease the global imbalances. This is important because, if global imbalances do not correct – even if partially – in response to the crisis, the Damocles sword of a disorderly unwinding of these imbalances remains. A major concern is that a sharp drop in the US dollar exchange rate would take down the currencies in emerging Asia – China in particular – in its wake since these are pegged to the US dollar. This would leave the euro area with an overvalued single currency and an associated loss in its competitiveness. Another concern is that a possible increase in US interest rates spills over to the EU economy. Monetary conditions could thus end up being very tight and a relapse into recession could ensue.

But even disregarding these disorderly unwinding scenarios, a more gradual unwinding of global imbalances may also have detrimental effects on Europe if a reduction in the US current account deficit is not matched by a concomitant reduction in the Chinese trade surplus. Against this backdrop, this chapter discusses the links between the implications of the global financial crisis and the global imbalances, including the implications if the crisis for the unwinding, and raises a number of associated policy issues for the European Union in the medium term.

4.2. SOURCES OF GLOBAL IMBALANCES

Global current account imbalances built up in the world economy starting in the late 1990s. Notably China, Japan, and the oil exporting countries have been posting large and growing external surpluses that served to finance a growing US deficit – although this development is now being partly reversed in response to the global crisis (see Graph II.4.1).

Graph II.4.1: Current account balances



Source: IMF Spring 2009 World Economic Outlook

Global imbalances, i.e. the persistent coexistence of a large US current account deficit with surpluses in the emerging Asian economies, in particular China, are generally deemed to be unsustainable. Many observers have for long expected a sudden withdrawal of foreign capital in the United States to prompt a confidence, currency and financial crisis, with the US dollar plummeting, and interest rates soaring across the globe.⁽²⁶⁾ The financial crisis indeed came, but it was not triggered by such a 'disorderly' unwinding of global imbalances, but rather by the bursting of the financial and real estate bubbles it had contributed to, as explained in Part I of this report. Either way, the persistence of global imbalances should be considered as a major risk factor in the global economy.

As to the forces shaping the imbalances, there are different views around. There are those who believe that excess saving in the emerging market economies is the main culprit and those who attach a larger weight to the US current account

⁽²⁶⁾ See e.g. OECD (2004).

deficit.⁽²⁷⁾ Probably both channels are relevant and mutually interact:

- On the one hand, the US current account deficit can be seen as the result of a combination of low household saving and accommodative macroeconomic policies. Moreover, the United States issues the world's reserve currency and derives from this a so-called 'exorbitant privilege'. Unlike economies whose currencies do not have this privileged status, the United States can issue international securities denominated in domestic currency with a liquidity premium and afford to sustain a large current account deficit as its creditors are inclined to keep future claims on US output on their balance sheets.⁽²⁸⁾
- On the other hand, the emerging economies – in particular China – are disposed to assume their role as US creditor owing to their large national saving surpluses – not least owing also to the US' financial maturity, manifested in its open and deep financial markets.⁽²⁹⁾ The Chinese saving surplus stems inter alia from: (i) a strategy of export-driven growth; (ii) underdeveloped and state managed financial institutions that force small and medium size enterprises to fund their investment primarily through retained earnings, that subsidise the costs of capital of state owned enterprises leading to excess capacity and that, because of the lack of alternatives, force households to deposit their saving in bank account with very low and sometimes negative real interest rate; (iii) underdeveloped social insurance systems that force households to maintain high rates of precautionary saving; and (iv) public support for enterprises through subsidised costs of capital and energy, low environmental and labour rights protection and supportive taxation which all allow high corporate savings. This constellation of policy strategies led to massive dollar inflows and dollar accumulation in China, which were recycled in the global economy and helped finance the US current account deficit on relatively favourable terms.

⁽²⁷⁾ See for prominent examples of these two opposing views respectively Bernanke (2005) and Gourinchas and Rey (2007).

⁽²⁸⁾ See e.g. Aizenman and Sun (2008) and Chinn and Ito (2007).

⁽²⁹⁾ See e.g. Caballero *et al.* (2008)

Thus, the global savings glut which, while originating in emerging Asian countries, by definition matched the 'saving draught' in the United States which it has helped financing.

However, while the divergent saving propensities in the US and Asian economies may explain the observed global imbalances, it does not provide a satisfactory explanation of the global liquidity glut that accompanied it and that contributed to the ensuing bubbles. Monetary policy must have played an accommodative role as well. Had monetary policy been tighter in the United States than it actually was before the crisis, liquidity creation and the associated risk of bubbles would have been smaller (see Chapter I.1). Moreover, had monetary policies in emerging Asia been tighter, their currencies would have appreciated (more) and their official reserves and recycling of US dollars in financial markets, and the associated risk of bubble formation, been smaller. Hence the following additional element is necessary to complete the picture:

- The emerging economies have been maintaining (de facto) exchange rate pegs to the US dollar at an undervalued rate. The rationale for this choice has been three-pronged: (i) to support their export-led growth strategy by maintaining a stable exchange rate vis-à-vis the dollar, (ii) to build up large foreign currency (US dollar) 'war chests' in response to the painful experience of the Asian crisis in the late 1990s, and to build up foreign exchange reserves by way of 'collateral' to attract foreign direct investment, and (iii) to avoid adverse balance sheet effects associated with capital losses on their currency reserves.⁽³⁰⁾

While it is true that since 2005 China has adopted a slightly more flexible de jure exchange rate regime, there was little change in the de facto dollar peg.⁽³¹⁾ Because the emerging economies kept their currencies from appreciating too rapidly, the accommodative stance of US monetary policy prior to and also in the wake of the dotcom slump spilled over into emerging economies' monetary policies via their exchange rate pegs. As a result,

⁽³⁰⁾ The 'collateral effect' was raised by Dooley *et al.* (2004).

⁽³¹⁾ See e.g. Frankel and Wei (2007) and Frankel (2009).

global liquidity has soared.⁽³²⁾ There are blue prints for reforms of the international monetary system being developed to address this issue (see Part III of this report), but for now the root causes of the global liquidity glut are still firmly in place.

4.3. GLOBAL IMBALANCES SINCE THE CRISIS

The crisis has been accompanied by a considerable correction in the magnitude of the global imbalances so far. In 2008 (Graph II.4.1) the current account deficits narrowed considerably in the United States. This is due mainly to the relatively pronounced decline in domestic demand in the United States. In most of the oil exporting countries the surpluses widened in 2008 because of the steep increase in oil prices in the first half of the year, but this masks a marked reduction in the surpluses in the second half of the year. This reflects the plunge in oil prices affecting the oil-exporting countries. Current account deficits also narrowed considerably in the UK, while the current account surplus narrowed in Japan. However, in China the crisis seems to have had virtually no impact on its external surplus in 2008. It reached USD 426.1 billion, an increase of 15% compared to the year before.

Graph II.4.1 also shows the most recent IMF forecasts for 2009. These predict that current account deficits in the US and the UK would narrow further in 2009. Japan's surplus is also forecast to shrink while China's surplus would actually increase slightly. In most of the oil exporting countries, the forecasts show the surpluses disappearing on the back of low oil prices.

Data coming in for 2009 seem to be broadly confirm these forecasts. The US current deficit narrowed from 4.4% of GDP in the fourth quarter of 2008 to 2.9% in the first quarter of 2009. In the UK the current account remained broadly stable in this period. In Japan, the current account surplus remained stable as well, after having shrunk considerably in the previous quarters. Regarding oil exporting countries, trade data for Gulf Cooperation Council (GCC) countries suggest a further reduction of the surpluses in the first

quarter of 2009 but the recent increase in oil prices may reverse this trend. There are no current account data for China for 2009. Regarding China, current-account data for the first half of 2009 showed a significant decrease in the surplus compared to the same period in the previous year, in line with developments in trade (see Box II.4.1). This suggests that the current account surplus in 2009 could turn out weaker than the IMF forecast. But this mostly reflects a temporary increase in raw materials imports associated with the Chinese stimulus package targeted on infrastructure along with temporary restocking spurred by low prices.

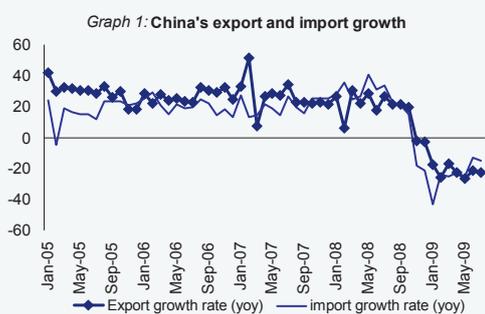
Meanwhile the euro area has switched from a broadly balanced current account position to a deficit. As Graph II.4.1 shows, it ran a small surplus during the period 2002-2007 but as of 2008 it posts a deficit. This is the result of export demand collapsing even more strongly than import demand. The euro area has thus provided a net demand stimulus to the rest of the world economy. Overall, the role of the euro area in global imbalances was negligible until the crisis broke. But the currently ongoing unwinding might have significant implications, as discussed in the next section.

Part of the recent correction in current account imbalances may be sustainable. In particular, regarding the US, the crisis appears to be forcing the private sector to increase saving rates to adjust to the excessive leverage and to the massive deterioration of balance sheets in the wake of falling asset prices. The US households saving rate, since last year, inverted its 20-year-declining trend and reached 6.9% of after-tax income in May, the highest rate since 1992. Households have seen their wealth shrink enormously due to the collapse in house and stock prices. The saving rate is therefore expected to remain high for many years to repair household's balance sheets. A further reduction in the US current account deficit could result from the eventual withdrawal of the currently very significant fiscal stimulus.

⁽³²⁾ See for recent evidence Adalid and Detken (2006), Ahrend et al. (2008) and Belke et al. (2008).

Box II.4.1: Making sense of recent Chinese trade data.

China's trade surplus appears to have gone down somewhat in the first half of 2009 in contrast to the IMF forecast for the current account surplus, which indicates a slight increase in 2009. China's trade surplus narrowed by about 13% in the first seven months of 2009 compared to the first seventh months of 2008.



Source: ECOWIN, value data.

This relatively moderate change, however, hides more significant movements in both export and imports. Both export and import growth has fallen dramatically from positive values of around 20% to 30% year on year to staggering negative numbers of around 20%. Graph 1 shows annual growth rates for both export and imports in values terms. In December and January, imports have fallen more significantly than exports.

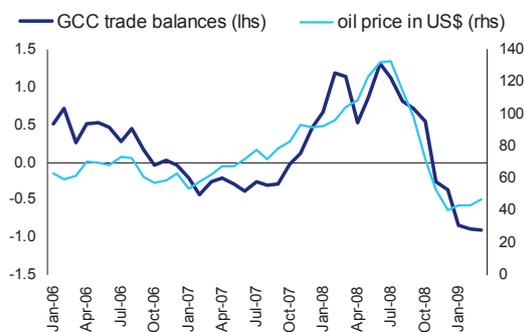
In contrast, in June and July, the fall in imports has markedly slowed down compared to the fall in exports. Accordingly, in the last two month the trade surplus narrowed substantially compared to one year ago.

The different dynamics of imports relative to exports could in part be related to the price of raw materials. Unfortunately, Chinese trade data are not available in volumes. But raw material import volumes have increased substantially since early this year according to World Bank estimates.⁽¹⁾ Falling prices, however, have masked this increase so that value data of imports have been falling. Only recently, the value data have picked up with the prices of raw material increasing again. This suggests that the Chinese stimulus was effective in stimulating import demand. However, the fall in prices more than offset the positive effects of the stimulus on import volumes. Overall, the trade balance did therefore not narrow substantially in value terms during the first half of the year and the Chinese economy was not contributing to global absorption.

⁽¹⁾ Louis Kuijs blog of the world bank in his blog entry <http://eapblog.worldbank.org/content/chinas-import-surge-standard-economic-theory-common-sense-prevails>.

However, some of the recent unwinding could prove ephemeral, and go in reverse when the global recovery takes hold. First, to some degree the recent correction has been the result of the sharp fall in the price of oil from its peak in 2008. If oil prices were to rise again as the world economy (including notably the emerging Asian economies) picks up, then at least some of the imbalances would tend to widen again. Graph II.4.2 shows the high degree of correlation between the trade balance in the GCC countries and oil prices. It suggests that trade surpluses in oil producing countries are likely to increase substantially with rising oil prices. Second, in the non-oil exporting surplus countries, the decline in surpluses reflects the collapse in foreign demand for consumer durables and capital goods.

Graph II.4.2: Trade balance in GCC countries and oil prices



Source: Reuters Ecwin, Gulf Cooperation Council (GCC).

A global recovery could lead to a rebound in spending on these items. Imbalances could

therefore re-emerge unless the surplus countries step up their domestic spending.

4.4. IMPLICATIONS FOR THE EU ECONOMY

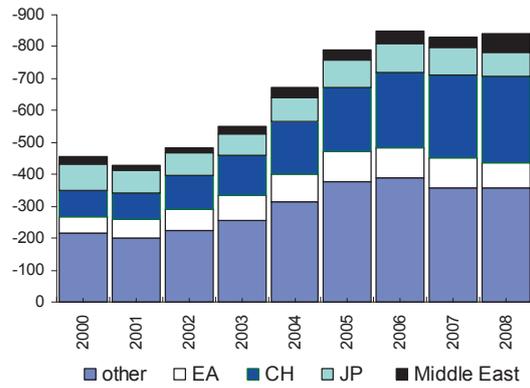
As noted in the introduction, a disorderly unwinding of the global imbalances would be detrimental for Europe. But even a more gradual – but supposedly lasting – reduction in the US current account deficit, could have detrimental effects dependent on how this is matched by adjustments in China.

US consumers have significantly adjusted their personal saving rates while at the same time housing investment has slowed markedly. This has already led to a significant reduction in the US current account deficit. The private sector adjustment might be a structural and lasting response to repair damaged private sector balance sheets. At the same time, the strong reduction in private demand has, to some extent, been offset by an unprecedented fiscal expansion. With fiscal deficits around 10% of GDP, public finance sustainability concerns become increasingly prevalent and the fiscal deficit will have to be reduced substantially in the medium run. As a consequence, the US current account deficit could widen even further.

A permanent reduction in US aggregate demand could go as far as to fully eliminate the US trade deficit of more than 800 billion US\$. This would have direct consequences for the main US trading partners. Graph II.4.3 shows that the single most important bilateral US trade deficit is with respect to China while the trade deficit with the euro area is comparatively small. The trade deficit relative to China has been increasing strongly, however. In fact the increase of the EU trade deficit with China is at the expense of a reduction of the EU trade deficit with other Asian countries. A reduction in US demand will therefore lead to a significant shortfall in demand for Chinese but also Japanese and euro area products. The direct effect of the evaporation of the euro area bilateral surplus against the United States would amount to around 90 billion US\$ or a reduction of US absorption of

euro area products of around 0.7 percent of euro area GDP ⁽³³⁾.

Graph II.4.3: The US trade deficit



Source: BEA, billion of US\$. Among the "other" regions, Africa, Mexico and emerging Asian economies figure most prominently.

The Member States in Central and Eastern Europe (CEE) ⁽³⁴⁾ as well as the United Kingdom and Sweden would also be directly affected by such a reduction of the US trade deficit, as all three areas run trade surpluses with respect to the US. The US trade deficit with respect to the UK has been falling since 2005 from almost 13 billion US\$ to around 5 billion in 2008. The CEE countries and Sweden both also run trade surpluses relative to the US of around 7 billion US\$. They would both be affected by the fall in US absorption.

The impact on EU countries is likely to differ depending on the adjustment responses of domestic demand in the EU countries. The development of bilateral trade balances depends, inter-alia, on the relative strength of demand. It is possible that the demand correction in large EU deficit countries is of similar magnitude compared to the fall-out in the US. In such a case, the trade surpluses relative to the US could remain in place or even increase.

Beyond its direct effects, a reduction of US demand has significant indirect implications. In particular, it will put downward pressure on the US real exchange rate. In fact, the reduction of domestic absorption entails a relative excess

⁽³³⁾ The Eurostat figure is slightly smaller.
⁽³⁴⁾ Hungary, Poland, Romania, Slovakia, Latvia, Estonia, Lithuania, Bulgaria, Czech Republic, Slovenia

supply of US-produced goods.⁽³⁵⁾ As a consequence, US goods will be in relative excess supply also on the world markets and this may translate into a depreciation of the real exchange rate of the US. Similarly, the UK as well as a number of CEE Member States had been running substantial trade balance deficits recently, which were, in some case, fuelled by a significant credit expansion, rising asset prices and an increase in foreign indebtedness. With asset prices falling, similar pressures to increase domestic savings (and reduce domestic absorption) can arise, putting downward pressure on real effective exchange rates.

The implications of a reduction in US demand and a depreciation of the real US dollar exchange rate for the euro area and the EU at large in part depend on the policy actions and economic developments in other parts of the world. At least two basic scenarios can be distinguished: a benign scenario and a harmful (for the euro area) 'asymmetric' scenario.

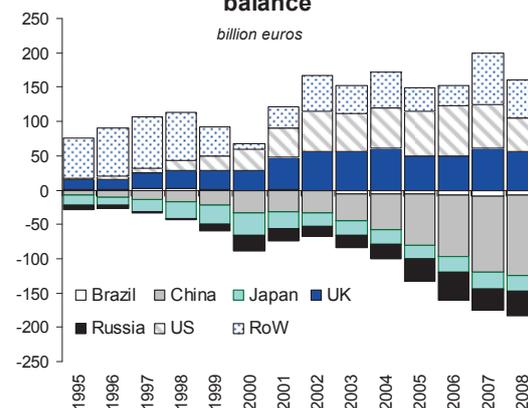
4.4.1. A benign scenario

In the benign (or symmetric) scenario, surplus regions and in particular China would massively step up their domestic absorption to absorb fully the decrease in the US trade deficit. Since there would be no world excess supply, world output would remain at its potential. To achieve such an outcome, China would have to take the necessary structural measures to boost its domestic demand. Such a structural change would have to be associated with an appreciation of the Chinese real effective exchange rate. The appreciation would have to combine an increase in the relative price of non-tradable to tradable goods (appreciation of the internal exchange rate) and a nominal appreciation relative to the dollar. The internal appreciation is needed to re-direct Chinese consumption to the tradable sector and re-allocate production to the non-tradable sector. The nominal appreciation relative to the US dollar is needed to increase the share of US goods in Chinese imports. The price changes would likely have to be accompanied by substantial structural measures, for example in

⁽³⁵⁾ Since the US government as well as US households have a home-bias in consumption, the absorption of US goods will fall more strongly than the absorption of foreign produced goods.

health care, social security, etc. to lower the Chinese savings rate.

Graph II.4.4: The Euro Area trade balance



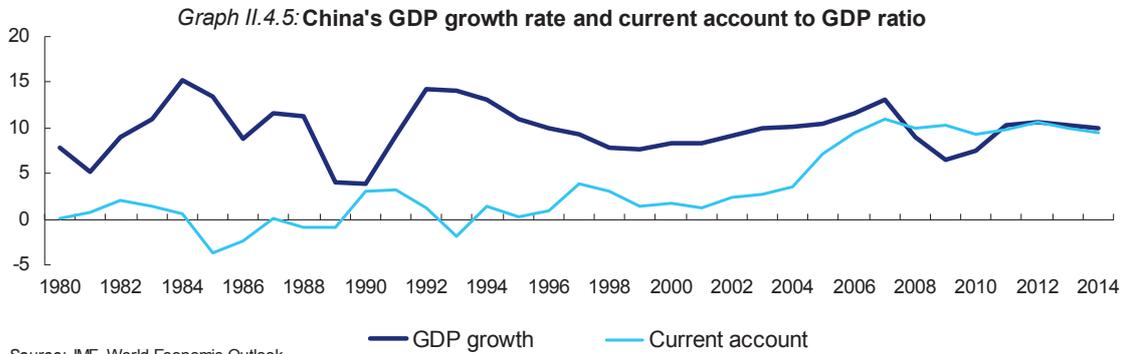
Source: Eurostat

In this scenario, the euro-area trade balance level would remain largely unchanged. There will, however, be a change in its composition. As Graph II.4.4 shows, the euro area is running trade surpluses with respect to the United States and the United Kingdom, while recently the deficit relative to China has substantially increased. A strong Chinese expansion would likely reduce the trade deficit with China. At the same time, the trade surplus with respect to the US could fall due to the exchange rate appreciation relative to the US.

4.4.2. An asymmetric scenario

It is, however, possible that the euro area will have to shoulder a more significant burden in the adjustment for several reasons. First, China could resist an increasing absorption of US products and an appreciation with respect to the US dollar. This policy would aim at preserving the Chinese trade surplus relative to the US and potentially also aim at sustaining the Remnimb value of US treasuries held by the People's Bank of China or other local financial institutions. As a consequence, US exporters would be forced to lower prices even more strongly with respect to other trade partners to find a market to sell their products. This could lead to a euro area trade deficit relative to the US and a stronger appreciation of the euro real exchange rate to the US dollar.

Second, China could allow for an appreciation of its currency with respect to the US dollar. This



would increase Chinese imports of US goods and reduce Chinese exports to the US. However, China could, for the above mentioned structural reasons, not be able to increase its domestic absorption to the extent needed (see section 4.2), at least not in the short run. As a consequence, Chinese companies would attempt to increase exports to other markets, in particular to the euro area. To achieve this, prices of Chinese products would have to be lowered and the euro area trade balance with China would move even more in the red. Moreover, the euro would appreciate in real terms relative to the Chinese currency.

In both cases, a substantial euro area trade deficit would emerge. The euro area tradable sector would come under significant price pressures as foreign produced goods would become cheaper. Euro area consumers would increasingly substitute domestic with foreign produced tradable goods. A situation in which a substantial trade deficit emerges appears less beneficial to the euro area than the benign scenario, in which surplus countries and in particular China would massively step up domestic absorption. There are two prominent reasons:

- First, the real appreciation will ultimately force euro-area companies to reduce the production of tradable goods that can be bought cheaper on the world market. Depending on the flexibility of the euro-area economy, time will be needed to re-allocate resources from the tradable to the non-tradable sector. In the transition phase, the euro-area output gap is likely to be affected negatively and unemployment could rise, in particular in the tradable sector and in Member States more heavily reliant on exports. Limited labour mobility in the euro area would further slow

adjustment and aggravate the negative effects. Similarly, UK and CEE exporters would increasingly be facing competitiveness pressures. However, they would be less affected by these pressures than the euro area since overall they tend to depend less on foreign demand.

- Second, large current account deficits are probably not desirable in Europe's ageing societies. Countries facing an ageing problem should typically run current surpluses in order to accumulate foreign assets for the times when more people retire. ⁽³⁶⁾

Overall, the less benign scenario appears more likely to materialise. It appears quantitatively unlikely that China can step-up absorption sufficiently to compensate for the short-fall in US demand. Even a reduction of the US current account deficit by 3 percentage points of US GDP would amount to an excess of world supply of around 430 billion US\$. Given the size of the Chinese economy at around 4400 billion US\$, of which only 35% is made up of consumption, Chinese absorption would need to increase by around 10 percent of Chinese GDP essentially eliminating the Chinese current account surplus. This would require a substantial decrease in the household and corporate savings rate. While China has increased the credit supply to its economy in the first half of the year and also stepped-up efforts to introduce health care insurance ⁽³⁷⁾, it appears unlikely that these measures would be enough to

⁽³⁶⁾ However, also China will face growing aging pressures in the next decades. These, however, can be offset to some extent by higher growth rates.

⁽³⁷⁾ See, e.g. Geoff Dyer, "Sickness of the savers", Financial Times, FT.com, May 12, 2009.

increase Chinese absorption of that magnitude, especially in the next couple of years. Moreover, more recently, Chinese credit expansion has slowed again possibly because of fears of the emergence of bubbles in equity markets. On the one hand, there is a risk that investment demand could slow again. On the other, there is a risk that heavy capital investment might ultimately increase excess capacities of tradable goods and thereby aggravate the surplus through dumping. With the stimulus package, the economy has become even more unbalanced: further increase share of investment in GDP, money goes to state owned enterprises that prefer to invest than increasing wages.⁽³⁸⁾

Among the other surplus countries, Japan appears to have limited policy levers for stronger demand. The oil-producing economies will, in-general, see their surplus increase with rising oil prices and are unlikely to generate domestic demand of similar magnitude. On a more positive note, Brazil and India are both forecast to increase their trade deficits (respectively reduce their surplus) with the rest of the world. However, in absolute terms, the figures are comparatively small.

Moreover, the recent IMF forecast suggests that Chinese surpluses will continue to increase and a global excess supply could emerge given a no-change exchange rate scenario. Graph II.4.1 indeed shows that the Chinese current account position is forecast to reach levels similar to the time prior to the crisis. Moreover, GDP is also forecast to grow strongly implying that the current account surplus will increase in absolute terms.

Last but not least, the Chinese as well as the US authorities might fear the negative repercussions in international capital markets of adjusting their exchange rate policies. Thus, at this stage it appears more likely that the unwinding of global imbalances in deficit countries and in particular the US will have sizeable implications for the euro area. In addition, rising oil prices could put further

pressure on the US consumers' budget constraint. Given the relatively inelastic demand for oil in the short to medium run, US households would have to further cut non-oil consumption to pay for the increasing energy bill. This could add further pressure to euro area's exporters.

4.4.3. Key policy issues

The above analysis suggests that attention should be paid to the process of how global imbalances unwind. Its potential implications for the euro area economy, representing more than two-thirds of the EU economy, are significant, even though the euro area had a balanced current account prior to the crisis. Thus, while the euro area as a whole has not in this sense contributed to global imbalances, the resolution of these imbalances will likely affect it heavily. From a policy perspective, the euro area as well as the EU as a whole should therefore advocate in favour of an increase in the domestic Chinese absorption and for an appreciation of the Chinese currency relative to the US dollar.

If the scenario of an asymmetric unwinding of imbalances eventually prevails, the euro area will have to prepare itself to face real appreciation pressures. This would mean that the euro area should foster policies that facilitate resource reallocation from the tradable to the non-tradable sector. Services sector reform should therefore remain high on the agenda. Increasing price pressure on tradable goods would affect in particular those Member States that rely heavily on exports for growth. Policies increasing labour mobility across countries and sectors could be beneficial in this context.

Finally, the analysis highlights the fact that the euro area is strongly linked with the global economy and existing imbalances. This underscores the need to step-up euro-area involvement in global affairs. Moreover, it underlines the importance for the euro area to speak with a single voice in international fora so as not to blur any message which would go against the common interest.

⁽³⁸⁾ In addition, Chinese authorities themselves recognise the difficulty in raising consumption in the short to medium-term, see the address at the global think-tank summit by Governor Zhou Xiaochuan of the People's Bank of China of July 3, 2009 in Beijing. In the speech, the Governor also raised the prospects of redirecting excess capacity to developing countries through its "Going Global" strategy. Such a redirection, however, is also likely to be successful only in the medium- to long-run.

Part III

Policy responses

1. A PRIMER ON FINANCIAL CRISIS POLICIES

1.1. INTRODUCTION

Policymakers in the European Union – both at the central and Member State levels – were badly surprised when the severity of the financial crisis jumped to extremely acute levels in the wake of the September 2008 events. Until then policy action had relied mainly on monetary policy operations to shore up liquidity of financial institutions in response to the freezing of the interbank markets after the summer of 2007. But after September 2008 policy action went into higher gear, including an aggressive easing of monetary policy – complemented with further 'quantitative easing' as the zero rate interest bound came in sight – and a wave of debt guarantees, recapitalisation and impaired asset relief implemented at record speed to avoid insolvency of financial institutions and meltdown of the financial system at large.

At that point it looked unavoidable that the downturn in the EU economy would be much steeper than initially thought. Relevant in this context, past experience with severe financial crises have shown that policies geared to the financial system are not sufficient to prevent a major economic downturn. The downturn will then feed onto itself, while also worsening the conditions for recovery of the financial system. Hence soon after the September 2008 events policies to mitigate the impact of the crisis on the economy came to the fore as vital – not least also to minimise social hardship associated with job, income and wealth loss. This included massive fiscal stimulus of a comparable order as in the United States, supplemented with labour and product market support targeted on hard-hit industries and workers.

Meanwhile, failures in the regulatory framework were identified as key for the build-up of the crisis and a new regulatory framework with enhanced prudential and supervision policies were therefore deemed essential. This led *inter alia* to the appointment of a high level committee under the chairmanship of J. de Larosière. New regulation and supervision frameworks were asked for to reduce the odds of repetition of a similar crisis in the future, or to deal with its control and resolution according to well defined rules and in a

coordinated manner in case of failure to prevent a crisis. In a global crisis a main challenge will be, moreover, to align solutions tailored to the various national financial systems with a global regulatory framework that prevents regulatory arbitrage. This issue came to figure prominently on the agenda of the G20 and other global fora in 2008 and 2009.

With hindsight the way policies in the European Union have responded to the crisis should overall be considered as successful so far. The fact that the European Union has been able to offer a framework for guidance, information exchange and coordination has been decisive in this regard (see Box III.1.1). At various stages there were threats of go-it-alone actions of Member States entailing adverse spill-over effects on their peers, but fortunately such dangers have been largely averted. In the light of the developments so far it should also be acknowledged, however, that had a clear EU framework for coordination of financial crisis policies been available beforehand, rather than being set up under extreme time pressure when financial meltdown became a genuine risk, coordinated action could have been implemented sooner and the social cost would have been lower.

At this point, the financial crisis is far from resolved. Despite the substantial support and stimulus measures that have been implemented since October 2008, credit restraint still acts as a drag on economic activity, and will continue to do so as long as lending channels remain impaired. Even if economic growth is showing incipient signs of rebounding, it resumes from a low base with the earlier output losses not being recovered. Only once the financial imbalances that caused the crisis have been resolved can genuine recovery take root. Otherwise banks and financial markets remain excessively risk averse, which can result in stagnation and deflation, as the example of Japan during the 1990s has showed. Hence a transparent and consistent set of policies needs to be set up as quickly as possible to strengthen the capital base of banks on a durable and self-sustained basis to restore a normal functioning of the banking system. Once clear signs emerge that financial and macroeconomic recovery is solid and self-sustained, coordinated 'exits' from banking support and, subsequently, fiscal stimulus and temporary support in product and labour markets

Box III.1.1: Concise calendar of EU policy actions

October 2008. European Central Bank (ECB) cuts its interest rate on its main refinancing operations (Refi) by 50 basis points (bp.) to 3¼ % in a coordinated move with other central banks. Commission establishes high-level group on effective European and global supervision for global financial institutions, chaired by J. de Larosière. Emergency summit of Heads of State or Government of the euro area agrees on steps to restore confidence in and proper functioning of the financial system. Commission provides guidance for support to financial institutions without distorting competition. Commission proposes to increase minimum protection for bank deposits to €100,000. Commission calls for a coordinated European recovery action plan.

November 2008. European Council agrees on principles and approaches for reform of the international financial system ahead of G20 meetings. Commission proposes conditions for the issuance of credit ratings. EU intends to provide medium-term financial assistance to Hungary of up to €6.5 billion. Commission adopts the European Economic Recovery Plan (EERP) and calls on the European Heads of State and Government to endorse it at their meeting on 11-12 December 2008. ECB cuts Refi by 50 bp. to 3¼ %.

December 2008. ECB cuts Refi by 75 bp. to 2½ %. Commission issues Communication on recapitalisation of financial institutions. European Council approves the European Economic Recovery Plan.

January 2009. Commission adopts decisions to increase the powers of the supervisory committees for EU financial markets to improve supervisory cooperation and convergence between Member States and to reinforce financial stability. Under the new rules, the supervision of securities, banking and insurance sectors will benefit from a clearer operational framework and more efficient decision-making processes. ECB cuts Refi by 50 bp. to 2%.

February 2009. EU intends to provide medium-term financial assistance to Latvia of up to €3.1 billion. Commission provides guidance for the treatment of impaired assets in the EU banking sector, including asset purchase or asset insurance schemes. It explains budgetary and regulatory implications and applicable State aid

rules. The de Larosière Group recommends transforming the supervisory committees for EU financial markets into European Authorities, with increased powers to co-ordinate and arbitrate between national supervisors on issues regarding a cross-border financial institution, to take steps to move towards a common European rulebook, and directly supervise pan-European institutions which are regulated at EU level, such as Credit Rating Agencies. Commission sets out measures to support the car industry.

March 2009. Commission Communication endorses the de Larosière recommendations and calls on EU leaders to move fast on financial market reform and show global leadership at G20 in April. ECB cuts Refi by 50 bp. to 1½ %. Spring European Council reviews the fiscal stimulus into the EU economy estimated at over €400 billion (over 3% of GDP). Leaders agree to speed up agreement on pending legislative proposals on the financial sector and define the EU position for the G20 Summit in London on 2 April. EU intends to provide medium-term financial assistance to Romania of up to € 5 billion.

April 2009. Commission Communication addresses the need for national governments to safeguard their tax revenues. The proposed measures aim to improve tax transparency, exchange of information and fair tax competition within the EU and on an international level. ECB cuts Refi by 25 bp. 1¼ %.

May 2009. ECOFIN Council approves an increase to € 50 billion of the lending ceiling for the EU support facility for non-euro area Member States in financial difficulty. ECB cuts Refi by 25 bp. to 1%. Commission Communication proposes ambitious reforms to the architecture of financial services committees.

July 2009. Commission Communication on how risks of derivative markets can be reduced. Commission proposes further revision of banking regulation to strengthen rules on bank capital and on remuneration in the banking sector. Commission proposal for simplified management of European funds to assist regions in tackling the crisis. Credit default swaps (CDS) relating to European entities start clearing through central counterparties regulated in the EU. Commission approves German asset relief scheme for tackling impaired assets.

Table III.1.1:

Crisis policy frameworks: a conceptual illustration

	<i>Crisis prevention</i>	<i>Crisis control and mitigation</i>	<i>Crisis resolution</i>	<i>EU coordination frameworks</i>
<i>Financial policy</i>	Regulation, supervision (micro- and macro-prudential)	Liquidity provision, capital injections, credit guarantees, asset relief	State-contingent exit from public support; audits, stress tests, recapitalisation, restructuring	EU supervisory committees, Single Market, Competition policy, joint representation in international fora (G20)
<i>Monetary policy</i>	Leaning against asset cycles	Conventional and unconventional expansions	State-contingent exit from expansion, safeguarding inflation anchor	Single monetary policy, European System of Central Banks
<i>Fiscal policy</i>	Automatic stabilisers within medium-term frameworks, leaning against asset cycles	Expansions plus automatic stabilisers, while respecting fiscal space considerations	State-contingent exit from expansion, safeguarding sustainability of public finances	Stability and Growth Pact, European Investment Bank
<i>Structural policy</i>	Market flexibility, entrepreneurship and innovation	Sectoral aid, part-time unemployment compensation	State-contingent exit from temporary support	Single Market, Competition policy, Lisbon Strategy
<i>EU coordinated tools</i>	Micro- and macro-prudential surveillance, fiscal surveillance, peer pressure, learning	Liquidity provision, balance of payment lending facilities, eurobonds	Definition of coordinated exit strategies, structural funds	-

Source: European Commission

can then be committed to. This would then set the stage for a normalisation of monetary policy.

Against this backdrop Part III of this report takes stock of the EU policy actions implemented to date. This is preceded in this chapter by a brief discussion of the EU coordination framework for crisis management as it is likely to emerge from the current crisis. This sets the stage for the policy agenda ahead that will be discussed in the final chapter.

1.2. THE EU CRISIS POLICY FRAMEWORK

The EU policy framework for crisis management largely builds on existing institutions and procedures, but parts of it are emerging from the various policy actions during, and prompted by, this crisis. This EU framework could be described along the lines of Table III.1.1., but this is by no means set in stone. While some elements are inherited from the past and well established and operational (such as the fiscal coordination under the Stability and Growth Pact), others (such as EU-level prudential supervision) are being developed, considered or discussed for the moment. The illustration in Table III.1.1 should therefore be seen as a 'projection', rather than as a factual description.

This framework, once fully developed, would include policy instruments in the pursuit of: (i) crisis prevention, (ii) crisis control and mitigation, and (iii) crisis resolution:

- At the *crisis prevention* stage, financial policy would deliver the appropriate regulation and supervision of financial markets so as to minimise the risk of crisis conditions building up. Monetary and fiscal policies would contribute by leaning against asset cycles, responding to a broad set of indicators of macro-financial stability such as credit growth and house prices. Structural policies would be geared to achieving robust potential growth and market flexibility to ensure that macroeconomic fundamentals remain strong.
- Even the best of crisis prevention frameworks may fail. Therefore a framework for *crisis control and mitigation* is indispensable. Monetary policy would play its usual independent role. Monetary easing would be stronger than in 'normal' recessions, as the policy transmission is weakened by the sore state of banks' balance sheet. Non-conventional monetary measures (such as the provision of liquidity against a broader range of collateral or the outright purchase of securities by the central bank) might be necessary, especially if the zero interest rate bound is in sight. Fiscal space permitting, budgetary stimulus would need to be employed to support demand – provided this is targeted on liquidity constrained households and businesses (as their spending behaviour will respond to variations in current income as opposed to 'permanent income'). The fiscal stimulus should also be timely and temporary as income support that comes too late or does not come with a sunset

clause is less likely to induce private spending. Automatic stabilisers are a complement to fiscal stimulus, although in a deep crisis automatic stabilisers may need to be strengthened, e.g. by extending the duration and level of unemployment benefits. Balance of payment support may be necessary for countries that have been cut off from external funding. Intervention in product markets may be employed to assist hard-hit but viable industries. Similarly, intervention in labour markets, e.g. temporary facilities for part-time unemployment compensation, may be needed in order to avoid hardship and socially costly human capital loss. Obviously, in all these cases distortions of competition should be avoided.

- At the *crisis resolution* phase a coordinated roadmap for the exit from accommodative financial, macroeconomic and microeconomic (product and labour market) policies must be available. The extent and depth of policy support is determined by the severity of the financial crisis and the economic downturn that ensues. But these policies can be implemented effectively only temporarily, which implies that explicit plans should be made about how to phase them out. This does not involve announcing a fixed calendar, but rather defines direction of next moves and the conditions that must be satisfied for making them.

Actual policy making in the European Union post-September 2008 largely followed this logic, but shortcomings have been exposed. Specifically, the exits from supportive policy stances have yet to be designed and committed to. Serious shortcomings have been revealed in the prevention and control of financial crises, and these need to be addressed as well. Moreover, in the light of the large spillover effects of national policy actions in a context of integrated financial and product markets, it is essential that the EU coordination framework be consolidated and developed further, in particular within the euro area. Monetary policy in the euro area is centralised, and this should facilitate the cooperation between the monetary authorities in the EU and globally. And fiscal policies in the EU are coordinated in the framework of the Stability and Growth Pact (SGP). Indeed, had the SGP not existed it would have to be reinvented for the purpose of managing financial crises. A soft

framework for structural policies in the EU also already exists in the form of the Lisbon Strategy after the 2005 reform. However, the coordination of financial policies is largely underdeveloped especially in the light of their strong spillovers. The regulation and supervision of financial markets can only work well if the cross-border dimension of financial institutions and markets – including the global dimension – is taken into account, which cannot be handled properly by national regulators and supervisors alone. The same holds true for the implementation and unwinding of bank rescues and other forms of support of financial institutions.

1.3. THE IMPORTANCE OF EU COORDINATION

The European Union is continuously evolving, although its driving rationale has always been the need for coordination of policies, including of economic policy. Coordination is seen as beneficial if a common interest would otherwise not be appropriately served, if there are economies of scale and scope, if behaviour of individual actors has significant spillover effects on other actors or if there are important learning benefits to be reaped. These rationales apply strongly to crisis management policies in the EU.

For expositional purposes it is useful to make a distinction between:

- 'Vertical' coordination between the various strands of economic policy (fiscal, structural, financial) and their timing – while always respecting the independence of monetary policy as essential for its effectiveness and credibility.
- 'Horizontal' coordination between the Member States to deal with cross-border economic spillover effects, to benefit from learning effects in economic policy and to draw benefits from external leverage in relationships with the outside world.

Vertical coordination serves not only to select the appropriate set of policy instruments but also to manage policy interactions and trade-offs. Financial rescue packages entail uncertain costs that depend on the future recovery rates of risky

assets, while the slump is protracted that present itself to the policymakers with a lag. There is an inherent trade-off between financial sector rescue packages and fiscal stimulus. On the other hand, both fiscal and monetary stimulus can buy time for banks to consolidate their balance sheets. Fiscal measures help to reduce losses for banks as they improve their clients' financial situation, while monetary measures facilitate access to liquidity. Even so, macro stimulus can only be temporary and therefore it is necessary to start financial market restructuring early.

Another complicating factor is that crisis policies involve multiple policy actors, which also calls for coordination. Specifically, at each of the three stages – crisis control and mitigation, resolution and prevention – support for the financial sector involves actions by the regulatory, monetary and fiscal authorities:

- At the *crisis control and mitigation* stage monetary authorities provide liquidity injections, implement interest rate cuts and may modify collateral rules. Regulatory action includes e.g. bans on short selling while fiscal measures include the increased guarantees on private deposits, bailing out or nationalising troubled institutions or relieving debtors' burdens. The purchase of securities in order to increase liquidity may be carried out by the monetary authorities, but ultimately commits the fiscal authorities with possibly relevant implications for fiscal sustainability and macroeconomic stability.
- *Crisis resolution* measures aimed at the financial system include capital injections, wider guarantees and separating toxic assets from healthy ones imply the fiscal authorities along with massive intervention by monetary authorities. Dependent on the severity of the financial crisis policy action may involve non-conventional intervention, with fiscal authorities taking large shares in private companies and monetary authorities lending directly to the private sector. Crisis resolution may also involve changes in the ownership structure of the financial industry. The restructuring process may start with occasional bankruptcies in the early stages of the crisis followed by a wave of mergers and

acquisitions. But such events are only the first steps towards systemic consolidation and restructuring, which also requires a renewed regulatory framework. Management of toxic assets by a 'bad bank' can be part of this restructuring effort, though the technical difficulties make it slow to implement (especially when it involves cross-border activities and ownership structures). Fiscal and monetary authorities thus replace or augment the private sector in some functions. The fiscal authorities may also embark on brokering deals of takeovers between financial institutions, owning private firms or by lending directly to non-financial enterprises.

- Policies to *prevent repetition* of crises are central to the crisis response and also heavily interact. Fiscal policy geared towards the sustainability in public finances will need to focus on expenditure control, although tax increases are probably unavoidable. To the extent this is the case, it is important that good principles of optimal taxation -- to limit distortions, tax arbitrage and undesirable distributional effects -- be respected. This may raise issues for structural policy, e.g. due to the heavy interaction between tax and social benefit systems or the implications for business location choices. Similarly, expenditure restraint would need to focus on items that are distorting and inhibit economic efficiency and growth, while creating room for growth friendly government spending such as for education and innovation. More generally, the 'quality of public finances' along with its quantitative aspects, is of eminent importance.

The multiple cross border spillover effects of policies, that may e.g. affect the functioning of the Single Market or the Economic and Monetary Union, call for horizontal coordination. The coordination of crisis policies within the EU framework was hitherto uncharted territory when the crisis broke, and hence there was little guidance to be drawn from historical precedents. However, with the European Economic Recovery Plan of November 2008, the European Commission took the initiative to provide a framework for a coordinated crisis control policy, including support measures at Community level, while also laying down guidance on principles to

govern the measures taken at national level.⁽³⁹⁾ The EERP was subsequently endorsed by the European Council of December 2008. Thus, policy coordination has been a feature of the ongoing efforts to handle the crisis in the EU, in the context of the existing framework, whose shortcomings for effective crisis control have become apparent in the process.

Against this backdrop the next two chapters take stock of the policies that have been implemented in the EU to date.⁽⁴⁰⁾ These have focussed mostly on crisis control and mitigation objectives (Chapter III.2), but first steps towards the development of a coherent EU framework for financial crisis resolution and prevention (Chapter III.3) have been taken.

⁽³⁹⁾ The European Economic Recovery Plan initiated by the Commission in November 2008 and endorsed by the European Council of December 2008 provided a framework for a coordinated crisis control policy, while also laying down guidance on principles to govern the measures taken at national level. See European Commission (2009f).

⁽⁴⁰⁾ For an overview of the EU's response to the crisis see European Commission (2009g). Directorate-General for Economic and Financial Affairs. Occasional Paper 51, July 2009. The EU's response to support the real economy during the economic crisis: an overview of Member States' recovery measures.

2. CRISIS CONTROL AND MITIGATION

2.1. INTRODUCTION

Major policy initiatives have been taken in the EU pursuit of crisis control and mitigation. Financial rescue policies have focused on restoring liquidity and capital of banks and the provision of guarantees so as to get the financial system functioning again. Deposit guarantees were raised. Central banks cut policy interest rates to unprecedented lows and gave financial institutions access to virtually unlimited lender-of-last-resort facilities. Governments provided liquidity facilities to financial institutions in distress as well, along with state guarantees on their liabilities, soon followed by capital injections and impaired asset relief. Discretionary fiscal stimulus was released so as to hold up demand and ease social hardship over and above the automatic fiscal stabilisers. These crisis control and mitigation policies are largely achieving their objectives. Economic contraction has been stemmed and the number of job losses contained relative to the size of the economic contraction. This chapter discusses and assesses the policy actions in these areas in some detail.

2.2. BANKING SUPPORT

After the September 2008 events several countries scrambled to rescue their systemically important financial institutions, which exposed serious adverse spillover effects, e.g. associated with cross-border banking groups or the nationality of depositors which grossly violated level-playing field conditions. This prompted an immediate and coordinated EU strategy to prevent an outright collapse of the financial system. Member State governments, together with the Commission, spelled out the principles and objectives for a coordinated approach to tackle the crisis. Rescue packages for national banking sectors were rapidly set up, in line with the guidance swiftly provided by the Commission on the design and implementation of State aid in favour of banks. The main rationale of this guidance is to ensure that rescue measures can fully attain the objectives of financial stability and maintenance of credit flows, while minimising competition distortions and negative spillovers of public interventions between beneficiaries of aid in different Member

States, between beneficiaries with different risk profiles and between aid beneficiaries and banks that do not benefit from aid. Central banks in turn responded by lowering the borrowing costs for banks. They also stepped up earlier measures to enhance market liquidity and later even resorted to unconventional policy measures like quantitative easing (as will be discussed in more detail in the next section).

Since October 2008, the Commission has approved a total of over 3½ trillion (almost one-third of the GDP) of State aid measures to financial institutions. So far, EUR 1½ trillion (13% of GDP) have been effectively used under the four main headings of debt guarantees, recapitalisation, liquidity support, and treatment of impaired assets (see Table III.2.1). State guarantees on bank liabilities represent the largest budgetary commitment among the aid instruments, with EUR 2.9 trillion (25% of EU GDP) of approved measures, out of which EUR 1 trillion (8% of GDP) have been effectively granted. Set up as an immediate response to the drying up of liquidity in the interbank market in the early days of the crisis, their aim was to provide a timely solution to the lack of confidence and remedy the liquidity squeeze and its wider consequences. Member States have typically chosen to provide such guarantees in national schemes, with a time-limited window during which banks could make use of them. ⁽⁴¹⁾

The main potential source of negative spillovers of such measures, which could also jeopardise their effectiveness, was the danger of large flows of funds between Member States in search for the highest level of protection. In order to avoid such arbitrage, the Banking Communication of 13 October 2008, together with the ECB recommendations on pricing of government guarantees, provided conditions with which any national guarantee on banks liabilities would have to comply. They need to be open to all banks, including subsidiaries of foreign banks established in a Member State without any discrimination; they can cover liabilities longer than 3 months lasting up to three years (subsequently prolonged

⁽⁴¹⁾ Some Member States also chose to provide other liquidity and bank funding support, totalling over EUR 300 billion (3% of EU GDP) of approved measures, of which the bulk has been used.

Table III.2.1:
Public interventions in the banking sector

% of GDP	Capital injections		Guarantees on bank liabilities		Relief of impaired assets		Liquidity and bank funding support		Total	
	Approved	Effective	Approved	Granted	Approved	Effective	Approved	Effective	Approved	Effective
Ireland	5.1	2.1	225.2	225.2	-	-	-	-	230.3	227.3
Belgium	4.2	5.7	70.8	16.3	5.7	5.0	NA	NR	74.6	35.3
United Kingdom	3.5	2.6	21.7	9.5	-	-	25.1	18.7	50.3	30.8
Netherlands	7.9	7.9	34.3	5.7	-	4.9	-	5.8	42.2	24.3
Luxembourg	6.9	7.9	12.4	NR	-	-	-	-	19.3	18.5
Sweden	1.6	0.2	48.5	8.8	-	-	0.1	-	50.2	9.0
Latvia	1.4	-	10.9	2.8	-	-	10.9	6.1	23.2	8.9
Austria	5.0	1.7	27.3	5.1	0.4	0.4	27.3	1.5	60.0	8.7
Germany	4.2	1.6	18.6	7.3	3.6	0.4	-	NR	26.4	6.3
Spain	-	-	9.3	2.8	-	-	2.8	1.8	12.1	4.6
France	1.2	0.8	16.6	3.1	2.3	0.3	-	-	20.1	4.2
Portugal	2.4	-	12.5	3.0	-	-	-	-	14.9	3.0
Greece	2.0	-	6.1	0.4	-	-	3.3	1.7	11.4	2.1
Denmark	6.1	0.3	253.0	NR	-	-	NA	NR	243.8	0.5
Hungary	1.1	0.1	5.9	-	-	-	-	-	7.0	0.1
Slovenia	-	-	32.8	-	-	-	-	-	32.8	-
Slovakia	-	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Italy	1.3	-	NA	-	-	-	-	-	1.3	-
Finland	-	-	27.7	-	-	-	-	-	27.7	-
Estonia	-	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-	-
Cyprus	-	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-	-
European Union	2.6	0.5	24.7	7.8	12.0	0.5	4.3	3.0	43.6	11.8
Euro area	2.6	1.4	20.6	8.3	12.0	0.7	1.3	0.7	36.5	11.1

Note: Countries ranked by total effective support, NR = not reported by the Member State, NA = not available. Source: European Commission.

to five), and they need to follow a common pricing formula.

Ensuring sufficient lending to the non-financial sector became a further immediate challenge as banks started the process of deleveraging. The Commission quickly followed up with the Recapitalisation Communication of 5 December 2008 (European Commission 2008c) guiding the design of recapitalisation of banks by Member States. The main principles that limit the competition distortion of these structural and lasting interventions are (i) the price that the beneficiary has to pay for State capital, which depends on the risk profile of the bank and the seniority of the instrument used, and (ii) the follow up required from the bank, which can go from an exit strategy from reliance on State capital for fundamentally sound banks to in-depth restructuring or liquidation for distressed banks.

So far, EUR 300 billion of state recapitalisations have been approved (2½ % of EU GDP), out of which EUR 170 billion (1½ % of EU GDP) have been effectively granted. Provided either as part of

a national scheme or through recapitalisation of individual banks on an ad-hoc basis, state capital took form typically of ordinary or of preferential shares, the latter with loss-absorption features allowing for their treatment as core Tier 1 capital. In case of recapitalisation by preferential shares, the State aid rules determined the level of pricing including step ups in order to incentivise the banks to redeem State capital when market conditions permit.

The uncertainty about the location and size of losses from impaired assets on banks' balance sheet continued to impact on investors' confidence, and the need to tackle this fundamental cause of the crisis became apparent. On 25 February 2009, the Commission (European Commission 2009g) provided guidance for the treatment of impaired assets. Irrespective of the design of the asset relief measures, be it as purchase, guarantee, or a hybrid, it requires full transparency and disclosure from beneficiary banks, adequate burden sharing between the State and the beneficiary, and prudent valuation of impaired assets based on their real economic value both in the base and stress

scenarios. So far EUR 50 billion ($\frac{1}{2}$ % of the EU GDP) of impaired asset relief has been approved and effectively used, but more measures for significantly larger amounts have been announced and are currently being implemented and discussed with the Commission.

From Table III.2.1 can be inferred that there are considerable differences in terms of the size of the financial support programmes among Member States. At over double its GDP, Ireland has committed by far the most resources to bank rescues. There is a second league of countries which includes the United Kingdom and the Benelux countries with effective support so far in the range of 20 to 40% of GDP. These differences reflect a range of factors, including the relative size of banking sectors (United Kingdom, Ireland and Luxembourg), the exposure to impaired assets originating in the United States (United Kingdom, Germany), the exposure to a collapse of local real estate markets (United Kingdom, Ireland, Spain, Denmark) and the exposure to emerging economies in Central and Eastern Europe (Sweden, Finland, Austria, Greece, Belgium, Netherlands). As shown in the table, the Central and Eastern European Member States have not introduced support measures for their foreign-based banks, preferring to rely on measures taken to support the parent banks in their home countries. However, the presence of foreign banks is not uniform and so their exposure to problems in the banking sectors elsewhere in the EU is correspondingly different.

Since the start of banking rescue packages in the third quarter of 2008, the balance sheets of EU banks have strengthened as capital injections have been considerably higher than write-downs. In this process, public capital injections have been instrumental in stabilising banks' capital positions. Thereby the outstanding amounts of capital and reserves of euro area banks have increased by more than 4% in the period from July 2008 to March 2009. The conditions for banks' debt financing have also improved significantly on the back of state-guaranteed debt issuance. Furthermore, there are no signs that state-guaranteed debt would have crowded out other forms of debt securities. Instead public debt guarantees provided a basis for restoring confidence in markets. The evolution in interbank interest spreads equally show a firm trend towards

more normal market conditions. The trend towards more a normal functioning of the financial sector has become more broad-based, as other financial market prices have largely mirrored the time profile of interbank interest rate spreads, thereby signalling a gradual decline in risk aversion and counterparty risk as well as a tentative recovery in expectations concerning bank profitability. The price of bank equity has seen a strong rebound since mid-March, signalling market expectations of improving profitability and higher earnings. Share prices in general have also been helped by reduced market risk, which has given investors more confidence and increased appetite for risk.

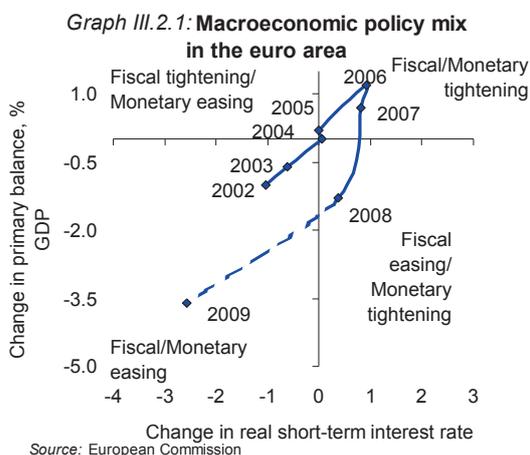
However, despite the various financial support measures, bank balance sheets are still fragile and the process of balance sheet adjustments in the banking sector is not yet over. Banks are still highly leveraged and persistent concerns about the quality of their assets raise worries about the overall health of their balance sheets. Near-term challenges relate mainly to issues of transparency, valuation of impaired assets and comparability of measures across jurisdictions. Medium-term challenges relate to the restructuring and return to viability of ailing banks, and efforts in these areas have to be sustained.

2.3. MACROECONOMIC POLICIES

2.3.1. A strongly expansionary stance

The financial crisis led to, and was reinforced by, a steep decline in economic activity from the fourth quarter of 2008 onwards. This forced EU central banks and governments to adopt an extraordinary expansionary stance of macroeconomic policies. Besides the lowering of borrowing costs, central banks stepped in as central providers of liquidity, thereby ensuring the allocation of short-term bank funding on dysfunctional money markets. Reflecting the discretionary fiscal stimulus adopted, but also, and more importantly, tax shortfalls and inertia in expenditure programmes, government deficits have increased more than twice as much as one would predict from the automatic stabilisers. The overall support of government finances to the economy in 2009 and 2010, as measured by the deterioration in the government balance, amounts to 5 percentage

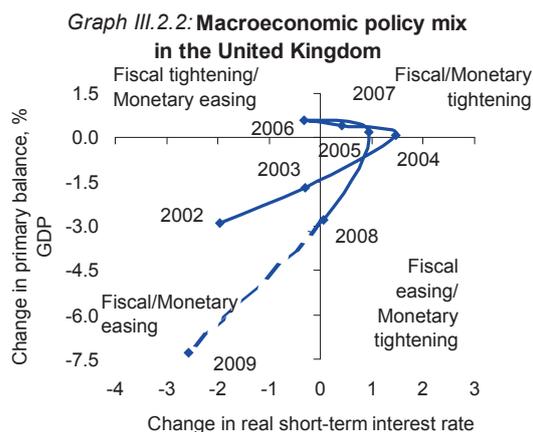
points in the EU (around 4½ percentage points in the euro area).



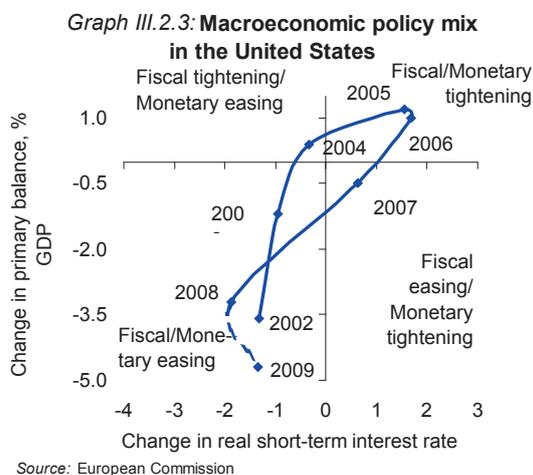
It is evident from comparing Graphs III.2.1, III.2.2 and III.2.3 that the extent of monetary and fiscal stimulus in the EU is of comparable magnitudes as in the United States. Moreover, it is notable that the ECB was the first major central bank to address market tensions via larger liquidity provisions to its banking system after the subprime crisis spread in the summer of 2007.

Conventional monetary policy as well as fiscal policy easing came in about a year later than at the other side of the Atlantic. This is not surprising to the extent that the United States has been the epicentre of some of the initial shocks that shaped the downturn. This may partly explain why the US economy so far has appeared to be less severely affected by the crisis than the EU economy.

2.3.2. Monetary policies

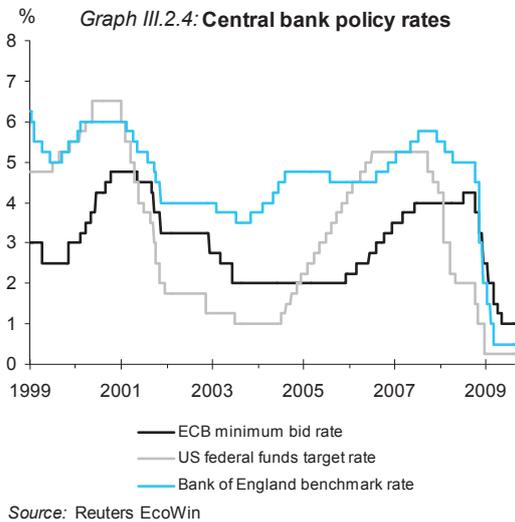


Central banks in the EU did respond decisively to the rising tensions on the money markets after the collapse of Lehman Brothers. The ECB lowered its borrowing costs by 50 basis points to 3.75 percent in early October 2008, in a coordinated move with the Bank of England, the *Sveriges Riksbank* and various non-EU central banks (Graph III.2.4). More interest rate reductions followed from October 2008 until the summer of 2009, leading to a reduction of the ECB benchmark policy rate by 325 basis points to 1%. Similarly, the Bank of England and the *Riksbank* lowered their policy rates by 400 basis points.



Besides the lowering of borrowing costs, as noted, central banks stepped in as central providers of liquidity, thereby ensuring the allocation of short-term bank funding on dysfunctional money markets. To this end, the ECB satisfied all liquidity bids in its main weekly operations at a fixed interest rate, widened the interest rate corridor (with the ECB deposit rate at 0.25% since April 2009, pulling the overnight rates effectively to zero; see Graph III.2.5) and provided liquidity in foreign currency. Moreover, the list of collateral eligible for refinancing was expanded, which facilitated banks' access to central bank money. With the objective of supporting banks' funding beyond very short-term horizons, the ECB also raised the volume allotted in its three-month refinancing operations and introduced six-month and twelve month refinancing operations. Comparable measures were also implemented by

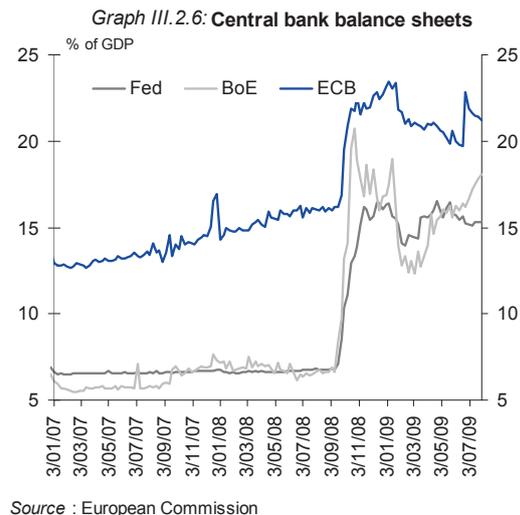
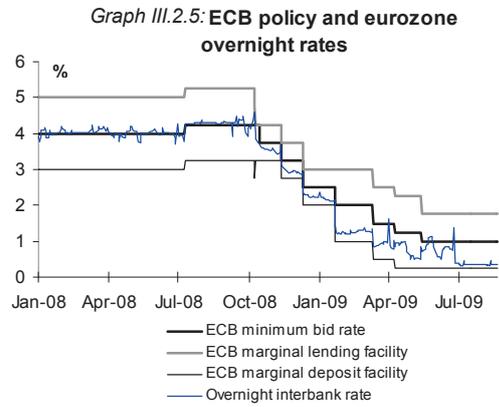
central banks outside the euro area. For example, the Bank of England extended the maturity of its discount window facility, conducted long-term repo transactions and temporarily established a special liquidity scheme.⁽⁴²⁾ In May 2009, the ECB added unconventional policy measures to its support of financial markets, agreeing to purchase euro-denominated covered bonds for a total amount of EUR 60 billion. This programme of credit easing is similar in kind to the asset purchase facility introduced by the Bank of England in March 2009.



Overall, the liquidity enhancing measures have contributed to an expansion of the ECB balance from EUR 1.2 trillion at the beginning of August 2007 to approximately 1.85 trillion at the end of July 2008. In terms of the euro area GDP, the ECB balance sheet rose from 13 to 21 percent over the period under review (Graph III.2.6). As noted, at the onset of the crisis in the summer of 2007 the ECB was the first major central bank to address market tensions via larger liquidity provisions to its banking system, first by increasing the size of its operations and then loosening its collateral standards. This expanded liquidity (or 'quantitative

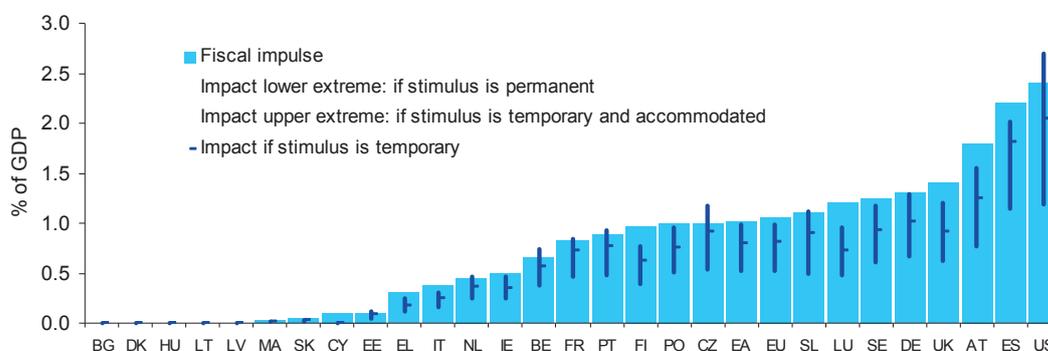
⁽⁴²⁾ In some Member States, governments took additional measures to support banks' liquidity. These measures involve swapping bank assets that had become illiquid against liquid assets (i.e. in Greece or Spain), or by providing infrastructure for money market activity (i.e. in Italy or Austria). Some central banks provided emergency lending assistance to specific financial institutions; others provided liquidity as part of state aid packages (i.e. in Denmark, Germany or the United Kingdom).

ease') is crucial when interest rates are close to the 'zero rate bound'.



The effectiveness of the extensive monetary policy action in Europe and elsewhere should be judged not only in terms of its traditional transmission channels, but also in terms of its success in avoiding a financial meltdown and thus preparing the ground for a return to normal functioning financial markets. The extensive monetary policy easing in the EU, like elsewhere, has certainly reduced the stress in financial markets and has had a positive impact on their functioning – even if these remain vulnerable.

Graph III.2.7: Fiscal stimulus in 2009



Note: See Box III.2.1 for explanation. Source: European Commission.

2.3.3. Fiscal policies

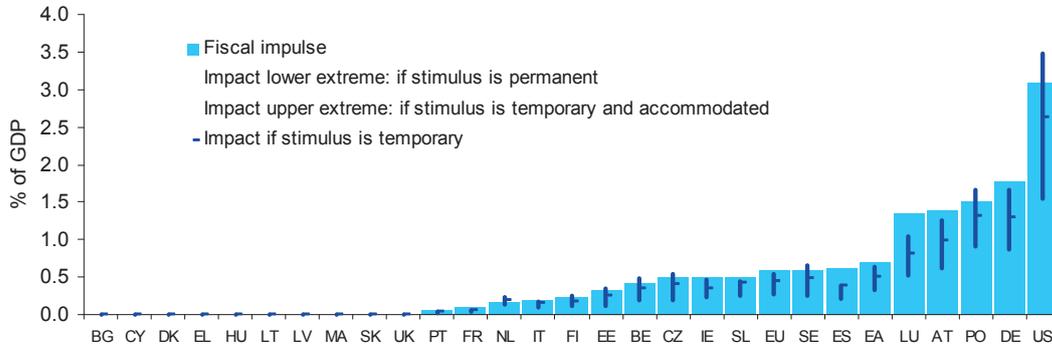
As noted, the EU has also contributed its fair share in terms of fiscal support to address the global downturn. With its European Economic Recovery Programme (EERP), the EU has defined an effective framework for addressing the economic downturn, combining active fiscal stimulus with structural reforms. The programme, as endorsed by the European Council in December 2008, is estimated to total almost 2% of GDP over 2009 – 2010, including EUR 20 billion (0.3 % of EU GDP) through loans funded by the European Investment Bank. The packages have broadly followed desirable general principles, i.e. they were differentiated according to the available fiscal room for manoeuvre and relied on measures that were targeted, timely and temporary. The stimulus measures are estimated to contribute about $\frac{3}{4}$ of a percentage point to real GDP growth in 2009 and about $\frac{1}{3}$ of a percentage point in 2010. The dispersion of package sizes is considerable (Graphs III.2.7 and III.2.8). For 2009, by far the largest fiscal stimulus package (in comparison to its GDP) was adopted by Spain, followed by Austria and, as indicated, the United Kingdom. For 2010, Germany and Poland stand out by their comparatively large fiscal stimulus packages. It should be noted, however, that implementation lags are likely to shift the measures back towards 2010-11.

The growth impact of each package may differ across countries, depending on the characteristics of their economies (such as their openness or share

of credit-constrained households) and depending on the composition of the packages. The estimates show the fiscal measures announced for 2009 could boost GDP by between 0.5 and 1% in 2009 and by between 0.3 and 0.6 % in 2010. The range of the estimates reflects the uncertainty with regard to the extent to which the policy action is credibly temporary. Temporary fiscal stimulus typically has a stronger impact on spending or production given that households and businesses are induced to advance their spending or production plans as they would otherwise miss out on the opportunity. Measures which are not accompanied by a credible sunset clause will fail to produce such anticipation effects and also generate stronger 'non-Keynesian' saving responses as households and businesses take out insurance against the risks of unsustainable public finances. Another factor that can enhance the impact of fiscal stimulus is the response of the monetary authorities. If they consider the measures as credibly temporary (i.e. with a predefined exit), they may accommodate the fiscal stimulus by adopting an easier policy stance than they otherwise would do.

Aside from the effectiveness of the packages, it is important also that the distribution of package sizes is appropriately mapped onto the distribution of countries' needs and their 'fiscal space' (i.e. their ability to temporarily run fiscal deficits without jeopardising the sustainability of their public finances or their external positions). The analysis in Graph III.2.9 suggests that, overall, Member States whose negative output gap (i.e. their degree of economic slack) is largest, are also those that

Graph III.2.8: Fiscal stimulus in 2010



Note: See Box III.2.1 for explanation. Source: European Commission.

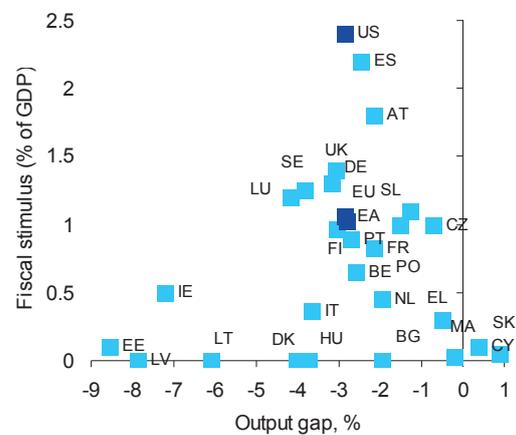
pursue the strongest fiscal stimulus – and *vice versa*. For example, the comparatively large fiscal stimulus packages of the United Kingdom and Germany are broadly in line with the relative severity of their downturns gauged by the output gap. Slovakia, at the other extreme, which has been affected only recently by the crisis, has adopted a relatively small package. There are exceptions to this pattern though. For example, at a first glance Spain's fiscal package appears somewhat excessive in view of the size of its output gap, but this needs to be viewed in Spain's comparatively favourable fiscal space. Conversely, Ireland and the three Baltic states have adopted comparatively small fiscal packages (or none at all), despite record slack. This again needs to be viewed against the limited fiscal space.

As discussed in Chapter II.3, 'fiscal space' available to countries to be an important determinant of countries' exposure to risk re-pricing and hence their ability to pursue fiscal stimulus. The fiscal space can be thought of comprising several elements: the initial public debt, the contingent liabilities vis-à-vis the financial sector, expected further revenue shortfalls, the current account position and the share of discretionary (as opposed to entitlement) expenditure.

It would be appropriate for Member States with a large fiscal space to bear a larger share of the burden of fiscal stimulus under the EERP and, conversely for countries with a more limited fiscal space to provide less fiscal stimulus. Given that the

EU economy is strongly integrated, less fiscally active Member States could benefit from fiscal activism among their peers via its impact on international trade.

Graph III.2.9: Output gap and fiscal stimulus in 2009



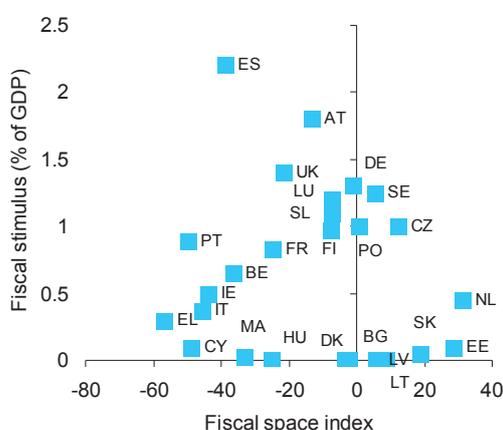
Source: European Commission.

Also in order to keep the average level of interest rates low in the European Union as a whole – and hence minimise the crowding out of private sector activity – it is best that fiscal activism be concentrated among Member States who dispose of the largest fiscal space.

Graph III.2.10 suggests that, overall, the amount of stimulus is positively correlated with the fiscal space of Member States, but that there are again exceptions. There is a large subset of Member

States – including Germany, France, Italy and the United Kingdom – whose packages are in line with their fiscal space. Concerning the exceptions, there is a subset of Member States which for a variety of reasons have adopted comparatively small stimulus programmes, or none at all, irrespective of their fiscal space. This group includes several emerging economies in Eastern Europe and also Denmark.

Graph III.2.10: Fiscal space and fiscal stimulus in 2009



Source: European Commission.

All considered, and certainly when taking into account the relative size of the economies of Member States, the distribution of fiscal stimulus efforts is broadly in line with the distribution of their needs in term of absorbing slack and with the distribution of their ability to implement fiscal stimulus – i.e. without running into severe problems with regard to the sustainability of their balance of payments or fiscal position. But obviously this conclusion is predicated on the assumption that the fiscal stimulus packages are indeed temporary and will be fully reversed at the appropriate time when the economy recovers. If not, there is a danger that fiscal policy will undermine the sustainability of public finances, notably if the recovery is slow and potential output growth is slow as well (see Chapter II.1). This outcome could imply higher long term interest rates, and thus crowd out capital formation and innovation and complicate the recovery of the financial system. Distortive and jobs-unfriendly tax increases may then be unavoidable at some stage, which would in turn weigh again on potential growth.

2.3.4. Balance of payments assistance

The EU balance-of-payments assistance is part of a multilateral effort by the EU together with the IMF and the World Bank. In the context of the financial crisis, the EU increased the ceiling of the EU Balance-of-Payments facility in two steps from EUR 12 billion in 1988 to EUR 50 billion on 18 May 2009. Three countries are benefiting from this facility at the moment: Hungary (total of EUR 6.5 billion), Latvia (EUR 3.1 billion) and Romania (EUR 5 billion) see Box III.2.2 for further details.

The IMF, with more resources available, is usually the main source of balance-of-payments assistance. However, in the case of Latvia, where the programme is particularly large relative to the size of the economy, the EU provides the largest share of funds. Moreover, in the case of Latvia, there was also bilateral financial support, mainly from Northern European countries, given their banks' heavy exposure to that country.

Given the importance of the financial sector in resolving the crisis, the multilateral institutions seek also, under the so-called "Coordination Initiative", voluntary commitments by parent banks to maintain their exposure to the countries concerned and to recapitalise foreign-based subsidiaries if the results of stress-tests indicate the need for such action. Romania and Hungary were the first EU Member States where this new approach was applied. Markets have reacted favourably to the joint EU/IMF programmes, as evidenced by easing pressures on the exchange and money markets. Programme adjustments, as in the case of Hungary and Latvia, have so far not led to dramatic market reactions, as they are seen as necessary adaptations to a further substantial deterioration of the economic situation, rather than the consequence of major policy failures.

Box III.2.1: Measuring the economic impact of fiscal stimulus under the EERP

Table 1 reports the fiscal multipliers for the first year for different fiscal measures computed with the Commission's QUEST model (Roeger and in 't Veld 2009). The macroeconomic impact of fiscal stimulus depends crucially on whether the shock is credibly temporary or perceived to be permanent. In the latter case, economic agents will anticipate higher taxes and raise their savings. In general, GDP effects are larger for public spending shocks (government consumption and investment) than for tax reductions and transfers to households. If monetary policy is assumed to be more accommodative towards the fiscal stimulus, first year GDP effects are considerably larger as they are accompanied by lower real interest rates.

Spending shocks and investment subsidies display the largest multipliers. Increasing investment subsidies yields sizeable effects especially if it is temporary since it leads to a reallocation of investment spending into the period the purchase of new equipment and structures is subsidised. Government investment yields a somewhat larger GDP multiplier than purchases of goods and services. However, it is mainly the long run GDP multiplier (not shown) which shows a significant difference because of the productivity enhancing effects of government investment. An increase in government transfers has a smaller multiplier, as it goes along with negative labour supply incentives.

Temporary reductions in value added and labour taxes show smaller multipliers. Tighter credit constraints tend to increase the multiplier of these measures. A temporary reduction in consumption taxes is more effective than a reduction in labour taxes as also forward looking households respond to this change in the inter-temporal terms of trade.

A temporary reduction of taxes is attractive from a credibility point of view, since the private sector is likely to believe in a reversal of a temporary tax cut more than into a reversing of a temporary spending increase. Nevertheless, permanent reductions in VAT or labour taxes could yield short run effects exceeding those of a permanent expenditure increase, because permanent reductions of taxes reduce distortions imposed by the tax system. Temporary corporate tax reduction would not yield positive short run GDP effects since firms calculate the tax burden from an investment project over its entire life cycle. A permanent reduction in corporate taxes yields higher GDP benefits, but with large capital adjustment costs it could take time for these results to materialise.

Figures III.2.7 and III.2.8 in the main text show the fiscal measures for 2009 and 2010 that have been announced so far under European Economic Recovery Plan (EERP) adopted in November 2008. Applying the multipliers above to these fiscal measures it is then possible to compute the likely first year GDP impacts, which are shown in the same graphs. The impact of these fiscal packages on GDP depends on the composition and on the credibility of the temporary nature. As it is not possible to directly assess the latter, the graphs show both the GDP effects if the measures are assumed to be permanent (low credibility) and if the measures are assumed to be temporary, i.e. for one year, (credible). In addition, it shows the effects if monetary policy is more accommodative and interest rates are kept unchanged for one year.

Table 1:
First year GDP effects of fiscal shocks of 1% of GDP

Fiscal measures:	Permanent stimulus	Temporary stimulus (one year)	Temporary with monetary accommodation (1)
Investment subsidy	0.46	1.37	2.19
Government investment	0.84	1.07	1.40
Government consumption	0.36	0.99	1.40
Consumption tax	0.37	0.67	0.99
Government transfers	0.22	0.55	0.78
Labour tax	0.48	0.53	0.68
Corporate profit tax	0.32	0.03	0.05

(1) unchanged nominal interest rates for 1 year.

Table III.2.2:
Labour market and social protection measures in Member States' recovery programmes

	Member States	Number of Member States	Number of measures	Consistency with principles/criteria		
				high	medium	low
Improving job placement and investing in re-training	AT, BE, BG, CZ, DK, DE, EL, ES, FI, FR, HU, IE, IT, MT, NL, PT, RO, SE, SI, SK, UK	21	64	33	33	0
Reinforcing activation	AT, BE, BG, CZ, DK, DE, EL, ES, FI, FR, IE, IT, LT, LU, MT, PL, SE, SI, SK	19	34	8	31	0
Supporting household purchasing power	AT, BE, BG, DK, DE, ES, FI, FR, IT, LU, LV, MT, PL, PT, RO, SE, SK, UK	18	48	4	42	1
Supporting employment by cutting labour costs	AT, BE, BG, DK, DE, ES, FR, HU, LT, LU, LV, NL, PT, RO, SE, SI, SK	17	35	11	26	0
Encouraging flexible working-time	AT, BE, BG, CY, CZ, DK, DE, FR, HU, IT, LT, LU, NL, PT, SI, SK	16	20	15	5	1
Mitigating the impact of financial crisis on individuals	AT, BG, CZ, EE, ES, FI, FR, HU, IE, IT, LT, LU, PT	13	27	1	25	0
Maintaining/reinforcing social protection	BE, BG, EL, FI, FR, IE, IT, LV, PT, RO, SE, UK	12	21	4	17	1
Others	AT, BE, CZ, DK, EE, FI, FR, LT, LV, RO, SE	11	12	1	7	3
Enhancing education and life-long learning	T, BG, DK, DE, LT, PT, SE	7	10	4	10	0
Revising EPL in line with flexibility	BG, EE, CY, LT	4	2	2	2	0

Note: Information included up to 31 March 2009. A single measure can be classified under several headings and thus the totals do not sum up. Each measure is assessed relative to the agreed principles using criteria such as timeliness, the degree of targeting, the consistency of short-term support measures with long-term policy such as those in the Lisbon strategy, and the possible need for coordination in light of cross-border spillovers. An attempt has been made to assess the consistency of measures relative to the principles/criteria. A 'high' degree of consistency is considered to occur when the measures are considered to be ambitious and comprehensive enough. A 'medium' degree of consistency is considered to occur when measures go in the right direction but are relatively limited in scope. A 'low' degree of consistency is considered to occur when measures potentially go in the wrong direction.

Source: European Commission

2.4. STRUCTURAL POLICIES

The European Economic Recovery Programme (EERP) called for priority to be given to structural policies which, although mostly aiming to raise growth and jobs potential of the economy in the longer run, could support aggregate demand, employment and household income in the short-run during the crisis, whilst at the same time improving the adjustment capacity to enable a faster recovery when conditions improve. The EERP has called for these measures to be consistent with long-term policy objectives such as those found in the Lisbon Strategy, the smooth functioning of the Single Market, and facilitating a move towards a low-carbon economy. The assessment below, which draws on an earlier publication by the European Commission services (European Commission 2009f), shows that Member States are largely undertaking policy responses in line with these principles.

2.4.1. Labour market policies

As discussed in Chapter 2 the financial crisis and the ensuing global downturn are beginning to be felt in labour markets. Projections indicate that employment will decline over the next two years,

leading to a steep rise in unemployment, which, on unchanged policies and labour market behaviour, is set to exceed 10% on average in the European Union in 2010. Moreover, access to credit for individuals has become difficult and private pension funds are under severe strain as a result of the correction in capital markets.

In a number of EU countries the adoption of temporarily shorter working hours or partial unemployment benefits prevented more significant labour shedding, in particular in manufacturing. The existing social safety nets are also cushioning the social impact of the economic downturn. In addition, Member States are pursuing a wide range of complementary employment policies aimed at containing the impact of the crisis on labour markets under the aegis of the EERP endorsed by the European Council of 12 December 2008. Table III.2.2 lists these measures. This indicates that approaches vary considerably, although most countries rely on at least a number of instruments.

The assessment of crisis-related labour market policies needs to be seen in conjunction with the other features of the policy response to the crisis, in particular the financial markets measures, the fiscal expansion and structural reforms in product markets. In combination these measures are aimed

at restoring confidence and supporting demand and potential growth – and hence indirectly would also support employment. Moreover, a set of overarching principles should be considered when assessing labour market measures. In particular: (i) measures should aim at reducing the costs of adjustment and speed up transitions on the labour market; (ii) they should support the income of the most disadvantaged groups and who have relatively high marginal propensity to consume; (iii) they should be consistent with long-term reform objectives such as the flexicurity principles under the Lisbon Strategy; and, especially in euro area countries, (iv) they should facilitate the adjustment of the divergences in external competitiveness through their impact on unit labour costs.

These guiding principles are largely endorsed by the EU Member States. As stressed in the Commission Communication for the Spring European Council "Driving European recovery" (European Commission 2009h), the following types of measures and design features would be particularly appropriate:

- Financial support to temporary flexible working-time arrangements in line with production needs to raise labour flexibility. Such action needs to be combined with measures supporting employability and guiding people towards new jobs, empowering workers to take advantage of new opportunities when the economy recovers.
- Reinforcing activation and providing adequate income support for those most affected by the economic slowdown, making full use of social protection benefits, in line with the flexicurity approach. In those countries where unemployment insurance is strictly limited in time, consideration should be given to its temporary expansion and/or a reinforcement of minimum income provisions. Back-to-work incentives should be kept intact, and vulnerable groups supported in line with the active inclusion strategy.
- Investing in re-training and skills upgrading particularly for workers on short time and in sectors that are in decline. Preference should be given to training targeted at future labour market needs, such as 'green jobs'. Anticipation of future skills needs should therefore be promoted. Employment Services should be properly equipped to cope with increased unemployment.
- Mitigating the direct impact of the financial crisis on individuals through specific measures to prevent over-indebtedness and maintain access to financial services. In countries with larger pre-funded schemes in their pension systems, pension fund managers need to reconsider their long-term projections of returns to protect the current and future income of pensioners and to avoid pro-cyclical variations in benefit and contributions rates.
- Ensuring the free movement of workers within the Single Market. It can help address the persistence of mismatches between skills and labour market needs, even during the downturn.
- Supporting measures such as lowering non-wage costs for low-skilled workers. Wage developments and fiscal measures should take account of each Member State's competitive position and productivity growth.
- Support to tackle youth unemployment and early school leavers. Time spent out of education or employment while young can have lasting adverse effects. Member States should prepare for and encourage an increase in demand for education and training, as existing students stay on and displaced workers seek to re-skill. In this respect, future labour market growth areas such as 'green jobs' can already be anticipated.
- Integrating measures aimed at revising employment protection legislation within a flexicurity approach covering all its components, so as to reduce segmentation and improve the functioning of labour markets.

Box III.2.2: EU balance of payments assistance

Hungary was the first EU Member State to receive EU medium-term financial assistance (up to EUR 6.5bn, Council Decision of 4 November 2008), in support of a comprehensive economic programme adopted by the Hungarian authorities in the last week of October 2008. The assistance is provided in conjunction with loans from the IMF (EUR 12.5bn) and World Bank (EUR 1bn). The purpose of the programme is to restore investors' confidence and alleviate financial stress. Other key objectives of the programme are to maintain sound government finances, and to strengthen the domestic banking sector and improve financial supervision and regulation in line with EU rules, notably on state aid. The first three instalments were disbursed in December 2008, March and July 2009, following completion of programme reviews and agreement on revised programme parameters and conditionality.

In the first two weeks of September, the Commission services have participated in the third IMF review mission (no EU disbursement was foreseen). The mission reached staff-level agreement with the authorities on policies and on the extension of the programme (without increased financing) by six months to October, 2010, to reflect changes in the external financing situation, and cover the election period and the transition to a new government. In parallel, in agreement with the Hungarian authorities, the last EU instalment would be re-phased and disbursed in three sub-tranches in the first three quarters of next year.

Latvia received EU medium-term financial assistance early this year (up to EUR 3.1bn, Council Decision of 20 January 2009), in support of the "Economic Stabilisation and Growth Revival Programme", adopted by the Latvian authorities on 12 December 2008. The Community assistance is part of a coordinated international package totalling up to EUR 7.5bn. The programme supports the fixed exchange rate regime and was designed to reinforce domestic and international confidence in the financial system, to control inflation and restore cost competitiveness, to strengthen the economy's growth potential, and to lay the groundwork for sustainable convergence and Latvia's entry in the euro area as soon as possible.

The first two instalments were released in February and July 2009. Policy conditionality has been revised in the course of programme implementation, to include additional budgetary savings and structural measures, and the fiscal path was substantially modified.

In July, the Commission services participated in an IMF mission under the First Review (no EU disbursement was foreseen), which reached staff-level agreement with the Latvian authorities. In view of the less urgent need of additional financing, the third and fourth EC instalments have been postponed by one quarter (to end 2009 and Q1-2010 respectively).

Romania received balance-of-payments assistance in May 2009 (up to EUR 5bn, Council Decision of 5 May 2009). The EU assistance comes in conjunction with loans of the IMF (EUR 13bn), the World Bank (EUR 1bn) and the EIB and the EBRD (EUR 1bn). The package was designed to enable the economy to withstand short-term liquidity pressures while improving competitiveness and supporting an orderly correction of imbalances in the medium term. The EU financial assistance is conditional upon the implementation of a comprehensive economic policy programme aimed at limiting the deterioration of government finances, improving fiscal governance (including through adoption of a binding medium-term budgetary framework), making public compensation more transparent, and reviewing the public pension system. The first instalment was disbursed in July.

In August, the Commission services participated in the first IMF review mission (no EU disbursement was foreseen), which reached staff-level agreement with the authorities on policies, including additional fiscal consolidation measures, and revised programme parameters conditionality in other areas.

In line with the principle of devising measures that do not hamper the adjustment capacity of labour markets or put the brake on recovery, and therefore do not need to be withdrawn when the recovery starts, the following set of measures should be avoided: (i) indiscriminate, tax-funded support for jobs in declining industries or regions; (ii) direct job-creation schemes (unless well targeted at specific vulnerable groups to help them keep in touch with the labour market); and (iii) early retirement, because of its adverse effects on economic efficiency, income distribution and the sustainability of public finances.

2.4.2. Business support and investment

The financial crisis affected companies and specific sectors through a severe contraction of credit and loans accompanied by a tightening of credit standards. The main drivers were the negative economic outlook, but also the impact of banks' ability to obtain financing in the market. While large enterprises were more affected by the net tightening of credit standards, the situation worsened for SMEs during the last quarter of 2008. As businesses and consumers are forced to scale down their investment plans in the face of tighter credit conditions, collapsing confidence, less favourable market conditions and considerable uncertainty surrounding future developments, investment – especially private investment - is forecast to decline by more than 10% in 2009 (European Commission 2009a).

The EERP recognised the need for public intervention to support viable businesses during the crisis to ease financing constraints facing and to support specific credit services (e.g. export credit insurance) which markets were temporarily unable to provide, at least at economically viable conditions and prices. Beyond the aggregate demand support provided by macroeconomic instruments, there may also be a case for temporary government support targeted at sectors where demand has been disproportionately affected by the crisis and could cause important dislocations. Temporary public support could help prevent unnecessary and wasteful labour shedding and the destruction of otherwise viable and sound companies. These measures will help contain the negative effects of the crisis on potential output by preventing a permanent loss of knowledge and skills and a reduction of productive capacity far

beyond what would be expected during a normal cyclical slowdown. Finally, there may be instances, where government support on the supply side is warranted for sectors and business where there are technological or other spillovers benefits to the economy.

The March 2009 Commission Communication "Driving European Recovery" set out a number of guiding principles for actions to be taken by Member States in support of businesses, among which were the following:

- Maintaining openness within the internal market, continuing to remove barriers and avoid creating new ones.
- Ensuring non-discrimination by treating goods and services from other Member States in accordance with EU rules and Treaty principles.
- Targeting interventions towards longer-term policy goals: facilitating structural change, enhancing competitiveness in the long term and addressing key challenges such as building a low carbon economy.
- Sharing information and best practice.
- Pooling efforts and designing measures so that they generate synergies with those taken by other member states. Stronger co-operation at European level is key in this respect.
- Keeping the Single Market open to trading partners and respect international commitments, in particular those made in the WTO.

2.4.3. Assessing the EERP

The Commission has carried out a preliminary assessment of the recovery measures undertaken by Member States against the principles and policy do's and don'ts set out in the EERP and the Communication of March 2009. An overview of measures is presented in European Commission (2009f).

Labour market and social protection measures in recovery programmes have been classified into

nine broad types of action and an attempt has been made to determine the degree of consistency of measures (high/medium/low) with the principles, see Table III.2.2. Overall, the following broad insights can be inferred:

- Overall Member States have put significant emphasis on employment in designing their recovery packages: measures to support a proper functioning of the labour market and supporting household purchasing power represent just over half of the recovery measures undertaken by Member State. Although they cover a smaller share of the total fiscal stimulus, overall, considerable budgets are being allocated to supporting employment.
- Assessed individually, most measures seem compatible with the agreed principles and policy do's and don'ts. The majority of measures seem to address the specific policy objective they pursue in a rather ambitious manner. There is also a considerable degree of targeting of measures on labour market categories that need support most (low income groups; recently laid-off workers). Short term policies also seem to be contributing to long term reform challenges with some 40% of the measures addressing country-specific recommendations or challenges identified under the Lisbon Strategy.
- However, there are a few measures that may risk undermining long-term policy goals or might be difficult to reverse. This concerns in particular public job creation schemes or fiscal support for overtime. Also, some 10% of the measures are likely to have permanent adverse effects on public finances. These measures should be reviewed and, where necessary, amended.
- Unfortunately, there seem to be very few measures aimed at improving the efficiency of welfare systems, and hence the reforms do not seem to directly contribute much to improving the sustainability of public finances. Of course, the measures addressing long term responses will indirectly support public finances.
- About a quarter of the measures are likely to generate sometimes considerable spill-overs on

other Member States. This concerns policies aimed at e.g. reducing social security contributions and, in particular, subsidies to working time flexibility (e.g. through part time unemployment support). Especially in the latter case, there may be a need for stronger EU-level coordination to avoid competitive distortions in the internal market.

Support for businesses sectors under the EERP has been provided both on the demand and the supply side (state aid). Most Member States have put in place horizontal frameworks that allow policy support to be given to sectors that are most affected by the crisis (e.g. cars, tourism, construction), and, as a general rule, these seem temporary, targeted and timely. However, there is considerable variation across Member States in terms of the support actually provided. Also, the effectiveness of national schemes for industries operating across the entire internal market could be somewhat limited. Should schemes need to be maintained beyond the year end then there would be a clear case for more coordination at the European level.

While it is an open question as to how such ex ante coordination could be organised, the benefits of proceeding with a common approach under circumstances of an extended crisis can hardly be in doubt. At this juncture, European businesses also face the additional risk of an increase in the recent resurgence of protectionist tendencies globally which are reflected in various types of measures, often below the threshold of being actionable but with the potential of triggering an avalanche of "tit for tat" responses. Ensuring that measures supporting the business environment through the crisis do not contribute to such developments will be crucial. Preventing that remains an important task for monitoring and coordination going forward. As investment, particularly private investment, has been hit especially hard in the current economic climate, it is a welcome finding that new or accelerated spending on public investments forms a significant share (about a third) of the overall fiscal stimulus provided in line with the EERP. As the focus is mostly on accelerating projects that were already in the pipeline, most actions will support economic activity in a timely manner in 2009 and 2010. Moreover, while there is a degree of focus on energy efficiency, there are few indications of a

Box III.2.3: Labour market and social protection crisis measures: examples of good practice

Labour market and social protection measures in Member States' recovery programmes can be ranked according to criteria such as timeliness, degree of targeting, temporariness and consistency with the Lisbon goals. The following three cases are examples of measures with particularly high scores on these criteria.

The *United Kingdom* developed a comprehensive strategy on employment, notably through the "New Opportunities White Paper". The employment package includes: increased training opportunities for the unemployed; strengthened pre-redundancy support; further support for those who are still unemployed after six months, there including and expanded range of work and training options. The Jobseeker's Allowance has been reformed with the introduction of a personalised, contracted Personal New Deal to provide the right support for skills and back-to-work activity, through a staged programme of support for all Jobseeker's Allowance customers. A National Employment Partnership has been also set up to examine what more employers can do to tackle unemployment, supported by a substantial expansion of JobCentre Plus Local and of JobCentre Plus Rapid Response Centre for employers.

Germany extended the period of receipt of short-time allowance from 12 to 18 months limited to 2009; simplified the application and procedure for

receipt of short-time allowance; and introduced support to companies to ensure that short-time takes precedence over redundancies by reimbursing 50% of employers' social security contributions in 2009 and 2010.

Employers who give their workers on short-time the opportunity to participate in qualification measures will be reimbursed with the full amount of SSC. A federal programme on funding qualification for workers on short-time will enhance in 2009 workers' adaptability to the requirements of the labour market. The programme distinguishes between qualification measures geared to the labour market in general and specific qualification measures focussing more strongly on the needs of the respective company. The amount of assistance varies between 25 and 80% of training course costs, depending on type of training, size of the company, and persons participating in the scheme.

Hungary adopted a modernisation and subsidy programme for heating schemes, consisting of two elements: (1) subsidising low-income households' energy bills; and (2) financially helping the modernisation of district heating systems (in particular for large block of flats). The scheme will be financed from a temporary 8% tax (surcharge) on the profits of energy companies for 2009 and 2010.

substantial shift towards green investment at the aggregate level (especially compared to the fiscal stimulus imparted by non-EU countries). Going forward, a key policy issue is whether the observed plunge in private investment and R&D spending will be reversed in an upswing, as a failure to do so would be detrimental to potential growth (especially to the objective of closing the productivity gap): for public investment, the key issue is what happens with budgetary consolidation. With this in mind, the success of ongoing efforts by the Commission and the European Investment Bank (EIB) to accelerate the transfer of cohesion funds and to improve the absorption capacity (see Box III.2.4) is key.

It is not possible at this stage to arrive at firm conclusions about the adequacy of the measures in light of labour market developments and prospects in individual member states. This also depends on the effectiveness of other parts of the recovery plans (e.g. investment, support to the business sector discussed below) and the support they bring to sustaining economic activity which has not yet been assessed. Nevertheless, the analysis suggests that in some Member States the policy response could be strengthened. As the employment and social impact of the crisis is likely to be more severe than was expected when measures were first put in place, there is a clear need to actively monitor and, where necessary, reinforce policies as the effects of the crisis unfold.

Box III.2.4: EU-level financial contributions

As indicated in the Commission's Communication of 4 March 2009, the stimulus packages of Member States called for in the EERP are complemented by actions at the EU level. A further € 30 billion or 0.3% of GDP has been made available from EU sources including a number of new public private partnerships. The Commission has proposed a targeted investment to the tune of € 5 billion to address the challenge of energy security and to bring high-speed internet to rural communities, as well as through additional advance payments under cohesion policy amounting to € 11 billion, of which € 7 billion for new Member States.

Moreover, the EIB has mobilised its resources to provide a timely response to the financial and economic crisis taking the form of additional annual lending of € 15 billion per year in 2009 and 2010. Its action relies on the following financing instruments: a) SMEs, mid-caps and mezzanine financing, b) energy, climate change and infrastructure, including the European Clean Transport Facility (ECTF), c) financing of convergence regions (focused on new Member States), d) Marguerite equity fund and, e) EIF mezzanine mandate. These activities will take the form of loans, equity, guarantees and risk-sharing financing, all at market conditions. The EIB support to SMEs is part of the mobilised additional resources endorsed by the Ecofin council in September 2008, boosting its SME lending possibilities by € 30 billion between 2008 and 2011. The results of these actions can be already observed both in terms of new commitments but also of accelerated disbursements in particular towards SMEs and key sectors in the European economy. In particular, a total of 12 operations have been approved in the automotive sector, from January to April 2009, for a global amount of € 4.025 billion of which € 2.744 billion under the ECTF.

The measures will also help mobilise complementary private resources to support additional investments. Some EU actions also target more specifically the New EU Member States in Central and Eastern Europe. On the basis of the Joint IFI Action Plan In Support of Banking Systems and Lending to the Real Economy in Central and Eastern Europe the EBRD will finance up to € 6 billion over 2009-2010 as part of its sharply increased business plan for the financial sector across region of operations. The EBRD's financing will take the form of equity investment and capital supporting instruments to ensure that its clients are adequately capitalised to meet the challenges ahead, targeted medium and long term debt finance to support lending to the real economy, particularly to the SME sector, and the doubling of limits available under its Trade Facilitation Program to support trade flows in the region.

In addition the EIB has € 5.7 billion in SME lending facilities available for drawing by Central, Eastern, and Southern European banks, and further tranches totalling a similar amount are expected during the 2009-2010 period (€ 11 billion in all) as part of the EIB volume increase under the EERP adopted by the December 2008 European Council. A first further tranche of € 2.8 billion should be approved by end-April 2009. The distribution of these SME facilities, currently totalling € 8.5 billion, is as follows: € 4.4 billion for New EU member states; € 1.9 billion for pre-Accession Western Balkan states; and € 2.2 billion for pre-Accession Turkey. The EIF, the EIB Group's venture capital and SME guarantee arm, is also aiming to increase its activity in this region over the next two years.

Finally, the risk that the current economic downturn will prompt countries to return to go-it-alone behaviour is high and can lead to negative spill-over effects.

Countering such risks calls for a more effective coordination between Member States, particularly when support is directed to sectors (or services) where intra-Community trade is important.

3. CRISIS RESOLUTION AND PREVENTION

3.1. INTRODUCTION

The emphasis of crisis resolution policies so far has understandably been focussed on the financial sector. The EU's role so far has been to coordinate stress testing of banks and to provide guidance on the restructuring of banks in accordance with state aid rules. The immediate priority is to restore the viability of the banking sector, since otherwise a vicious circle of weak growth, more financial sector distress and ever stiffer credit constraints would inhibit economic recovery. Financial repair has therefore been at the core crisis resolution policies so far.

In addition, regulatory and supervisory initiatives have been taken in the pursuit of crisis prevention. The agenda for regulation and supervision of financial markets in the EU is vast. Action plans have been put forward by the EU to strengthen the regulatory framework in line with the G20 regulatory agenda. With the majority of financial assets held by cross-border banks an ambitious reform of the European system of supervision, based on the recommendations made by the High-Level Group chaired by Mr Jacques de Larosière (2009), is under discussion. Initiatives to achieve better remuneration policies, regulatory coverage of hedge funds and private equity funds are being considered but have yet to be legislated. In many other areas progress is lagging, although consensus is shaping.

3.2. CRISIS RESOLUTION POLICIES

3.2.1. Stress testing of banks

The ultimate resolution of the financial crisis requires removing investors' uncertainty about the quality of bank balance sheets. Stress tests can be a decisive tool for accomplishing this since they provide information about banks' resilience and ability to absorb possible shocks. They are already an important tool in financial institutions' risk management and bank supervisors use stress-tests on an ongoing basis for monitoring the robustness of banks' financial health in accordance with the Basle II provisions.

The EU has mandated the Committee of European Bank Supervisors (CEBS) to coordinate an EU-wide forward-looking stress testing of the banking system. This exercise does not intend to duplicate the efforts at national level but is a means to remove the negative confidence effects of having many different and often inaccurate estimates of likely bank exposures. The EU-wide stress test will be applied by national supervisors on a bank-by-bank basis (for 22 major cross-border institutions), with the purpose to increase the level of aggregate information among policy makers in assessing the European financial system's potential resilience to shocks and to contribute to the convergence of best practices in the EU.

The main advantage of an EU-wide stress test is to provide a more general outcome based on common guidelines and common stress scenarios. This will ensure comparable results and consistency in the analysis, thus increasing the level of information about the challenges ahead. The Commission spring forecast serves as the foundation of the baseline scenario, while the ECB has proposed an adverse macroeconomic scenario surrounding the baseline. In order to enhance consistency and comparability of the approaches, the ECB has provided benchmarks for translating the macroeconomic shocks into the credit risk parameters. National supervisors may use their own estimates but are expected to explain the rationale for diverging from the benchmarks.

The stress tests will be an important step in providing a more concrete perspective of the resilience of the financial sector in Europe. It is vital that Member States and industry capitalise on the work conducted. This could involve ensuring that the balance sheets of banks have been cleaned out and that there is an optimal level of transparency throughout the sector. It would also be an occasion for Member States to consider whether certain structural changes are needed to the configuration of the financial sector within their jurisdiction. Though the EU exercise is not intended to be used to assess specific institutions' needs for recapitalisation, considerable resources remaining available for bank support could prove useful for recapitalising banks found to be vulnerable. Apart from government support, recapitalisation could also be achieved through the

issuance of new capital instruments or by the sale of assets and business lines.

3.2.2. Restructuring banks

The road to viability of the EU banking sector leads through restoring viability of individual financial institutions. Some of them are in the position to weather the current crisis with limited adjustments in their operations as a response to shareholders' and market pressures. Others, which have received large amounts of State aid and with unsustainable business models, need to undertake in-depth restructuring in order to restore long-term viability without reliance on State support. None will be able to properly perform their function of lenders to the real economy until this process is undertaken.

The European Commission's State aid control provides the framework for the use of public support for banks restructuring. To this effect, the Commission issued on 22 July 2009 a Communication on "The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules" (European Commission, 2009i). Building upon the immediate requirement of safeguarding financial stability and market confidence, the framework provides Member States and banks with the conditions for acceptance of restructuring state aid with the medium-term objectives of restoring the viability of the beneficiary banks without state support and returning to normal competitive market functioning:

- Firstly, the beneficiary banks need to restructure so as to restore their long-term viability without State support. A thorough restructuring plan, demonstrating strategies to achieve viability also under adverse economic conditions, needs to be based on rigorous stress testing of the banks' business and needs to include, where appropriate, full disclosure of impaired assets. The restructured bank should be able to compete in the market place for capital on its own merits in compliance with relevant regulatory requirements. While restructuring needs to commence now, the timetable for the completion of structural measures necessary for restoring viability will take account of the scale of restructuring in the

sector and current adverse market conditions. The benchmark of long-term viability may imply different solutions across banks, ranging from limited restructuring with no divestments to an orderly winding down of unviable entities.

- Secondly, the bank and its capital holders should contribute to the costs of restructuring as much as possible with their own resources, in order to address moral hazard and to create appropriate incentives for their future behaviour. This is achieved through setting appropriate price for State support which ensures adequate burden sharing, so that the aid cannot be used to finance market-distorting activities not linked to the restructuring process.
- Thirdly, competition distortions created by aid need to be addressed in order to create conditions for the development of competitive and efficient markets after the crisis. Tailor-made to market circumstances of each case, and dependent on the size and duration of aid as well as the relevant market structure, possible divestments, temporary restrictions on acquisitions by beneficiaries or other behavioural safeguards will tackle competition distortions between banks which have received public support and those which have not, as well as between banks located in different Member States. Differences between Member States in terms of resources available for State intervention can harm the level playing field in the single market, while national interventions could result in fragmentation of the internal market. Measures to limit distortions of competition will help avoiding harmful subsidy races and ensuring the competitiveness and efficiency of EU banks.

This three-pronged strategy is to ensure that the EU banking industry returns to business as usual as soon as market conditions permit, and the banks which emerge strong from the crisis are determined by the merits of their business strategies, to the ultimate benefit of consumers. A side benefit of such a strategy is to limit the overall amount of aid, with a corresponding positive effect on public finances, as discussed below.

Once the above strategy is implemented the time is ripe to further develop and implement an appropriate framework to deal with future risks of financial crisis. Ideally, such a new framework would contain rules for crisis prevention and – to take out insurance against cases where even the best of prevention policy fails to deliver – rules for crisis control/mitigation and resolution. The focus of EU action so far, however, has been on the prudential aspects of bank regulation and supervision.

3.3. CRISIS PREVENTION

3.3.1. Regulatory initiatives

The EU quickly responded to the financial crisis with the ECOFIN 'roadmap for regulatory reform' and the March 2009 Commission Communication: Driving Economic Recovery. These two action plans provide the basis for strengthening the regulatory framework for the EU, and are in line with global initiatives that formed the basis for the G20 regulatory agenda as well as the Geitner plan in the United States. In addition, the EU reacted rapidly in amending existing legislation by tightening the rules for banks' liquidity lines to the structured investment vehicles that were used to hold securitised products. Moreover, principles on liquidity management were updated.

In accordance with the roadmap, the EU has agreed to make changes to the regulatory treatment of securitisations, hybrid capital and home-host supervisory arrangements and key improvements in the flows of regulatory information. In a sector where the majority of assets are held by thirty six cross-border banks, it is important to note that supervisory colleges for each of these institutions are being set up. Ongoing initiatives at the EU level will further address liquidity, leverage, dynamic provisioning, and the quality of capital.

Another line of regulatory reform aims at addressing areas with little oversight in the past. The EU has agreed on appropriate rules for Credit Rating Agencies to ensure that they meet the international code of good practice. Furthermore, work is ongoing on the relevance of certain accounting doctrines and improvements thereto to ensure that they remain appropriate and relevant to the developments in the market. Further examples

are the work on remuneration and the coverage of alternative investment funds.

The financial policy weaknesses revealed by the financial crisis are global, hence EU-level solutions can only have their full effect if they are part of a global effort to improve stability of the financial sector and the real economy. The EU must work with third countries to ensure *inter alia* that there is convergence on key regulatory principles and pointless regulatory friction is avoided. International cooperation on financial market regulation and international financial institutions launched at the G20 summit in Washington in November 2008 is at the core of this movement to establish enhanced supervisory and regulatory standards. The Commission is actively contributing to this process, which is only in its early stages.

3.3.2. Supervisory initiatives

Supervisors in the EU failed to detect, warn and act upon major risks that were accumulating in the financial system. Supervisors did not sufficiently take account of global macroeconomic and macro-prudential developments and as the crisis developed, supervisors were often not prepared to discuss with appropriate frankness and at an early stage the vulnerabilities of financial institutions that they supervised. Information flows among supervisors were far from optimal, especially in the build-up phase of the crisis. This led to an erosion of mutual confidence among supervisors. Moreover, in a number of instances the existing European committees of supervisors, being merely advisory committees to the Commission, were unable to contribute to the effective management of the crisis, notably their inability to take urgent decisions.

In response the Commission proposed an ambitious reform of the European system of supervision based on the recommendations made by the High-Level Group chaired by Mr Jacques de Larosière. The de Larosière Group recommended establishing a new framework for safeguarding financial stability based on two pillars:

- A *European System of Financial Supervision* (ESFS), that would create a network of EU financial supervisors, based on the principle

of partnership, cooperation and strong coordination at the centre. National supervisory authorities would continue to be responsible for the day-to-day supervision of firms but the existing European committees of supervisors ('Lamfalussy committees') would be transformed into three European Supervisory Authorities. These European Authorities would be responsible for defining the technical supervisory standards (e.g. for colleges of supervisors) to be followed by national supervisors, for fostering cooperation and consistency and for taking a number of decisions which cannot be adequately taken at the national level (e.g. the responsibility for the licensing and supervision of some specific EU-wide institutions, such as Credit Rationing Agencies). These central Authorities would also mediate and arbitrate in cases of differences of views or conflicts between national supervisors.

- A *European Systemic Risk Council* that would be responsible for macro-prudential oversight of the financial system in order to prevent or mitigate systemic risks and to avoid episodes of widespread financial distress. The ESRC would provide early risk warnings when significant risks to financial stability are emerging. It would, where appropriate, issue recommendations for remedial action and monitor their implementation. This body would have as voting members the members of the General Council of the ECB, a Member of the European Commission and the Chairpersons of the three committees of supervisors (respectively, of the three new European Supervisory Authorities once they are established). The ECB would provide administrative, logistical, statistical and analytical support to the ESRC.

The de Larosière Group stressed the need to introduce binding cooperation and information sharing procedures between these new bodies. This is considered to be fundamental so as to ensure that individual firms' financial soundness is no longer supervised in isolation but also takes account of wider macroeconomic developments of risks to the stability of the financial system as a whole. On 4 March 2009 the Commission endorsed the key principles set out in the de Larosière Group report (European Commission

2009h). It also launched a public broad consultation on the recommended reforms of supervision for the financial services. The European Council on 19/20 March 2009 also agreed that the de Larosière Group report would be the basis for action.

On 27 May 2009 the Commission therefore presented a Communication on European financial supervision (European Commission 2009j), setting out in more detail the proposed outline of supervisory reform. The ECOFIN-Council on 9 June agreed with the objectives laid down in the Commission Communication. In particular, the Council agreed that an independent macro-prudential body covering all financial sectors, the European Systemic Risk Board (ESRB), should be established and that the Commission should present draft legislative proposals by early autumn 2009 at the latest. The EU has thus embarked on an ambitious agenda of regulatory and supervisory reform. On many issues, agreement in principle has been reached and must now be followed up by specific legislative action. For example, a European Systemic Risk Board and European Supervisory Agencies must be put in place and the institutional decision-making process on changes to banking regulation must be completed. Moreover, efforts to achieve better risk management with regards to remuneration policies and the regulatory coverage of hedge funds and private equity funds must continue and ensure that the weaknesses of the past have been eradicated. It is also imperative to address the exuberance of financial institutions during economic upturns by ensuring that high profits in 'good times' are modulated to allow for adequate provisions and capital buffers for 'bad times'. During upturns, enough provisions and capital must be put aside to cope with more difficult times. This is necessary in order to avoid the extreme peaks and troughs in financial market conditions over the last two years. In parallel with efforts in the areas of banking supervision and regulation, the EU needs to ensure that complementary areas, such as the accounting frameworks, also evolve in the same direction. Institutions have to operate using the rule books of various regulators and standard setters while responding to the needs of the markets. Therefore a certain degree of commonality and consistency across these rule books is important. A single regulatory rule book, as soon as feasible, would be desirable.

4. POLICY CHALLENGES AHEAD

4.1. INTRODUCTION

The current crisis has demonstrated the importance of a coordinated framework for crisis management and prevention. It should contain the following building blocks:

- *Crisis prevention* to prevent a repeat in the future. This should be mapped onto a collective judgment as to what the principal causes of the crisis were and how changes in macroeconomic, regulatory and supervisory policy frameworks could help prevent their recurrence. Policies to boost potential economic growth and competitiveness could also bolster the resilience to future crises.
- *Crisis control and mitigation* to minimise the damage by preventing systemic defaults of banks or by containing the output loss and easing the social hardship stemming from recession. Its main objective is thus to stabilise the financial system and the real economy in the short run. It must be coordinated across the EU in order to strike the right balance between national preoccupations and spillover effects affecting other Member States.
- *Crisis resolution* to bring crises to a lasting close, and at the lowest possible cost for the taxpayer while containing systemic risk, securing consumer protection and minimising competitive distortions in the internal market. This in part requires reversing temporary support measures as well action to restore economies to sustainable growth and fiscal paths. Inter alia, this includes policies to restore banks' balance sheets, the restructuring of the sector and an orderly policy 'exit'. An orderly exit strategy from expansionary macroeconomic policies is also an essential part of crisis resolution.

The beginnings of such a framework are emerging, building on existing institutions and legislation, and complemented by new initiatives. But of course policy makers in Europe have had no choice but to employ the existing mechanisms and procedures. A framework for financial crisis prevention appeared, with hindsight, to be

underdeveloped – otherwise the crisis would most likely not have happened.

As discussed in Chapter III.2, most EU policy efforts to date have been in the pursuit of *crisis control and mitigation*. But as shown in Chapter II.3, steps have also been taken to redesign financial regulation and supervision – both in Europe and elsewhere – with a view to *crisis prevention*. By contrast, the design of *crisis resolution* policies has not begun in earnest yet. This is now becoming urgent – not least because it should underpin the effectiveness of control policies via its impact on confidence.

4.2. THE PURSUIT OF CRISIS RESOLUTION

In some ways the financial and economic crisis has many features in common with similar financial-stress driven recession episodes in the past. It was preceded by relatively long period of rapid credit growth, low risk premiums, abundant availability of liquidity, strong leveraging, soaring asset prices and the development of bubbles in the real estate sector. Excessive leveraging and the spreading of the associated risk via securitisation rendered financial institutions very vulnerable to corrections in asset markets. As a result, a turn-around in a relatively small corner of the financial universe (the US subprime market) was sufficient to trigger a crisis that toppled the whole structure. Such episodes have happened before and the examples are abundant (e.g. Japan and the Nordic countries in the early 1990s, the Asian crisis in the late-1990s). The difference with these earlier episodes, however, is that the current crisis is global. This has at least one major implication for economic policy: devaluation or other 'solutions' that seek to 'export' the economic effects of the crisis to neighbouring countries – which always risk backfiring – are now potentially extremely dangerous. This is one reason why observers find it appropriate to compare the current crisis to the 1930s Great Depression (see Chapter I.2).

It should be noted, however, that, while it may be appropriate to consider the Great Depression as the correct benchmark from an analytical point of view, it has also served as a great lesson. At present, governments and central banks are well aware of the policy mistakes that were common at

the time, both in the countries that now constitute the EU and elsewhere. Deposit insurance schemes have avoided large-scale bank runs and efforts are being made to recapitalise banks or guarantee their liabilities so as to safeguard their solvency. Monetary policy has been eased aggressively, complemented with 'quantitative easing' to ensure that liquidity is plentiful. EU governments, akin to their counterparts elsewhere, have released fiscal stimulus in an effort to hold up demand and to provide the hardest hit groups with temporary income support or job protection. And, unlike the experience during the Great Depression, countries have not, or at least not massively, resorted to protectionism or other beggar-thy-neighbour policies, which is a very important achievement.

Even so, while the policy responses both in the EU and elsewhere can be viewed as very effective in comparison with the dismal policy performance that led to the Great Depression, the question is legitimate whether the policy response should not take a longer-term perspective. Admittedly, to some extent there already is some long-term focus. Efforts are being made to reinforce and link EU-wide and globally systems of enhanced supervision and regulation of financial markets. It has become widely accepted that macro-prudential supervision, on a cross-border basis, is an essential complement of micro-prudential supervision (as proposed by the Larosière Report and developed further by the Commission's proposal, European Commission 2009j). It is unlikely that the experience of the crisis would leave the conduct of future monetary policies unaffected. Hence it may be expected that central banks will lean more against the wind of future asset price upturns – even if the occasional reoccurrence of bubbles cannot be fully excluded. However, no matter how important these policy directions may be, they are more of a preventive nature in the face of possible future crises. They help little to soften the knock-on effects of the current crisis.

It is therefore essential that a policy framework to deal with the crisis in a longer-term perspective be developed, not only to better cope with the aftermath of the crisis per se and bolster the economy's potential and resilience, but also to enhance the credibility of crisis resolution policies that are being implemented at present. The standard example illustrating this point is that fiscal stimulus without a credible 'exit strategy' is

unlikely to be effective, its multiplier effect being wiped out by 'non-Keynesian' saving responses. But the repercussions of unduly ignoring exit strategies once the acute phase of the crisis is over reach much wider. Financial rescues that create 'zombie banks' and entail a risk of moral hazard may not only fail to sustain the recovery via an adequate supply of credit and re-establish a sound financial system in the medium to longer run, but may also fuel sentiments of social injustice and adversely affect confidence now.

Moreover, while the financial crisis shock has been common to all EU Member States, its impact has – as noted – affected them in rather different ways. This raises important coordination issues, especially for the euro area. Some of the earliest and hardest hit countries have sometimes acted on their own, at least initially, inflicting damaging spillover effects onto their peers. There has also been reluctance to implement bold fiscal stimulus in some countries out of fear that trade spill-over effects would invite free-riding behaviour of its trading partners. By way of another example, until the crisis unfolded there was a clear reluctance to coordinate supervision and regulation of financial markets. This has changed, as evidenced by the adoption of the de Larosière Report, but its implementation may still meet headwinds. So, while the outburst of outright beggar-thy-neighbour policies has fortunately been prevented, internal coordination in the EU leaves to be desired.

The question is legitimate whether the economic outlook has not fundamentally changed from our pre-crisis priors and if this should not be reflected in the design of the 'exit strategy' from the present crisis policies. There are two views around:

- Some hold on to an optimistic view and expect a sharp recovery. In this view potential output would have been little affected and actual output would soon rebound to its pre-crisis path. This view finds some support in recent developments. Sentiment recovered in recent months, the stock market rebounded from its October 2008 lows, some commodity prices have surged. Moreover, yield curves are upward sloping, which in a normal situation would herald an economic upturn. If this is to be interpreted as evidence of a sustained pickup in economic activity, the conditions for exits

from monetary and fiscal policy stimulus and support for the financial sector would soon be in place.

- However, without appropriate policy responses a sluggish recovery cannot be excluded. Despite the recent signs of stabilisation, the recovery is still fragile. Moreover, some of the contraction in activity may be permanent, i.e. be associated with the scrapping of obsolete capital and jobs. The deleveraging process across the private sector as a whole is likely to be lengthy and act as a drag not only on actual output growth but also on future potential output growth, as risk premiums on investment and innovation may remain high. Even if the increase in fiscal deficits may be to a large extent the result of 'automatic stabilisers', high deficits (and debt) may well be persistent when there is a downward shift in the level and/or the growth rate of potential output. The upward-sloping yield curve, rather than being a sign of imminent recovery, may spell fiscal trouble and be more akin to an insurance premium for distressed banks and industries that have made calls on government support.

The upshot is that a weak recovery would make a timely exit of fiscal stimulus more challenging, yet all the more indispensable and requires bold structural reforms to boost potential growth. Fiscal stimulus will be maintained in 2010 as this is largely implemented already in 2009. Some of the fiscal stimulus is expected to be phased out automatically in 2011. However, this will not be sufficient to stem the rise in public debt, hence undermining sustainability of public finances. This outcome could imply higher long term interest rates, and thus crowd out capital formation and innovation and complicate the recovery of the financial system. Distortive and jobs-unfriendly tax increases may then be unavoidable at some stage while in fact it is vital to avoid work incentives to be weakened as this would exacerbate the supply constraints. While the need to withdraw fiscal stimulus will be greater in these circumstances, it will be more difficult politically to achieve as the reduced stimulus will almost certainly entail a dip in activity.

As recovery takes hold, emphasis needs to shift clearly from fiscal to structural policies. It is important to highlight that even prior to the

financial crisis potential output growth was expected to roughly halve (to as little as around 1% in the euro area) in the next decade due to the ageing population. But even these projections now look optimistic in view of the financial crisis. It is unlikely that growth will be anywhere close to the rates that were deemed normal in past decades. It is therefore important to decisively restore the longer-term viability of the banking sector so as to maximise its contribution to growth in the real economy and sustain, if not step up, the pace of broader structural reform so as to boost productivity and potential growth. Without it, potential growth is likely to stall, which, as noted, would make the fiscal burden heavier, the exit strategy for fiscal and monetary policy more painful and make the distress in the financial system more persistent.

Structural reforms should be directed to enhancing the economy's infrastructure capital, employing idle or underutilised labour resources and improving the use and development of new technologies. This requires government initiatives in the pursuit of investment in infrastructure (public or private), the development of skills, greater labour mobility (geographical or across industries and occupations) and innovation (including the development of low-carbon technologies). Now that the financial system takes a more conservative attitude to risk financing even allowing for recovery in the banking sector, the expected social rate of return on such investments easily exceeds their perceived private return. This suggests that government initiative has a key role to play. Meanwhile, it is important that those fiscal measures that provide demand stimulus while doing little to support potential output, be withdrawn with priority.

The core of all crisis resolution policies remains the repair of the financial system. Without it a vicious circle of weak growth, more financial sector distress and ever stiffer credit constraints would be harder to break. Banks cannot escape the need to adjust their balance sheets as a return to pre-crisis high-leveraged banking models is not an option. In a rapid recovery scenario governments may hope that the financial system will 'grow out of the problem' and the exit from banking support would be relatively smooth. But, as long as the quality of the assets on banks' balance sheets is still not fully disclosed, uncertainty remains as to

the adequacy of the measures taken. In this context, the reluctance of many banks to reveal the true state of their balance sheets risks aggravating the situation. This may jeopardise the recovery. Therefore the immediate priority now is to fix the banking sector.

It is important that financial repair be done at the lowest possible long-term cost for the tax payer, while taking considerations of competition, consumer protection and systemic risk into account. Cleaning the balance sheets of banks may have a negative impact on public finances in the short run, but can have a positive longer-run impact via an expansion of the tax base and the economy at large. Minimising the net fiscal cost of the financial repair is important not only to win political support, but also because distortive tax increases down the road would undermine the policy goal of boosting potential growth.

Stronger emphasis on financial sector repair and structural reform can set a virtuous circle in motion. Economies will have to go through an immense effort of reallocation of resources, and this will make large calls on fresh capital. Innovation must be stepped up so as to enhance productivity and potential output, and this will require risk capital. And there is evidence that a well functioning financial sector and deep capital markets would strengthen the returns on and political incentives for structural reform. Conversely, if households and businesses remain excessively credit constrained, their behaviour will tend to be less focused on longer term growth objectives. Thus, the more effective the cleaning-up and strengthening of bank balance sheets is the faster, stronger and more sustainable the economic recovery will be. This would also set the conditions right for a normalisation of monetary policy.

4.3. THE ROLE OF EU COORDINATION

In view of the recent experience with the financial crisis, it is important that the framework for EU coordination of policy be extended and strengthened. The rationale is strong at all three stages – control and mitigation, resolution and prevention:

- At the *crisis control and mitigation* stage, financial assistance by home countries to their financial institutions may have potentially disrupting spillover effects. Moreover, it must be ensured that financial rescues attain their objectives with minimal competition distortions and negative spillovers. The coordinated response put in place in the autumn of 2008 in the face of the risk of financial meltdown shows that EU policymakers became fully aware of the need of a joint strategy. The need for deeper policy coordination and improved cross-border crisis management is a key lesson learnt from the recent crisis. Fiscal stimulus also has cross-border spillover effects, through trade and financial markets. Spillover effects are even stronger in the euro area in the absence of exchange rate offsets. The need for a fiscal boost underpinned the adoption of the EERP in December 2008. Moreover, the activation and strengthening of the EC Balance-of-Payment Facility helped to provide stability in Central and Eastern Europe.
- At the *crisis resolution* stage a coordinated approach is necessary to ensure an orderly exit of crisis control policies. It is important that state aid for financial institutions or other severely affected industries not persist for longer than is necessary in view of its implications for competition and the functioning of the EU Single Market. National strategies for a return to fiscal sustainability should be developed, for which a framework exists in the form of the Stability and Growth Pact which was designed to tackle spillover risks from the outset. The rationales for the coordination of structural policies have been spelled out in the Lisbon Strategy and apply also to the exits from temporary intervention in product and labour markets in the face of a crisis. Within the euro area, the adjustment of excessive current account imbalances should be facilitated by both structural reforms and macroeconomic policies. For instance, surplus countries should implement measures conducive to stronger demand while deficit countries should be urged to not resist the unwinding of their construction slumps.
- At the *crisis prevention* stage the rationale for EU coordination is also straightforward in view

of the high degree of financial and economic integration. Regulatory reform geared to crisis prevention, if not coordinated, can lead to regulatory arbitrage affecting location choices of institutions and may change the direction of international capital flows. Moreover, with many financial institutions operating cross border there is a clear case for exchange of information and burden sharing in case of defaults. The ongoing establishment of a new EU supervisory system will continue to help prevent future financial crises. The experience with the crisis underlines also the powerful rationale for stronger multilateral surveillance of economic policies within the EU. As regards the Central and Eastern European economies, Member States need to resist the emergence of imbalances and foster an efficient allocation of foreign capital. The EU can offer enhanced policy leverage (e.g. as the guardian of the single market), growth-enhancing financial transfers (structural funds, EIB, etc.) and a credible medium-term anchor for policies, including via the prospect of euro adoption. At the global level an appropriate strategy to reduce the global imbalances should be adopted – e.g. China should be encouraged to reduce its national saving surplus and change its exchange rate policy.

The rationale for policy coordination is thus strong: without it, Member States would not sufficiently take into account the favourable or unfavourable cross-country spillover effects of their policy choice. 'Internalising' these spillover effects in their policy choices would benefit both the European Union as a whole and its Member States.

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