OECD Economic Outlook
Volume 2011/2

Chapter 1

GENERAL ASSESSMENT OF THE MACROECONOMIC SITUATION

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Summary

- More than usual, world economic prospects depend on events, notably policy decisions related to the euro-area debt crisis and US fiscal policy. The nature and timing of many such events remain highly uncertain and the projection presented in this *Economic Outlook* therefore portrays a "muddling-through" case in the absence of decisive events.
- With this caveat, and against a profound loss of confidence related to the euro area debt crisis and US fiscal policy, the muddling-through projection involves very weak OECD growth in the near term, and a mild recession in the euro area, followed by a very gradual recovery.
- Concomitantly, unemployment would remain at a high level through 2013 and inflation would be under downward pressure in most regions.
- This calls for a continuation of present easy monetary policy stances for a considerable period and in some cases, most notably the euro area, a substantial relaxation of monetary conditions.
- Underlying budget consolidation is assumed to take place in most OECD countries; in the United States it is assumed to be weaker than embodied in current legislation, so as not to unduly restrain growth, and broadly in line with official consolidation plans in the euro area. In Japan, post-earthquake reconstruction spending will temporarily push up the budget deficit.
- With growth in emerging economies also having slowed and with high external surpluses in oil-exporting countries, global current account re-balancing has stalled. Imbalances are projected to remain broadly stable, but at a lower level than before the 2008-09 crisis, as demand growth recovers slightly more rapidly outside the OECD area than within.
- Serious downside risks stem from the euro area, linked to further contagion in sovereign debt markets driven by the possibility of sovereign default and its associated cross-border effects on creditors and risks to the monetary union itself. Without preventive action, events could strengthen such pressures and plunge the euro area into a deep recession with large negative effects for the global economy.
- To stem contagion, banks will have to be seen as adequately capitalised and convincing capacity, and commitment to use it, will be needed to ensure smooth financing at reasonable interest rates for otherwise solvent sovereigns. Such action to address financial imbalances will need to be accompanied by governance reform to limit moral hazard and by decisive policy reform to address the economic imbalances at the root of the present crisis. Forceful policy action could result in a significant boost to growth in the euro area and the global economy.
- A serious downside risk is that no action will be agreed to counter strong, pre-programmed fiscal tightening in the United States. Much tighter fiscal policy than in the projection could tip the US economy into a recession that monetary policy can do little to prevent.
- The OECD Strategic Response to an economic relapse identifies country-specific policy recommendations that could be implemented if the economy turned out much weaker than projected: fiscal support, backed by improved fiscal frameworks, where the state of public finances and confidence allows; monetary policy easing where possible; and structural policy reforms to strengthen growth, lower unemployment and bolster confidence.

Introduction

OECD activity is soft and the outlook uncertain

Global activity has slowed – in emerging economies, where it reflects policies to rein-in inflationary pressures, and in OECD economies where it is associated with a sharp fall in confidence. The economic outlook is now more uncertain than usual, with a number of possible events related to the euro area debt crisis and fiscal policy in the United States likely to dominate economic developments in the coming two years. With the nature and timing of such events impossible to predict, a "muddling-through" projection is presented here, in which disorderly sovereign defaults, systemic bank failures and excessive fiscal tightening are assumed to be avoided. The risks around this projection emerge largely from OECD economies and are tilted to the downside.

The "muddling-through" OECD projection is very weak in the near term followed by a muted recovery

The muddling-through projection shows very weak OECD growth in the near term, and a mild recession in the euro area, followed by a soft and gradual recovery (Table 1.1). On this basis, unemployment would remain very high while inflation would drift down, though deflation would be avoided provided inflation expectations do not become

Table 1.1. **The global recovery has lost momentum**

OECD area, unless noted otherwise

	Average 1999-2008	2009	2010	2011	2012	2013	2011	2012 Q4 / Q4	2013
	Per cent								
Real GDP growth[1]	2.5	-3.8	3.1	1.9	1.6	2.3	1.6	1.8	2.5
United States	2.5	-3.5	3.0	1.7	2.0	2.5	1.5	2.0	2.7
Euro area	2.1	-4.2	1.8	1.6	0.2	1.4	0.9	0.6	1.7
Japan	1.2	-6.3	4.1	-0.3	2.0	1.6	0.8	1.7	1.6
Output gap[2]	0.7	-4.4	-3.2	-3.1	-3.4	-3.1			
Unemployment rate[3]	6.4	8.2	8.3	8.0	8.1	7.9	8.1	8.1	7.8
Inflation[4]	2.7	0.5	1.8	2.5	1.9	1.5	2.6	1.7	1.5
Fiscal balance[5]	-2.2	-8.3	-7.7	-6.6	-5.9	-5.1			
Memorandum Items									
World real trade growth	6.7	-10.7	12.6	6.7	4.8	7.1	5.1	5.7	7.7
World real GDP growth[6]	3.8	-1.2	5.0	3.8	3.4	4.3	3.4	3.6	4.6

1. Year-on-year increase; last three columns show the increase over a year earlier.
2. Per cent of potential GDP.
3. Per cent of labour force.
4. Private consumption deflator. Year-on-year increase; last 3 columns show the increase over a year earlier.
5. Per cent of GDP.
6. Moving nominal GDP weights, using purchasing power parities.

Source: OECD Economic Outlook 90 database.

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unanchored. In emerging market economies, inflation is projected to ease as pressures on resources dissipate, with growth staying soft in the near term. The outlook would be much darker if negative events were to occur, notably those that could lead to an intensification of concerns about the robustness of the banking system and contagion in euro-area sovereign debt markets, or an excessively tight fiscal policy in the United States due to political gridlock. On the other hand, prospects for the global and OECD economy could become significantly brighter if measures were taken to successfully stem pressures in the euro area and a credible medium-term fiscal programme was to be enacted in the United States.

This chapter is organised as follows. After briefly reviewing the main forces at work, it sets out the muddling-through projection and policy requirements consistent with such an outlook. It then turns to the consequences of alternative scenarios in the euro area, assessing the strength of the different contagion channels and the resources and policies required to stem contagion. An alternative fiscal scenario in the United States is then presented, based on different assumptions about the future stance of fiscal policy. Finally, the chapter sets out key macroeconomic policy requirements and structural reform measures that would become more urgent should activity turn out to be significantly weaker than projected.

Key forces acting

The recovery is close to halting

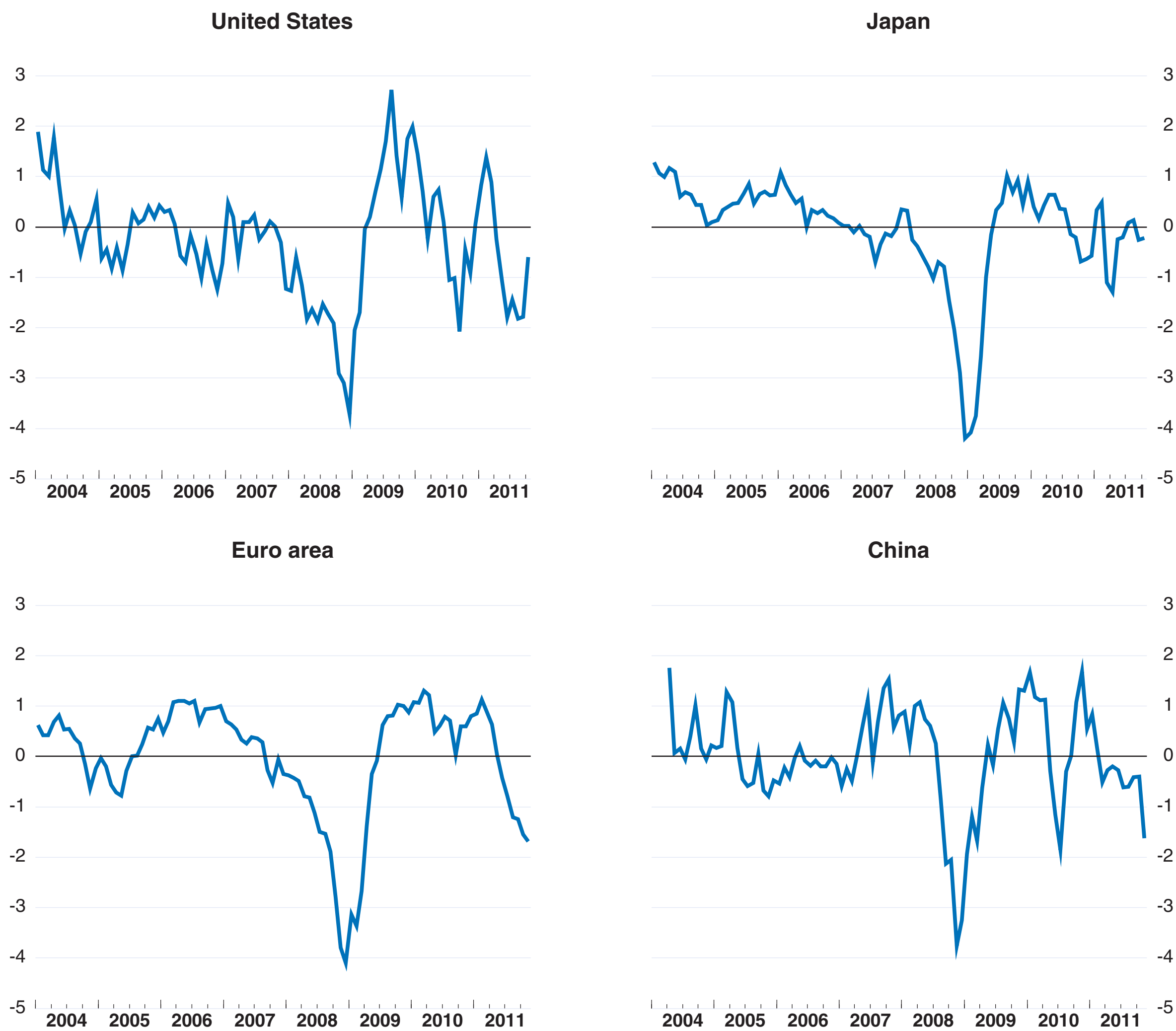
The recovery in the OECD area has now slowed to a crawl, notwithstanding a short-lived rebound from the restoration of global supply chains disrupted by the Japanese earthquake and its aftermath. Emerging market output growth has also continued to soften, reflecting the impact of past domestic monetary policy tightening, sluggish external demand and high inflation. Against this background, the protracted fiscal-policy discussions in the United States and the deepening euro area crisis have highlighted the role of destabilising events and policies as well as the reduced political and economic scope for macroeconomic policies to cushion economies against further adverse shocks. In turn, this has heightened risk awareness and uncertainty, with a corresponding drop in confidence, both in financial markets and in the non-financial private sector. Lower confidence will weigh on the global economy in the coming quarters. Key forces acting include:

Business and consumer sentiment has plummeted…

- Business and consumer sentiment and order books have dropped sharply since the summer in most OECD and non-OECD economies, with Japan being a notable exception. In most cases though, indicators have not reached the levels observed at the depth of the crisis in 2008-09 (Figure 1.1). The PMI surveys in the major global economies now point to weak or, especially in the euro area, no growth in the near term. Survey measures of hiring intentions have also softened in many cases, particularly in Europe, pointing to a continuation of recent upticks in unemployment.

Figure 1.1. **Business surveys point to a much weaker outlook**

Difference between the net PMI balances for new orders and the stock of finished goods, normalised



Note: PMI expressed in units of standard deviations around average.

Source: Markit; and OECD calculations.

… and global activity and commodity prices have weakened

- Trade-related indicators, such as export order books and container shipping rates, point towards weak global trade growth in the near term. Widespread flooding in Thailand has also begun to generate renewed disruptions in global supply chains, which will further damp trade growth temporarily. The softening in global demand has begun to be reflected in global commodity prices, but only to a relatively limited extent to date, especially in oil markets. This may reflect expectations of continued relatively strong growth in comparatively commodity-intensive emerging market economies. Even so, the easing of commodity prices that has already occurred should provide a modest fillip to the OECD economies (whose growth might otherwise have been even weaker) by up to ¼ percentage point per annum, over the next two years. It will also act to further ease recent pressures on headline inflation.

Heightened risk has spurred considerable financial market turbulence…

- Higher perceived risk has generated considerable turbulence in financial markets. Equity prices have declined markedly (Figure 1.2), especially for banks in the euro area but also worldwide;[1] bank credit default swap rates have increased sharply, in both Europe and the United States, reflecting renewed concerns about banks' solvency (Figure 1.3); and the widening of sovereign yield spreads has become generalised beyond euro area programme countries (Figure 1.4). The funding pressures on the banking sector are likely to result in moves towards tighter credit standards, with the first tangible evidence provided by the latest ECB *Bank Lending Survey* and the US *Senior Loan Officer Survey*.[2] The flipside of risk re-evaluation has been a substantial decrease in the yields on "safe-haven" government bonds and top-rated corporate bonds, in some cases to historic lows. The US dollar, the yen and the Swiss franc effective exchange rates have appreciated significantly since mid-year, on the back of safe-haven effects.[3] Putting these developments together, the OECD financial conditions indices (FCIs) show divergent developments across countries (Figure 1.5): a deterioration in the euro area and, more recently, in the United States, implying that GDP growth could be reduced respectively by 1 and ½ percentage point in 2012 and ½ and ¼ percentage point in 2013 compared with the outcome if the FCI had not deteriorated; but some improvement in Japan.

… including in emerging markets…

- Financial conditions in emerging economies are becoming less supportive of growth. Sovereign bond spreads have risen, equity prices have declined and credit growth has slowed, including in China; several economies have also recently experienced sizeable exchange rate depreciations against the US dollar, reversing the tendency prevailing earlier in the year.

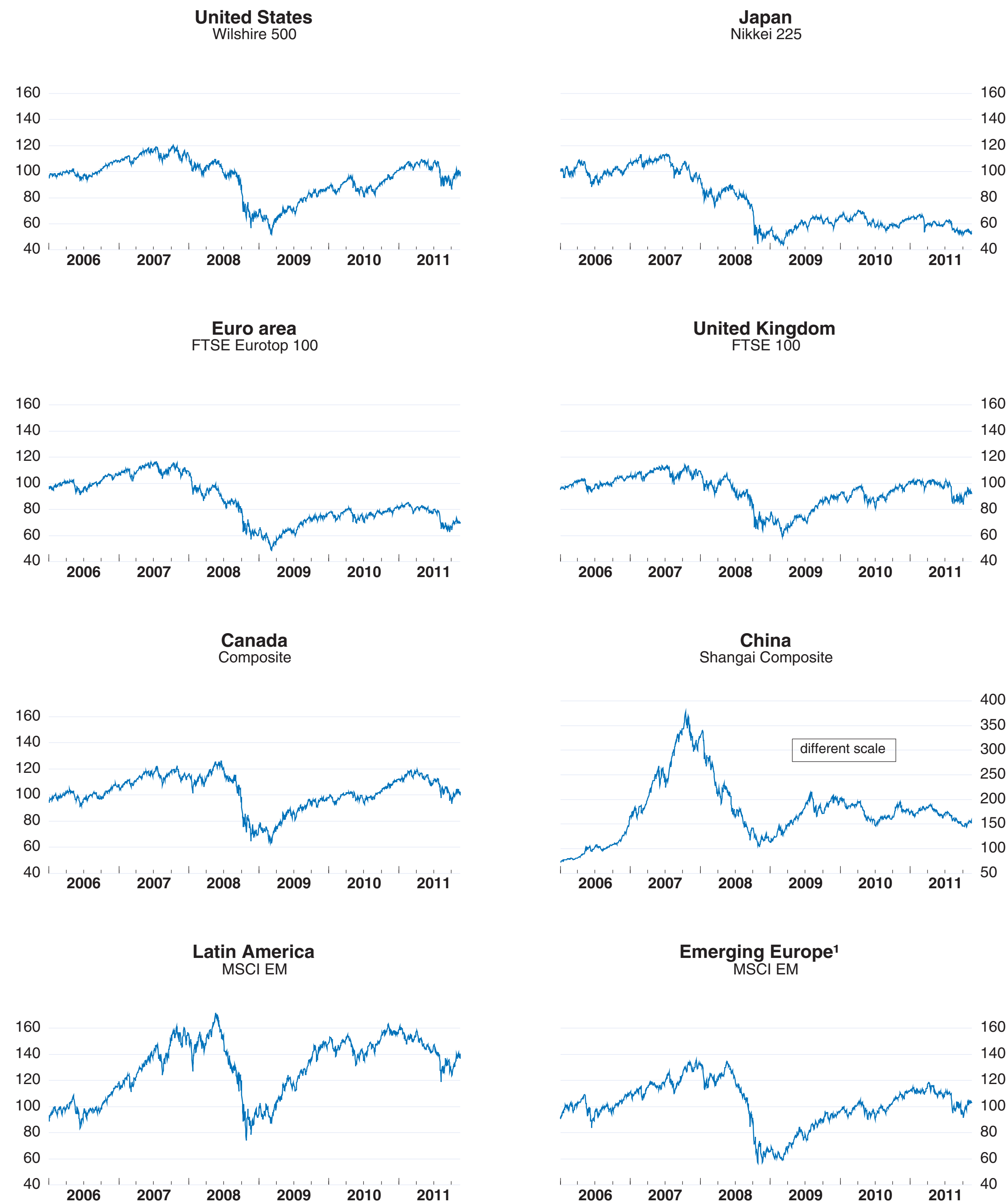
…and has raised uncertainty

- In addition, indicators of uncertainty in financial markets, as reflected in the daily volatility of equity markets, have risen sharply, back towards the high levels last seen in 2008-09. Such uncertainty, which is not included directly in the FCIs, is likely to result in the postponement of some planned, but hard-to-reverse, expenditures, especially by companies, and also delay hiring decisions (Box 1.1).

1. With equity prices low relative to cyclically-averaged earnings, their recent correction may in part reflect a rise in the equity risk premium given heightened uncertainty.
2. The ECB survey showed that a balance of respondents are now tightening credit standards in the euro area, and the US survey showed that fewer respondents are now easing credit standards. In both cases, these changes serve to make financial conditions less growth-friendly than would otherwise have been the case.
3. In response to upward pressure on the Swiss Franc, the Swiss National Bank capped its value at SFr 1.2 per euro through unlimited intervention.

Figure 1.2. **Equity markets have weakened again**

Index 2000=100



1. The MSCI index for Emerging Europe also includes Middle-East and Africa.

Source: Datastream.

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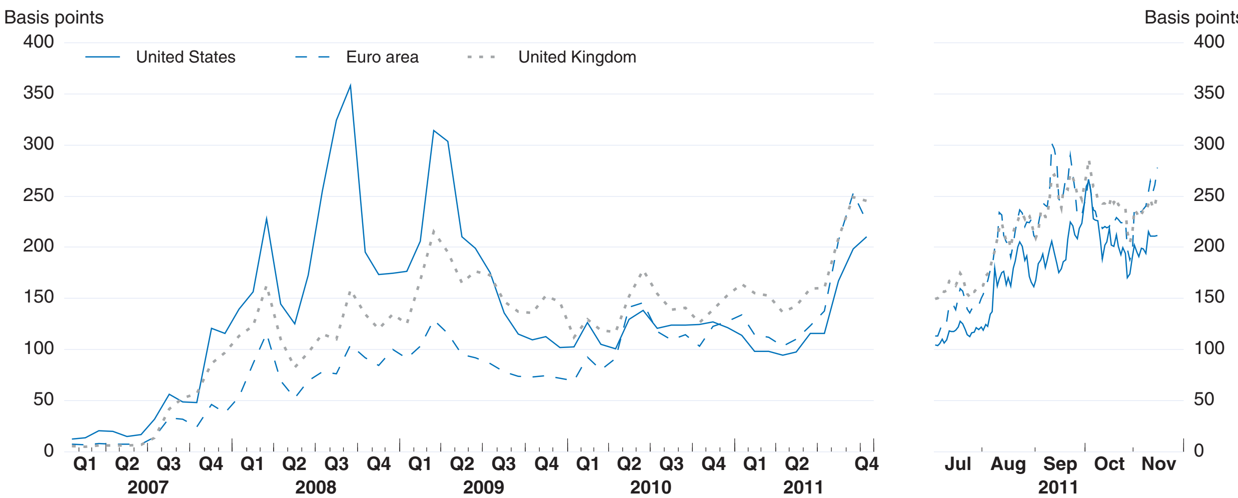
Figure 1.3. **It has become more expensive to insure unsecured bank debt against default**

Annual rates of five-year credit default swap contracts on very large banks



Note: Banking sector 5-year credit default swap rates.

Source: Datastream.

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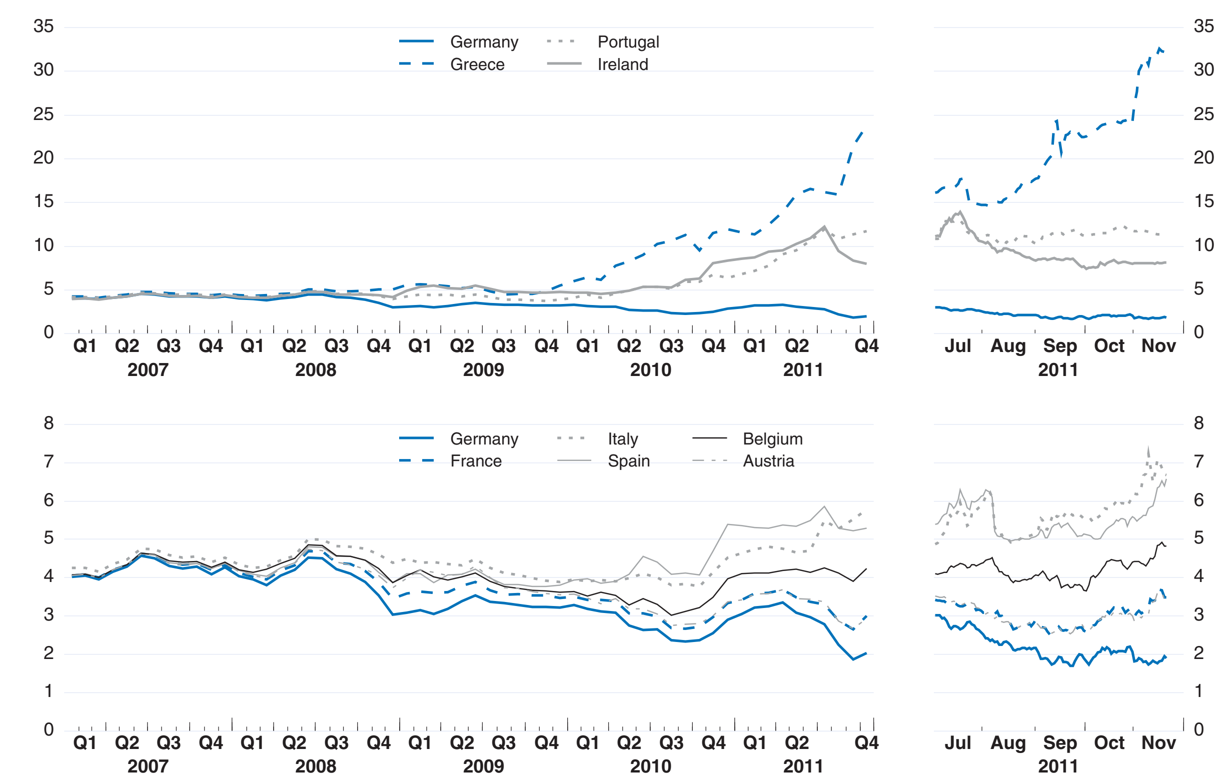
Figure 1.4. **Investors are now discriminating strongly across euro area sovereign bonds**

10-year sovereign bond yield, in per cent



Source: Datastream.

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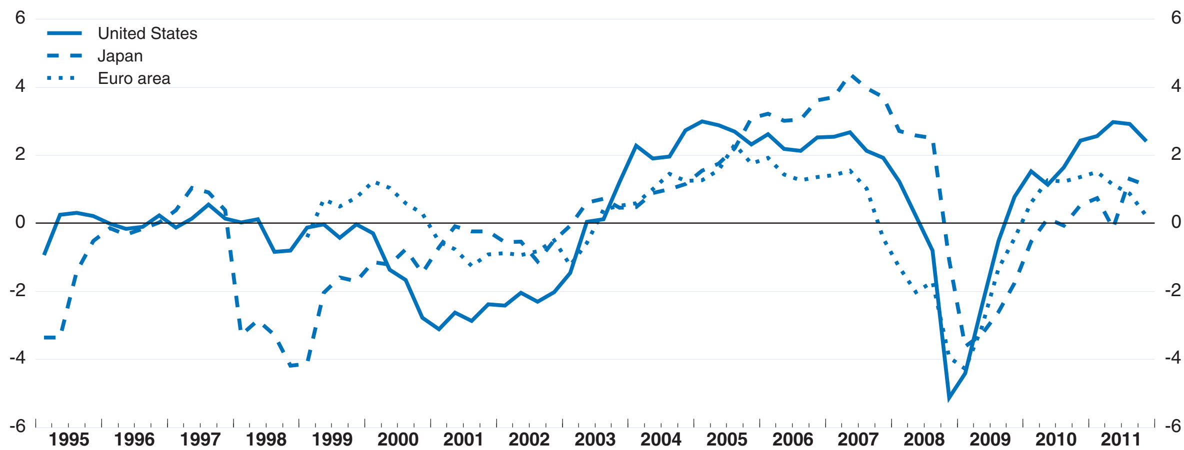
Figure 1.5. **Overall financial conditions have been hit in the euro area**



Note: A unit increase (decline) in the index implies an easing (tightening) in financial conditions sufficient to produce an average increase (reduction) in the level of GDP of ½ to 1% after four to six quarters. See details in Guichard et al. (2009).
Estimation done with available information up to 17 November 2011.

Source: Datastream; OECD Economic Outlook 90 database; and OECD calculations.

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This is placing renewed pressures on household balance sheets

Household balance sheets have begun to weaken once more in some economies, reflecting the adverse effects of lower equity prices and persistent housing market weakness, with real house prices now declining in around two-thirds of the OECD countries for which timely estimates are available.[4] This is likely to contribute to keeping household saving rates elevated for some time to come, to help repair balance sheets. In addition, reflecting the widespread slack remaining in labour markets and the upturn in headline inflation this year, real wage and household income growth remains modest, holding back household consumption growth. Over and above effects from balance sheets and real income, the large recent declines in consumer confidence could also damp consumption growth in the near term (Box 1.1).

4. The direct impact of lower equity prices in the United States and the euro area could imply an eventual reduction in household consumption of just under 1%. In the United States, equity prices have declined by around 8¼ per cent since the end of the first quarter, reducing the value of household financial assets by around $1.6 trillion, taking into account the impact on the value of equities held directly by households and indirectly through pension funds and mutual funds. Assuming a marginal propensity to consume out of financial wealth of 6 cents per dollar (Carroll *et al.*, 2011), this implies an eventual reduction in household consumption of around 0.9%. The equivalent calculations for the euro area, where equity prices have declined by close to 25% since the end of the first quarter, imply a reduction in household consumption of 0.8%. The wealth calculations for the euro area take account of quoted equities, unquoted equities and mutual funds held directly by households and indirectly through insurance and pension funds. Equity price changes are assumed to apply to 40% of unquoted equity holdings and 30% of mutual fund holdings.

Box 1.1. **Risk awareness, uncertainty and confidence**

Recent economic developments have been accompanied by heightened risk awareness and uncertainty, and sharp falls in confidence, both in financial markets and in the non-financial private sector. Such changes are often taken as an early, and timely, indicator of short-term cyclical swings in activity. This is especially so for hard and costly to reverse decisions, such as fixed investment, new hiring and purchase of durable goods. For such decisions, heightened uncertainty raises the option value of waiting, and hence weakens near-term expenditure (Bernanke, 1983; Pindyck, 1991; Bloom, 2009 and 2011). Equally, movements in survey-based indicators of consumer confidence have also been found to have a direct significant association with current and future private consumption growth (Nahuis and Jansen, 2004), particularly if the movements are large (Dees and Brinca, 2011), even if other factors such as income and wealth are taken into account (Carroll *et al.*, 1994; Ludvigson, 2004; Wilcox, 2007).

Two important issues are whether there is a consistent, statistically significant and economically relevant relationship over time between private expenditure and measures of confidence and uncertainty, and whether there is independent information in measures of uncertainty and confidence relevant for understanding near-term developments in private expenditure. To assess these, the OECD has developed simple quarterly indicator-type models for consumption growth and business investment growth in the United States and the euro area (see Jin *et al.*, 2011). These quarterly equations are augmented by separate monthly models for business and consumer confidence.

The results confirm that uncertainty, proxied by the VIX and VSTOXX indices – measures of the respective daily implied volatility of the US and euro area equity markets – and confidence measures influence private spending after accounting for other financial market developments (as reflected in the OECD financial condition indices):

- Business survey measures of investment intentions and production expectations are found to be strongly associated with quarterly changes in capital spending in the United States and the euro area, respectively.
- Monthly changes in the business survey measures are themselves found to be affected directly by monthly changes in stock market uncertainty. In addition, quarterly changes in stock market uncertainty are found to have a separate direct impact on investment spending in the United States, but not in the euro area.
- The quarterly growth of consumer spending is found to be linked to aggregate consumer confidence indicators in both the United States and the euro area, but it does not seem to be affected directly by measures of stock market uncertainty.

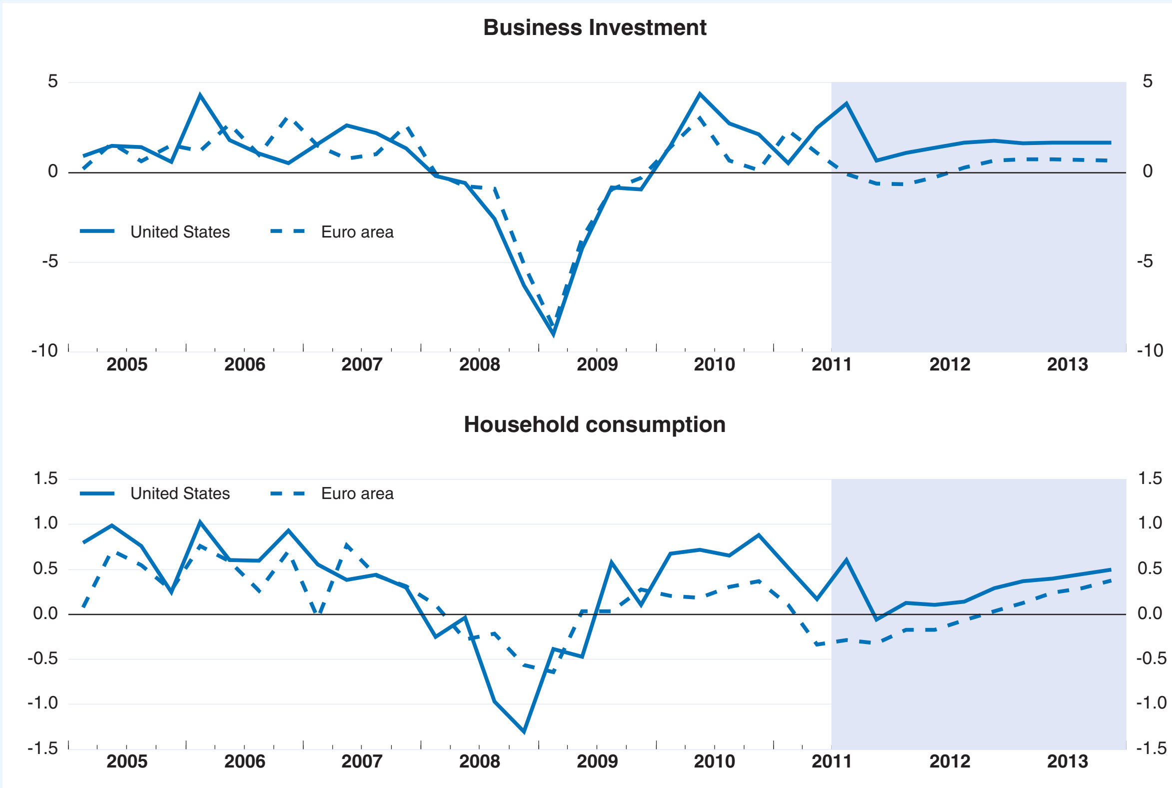
The empirical results have been used to produce a profile for business investment and private consumption growth over the coming two years. In both cases, financial conditions are assumed to remain fixed at their last observed level (see main text for details). The results presented here should be distinguished from the main projection where a broader range of factors are incorporated.

- For the investment path, stock market uncertainty is assumed to remain elevated until the end of the first quarter of next year, before reverting to its mean value by mid-2012. The resulting estimates, set out in the first figure below, indicate that near-term business investment growth in the euro area could be particularly subdued, unless uncertainty was to suddenly subside. In both economies, the projected outcome from these equations is somewhat weaker than in the muddling-through projection. This is particularly so in the euro area, where quarterly declines are projected by the indicator equation until the latter half of 2012; in contrast, the muddling-through projection is for weak, but positive investment growth from the second quarter of 2012.
- For the consumption path, consumer confidence is assumed to decline marginally further in the fourth quarter of 2011, and then remain unchanged until mid-2012 before reverting towards longer-term norms thereafter. On this basis, the resulting estimates set out in the second figure below point to small quarterly declines in consumption in the first half of next year in the euro area and little or no growth in the United States; these are somewhat weaker outcomes than incorporated in the muddling-through projection.

Box 1.1. **Risk awareness, uncertainty and confidence** *(cont.)*

The implications of confidence and uncertainty for expenditure growth

Quarter-on-quarter growth rate in per cent



Source: OECD calculations.

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Several factors may cushion the lapse in activity

Set against the negative factors above, the extent of any further weakness in activity may be damped by adjustments that have been ongoing since the onset of the recession in 2008. In particular, balance sheets are already adjusting at a sustained pace, which may limit the need for a further large precautionary upward adjustment in private sector saving rates in response to weaker asset prices. Many companies also have large cash holdings, which could be used as a buffer to help support employment and investment if sluggish growth is expected to be only short lived. Survey indicators also suggest that inventories have not yet risen to the excessive levels attained in 2008-09, reducing the likelihood that weakness in final demand will be reinforced by a large contraction in inventory levels. Similarly, other cyclically-sensitive categories of expenditure, notably housing investment and consumer durables, now account for a much lower share of final expenditure than in 2006-07.

The muddling-through projection

Conditional on particular assumptions, growth is likely to remain weak and recover only slowly…

The projections presented here rest on a tacit assumption that sovereign debt and banking sector problems in the euro area can be somehow contained and the assumption that excessive, pre-programmed fiscal tightening will be avoided in the United States. Against this backdrop, near-term output growth is projected to be subdued in the OECD economies and at below-trend rates in the major emerging market economies. In some economies, especially the euro area, a mild recession is projected in the near term. Ongoing support is provided by accommodative monetary policies throughout the projection period (Box 1.2), but continued fiscal consolidation and weak labour, housing and credit markets will all act to check growth. Further ahead, from the latter half of 2012, the recovery is thus likely to be only modest, reflecting the gradual speed and extent to which confidence is assumed to recover as it

Box 1.2. **Policy and other assumptions underlying the projections**

Fiscal policy settings for 2012 and 2013 are based as closely as possible on legislated tax and spending provisions. Where government plans for 2012-13 have been announced but not legislated, they are incorporated if it is deemed clear that they will be implemented in a shape close to that announced. Otherwise, in countries with impaired public finances, a tightening of the underlying primary balance of about ½ and 1% of GDP in 2012 and 2013, respectively, has been built into the projections. Where there is insufficient information to determine the allocation of budget cuts, the presumption is that they apply equally to the spending and revenue side, and are spread proportionally across components. These conventions allow for needed consolidation in countries where plans have not been announced at a sufficiently detailed level to be incorporated in the projections. Along this line, the following assumptions were adopted (with additional adjustments if OECD and government projections for economic activity differ):

For the United States, the assumptions for 2011 are based on legislated measures. Given the legislative uncertainty about budget policy for 2012 and 2013, the general government underlying primary balance is assumed to improve by ½ and 1 per cent of GDP in 2012 and 2013, respectively.

For Japan, the projections are based on the revised Medium-term Fiscal Framework announced in August 2011 which limits the issuance of new government bonds (excluding bonds to finance earthquake-related reconstruction) in FY 2011-12 to the FY 2010 level. The projection also includes reconstruction spending of around 19 trillion yen (about 4% of GDP) over five years and the planned tax increases of around 11 trillion yen (about 2% of GDP) over a period of up to 25 years to finance such spending.

For Germany, the government's medium-term consolidation programme, announced in September 2010, as well as the phasing out of the temporary components of the fiscal stimulus packages have been built into the projections, including recently announced measures aimed at compensating for weaker growth. For France, the projections incorporate the government's medium-term consolidation programme. For Italy the projections incorporate legislation up to and including the September Emergency Budget, and additional tightening needed to respect the government's commitment to a near-zero deficit in 2013 given that projected activity is lower than that on which the budget legislation is based. For the United Kingdom, the projections are based on tax measures and spending paths set in the March 2011 budget.

Box 1.2. **Policy and other assumptions underlying the projections** *(cont.)*

The concept of general government financial liabilities applied in the OECD *Economic Outlook* is based on national accounting conventions. These require that liabilities are recorded at market prices as opposed to constant nominal prices (as is the case, in particular, for the Maastricht definition of general government debt). In 2010, euro area countries with unsustainable fiscal positions that have asked for assistance from the European Union and the IMF (Greece, Ireland and Portugal) experienced large declines in the price of government bonds. For the purpose of making the analysis in the *Economic Outlook* independent from strong temporary fluctuations in government debt levels on account of valuation effects, for these countries, the change in 2010 in government debt has been approximated by the change in government liabilities recorded for the Maastricht definition of general government debt. Given uncertainty about the precise amounts involved, no adjustment has been made for Greek government debt write-down as agreed at the 26 October Euro summit.

Policy-controlled interest rates are set in line with the stated objectives of the relevant monetary authorities, conditional upon the OECD projections of activity and inflation, which may differ from those of the monetary authorities. The interest rate profile is not to be interpreted as a projection of central bank intentions or market expectations thereof.

- In the United States, the target Federal Funds rate is assumed to remain constant at ¼ per cent for the entire projection horizon.
- In the euro area, the overnight rate is assumed to fall to 0.35 per cent by the end of 2011 through cuts in the repo and deposit rates and expanded liquidity provision, and remains constant until the end of 2013.
- In Japan, the current interest rate policy needs to be continued until inflation is firmly positive. The short-term policy interest rate is assumed to remain at 10 basis points for the entire projection horizon.
- In the United Kingdom, the policy interest rate is assumed to remain constant at ½ per cent for the entire projection horizon. The Bank of England is assumed to announce an additional bond purchase programme of £125 billion in early 2012. The additional purchases are assumed to keep longer-term interest rates 50 basis points below the path which they would have been assumed to follow without this measure.

For the United States, Japan, Germany and other countries outside the euro area, 10-year government bond yields are assumed to converge slowly toward a reference rate (reached only after the projection period), determined as future projected short rates plus a term premium and an additional fiscal premium. The latter premium is assumed to be 2 basis points per percentage point of gross government debt-GDP ratio in excess of 75 per cent and an additional 2 basis points (4 basis points in total) per percentage point of the debt ratio in excess of 125%. For Japan, the premium is assumed to be 1 basis point per percentage point of gross government debt-to-GDP ratio in excess of 75%. The long-term sovereign debt spreads in the euro area *vis-à-vis* Germany are assumed to halve in the course of 2013 for all other euro area member countries.

The projections assume unchanged exchange rates from those prevailing on 14 November 2011: $1 equals 76.98 JPY, €0.734 (or equivalently, €1 equals $1.36) and CNY 6.35.

The price of a barrel of Brent crude oil is assumed to be constant at $110 from the fourth quarter of this year onwards. Non-oil commodity prices are assumed to be constant over the projection period at the average level in October 2011.

The cut-off date for information used in the projections is 22 November 2011. Details of assumptions for individual countries are provided in Chapters 2 and 3.

becomes clear that other, worst-case, scenarios have been avoided. The key features of the economic outlook for the major economies are as follows:

… in the United States…

- Growth in the United States is expected to remain fairly subdued through 2012 before gradually picking up. Weak confidence, soft employment growth and the renewed pressures on balance sheets from lower asset values are all likely to damp consumers' expenditure. Heightened uncertainty should also moderate business investment growth in the near term, despite healthy corporate balance sheets. Continued fiscal consolidation, although assumed to be at a more moderate pace than in 2011, will also hold back activity. Provided confidence recovers during 2012, as assumed, accommodative monetary policy and strengthening external demand should help to buoy activity through 2013, allowing the sizable negative output gap to narrow marginally. But, despite a pick-up in employment growth, the unemployment rate is projected to remain elevated, declining only to around 8½ per cent by the end of 2013.

... in the euro area...

- The euro area is seen to have entered a mild recession, which will be followed by an only hesitant pick-up in activity. Deteriorating financial conditions and ongoing fiscal consolidation, with several countries having announced additional consolidation in the light of heightened concerns about sovereign debt sustainability, will act as a drag on the economy in both 2012 and 2013. In the near term, with output expectations continuing to decline and the loss of momentum in the economy, business investment is likely to be very weak. Softening confidence, deteriorating labour market conditions and renewed balance-sheet pressures are also likely to weigh on private consumption. Provided sovereign debt and banking problems can be contained, as assumed, and supportive monetary policy actions are undertaken, confidence should gradually recover from the latter half of next year. However, the large negative output gap is projected to close only marginally in 2013. The unemployment rate is projected to remain elevated, at just over 10% at the end of 2013.

... in Japan...

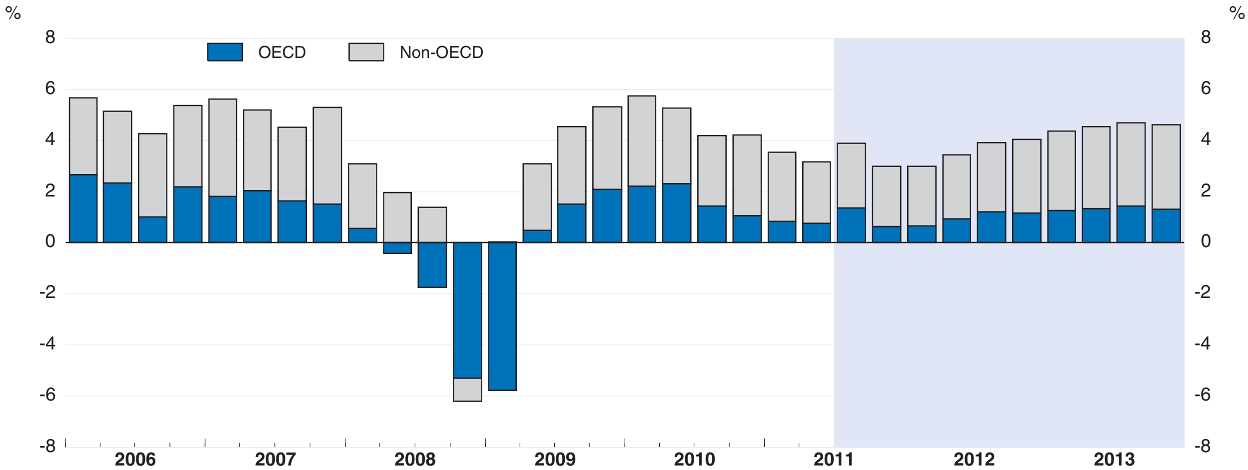
- After an initial rapid rebound in activity following the earthquake and the Fukushima disaster, the pace of the recovery is now moderating. Financial conditions have improved modestly through 2011, providing a stimulus to activity in 2012, and the planned fiscal package (worth 2% of GDP) is likely to boost growth by next year. Ongoing private and public reconstruction expenditure should help to support demand, though the timing of such expenditure remains uncertain. Soft global growth and the appreciation of the real exchange rate are, however, likely to check the pace of the upturn. As public reconstruction efforts fade, stronger business investment and a gradual improvement in labour market conditions should support the recovery, and allow the negative output gap to diminish gradually through the projection period.

... and in emerging markets...

- The contribution of emerging markets to global growth is substantial at present (Figure 1.6), and likely to remain so. Even so, output growth in China is projected to be well below potential in the near term. Domestic demand is likely to be relatively resilient, helped by increasing public

Figure 1.6. **Global growth is heavily dependent on the non-OECD economies**

Contribution to annualised quarterly world real GDP growth



Note: Calculated using moving nominal GDP weights, based on national GDP at purchasing power parities.

Source: OECD Economic Outlook 90 database.

StatLink http://dx.doi.org/10.1787/888932540315

spending on social housing, but net trade is likely to be a drag on activity, reflecting both strong import growth and, in the near term, soft external demand. As inflation and monetary conditions ease, GDP is expected to pick up from around the middle of 2012 and to grow at rates close to 10% through 2013. In India, the recent moderation in activity is expected to persist through to mid-2012, given tight monetary conditions, leading to a wider negative output gap. Improving domestic confidence, easier monetary conditions and stronger external demand should help growth to pick up to around 8¼ per cent in 2013. In Brazil, domestic demand is projected to remain solid over the next two years, helped by large infrastructure programmes. However, the ongoing drag exerted by net export declines should keep GDP growth below potential rates, at around 3¼-4 per cent per annum. In Russia, GDP growth is expected to remain close to potential rates, at around 4% per annum, sustained by the still-high level of oil prices.

… subduing world trade growth

- World trade growth is expected to broadly follow its normal pattern relative to world GDP growth through the projection period, picking up from an annualised rate of 3½ per cent in the fourth quarter of this year, to around 8% by the latter half of 2013. A benchmark dynamic-factor model of trade growth (Guichard and Rusticelli, 2011), using a wide range of trade indicator variables, shows that there is a risk that trade growth could be softer than projected in the near term, and possibly even decline in the fourth quarter.

Inflation is peaking…

Annual rates of headline consumer price inflation in most OECD and emerging market economies have now started to decline. Much of the previous run-up had stemmed from the comparative strength of commodity prices, especially in many emerging market economies. However, core inflation rates, abstracting from the direct effects of food and energy price inflation, have also drifted up this year, in part due to increases in indirect taxes and administered prices in several OECD economies and the effects of domestic capacity constraints in economies such as China, India and Brazil. Long-term inflation expectations in the OECD economies, especially as represented by survey-based measures, appear to remain reasonably well anchored.[5]

... and will weaken steadily

Weakened commodity prices will help to quickly bring down headline inflation rates. Moreover, continued, and in some cases widening, negative output gaps in the OECD economies should bear down on inflation through much of the projection period (Figure 1.7 and Box 1.3).[6] Continued labour market slack should also ensure that labour

Box 1.3. **The anchoring of inflation expectations and the risk of deflation**

With growth prospects weakening in an environment characterised by low core inflation and still ample economic slack, concerns about deflation risk have re-emerged. Stable inflation expectations can serve as a powerful buffer against entering a deflationary spiral, raising a question as to how stable these expectations really are.

One means of evaluating the relationship between inflation expectations and realised inflation is to regress indicators of inflation expectations on current and lagged consumer price inflation, using a rolling window, and study the development of the sum of the estimated coefficients (Trehan 2010). In the regression results depicted below, a 15-year rolling window is used and the number of lags is set to seven quarters. The results from regressing US consumers' short-run or long-run inflation expectations on headline inflation show that the sum of the estimated coefficients is currently lower than in 2007. Results using professional forecasters' short-run or long-run inflation expectations are similar. These findings suggest that changes in headline inflation have had a declining impact on inflation expectations. For the euro area, results from regressing professional forecasters' short-run or long-run inflation expectations on headline inflation show that the sum of the estimated coefficients continues to be low.

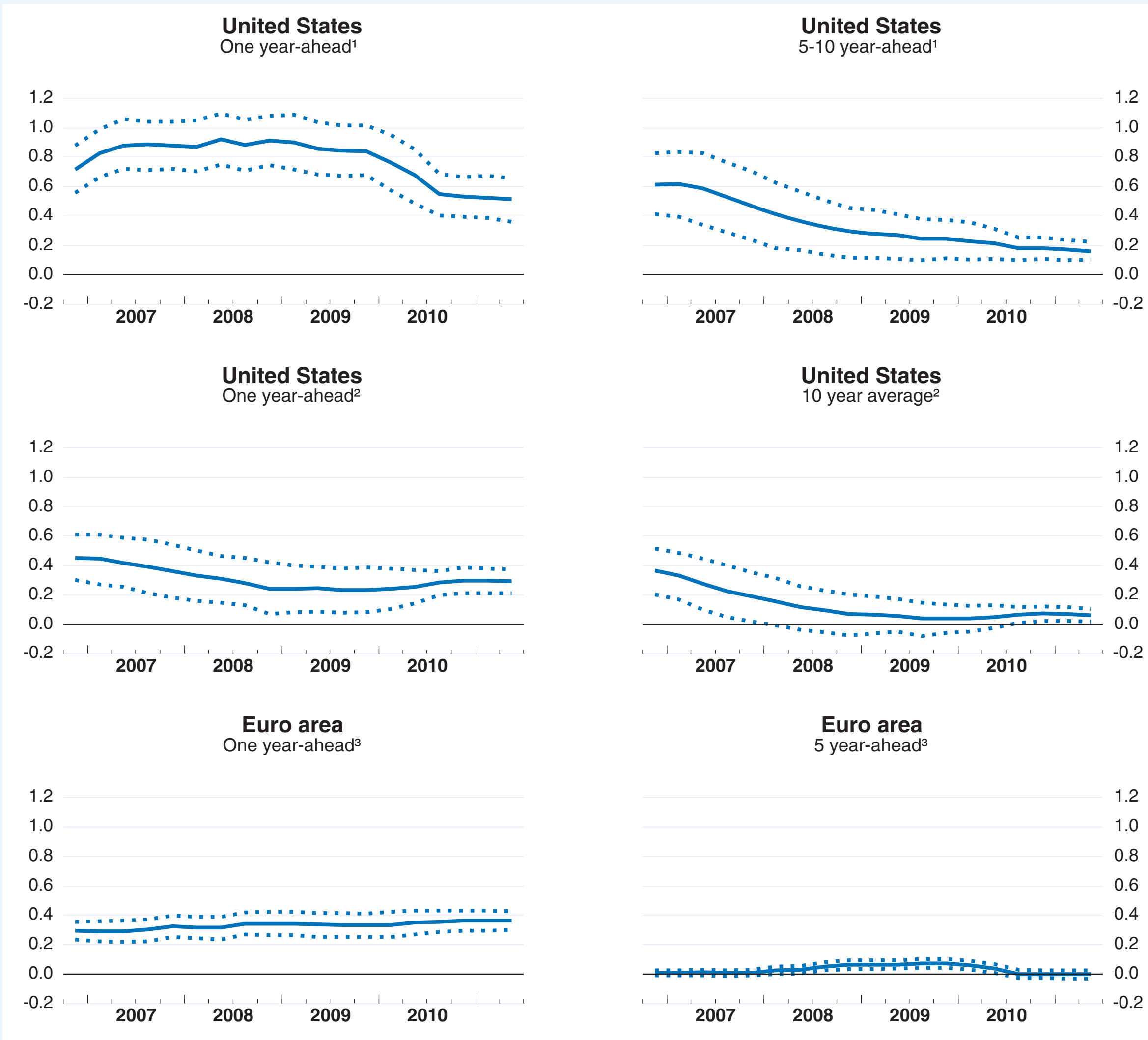
Therefore, even after the experience of large swings in headline inflation, inflation expectations appear to be well-anchored. This result might give grounds to hope that projected falls in headline inflation, due to weaker economic developments and falls in commodity prices, will not reduce inflation expectations sufficiently to pose significant deflation risk in the muddling-through projection. For instance, based on the coefficient estimates for the most recent period, the one percentage point fall in headline US CPI inflation in the projection between end-2011 and end-2012 would be associated with one-year-ahead inflation expectations falling by roughly ½ percentage point over the same period. This itself contributes ¼ percentage point to the fall in core inflation in 2013 based on the expectations-based Phillips curve estimated in Moccero *et al.* (2011). Similarly, in the euro area, the ¾ percentage point decline in headline inflation between end-2011 and end-2012 would reduce one-year-ahead inflation expectations by ¼ percentage point, which in turn would subtract ¼ percentage point from core inflation in 2013.

5. Some signs of weaker inflation expectations have begun to appear in market-based measures derived from yield differences between nominal and indexed bonds, but in part this reflects a mis-measurement generated by the flight to more liquid nominal bonds during renewed financial turmoil.
6. Empirical evidence suggests that the effects of economic slack on inflation are much weaker now than in the past (Koske and Pain, 2008; Moccero *et al.*, 2011).

Box 1.3. **The anchoring of inflation expectations and the risk of deflation** *(cont.)*

Sensitivity of various measures of inflation expectations to headline inflation

Estimated response of inflation expectations to a one percentage point change in headline inflation



Note: Dotted lines show 90 per cent confidence interval computed by a bootstrap procedure.

1. Based on inflation expectations from Reuters/University of Michigan Surveys of Consumers.
2. Based on inflation expectations from US Survey of Professional Forecasters.
3. Based on inflation expectations from ECB Survey of Professional Forecasters.

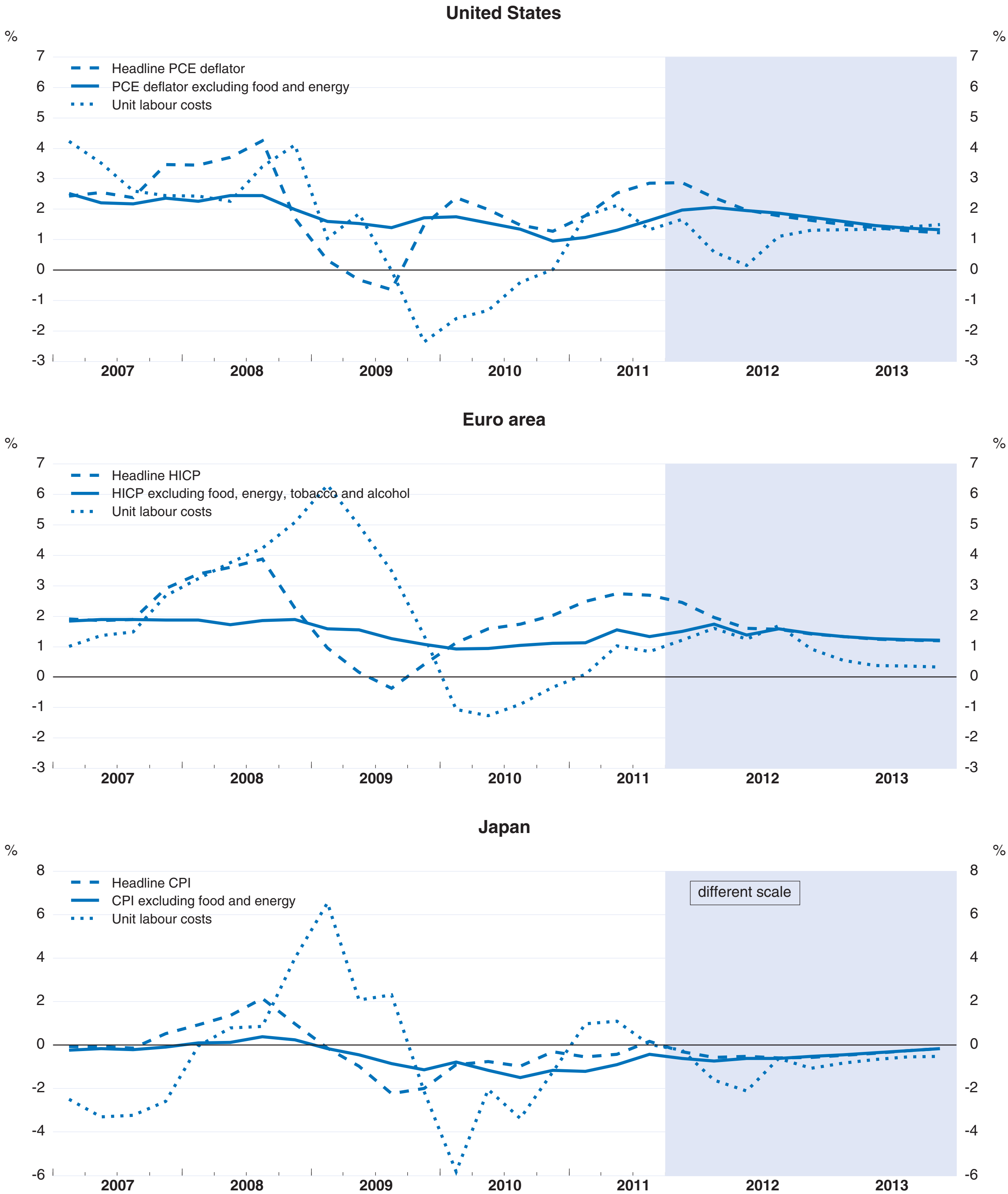
Source: Datastream; ECB; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888932540391

cost pressures remain weak. In the United States and the euro area, the annualised rate of core inflation is projected to drift down to around 1¼ per cent over the projection period. Deflation is expected to persist in Japan, albeit at a gradually diminishing pace. In emerging countries, slower current and future growth should suffice to alleviate inflationary tensions arising from domestic capacity constraints.

Figure 1.7. **Underlying inflation is likely to moderate**

12-month percentage change



Note: PCE deflator refers to the deflator of personal consumption expenditures, HICP to the harmonised index of consumer prices and CPI to the consumer price index. Unit labour costs are economy-wide measures.

Source: OECD Economic Outlook 90 database.

StatLink http://dx.doi.org/10.1787/888932540353

Labour markets are now weakening once more…

Following a brief period of improving outcomes, unemployment is now rising once more in several economies, especially in Europe. The projection builds in an assumption that, as in 2008-09, widespread labour hoarding will help to preserve employment through a prolonged period of sub-par growth. Short-time working arrangements could, in principle, facilitate such labour hoarding, but their use may now be reduced, as average hours worked have still not returned to pre-crisis norms in many companies. If working hours do not adjust as much as in 2008-09, companies will either have to accept weak productivity growth as the counterpart to labour hoarding or lay off workers faster than projected.

… and little improvement is foreseen

In the projection, total OECD employment rises by between ½-¾ per cent in 2012 and 2013 (Table 1.2), with ongoing job growth in the United States offset in part by job losses in some European economies and Japan. The OECD-wide unemployment rate is projected to decline by only a ¼ percentage point over the two years to the fourth quarter of 2013. This would leave a large and persistent degree of labour market slack in most OECD economies (Figure 1.8), despite the extent to which factors such as higher long-term unemployment and unemployment benefit extensions may have pushed up the structural rate of unemployment in recent years.

Table 1.2. **OECD labour market conditions are no longer improving**

	2008	2009	2010	2011	2012	2013
	Percentage change from previous period					
Employment						
United States	-0.5	-3.8	-0.6	0.5	1.2	1.5
Euro area	0.9	-1.8	-0.5	0.2	-0.3	0.2
Japan	-0.4	-1.6	-0.4	-0.1	-0.4	-0.4
OECD	0.6	-1.8	0.3	1.2	0.5	0.8
Labour force						
United States	0.8	-0.1	-0.2	-0.1	1.1	1.1
Euro area	1.0	0.3	0.1	0.1	0.2	0.2
Japan	-0.3	-0.5	-0.4	-0.6	-0.5	-0.5
OECD	1.0	0.5	0.5	0.8	0.6	0.6
Unemployment rate	Per cent of labour force					
United States	5.8	9.3	9.6	9.0	8.9	8.6
Euro area	7.5	9.4	9.9	9.9	10.3	10.3
Japan	4.0	5.1	5.1	4.6	4.5	4.4
OECD	6.0	8.2	8.3	8.0	8.1	7.9

Source: OECD Economic Outlook 90 database.

StatLink http://dx.doi.org/10.1787/888932541645

Structural measures are essential to help tackle rising unemployment

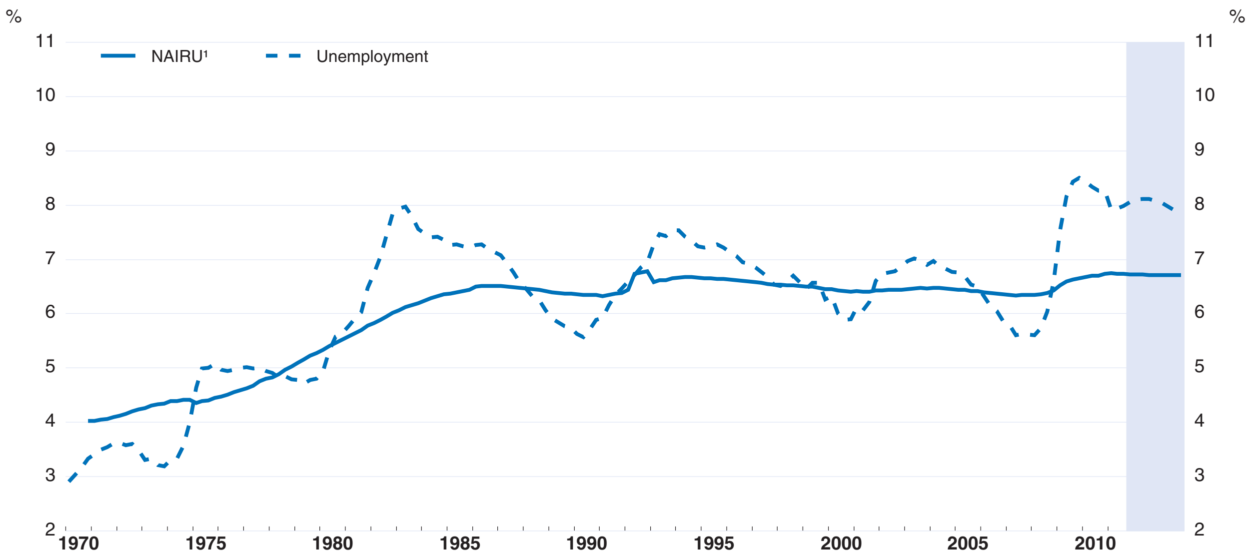
Labour market policies can help to foster near-term employment growth and minimise the employment costs of the downturn.[7] Factors that are likely to be of particular importance for raising hiring incentives

7. A full range of structural reforms that could help to increase near-term employment growth and minimise the employment cost of the downturn are discussed in detail in OECD (2011a).

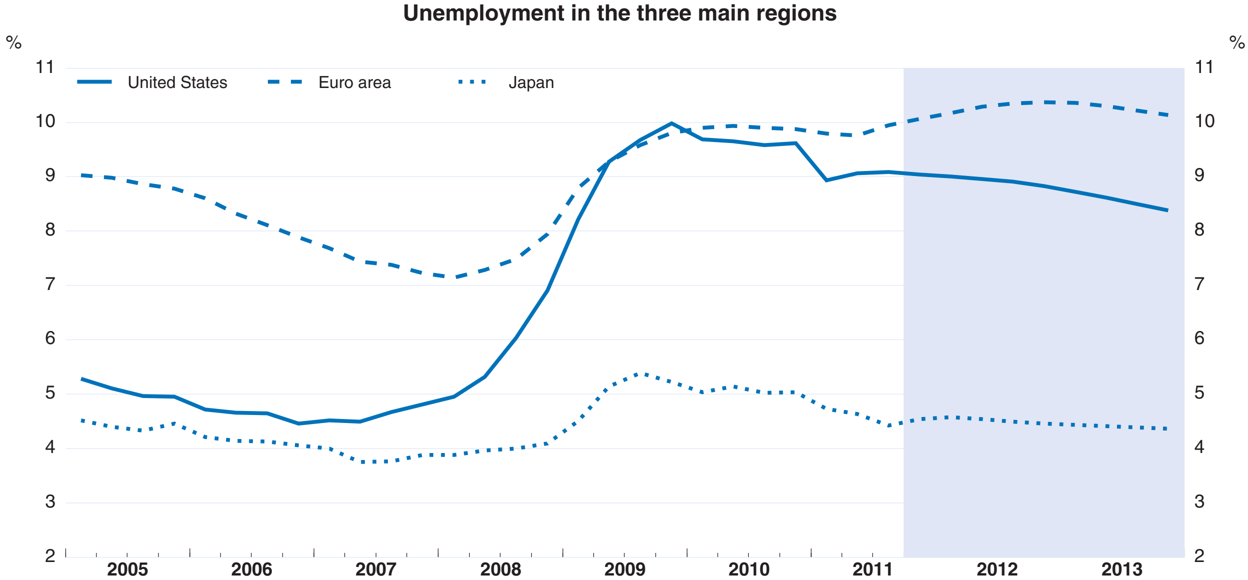
Figure 1.8. **Considerable labour market slack is set to persist**

Percentage of labour force

Unemployment and estimated NAIRU in the OECD area



Unemployment in the three main regions



1. NAIRU is based on OECD Secretariat estimates. For the United States, it has not been adjusted for the effect of extended unemployment benefit duration.

Source: OECD Economic Outlook 90 database.

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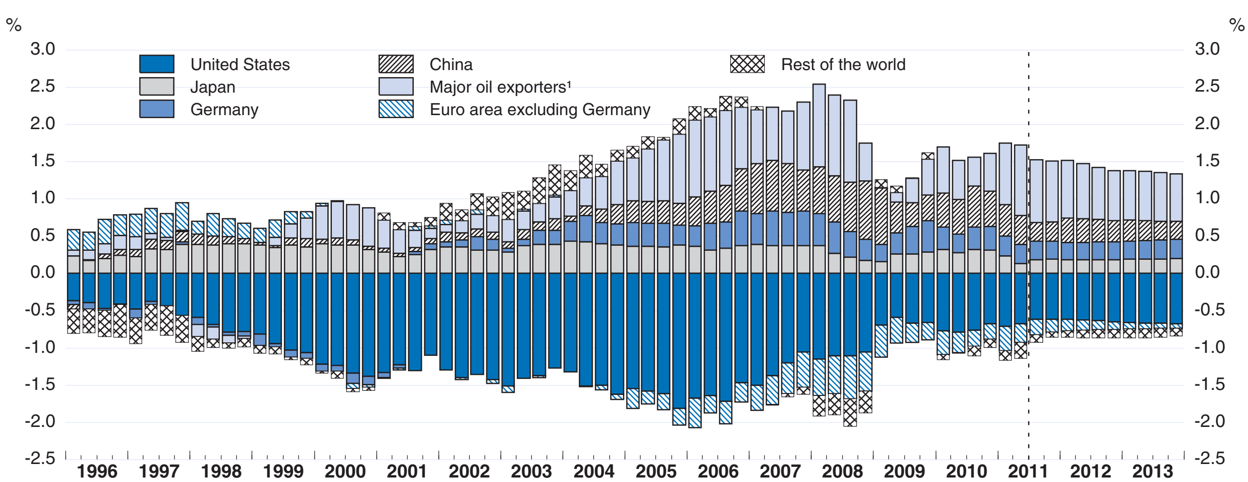
include: strengthening public employment services and training programmes to improve the matching of workers and jobs; rebalancing employment protection towards less-strict protection for regular workers, but more protection for temporary workers; and temporary reductions in labour taxation, where feasible through well-targeted marginal job subsidies (for new hires where net jobs are rising) rather than via across-the-board reductions in payroll taxes. Reforms to relax regulatory restrictions in sectors in which there is a strong potential for new job growth, such as retail trade and professional services, could also serve to improve labour market outcomes relatively quickly. Some of the measures that would help to stimulate employment in the near term could also reduce the risk of the transformation of cyclical into structural unemployment and strengthen labour market performance more generally. Other possible measures that might help to improve long-term labour market outcomes, such as reductions in unemployment benefit duration, may have more negative social consequences when labour demand is weak and should be pursued in the current context only when existing policy is clearly excessive.

Current account imbalances are likely to remain elevated

The narrowing of global imbalances since the advent of the crisis in 2008 has now slowed, and imbalances seem likely to remain broadly stable over the projection period (Figure 1.9, Table 1.3). The sum of all external balances in absolute terms is projected to remain around 3½ per cent of world GDP over the projection period, well below the level immediately prior to the crisis. Global imbalances are being kept elevated, at least in part, by the large increase in the external surpluses of the high-saving oil-producing economies, on the back of the still-high level of oil prices. Whilst re-spending of oil revenues is likely to reduce the external surpluses of oil-producing economies somewhat, much of the additional

Figure 1.9. **Global imbalances remain elevated**

Current account balance, in per cent of world GDP



Note: The vertical dotted line separates actual data from forecasts.

1. Include Azerbaijan, Kazakhstan, Turkmenistan, Brunei, Timor-Leste, Bahrain, Iran, Iraq, Kuwait, Libya, Oman, Qatar, Russian Federation, Saudi Arabia, United Arab Emirates, Yemen, Ecuador, Trinidad and Tobago, Venezuela, Algeria, Angola, Chad, Rep. of Congo, Equatorial Guinea, Gabon, Nigeria and Sudan.

Source: OECD Economic Outlook 90 database.

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Table 1.3. **World trade is slowing and imbalances remain**

	2009	2010	2011	2012	2013
Goods and services trade volume	Percentage change from previous period				
World trade[1]	-10.7	12.6	6.7	4.8	7.1
of which: OECD	-12.0	11.4	5.7	3.8	6.1
OECD America	-12.5	13.0	6.2	4.9	6.6
OECD Asia-Pacific	-12.7	15.4	5.7	6.7	7.4
OECD Europe	-11.6	9.8	5.5	2.7	5.5
China	-4.0	24.8	9.9	10.4	12.4
Other industrialised Asia[2]	-10.1	17.4	8.3	5.8	8.6
Russia	-17.2	14.6	9.4	4.7	6.5
Brazil	-10.9	24.4	9.0	11.5	11.8
Other oil producers	-3.7	1.0	6.4	5.4	7.4
Rest of the world	-10.6	8.5	9.6	3.8	5.6
OECD exports	-11.6	11.5	6.0	4.1	6.2
OECD imports	-12.4	11.3	5.4	3.5	5.9
Trade prices[3]					
OECD exports	-9.2	2.6	9.5	-0.4	1.3
OECD imports	-11.2	3.6	10.7	-0.4	1.3
Non-OECD exports	-13.7	11.1	15.7	1.3	1.5
Non-OECD imports	-9.4	9.6	12.8	1.6	1.4
Current account balances	Per cent of GDP				
United States	-2.7	-3.2	-3.0	-2.9	-3.2
Japan	2.8	3.6	2.2	2.2	2.4
Euro area	0.0	0.2	0.1	0.6	1.0
OECD	-0.5	-0.6	-0.6	-0.4	-0.4
China	5.2	5.2	3.1	2.6	2.1
	$ billion				
United States	-377	-471	-455	-463	-519
Japan	143	196	130	136	153
Euro area	8	27	10	81	138
OECD	-205	-252	-284	-203	-206
China	261	305	230	224	204
Other industrialised Asia[2]	131	105	110	120	130
Russia	49	70	102	78	70
Brazil	-24	-47	-49	-56	-70
Other oil producers	92	249	498	452	439
Rest of the world	-86	-107	-185	-184	-172
Non-OECD	423	576	707	634	600
World	218	324	423	431	394

Note: Regional aggregates include intra-regional trade.
1. Growth rates of the arithmetic average of import volumes and export volumes.
2. Chinese Taipei; Hong Kong, China; Malaysia; Philippines; Singapore: Vietnam; Thailand; India and Indonesia.
3. Average unit values in dollars.

Source: OECD Economic Outlook 90 database.

StatLink http://dx.doi.org/10.1787/888932541664

revenue accrued is likely to be saved, as appropriate for countries in which oil reserves are being depleted gradually.

In the major economies, a deterioration of the oil trade balance has been an important factor behind recent changes in external imbalances. In the nine months to September, this deterioration more than accounted for the nominal decline in the aggregate external trade surplus of China, compared with the same period a year ago; in the United States it accounted for around two-thirds of the rise in the external trade deficit compared with the same period a year ago.[8] In contrast, over the projection period, developments in the major economies largely reflect differences in the respective cyclical positions. The US external deficit is projected to widen by just under ½ per cent of GDP, and the euro area surplus in aggregate is projected to rise by around 1% of GDP. After a sharp decline to just over 3% of GDP in 2011, the Chinese current account surplus is projected to fall further, to around 2¼ per cent of GDP in 2013, with strong domestic demand growth helping to keep the surplus lower than in the recent past.

Structural reforms would help narrow imbalances

Further durable reductions in global imbalances will likely require greater exchange rate flexibility, as well as structural reforms and fiscal adjustments, with consolidation needs generally greater in external deficit OECD countries than in external surplus economies. In addition to having a direct benefit on prospects for national growth and welfare, many structural reforms are likely to help address the underlying determinants of global external imbalances over the medium term, *via* their impact on national saving and investment rates (OECD, 2011b). In particular, measures that stimulate investment in external surplus economies by reducing product market regulations in sheltered sectors, in conjunction with measures to improve social welfare systems and liberalise financial markets (while ensuring adequate prudential regulation) in non-OECD economies with an external surplus, could help to narrow global imbalances in the years ahead. In external deficit economies, rebalancing could be assisted by giving priority to: measures that enhance job creation, thereby reducing incentives for firms to substitute capital for labour; reforms that improve the efficiency of the tax system, and enhance the incentive to save; and measures that enhance non-price competitiveness. As discussed below, structural reforms are also needed to durably reduce imbalances within the euro area.

Risks are mainly event-driven and to the downside…

The main risks around the projection, on both the upside and the downside, relate to possible events arising from the evolution of the euro area debt crisis and fiscal policy in the United States that are discussed in detail below. In addition there are a number of other specific downside risks and fragilities that could weaken growth if they materialised:

… but also stem from possible developments in Japan…

- In Japan, an important downside risk to activity arises from ongoing uncertainty about the extent to which electric power shortages as a result of nuclear plant suspensions and closures may continue, and the extent to which this may check the recovery.

8. The changes in the balance of oil trade reflect both the impact of higher oil prices and changes in the volume of net oil imports. In China, where activity growth has been relatively strong, the volume of oil imports (proxied by import tonnage) in the first eight months to August was 7% higher than in the same period a year earlier. The volume of US oil imports declined in the same period.

... China...

- In China, an important near-term risk is that activity could slow more than projected against the backdrop of the tightening of monetary conditions over the past year, and declines in property and financial asset values. Indeed, recent survey indicators have underlined concerns about such a risk. Further ahead, uncertainties relate to the extent to which stable, high growth rates can be sustained in the context of the need to lower the share of fixed investment in aggregate demand.

... oil markets...

- Crude oil supply has tightened recently on account of supply disruptions in Libya and temporary but wide-spread disruptions outside OPEC. An easing of supply disruptions could, in principle, allow oil prices to fall below current levels. But the upside risk to prices remains a greater concern, with oil consumption by emerging markets continuing to trend upwards and current levels of oil stocks being fairly low.

... and a further weakening of potential output

- There is a risk that the loss of momentum in the recovery and heightened risk aversion in financial markets may further weaken potential output, by raising the prospects of an increasing part of the rise in unemployment since the onset of the crisis becoming long-lasting, and by raising the cost of capital for many companies. An implication would be that fiscal imbalances are structural to an even larger extent than currently thought.

Policies in the muddling-through projection

Monetary policy

Accommodative monetary policy is warranted...

The weak economic outlook with low inflation and predominantly downside risks in the OECD area calls for strongly accommodative monetary policy. In addition, central banks should provide ample liquidity to calm tensions in financial markets. In some OECD economies where monetary tightening had already started, policy interest rates should be reduced. Near zero-interest-rate policies are not costless as they can prompt excessive risk taking and capital misallocation. Nevertheless, in the current weak economic environment with significant downward risks, such considerations are outweighed by the need to provide monetary accommodation. Indeed, given the outlook, interest rates need to be close to zero in most OECD countries over the projection period, with further support coming from non-conventional measures:

... in the United States...

- In the United States, in response to the weakened economic prospects, the Federal Reserve stated in August that economic conditions were likely to warrant exceptionally low levels of the policy rate at least until mid-2013. In addition, the Federal Reserve decided in September to extend the average maturity of its holdings of securities by the end of June 2012 ("Operation Twist"). These measures are expected to stimulate the economy by lowering medium and long-term interest rates and the yield curve indeed flattened in the wake of their announcement, especially following the former policy decision. On the basis of the projections, it would be appropriate to keep the target Federal Funds rate at the current level until end-2013. However, government bond yields are assumed to rise as safe haven considerations dissipate gradually and government debt rises.

... the euro area...

- In the euro area, the European Central Bank raised the main refinancing rate in April and July from 1 to 1½ per cent, despite a large output gap and relatively low core inflation rates – especially once corrected for indirect tax increases.[9] In face of renewed turmoil since early August, it has started to again make sizeable government bond purchases under the Securities Market Programme, further expanded liquidity provision, including two operations of around 1 year and a new covered bond purchase programme, and reduced the main refinancing rate to 1¼ per cent in early November. The weak prospects for the euro area economy and fading inflation strongly argue for further prompt reductions in interest rates. In the projections, the overnight interbank rate is assumed to fall to its post-Lehman low of 0.35% before the end of this year, and to stay at this level, which can be achieved through a combination of cuts in the main refinancing and deposit rates and ample liquidity provision.

... Japan...

- In Japan, the current zero-interest-rate policy needs to be continued until inflation is firmly positive. In the absence of a clear trend toward achieving the implicit 1% inflation target, the Bank of Japan should undertake further measures, including the expansion of the scale of the asset purchase programme. The policy rate is assumed to be kept at the current level over the projection period.

... and the United Kingdom...

- In the United Kingdom, against the background of a significant weakening of the economic outlook, the Bank of England announced an expansion of its bond purchasing programme by £75 billion. If inflation comes down rapidly, further asset purchases will be appropriate, an action which is incorporated in the projections (for an additional amount of £125 billion, see Box 1.2).

... and more would be needed in the event of the downturn intensifying

Furthermore, in view of downside risks, monetary authorities in most countries and areas should prepare contingency plans that could be implemented swiftly if the weakness looks set to be more pronounced than in the projection. Such contingency plans could contain measures ranging from recently tested "unconventional" instruments to yet untested options.

In the large non-OECD economies, monetary policy is at a crossroads

In the large emerging market economies outside the OECD, falls in commodity prices and the slower growth of the global economy have started, or will soon start, to mitigate inflationary pressures. However, in

9. Indirect tax increases are estimated to have contributed about ½ percentage point to core inflation in the euro area in 2011.

deciding whether, when and how rapidly to ease, central banks need to take into account that inflation in some cases starts from a level well above implicit or explicit targets. In China, monetary policy has continued to be tightened gradually this year through increases in official interest rates and required reserve ratios while individual lending quotas have been applied for each bank. By contrast, the effective appreciation of the exchange rate since the beginning of the year has been very small. Going forward, and as the easing of overall monetary conditions becomes warranted, more significant appreciation of the effective exchange rate would increase the scope for a domestic policy response. A useful first step would be for the Chinese authorities to manage the exchange rate with reference to a clearly-defined basket of currencies. Without such currency policy, domestic monetary policy instruments – which are harder to calibrate – have to be kept at comparatively more restrictive levels to keep inflation on track. Such a strategy involves a risk of an excessive economic slowdown, especially if it were to trigger a downward spiral between property prices and bank capitalisation due to a potential problem of poor-quality lending in the property sector. In India, where continued high inflation has put the anchoring of inflation expectations at risk, some easing will be possible once inflation starts to decline noticeably, which is projected to occur in the second half of 2012. In Brazil, the central bank has ample room to reduce the policy rate further in response to weaker prospects for the economy.

Fiscal policy

Fiscal deficits are falling while debt ratios continue drifting up in most countries

In the projection, the OECD area-wide fiscal deficit is expected to fall by ¾ per cent of GDP in both 2012 and 2013, with the improvement more than accounted for by planned consolidation measures, partly offset by rising interest payments. For most countries, present consolidation plans envisage some mix of spending restraint and revenue-raising measures, with more weight being put on the former (Figure 1.10). Gross debt in terms of GDP continues drifting upwards, with 2013 debt ratios projected to exceed 2011 levels in the United States, the euro area and Japan by 11, 2½ and 15 percentage points, respectively (Table 1.4).

The key fiscal policy assumptions are…

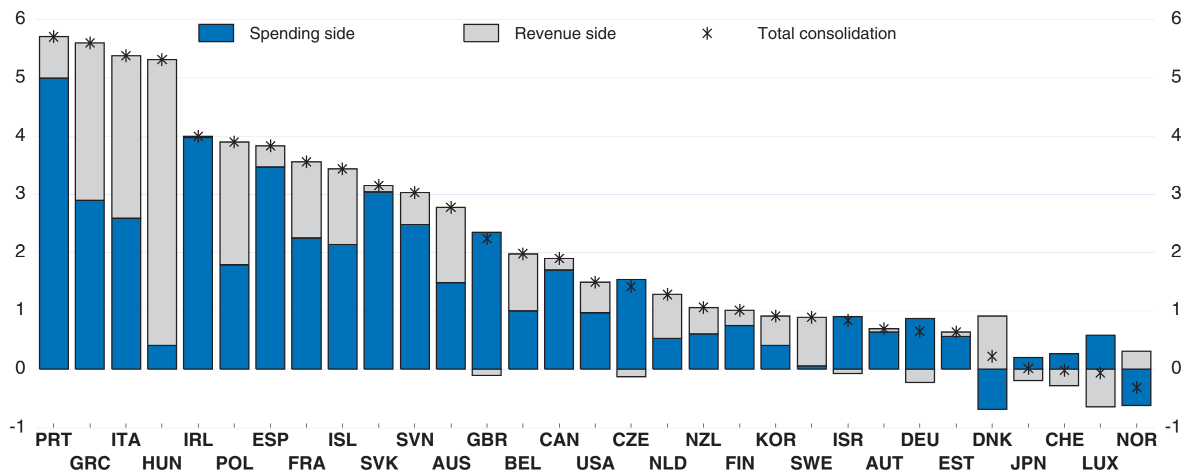
The fiscal policy assumptions employed in the projections are based on government programmes in most cases, though normative assumptions have been made where there is particular uncertainty about the likely evolution of budget policy in 2012 and 2013:

… in the United States, less near-term consolidation than currently embedded in legislation…

- In the United States, given the uncertainty surrounding fiscal policy in the coming two years, a normative assumption has been adopted that the underlying primary balance will improve by ½ and 1 percentage point of GDP in 2012 and 2013, respectively. This compares with a fiscal tightening embodied in current legislation of about 2 and 3 per cent of GDP in 2012 and 2013 respectively, which would be excessive given the relatively weak economic outlook. This programmed tightening would

Figure 1.10. **The composition of fiscal consolidation plans**

Change in the underlying primary balance 2011-13, in per cent of potential GDP



Note: Total consolidation is the projected difference in the underlying primary balance; revenue side is the projected increase in the underlying receipts excluding interest earned on financial assets; and spending side is the projected decline in the underlying primary spending excluding interest payments on debt.

Source: OECD Economic Outlook 90 database; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888932540448

Table 1.4. **Fiscal positions will improve only slowly**

Per cent of GDP / Potential GDP

	2009	2010	2011	2012	2013
United States					
Actual balance	-11.6	-10.7	-10.0	-9.3	-8.3
Underlying balance	-8.9	-8.5	-7.9	-7.7	-6.8
Underlying primary balance	-7.4	-6.8	-6.0	-5.6	-4.5
Gross financial liabilities	85.0	94.2	97.6	103.6	108.5
Euro area					
Actual balance	-6.4	-6.3	-4.0	-2.9	-1.9
Underlying balance	-4.7	-4.1	-2.8	-1.4	-0.4
Underlying primary balance	-2.3	-1.7	-0.3	1.3	2.5
Gross financial liabilities	87.6	92.9	95.6	97.9	98.2
Japan					
Actual balance	-8.7	-7.8	-8.9	-8.9	-9.5
Underlying balance	-8.3	-7.7	-8.0	-8.3	-8.6
Underlying primary balance	-7.2	-6.6	-6.7	-6.8	-6.7
Gross financial liabilities	194.1	200.0	211.7	219.1	226.8
OECD[1]					
Actual balance[1]	-8.3	-7.7	-6.6	-5.9	-5.1
Underlying balance[2]	-6.8	-6.4	-5.7	-5.0	-4.2
Underlying primary balance[2]	-5.1	-4.6	-3.8	-2.9	-2.0
Gross financial liabilities[2]	91.4	97.9	101.6	105.7	108.4

Note: Actual balances and liabilities are in per cent of nominal GDP. Underlying balances are in per cent of potential GDP and they refer to fiscal balances adjusted for the cycle and for one-offs. Underlying primary balance is the underlying balance excluding net debt interest payments.

1. Excludes Chile and Mexico.
2. Excludes Chile, Mexico and Turkey.

Source: OECD Economic Outlook 90 database.

StatLink http://dx.doi.org/10.1787/888932541683

be substantially reduced if the Administration's proposed stimulus, worth some 3% of GDP in the coming two years, were to be approved by Congress, but this remains uncertain. The recent failure of a Congressional committee to conclude a bi-partisan agreement on a medium and long-term consolidation programme may weaken confidence in the long-term anchoring of fiscal policy and, thus, limit the fiscal space that the authorities have to respond more flexibly to a much weaker-than-expected economy, if that were to occur.

… in Japan, stimulus reflecting government reconstruction plans…

- In Japan, based on government policy, the underlying budget deficit is assumed to widen by ½ of a percentage point of GDP by 2013. This incorporates cumulative post-earthquake reconstruction spending of around 2% of GDP in 2012 and 2013 that is assumed to be financed only partially by higher revenues, and limits on central government primary spending, excluding reconstruction spending, to the nominal level in the initial budget for FY 2011. The revised three-year medium-term fiscal framework announced in August 2011 maintained the aims of halving the primary budget deficit (relative to GDP) of central and local governments by FY 2015, achieving a primary surplus by FY 2020 and steadily reducing the public debt ratio thereafter. However, it is yet to be decided how to attain the targets. Given the very high sovereign debt level, the top priority must be to establish a detailed and credible fiscal consolidation programme, including tax increases, spending limits and privatisation revenues.

… in the euro area, planned consolidation programmes…

- In the euro area as a whole, the fiscal projections are based on announced policies, implying a reduction in underlying deficits of 1½ and 1 per cent of GDP in 2012 and 2013, respectively. Reductions in underlying deficits are particularly steep in the IMF/EU programme countries, Italy and Spain: close to 2¾ and 1¼ per cent of GDP in 2012 and 2013 respectively, for the group on average. Planned consolidation must be implemented to help regain confidence. In France, fiscal tightening is set to amount to around 1¾ per cent of GDP in both 2012 and 2013. On the other hand, relatively modest annual consolidation of around ½ per cent of GDP or less is appropriately planned in some of the countries with comparatively sound public finances (*e.g.* Germany).

… and in the United Kingdom, the government's deficit reduction strategy

- In the United Kingdom, the projection embodies consolidation amounting to 1¼ per cent of GDP in both 2012 and 2013, in line with the government's medium-term consolidation strategy, which targets reaching cyclically-adjusted current balance by the end of a rolling five-year period. This programme is appropriate to regain fiscal sustainability.

Public finances are generally relatively healthy in emerging markets

In emerging market economies, fiscal positions vary considerably, although in most cases they are better than in the majority of OECD countries, not least because high growth rates tend to ease debt dynamics. In China, fiscal policy looks set to be expansionary, especially in 2013, as off-budget financing of social housing is stepped up. In Brazil and India, consolidation is underway and should remain a priority.

Financial market policy

Financial market policy has a key role to play in restoring confidence...

The recent turmoil in the euro area has seen investors losing confidence again in the reliability of banks' financial statements and official stress tests, and hence in banks' solvency. The immediate concern is that accounting rules allow sovereign debt held in banking books to be valued at acquisition cost and not at market prices when banks declare that they intend to hold these securities to maturity. With sharp cuts in the market price of sovereign bonds issued by many countries in the euro area, this has opened up a gap between "market" and "accounting" measures of these assets. In addition, there is a lack of clarity in the treatment of sovereign bonds held in the banking book that are available for sale: under international financial reporting standards they are expected to be marked to market, but some countries are reported to have applied "prudential filters" allowing banks to value them at amortised cost for the purpose of calculating compliance with regulatory capital requirements. Another source of uncertainty about banks' financial statements relates to the treatment of their credit default swap (CDS) exposures as it appeared in October that a significant euro area bank had previously classified them as guarantees (which can receive a special accounting treatment), meaning that it did not have to recognise mark-to-market losses. There are also concerns that some banks outside the euro area could have large exposures to vulnerable euro area countries and banks, especially through credit default swaps (see below).

... by insisting on more solid capital bases of banks

To strengthen confidence in banking systems, EU governments have announced a plan to strengthen the core capital ratios of the major European banks (see Box 1.4). Capital has to be raised swiftly, to anticipate

Box 1.4. **The decisions taken at the October 2011 Euro summit and EU Council meeting**

The 26 October Euro summit and EU Council packages set out a further series of measures to help resolve sovereign debt and banking sector problems in the euro area. The main body of measures concerned proposals for Greece, steps to enhance the effectiveness of the European Financial Stability Facility (EFSF), bank recapitalisation, bank term funding and further significant enhancements of economic governance. Overall, the elements of the package represent a significant step towards resolving the euro area crises. However, the critical details remain to be determined and the measures have not succeeded in damping sovereign debt market tensions. A stronger link would also be appropriate with structural reform commitments and policy actions to enhance growth and rebalancing in the euro area – elements that are crucial to address the economic imbalances at the root of the crisis.

Concerning Greece, the summit invited the Greek government, private investors and other parties concerned to develop a voluntary bond exchange with a nominal 50% discount on notional Greek sovereign debt held by private investors, with the aim of putting Greek public finances on course to achieve a government debt stock of 120% of GDP by 2020. This would be some 30% of GDP lower than implied by earlier plans announced at a summit in July. Euro area countries would contribute up to €30bn to this new package. On that basis, additional official programme financing of up to €100bn until 2014 would be provided, including the additional resources required for the recapitalisation of Greek banks.

Box 1.4. **The decisions taken at the October 2011 Euro summit and EU Council meeting** *(cont.)*

If it can be achieved, this package would help ensure greater economic stability in Greece but may not fully put concerns about debt sustainability to rest, given the still-high debt level that is projected at the end of the decade. The extent of private sector participation also remains unknown, with some financial institutions possibly preferring to hold out for either repayment in full or an involuntary debt write-down, given their offsetting credit default swap (CDS) positions that would be triggered in such an event. In addition, the basis for calculating the 50% discount remains to be determined. More generally, if the large Greek write-down is ultimately treated as voluntary, investors might question whether holding CDS offers much protection against possible write-downs of their other holdings of sovereign bonds, adding to uncertainty about the balance sheet positions of financial institutions.

On the EFSF, two options were proposed to increase its capacity and raise the resources available to help achieve stability in the euro area :

- Providing credit enhancement to new debt issued by member states to reduce funding costs. Private investors would have the option of purchasing this risk insurance when buying bonds in the primary market.
- Maximising the funding arrangements of the EFSF through a combination of resources from private and public financial institutions and investors, arranged through Special Purpose Vehicles (SPVs) on the back of equity provided by the EFSF. If successful, this would enlarge the amount of resources available to extend loans and provide credit enhancements, for bank recapitalisation and for buying bonds in the primary and secondary markets.

The EFSF would have flexibility to use these two options simultaneously and deploy them for different objectives as required. For instance enhanced purchases of bonds in the secondary market could be required if the risk insurance available on newly issued sovereign debt resulted in existing debt, without such risk insurance, coming under increased pressure. The precise leverage effect of each option could be up to four or five times the available resources of the EFSF at present.

The feasibility of the schemes remains unclear. In particular, the success of the proposed SPVs will depend on the extent to which investors are willing to finance the sovereign debt of vulnerable countries at yields which do not threaten debt sustainability. As any extension of the sovereign guarantees underpinning the EFSF was ruled out, possible leverage and costs thereof remain dependent on the extent to which bond market contagion to the countries that guarantee the EFSF can be contained. Using first-loss insurance as a means to increase leverage effectively extends coverage by reducing the impact on yields.

The third main announcement comprised new measures to support the European banking system:

- Banks have a deadline of June 2012 to raise their "core" capital ratios to 9% after marking to market their holdings of sovereign debt as of end-September. Estimates by the European Banking Authority (EBA) suggest that the total capital shortfall to be made up is €106 billion (around 1% of euro area GDP). Plans for achieving the capital ratio target have to be agreed with national supervisors and co-ordinated by the EBA, in order to prevent excessive deleveraging.
- The necessary additional finance should initially be raised from private sources, including through the restructuring and conversion of debt to equity. If necessary, national governments should provide support, and if this was not available, recapitalisation of euro area banks should be funded by a loan from the EFSF to the national authorities. Banks that fail to meet the new capital target are also to be subject to constraints on dividend payouts and bonus payments by regulators until the targets are met.
- There was also an agreement to establish a co-ordinated EU-level approach that would establish public guarantee schemes to support banks' access to term funding at reasonable conditions.

Box 1.4. **The decisions taken at the October 2011 Euro summit and EU Council meeting** *(cont.)*

These steps are much needed to help restore confidence in the European banking sector, although their effectiveness remains to be seen. Bond yields in many euro area countries have risen markedly further (hence weakening bond values) since the end of September, possibly implying that an even larger additional level of capital might now be prudent for some banks. There is also a clear danger that the new capital ratios will be achieved through deleveraging, with banks discriminating between domestic and foreign borrowers and concentrating lending activities in home markets only. This could be a particular problem in smaller European economies in which foreign banks have a large market share. To guard against this, it would be preferable if the objectives for individual banks could instead be specified as targets for the amount of capital raised.

Where governments take equity stakes, there is a strong case for doing so in the form of ordinary shares, which have the benefit of diluting existing shareholders (reducing moral hazard) and giving the public purse a benefit if banks' fortunes improve: this approach would contrast with the 2008-09 episode when for the most part fiscal authorities recapitalised banks through means which exposed taxpayers to equity-like risk but gave them debt-like returns. Taking ordinary shares would also enable governments to exercise their shareholder rights, which could facilitate efforts to suspend dividend payments and to cap compensation per employee in order to improve balance sheets as quickly as possible without curtailing credit supply.

Finally, on governance, a number of significant new political commitments were made to reinforce the co-ordination and surveillance of euro area policies. In particular:

- Reinforcing national fiscal frameworks by basing national budgets on independent growth forecasts and introducing national legislation (if necessary) to establish rules on structural balanced budgets, preferably at constitutional level or equivalent.
- Enhancing fiscal monitoring and enforcement for countries in the Excessive Deficit Procedure, by allowing the European Commission and the Council to examine and comment on national draft budgets, monitor implementation and, if needed, suggest amendments.
- Commitment to stick to the recommendations of the Commission and the relevant Commissioner regarding the implementation of the Stability and Growth Pact.

any sovereign credit events. To avoid a process of credit curtailment and generalised bank deleveraging which could prove extremely disruptive, regulators should ensure that banks increase their capital levels rather than shrinking assets. To the extent that public capital injection is needed, it should come in the form of ordinary shares so as to give tax payers a share not only in potential losses but also potential upsides. The European co-ordination process could be used to avoid "stigma" effects by making recapitalisation occur in a harmonised way across countries. This effort should extend to banks located outside the euro area that have large exposures, through loans, guarantees or derivatives, to the vulnerable countries of the euro area.

Alternative scenarios for the euro area

There are both downside and upside risks for the euro area

The euro area crisis represents the key risk to the world economy at present, with concerns about sovereign debt sustainability having become increasingly widespread. Financial markets have priced in a restructuring of sovereign debt in Greece with large losses for creditors and also significant contagion to other fiscally vulnerable members of the euro area. This is particularly so for Italy and Spain, with government bond yield spreads surging towards levels that are ultimately hard to sustain, but also Belgium and, to a lesser extent, France and Austria. Indeed, contagion has entered a new phase and spread beyond euro area countries normally seen as fiscally vulnerable, suggesting that fiscal concerns are no longer the only driving force behind contagion. The policy measures announced at the Euro Summit and the EU Council meeting on 26 October (Box 1.4), like previous policy packages, provided only a temporary respite to market pressures.

A number of downside scenarios can be envisaged

A number of downside scenarios can be envisaged depending on the combination of particular events, transmission channels and interactions at work. An orderly debt write-down, without invoking CDS trigger clauses, might have only muted cross-border impact; a disorderly default, with comparatively large losses for investors and the triggering of CDS credit clauses, could give rise to uncontrollable contagion to other vulnerable countries. Accentuated concerns about the future integrity of the euro area could, even in the absence of sovereign defaults, lead to disorderly financial market developments with substantial economic fall-out. The trigger of a downside scenario could even be a separate event, for example the threatened collapse of one or more large financial institutions.

This section sketches particular scenarios on the downside…

This section sketches the possible implications of a disorderly sovereign default in various downside scenarios, depending on the contagion channels at work and their virulence, ranging from relatively benign to catastrophic outcomes. The particular scenarios described below should be seen as illustrative examples of how contagion channels could transmit shocks if a specific set of events were to occur in a particular sequence. In practice, each event can give rise to different outcomes, giving a large number of possible scenarios.

… and on the upside

This section also presents an upside scenario in which decisive policy measures, including those announced at the October Euro Summit and the EU Council meeting, are taken swiftly to break the link between sovereign debt and banking distress, to deal with Greece and to end the present contagion to sovereign debt markets in other European countries. The numerical estimates below give an illustrative example of the possible orders of magnitude in the different scenarios. In general, in the absence of a clear and credible policy commitment to halt contagion, backed by resources that are seen to be adequate, some form of downside scenario would become ever more probable; alternatively, if such a commitment is made, and succeeds in restoring confidence, an upside scenario will become more likely.

Downside scenarios

A disorderly default would have a cross-border impact…

Cross-border financial spill-over effects from a disorderly sovereign default in the euro area can take different forms:

… via losses for banks…

- Foreign creditor banks would suffer losses on: their holdings of government bonds in the country concerned (unless they have insured their holdings with credit default swaps, in which case the counter-party bears the loss); their exposures from loans to banks in that country (most of which would become insolvent if the write-down is large and there is no countervailing measure); and their claims on the non-bank private sector. These losses could have ripple effects throughout closely inter-connected banking systems if the write-downs cast doubt about the capacity of the affected banks to honour their obligations to counter-parties.

… and other creditors…

- Foreign non-bank creditors holding impaired sovereign debt or exposed to it via CDS contracts would also be affected. Some official creditors, such as the IMF, the EFSF and national governments, may enjoy priority status, but there is uncertainty as to the treatment that would apply to others.[10] Little is known about foreign non-bank private creditors, but they are likely to include insurance companies and pension funds. The lack of information about the exposure of institutional investors to sovereign debt could in itself be a source of uncertainty, triggering excessive precautionary withdrawals by policy holders and forcing pension funds to liquidate assets.

… higher government bond yields…

- Perceived default probabilities may rise on sovereign debt in other fiscally weak countries for several reasons. First, investors would realise that default can occur. Secondly, default in one country would create a precedent, which could result in other fiscally challenged countries considering it as one possible way of adjusting. Thirdly, the fiscal positions of other euro area countries could be weakened by losses on official bilateral loans, calls on EFSF guarantees or the need to recapitalise or resolve domestic banks with large exposures to the defaulting country. Such contagion would show up in higher government bond yields, further undermining public finances. Furthermore, were a default to strengthen expectations of euro-area exit, other weak countries might also see their bond yields increased by fears of a domino effect.

10. ECB holdings of sovereign bonds from the country concerned, purchased under the Securities Market Programme, may also be affected (though the bonds are most likely to have been acquired at a significant discount to face value). Impaired government bonds used by banks as collateral for their borrowing from the ECB would not give rise to losses for the ECB as long as the debtor banks remained solvent.

... lower equity prices...

- Diminished expectations of economic growth in the countries concerned would be swiftly incorporated into the equity prices of foreign corporations that derive significant earnings from exporting to, or operations in, these countries. Share prices would also reflect lower growth outside the countries concerned by default, brought about by other contagion channels.

... legal uncertainty...

- In the absence of EU bankruptcy rules for individual sovereigns, legal uncertainty could arise about the resolution of sovereign debt, further adding to the risk premium demanded by creditors on debt issued by fiscally weak member countries.

... and increased risk aversion

- A generalised increase in risk aversion could put downward pressure on all assets seen to be relatively risky and reduce the willingness to be exposed to all but the most-safe counterparties.

The direct contagion effects of a default via the banking system will depend on the country concerned

The extent to which the contagion effects from a disorderly default are manageable will depend in part on the size of the economy in which the default occurs and the size of the exposures that foreign banks have to that economy. Provided it does not trigger off panic reactions, related for example to uncertainty about the allocation of exposures to the country, the direct consequences of a default in a comparatively small euro area economy would seem to be manageable. A default by a larger economy or contagion to a large group of economies would prove much more disruptive.

In a small country, such as Greece, the direct contagion effects should be manageable

In the specific case of Greece, the agreement reached at the October 26 Euro Summit and EU Council meeting has increased the likelihood of voluntary private-sector write-down. If a credit event occured, whether voluntary or otherwise, creditor banks would have to write down the value of their claims on the Greek government, amounting to €34 billion as of end-2010 for EU banks outside Greece (Table 1.5).[11] National banking systems should be able to absorb significant losses on their Greek sovereign debt holdings with their current "free" Core Tier 1 capital (*i.e.* the capital above the required minimum of 4½ per cent of risk-weighted assets applicable under Basel III as from 2015). Public capital injections to make up for the write-downs might be needed for individual, particularly heavily exposed banks, but should be small relative to GDP.[12] As provided for in the October Euro Summit agreement, banks could incur additional losses on Greek private assets as the

11. Even in the absence of a default, some of this outstanding amount is likely to be written down provided private sector investors participate in the voluntary bond exchange programme announced at the Euro Summit in October.
12. Banks that are net sellers of credit default swap (CDS) protection on Greek sovereign debt would suffer losses in the case of default, but the small size of the market for Greek sovereign CDS suggests that the impact should be limited, unless it were to be highly concentrated. The overall notional amount of outstanding sovereign Greek CDS contracts has been estimated at below €8 billion (Baker, 2011).

Table 1.5. **Bank exposure to Greek sovereign and total debt**

	Stress-tested banks			BIS reporting banks
	% of core Tier I	% of free core Tier I[1]	% of GDP	% of GDP
Sovereign debt				
Germany	6.9	13.4	0.3	0.4
France	6.2	13.4	0.5	0.5
Italy	1.8	4.5	0.1	0.1
Spain	0.3	0.8	0.0	0.0
Belgium	13.6	22.5	1.1	0.4
Portugal	8.5	22.9	0.8	
Total debt				
Germany	15.7	30.3	0.7	
France	27.2	58.3	2.3	
Italy	2.1	5.4	0.1	
Spain	0.3	0.8	0.0	
Belgium	19.4	32.1	1.6	
Portugal	44.2	119.6	4.3	

Note: These ratios are reported to provide indications about the scales of exposures and should not be interpreted as estimates of expected losses. Data for stress-tested banks' core Tier I capital and exposures are taken from the detailed bank-by-bank result tables published by the European Banking Authority following the 2011 EU-wide stress test. Sovereign and total debt respectively refer to the EBA's concepts of gross direct long exposures to sovereigns and total EAD (Exposures at Default). Figures relating to total debt represent lower-bound estimates because a number of stress-tested banks made use of a materiality threshold which allowed them to refrain from reporting country-specific EAD exposures that are smaller than 5% of total EAD exposures. Those undisclosed country-specific exposures are however included under "others," a category which on average represents 7% of total EAD. The estimated country aggregates for total debt used to compute the ratios reported above have been calculated by summing total EAD exposures for banks that reported them and sovereign exposures for banks that chose not to report country-specific EAD exposures.

1. Exposure as a share of core Tier I capital in excess of 4.5% of risk-weighted assets (the Basel III core capital ratio applicable as of 2015).

Source: European Banking Authority; Bank for International Settlements; OECD Economic Outlook 90 database, and OECD calculations.

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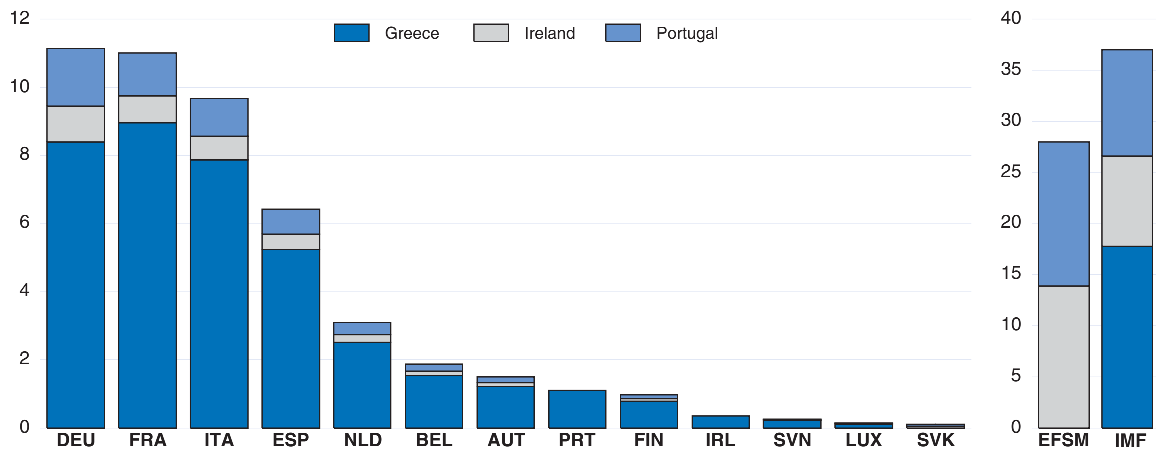
domestic banking system and, in the case of a general default, the non-bank private sector would most likely find it difficult to fully meet their obligations. Indeed, foreign claims on non-government entities in Greece are as large as claims on the government. Nonetheless, banking systems should also be able to absorb such losses without much public assistance in the form of capital injections, though particularly exposed institutions could face problems. Inter-bank markets could seize-up in the immediate wake of a default announcement, but already-announced central bank liquidity provision should contain the adverse effects of this on the functioning of the broader financial system. Foreign non-bank private creditors, who hold an estimated €65 billion of Greek government debt (20% of the total), would also be affected in the case of a default and this could be the case for official creditors, who hold claims amounting to €73 billion in Greece (Figure 1.11).

Sovereign debt in other programme countries should also be manageable

If a sovereign debt restructuring in Greece raised perceived default probabilities in one or both of the other programme countries, government bond yields would rise in Portugal from already high levels and the recent sharp drop in spreads in Ireland could be reversed. However, much of the

Figure 1.11. **Official loans to the governments of Greece, Ireland and Portugal**

Billions of euros



Note: Countries' exposures cover bilateral loans under the Greek Loan Facility and loans by the European Financial Stability Facility (EFSF) to Ireland and Portugal, disbursed until March, September and October 2011 for Greece, Ireland and Portugal, respectively. In addition, loans have been dispersed by the European Financial Stabilisation Mechanism (EFSM) and the IMF. Moreover, bilateral loans to Ireland from Denmark, Sweden and the United Kingdom amount to 0.5 billion euros combined until September 2011 (not included in the chart).

Source: European Commission; European Financial Stability Facility (EFSF); and IMF.

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funding needs of these two countries in the coming two years is covered by the IMF/EU programmes (Table 1.6), the increase in yields in secondary markets would have minimal near-term effects on actual borrowing costs. Higher yields might, however, require some capital injection into domestic banks to offset losses on their holdings of domestic sovereign bonds. Foreign

Table 1.6. **EU / IMF Programme countries : Funding needs and sources**

Billion euros

	Greece[1]			Ireland			Portugal		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Total financing needs	84.9	67.9	54.6	51.2	23.2	25.7	53.2	37.9	31.4
Net borrowing	17.1	14.9	11.4	16.2	14.3	12.1	10.0	7.6	5.2
Debt rollover	37.3	41.3	36.7	16.0	8.9	13.6	29.6	25.3	20.8
Other[2]	30.5	11.7	6.5	19.0	0.0	0.0	13.6	5.0	5.4
Total EU/IMF help	71.2	54.1	37.3	38.1	19.0	10.2	38.1	25.0	10.0
EU	53.6	39.4	27.1	25.6	12.7	6.6	25.4	16.7	6.7
IMF	17.6	14.7	10.2	12.5	6.3	3.6	12.7	8.3	3.3
Financing gap	13.7	13.8	17.3	13.1	4.2	15.5	15.1	12.9	21.4

1. EU/IMF help includes estimates of a new loan.
2. For Greece it includes bank assistance and stock-flow adjustment. For Ireland it includes bank recapitalisation. For Portugal it includes the bank Solvency Support Facility, bank restructuring costs and net financing from retail government securities programmes.

Sources: IMF(2011), "Greece: Fourth Review Under the Stand-By Arrangement and Request for Modification and Waiver of Applicability of Performance Criteria", *IMF Country Report No. 11/175*, July; IMF (2011), "Ireland: Third Review Under the Extended Arrangement – Staff Report", *IMF Country Report No. 11/276*, September; IMF (2011), "Portugal: First Review Under the Extended Arrangement," *IMF Country Report No. 11/279*, September.

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creditor banks would also incur losses on their holdings of Portuguese and Irish sovereign debt, but the amounts involved would be small relative to total core Tier 1 capital in the banking system of the creditor countries.

A wider contagion to vulnerable countries would have dire consequences for…

The intensified concerns that have appeared about sovereign debt sustainability in other larger countries with high or rapidly rising debt, and the recent extension of contagion to countries normally seen as having relatively solid public finances, have the potential to massively escalate the economic disruption. This is particularly so for Italy, where long-term government bond yields have risen rapidly by more than 100 basis points in the month to mid-November, but also Spain and Belgium, notwithstanding differences in their initial government debt levels, budget deficits, bond-yield spreads and potential growth prospects. Major negative turns in market sentiment, of the sort that in the past have been reflected in increases of 350 basis points in long-term government bond yields in affected countries,[13] could have dire consequences for the public finances and the banking sector. However, the strong increase in the yield spreads of Italian, Spanish and Belgian government bonds over German bonds observed in recent months may already incorporate part of this contagion effect. Moreover, the level of bond yields is being cushioned to some extent by lower German bond yields, which could continue to be the case. Against this background, the stylised quantifications below, based on a 350 basis point increase in yields (relative to that in the muddling through projection), could be overly pessimistic:

… public finances…

- Public finances would be impaired by higher debt servicing costs. Given the maturity structure of public debt, this effect would occur gradually but would require additional consolidation of 2% to 3% of GDP by 2020 to offset the impact on net lending in the countries concerned (Figure 1.12). The risk is that little progress in reducing debt ratios, or even continued increases in debt ratios, would further weaken confidence in public finances and result in an adverse feedback loop with additional interest rate increases forcing additional consolidation measures to be undertaken to meet headline budget objectives, which would further sap growth and confidence.

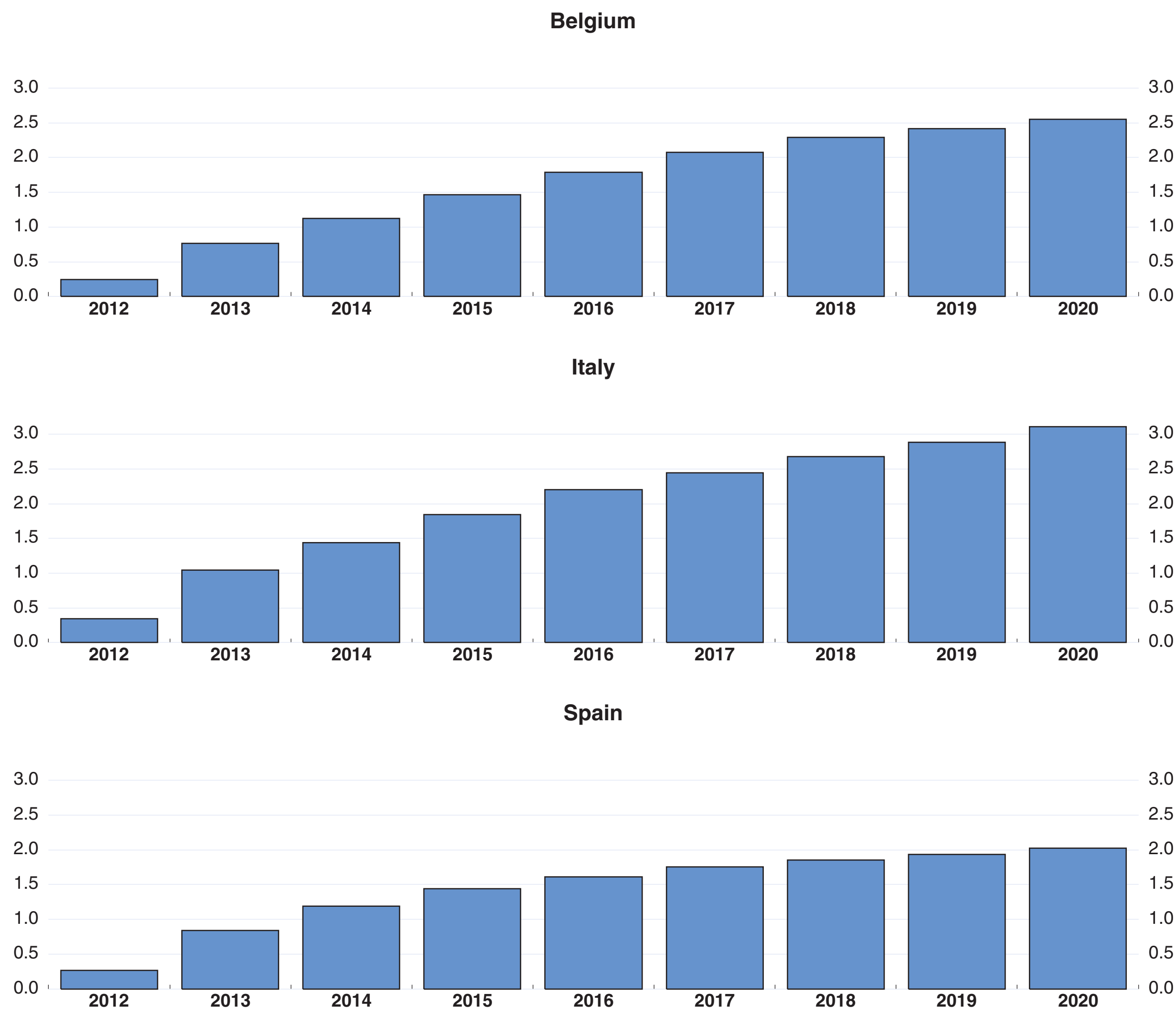
… and banking systems…

- Banks' balance sheets would be weakened as would their capacity to raise liquidity. The increase in yields would imply a reduction of around a quarter in the market value of sovereign bonds issued by the three countries. This would have the biggest effects on the domestic banks in these countries, given their vast holdings of domestic sovereign debt. However, outside these three countries, pressures on banks could also become stronger, as has already been seen in France. Weaker balance sheets could possibly prompt deleveraging that would sharply curtail credit extension and raise fears that government funds would be

13. For instance, as uncertainty grew about the effective lending capacity of the EFSF, Irish and Portuguese yields rose by almost 3½ per cent from mid-June to mid-July 2011.

Figure 1.12. **Belgium, Italy and Spain: the impact of higher interest rates on consolidation needs**

In per cent of GDP



Note: The bars show by how much the underlying primary balance as a share of GDP would need to increase to stabilise the debt ratio over the period 2014-20 at its 2013 level, if government bond yields were 3.5 percentage points higher than assumed in the baseline. This implies stabilising the debt-to-GDP ratio at high levels, in particular in Italy (at 127%) and Belgium (at 101%). The baseline is based on the OECD Economic Outlook 90 projections until 2013 and thereafter on the long-term scenario presented in OECD Economic Outlook 89.

Source: OECD Economic Outlook 90 database; OECD Economic Outlook 89 database; and OECD calculations.

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required to safeguard the banking system. In turn, any perceived need for government-funded bank recapitalisation would exacerbate sovereign debt stress, pushing yields higher. The significant widening of French government bond spreads in the wake of French bank funding stress since mid-2011 illustrates the potential strength of this crisis amplification channel.

... with potentially extreme effects for the euro area as a whole

The interaction between public finance and banking woes could result in a self-reinforcing feed-back loop: banking problems requiring costly public interventions, which in turn would raise long-term interest rates with additional adverse effects on economic growth, banks, etc. If unchecked, such a development could lead to fears of possible sovereign and banking defaults. This would have dramatic effects on the stability of the banking system in the euro area as a whole, and on government bond yields in previously unaffected countries, given the very large exposures of banks throughout the area to sovereign and private debt in the vulnerable countries (Table 1.7).

Table 1.7. **Stress-tested banks' exposures to Belgian, Italian and Spanish debt**

	% of core Tier I	% of free core Tier I[1]	% of GDP
Sovereign debt			
Germany	54	104	2.5
France	62	134	5.2
Italy	209	535	10.8
Spain	171	441	22.6
Belgium	188	311	15.3
Portugal	8	21	0.7
Total debt			
Germany	203	391	9.4
France	312	668	26.0
Italy	1 587	4 059	82.2
Spain	1 557	4 008	205.0
Belgium	1 068	1 769	87.0
Portugal	132	357	12.8

Note: These ratios are reported to provide indications about the scales of exposures and should not be interpreted as estimates of expected losses. Data for stress-tested banks' core Tier I capital and exposures are taken from the detailed bank-by-bank result tables published by the European Banking Authority following the 2011 EU-wide stress test. Sovereign and total debt respectively refer to the EBA's concepts of gross direct long exposures to sovereigns and total EAD (Exposures at Default). Figures relating to total debt represent lower-bound estimates because a number of stress-tested banks made use of a materiality threshold which allowed them to refrain from reporting country-specific EAD exposures that are smaller than 5% of total EAD exposures. Those undisclosed country-specific exposures are however included under "others," a category which on average represents 7% of total EAD. The estimated country aggregates for total debt used to compute the ratios reported above have been calculated by summing total EAD exposures for banks that reported them and sovereign exposures for banks that chose not to report country-specific EAD exposures.

1. Exposure as a share of core Tier I capital in excess of 4.5% of risk-weighted assets (the Basel III core capital ratio applicable as of 2015).

Sources: European Banking Authority, OECD Economic Outlook 90 database, and OECD calculations.

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An intense euro area crisis would have strong global effects both directly…

An intense euro area crisis would have significant adverse effects outside the euro area through many channels. For example, banks in the United States and Japan would take a hit on their holdings of sovereign, bank and non-bank debt of the euro area countries in question, though the total direct exposure to Greece, Ireland, Portugal, Spain, Italy and Belgium is small relative to Tier-1 capital in the US and Japanese banking system (Table 1.8). US banks have large gross exposures to Europe through guarantees, including gross CDS exposure; however, their net exposures are likely to be substantially smaller due to accompanying hedging operations, as long as the counterparties are solid.[14] Little is known about the exposure of US and Japanese non-bank financial institutions to the euro area countries.

Table 1.8. **US and Japanese banks: Exposure to programme and vulnerable euro countries**

% of Tier 1 capital

	United States	Japan
Total foreign claims	21.9	24.2
Public sector	3.6	11.7
Banks	7.7	2.8
Non-banks	10.4	9.6
Other (including gross CDS exposure)	58.5	3.2

Source: Bank for International Settlements and OECD calculations.

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… and indirectly

Intense sovereign debt problems in the euro area could also highlight the extent to which rapid public debt accumulation has yet to be arrested in the United States and Japan, though yields in the deep government bond markets in these two countries are likely to be determined primarily by factors other than contagion. However, equity markets in the two countries would be hit as profits of US and Japanese exporters to Europe would fall, as would earnings of subsidiaries of US and Japanese companies in Europe. This effect would likely be reinforced by a general reduction in risk appetite. Heightened general risk aversion would also be an important channel by which emerging market economies would be affected by an intense crisis in the euro area, with large-scale capital outflows depressing economic growth in addition to the effect of much weaker export markets.

The global consequences of a contagious sovereign debt event on activity would also be large

Some illustrative estimates of the possible outcomes in one particular stylised scenario are set out in Box 1.5, pointing to: sharp falls in the level of output in the OECD economies relative to the muddling-through projection, especially in the euro area; a decline in the level of world trade relative to the muddling-through scenario possibly amounting to between 9-10% by the latter part of 2013; and likely deflation in many OECD economies by 2013. These estimates are highly stylised and only illustrative. They consider only a restricted sample of countries despite the recent generalisation of contagion, and they do not discriminate among the three countries concerned in spite of their present differences in fiscal situations and government bond yields. That said, the estimates highlight the scale of the policy challenge involved if such a scenario did occur, and the urgency of taking action to put in place mechanisms that can prevent it from occurring.

Euro area exit would be devastating in the very short run…

In a worst-case situation, albeit one with only a small probability of occurring, the downside scenario above could be strongly accelerated and amplified if it was accompanied by one or several countries leaving the euro area and re-establishing their own national currencies – or even just by expectations thereof. For instance, this could be prompted by the need to restore external competitiveness after a large erosion since entry into

14. In mid-2011, the stock of credit default swaps sold by the top 25 US commercial banks and trust companies in derivatives was almost equal to total credit default swaps bought by the same institutions, see Comptroller of the Currency (2011).

Box 1.5. **Calibrating a stylised downside scenario in the euro area**

The scenario set out below provides some illustrative indications of the possible economic effects resulting from one particular stylised downside scenario in the euro area. It assumes that contagion from a disorderly sovereign debt restructuring, for instance in Greece, is widespread in the euro area and, as a very stylised assumption, equally reflected in sovereign debt markets in Italy, Spain and Belgium, notwithstanding present differences in their fiscal positions and government bond yields. The scenario does not allow for the possibility of exit from the euro area, or for stronger expectations thereof, or for possible major discontinuities that might arise if any major financial institutions ceased to operate. The effects shown should be seen relative to the muddling-through projection, which incorporates the impact of the deterioration in financial conditions that has already occurred since the summer.

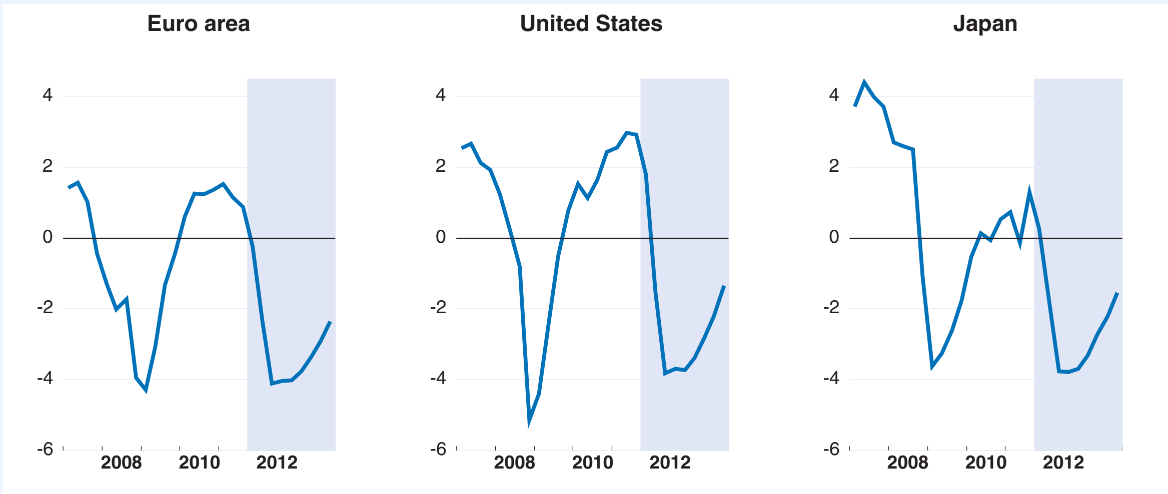
Given the likely global nature of the downturn and the key role of financial market contagion, as in the 2008-09 crisis, the downside scenario is calibrated on developments observed in that crisis. In particular, the deterioration in credit conditions, corporate bond spreads and equity prices between the latter half of 2007 (the half-year prior to the onset of a generalised collapse in confidence) and the height of the crisis in the first quarter of 2009 has been used to calibrate a benchmark for the declines that could occur in major OECD economies in this downside scenario. These benchmark declines are applied to the average value of credit conditions, bond spreads and equity prices in the six month period to July this year (the corresponding six months before the collapse in confidence began in August). The resulting calibrated levels of credit conditions, bond spreads and equity prices are assumed to be reached by the second quarter of 2012, and to remain at this level until end-2012. Thereafter, the reversion in these variables towards more normal, pre-crisis levels is assumed to be protracted compared with 2008-09, reflecting the more limited scope for sizable support from macroeconomic policies at the current conjuncture. In addition, as discussed in the main text, long-term government bond yields in this stylised scenario are also assumed to rise by 350 basis points in Italy, Spain and Belgium, in line with past experience following major turns in financial market sentiment. In practice, if such a scenario materialised, the situation in each country could differ, reflecting their different starting positions.

The broader economic impact of such developments can be quantified in a number of different ways:

- Aggregate financial conditions would quickly deteriorate in the euro area and other economies (see the first figure below). The decline in the FCIs implies, all else being equal, that the level of output in the major OECD economies (and the output gap) could be around 5% lower by the first half of 2013 than might otherwise be the case. A change of this magnitude from the muddling-through baseline would be associated with a deep recession in the euro area, and also push the United States and Japan into recession. It would also give rise to strong disinflationary, or even deflationary, forces. Financial conditions in the emerging market economies might also be strongly adversely affected in such circumstances, not least because of the likely rise in financial outflows from these countries as OECD financial institutions repatriate capital.
- In this situation, the decline in financial conditions would likely be accompagnied by a further increase in uncertainty and a continued weakening of consumer confidence (see the second figure below). As above, the changes between the latter half of 2007 and the height of the crisis in 2008-09 have been used to calibrate the changes in uncertainty and confidence, using the average value over February-July 2011 as a starting point.
- Using the analysis referred to in Box 1.1, the recalibrated FCIs and the associated alternative paths for uncertainty and consumer confidence point to a sustained and deep contraction in business investment relative to the muddling-through projection (see the third figure below). Such changes would likely have an adverse impact on near-term potential growth, by lowering the capital stock. The investment impact in the United States could even be larger than in the euro area, reflecting a greater estimated sensitivity of investment to changes in both the FCI and uncertainty in the United States. Private consumption would also weaken considerably; all else equal, the growth of private consumption would be lowered by around 2 percentage points in 2012 in the euro area and the United States, and by close to 3 percentage points in 2013 relative to the muddling-through projection.

Box 1.5. **Calibrating a stylised downside scenario in the euro area** *(cont.)*

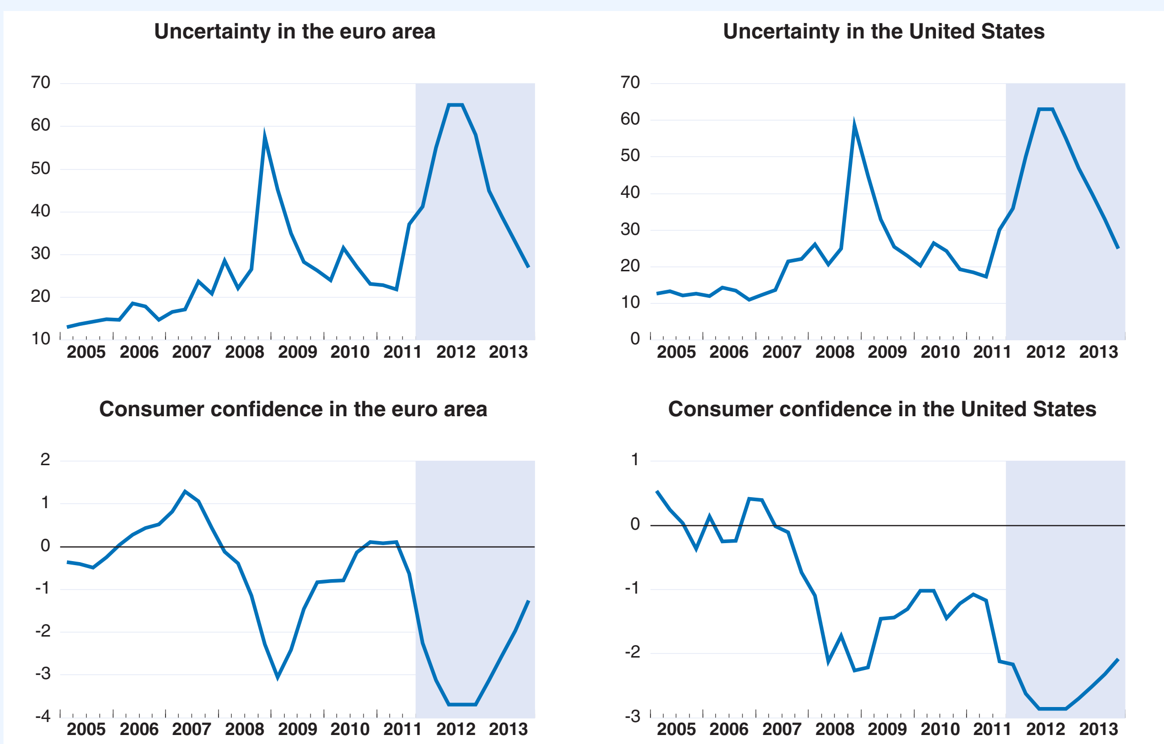
Financial conditions in a stylised euro area downside scenario



Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888932540486

Uncertainty and consumer confidence in a stylised euro area downside scenario



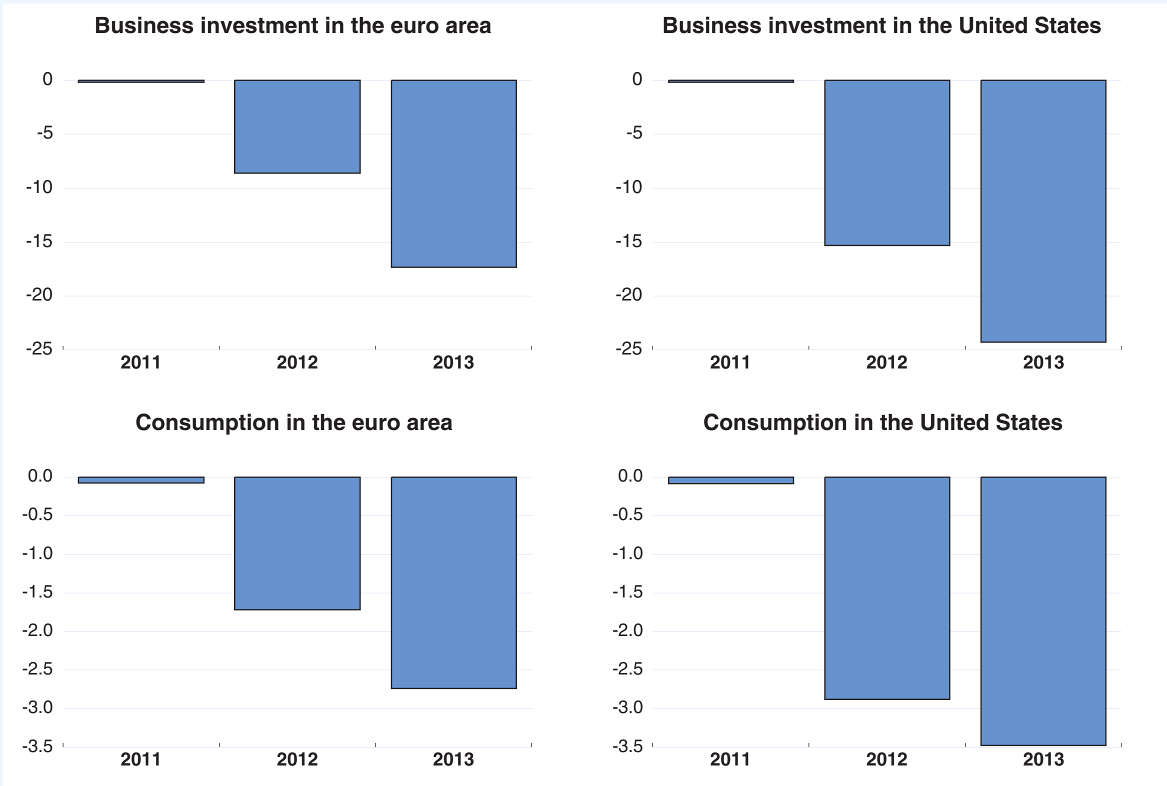
Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888932540505

Box 1.5. **Calibrating a stylised downside scenario in the euro area** *(cont.)*

Private sector demand in a stylised euro area downside scenario

Annual growth rate in percent, change from the muddling-through scenario



Note: Calculated from separate equations for investment and consumption, using financial conditions, uncertainty and confidence. See Box 1.1 for further details.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888932540524

A broader picture of the possible near-term outcomes and effects in this downside scenario can be obtained from simulations on NiGEM, the global macroeconomic model of the National Institute of Economic and Social Research. This allows a full account to be taken of the spillovers between countries arising from changes in trade and international financial linkages *via* asset prices and net foreign asset accumulation.

In a simulation of the downside scenario, equity risk premia, corporate bond spreads, household sector interest rate spreads, equity prices and euro area bond yields are changed as set out above for the changes applied to recalibrate the FCIs. In addition, the simulation incorporates a 40% decline in equity prices worldwide (again reflecting the pattern of changes between the latter half of 2007 and the first quarter of 2009) and a stylised rise of 350 basis points in long-term government bond rates in Italy, Spain and Belgium. All shocks are assumed, for simplicity, to persist fully for two years. Policy interest rates are assumed to remain at their baseline settings (close to the zero bound). Budget solvency rules are turned off, so that the full effect of the downturn is reflected in the automatic stabilisers, apart from in the six euro area countries assumed to be at the heart of the crisis in this scenario (the programme countries, Italy, Spain and Belgium) and Japan, which as discussed in the main text on the OECD Strategic Response to a potential new relapse in economic activity, would have to at least partly offset the automatic stabilisers to avoid losses in market confidence about sovereign debt sustainability.

Box 1.5. **Calibrating a stylised downside scenario in the euro area** *(cont.)*

Broadly in line with the results above, the simulation results (see the Table below) point to a likely prolonged and deep recession in the euro area in the absence of any discretionary policy responses, given the already weak area-wide activity in the muddling-through baseline. The OECD as a whole would move into recession, with marked declines in activity in both the United States and Japan. The emerging market economies would not be immune from this shock, with global trade volumes around 9½ per cent lower than baseline after two years, and the value of their international asset holdings being hit by weaker equity prices. Differences across countries in the response to the shock reflect differences in the sensitivity of expenditure to changes in financial conditions and asset values in the macroeconomic model, as well as differences in real and nominal rigidities. In part, these help to account for the relatively slow first year response of euro area activity to the shocks. The response in Japan is relatively large, in part because the automatic fiscal stabilisers (which are small to begin with) are being offset by other fiscal measures so that the headline budget balance remains unchanged, and in part because of the relative sensitivity of net exports to changes in demand and the real exchange rate.

Disinflationary forces would intensify, with deflation likely occurring in many OECD economies by 2013, given the already low level of inflation in the main projection and the gradual extent to which stronger disinflation begins to push down inflation expectations. Unemployment would also rise sharply, by close to 2 percentage points in the OECD economies by 2013, and possibly even by more if past labour hoarding now led firms to reduce employment levels more actively. If other governments made efforts to stick to their announced fiscal objectives for the headline budget balance, the necessary further *ex-ante* fiscal tightening in the remaining euro area economies would exceed 1% of GDP in 2012 and over 2½ per cent of GDP in 2013; if implemented such changes would further intensify the adverse near-term effects on growth.

A stylised euro area downside scenario: macroeconomic model simulation results

Difference from baseline

	2012	2013
United States		
GDP growth (%)	-2.05	-2.77
Inflation (%)	-0.37	-2.50
Unemployment rate (%)	0.61	2.05
Budget balance (% of GDP)	-0.71	-2.05
Current balance (% of GDP)	0.07	0.25
Euro area		
GDP growth (%)	-2.07	-3.68
Inflation (%)	-0.34	-2.16
Unemployment rate (%)	0.72	2.14
Budget balance (% of GDP)	-1.00	-2.56
Current balance (% of GDP)	1.20	2.37
Japan		
GDP growth (%)	-1.82	-2.09
Inflation (%)	-0.07	-0.79
Unemployment rate (%)	0.15	1.03
Budget balance (% of GDP)	-0.42	-1.19
Current balance (% of GDP)	0.26	0.36
China		
GDP growth (%)	-0.85	-1.59
Inflation (%)	-0.20	-1.69
Current balance (% of GDP)	-0.22	-0.49
OECD		
GDP growth (%)	-2.00	-3.07
Inflation (%)	-0.29	-2.03
World		
GDP growth (%)	-1.29	-2.10
Trade growth (%)	-4.17	-5.32

Note: Equity prices drop by 40%;
investment risk premia (corporate bond spreads) are raised to their peak in 2009 Q1;
household borrowing-lending wedges go up by 400bp in the Euro area, 100bp in Japan and 200bp elsewhere;
equity risk premiums go up by 300bp in the Euro area, 75bp in Japan and 150bp elsewhere.
Short-term interest rates and nominal exchange rates are held fixed. Budget solvency rules are turned off except in Belgium, Portugal, Italy, Ireland, Greece, Spain and Japan.
The simulation results are based on the model run in backward-looking mode. See text for the explanation of the shocks applied.

Source: OECD calculations, using NiGEM.

StatLink http://dx.doi.org/10.1787/888932541816

the currency union. Although this would most likely prove to be extremely costly for the country in question in the short run, and possibly even in the long run,[15] euro-area exit might nevertheless be seen as a politically less unappealing option for countries under market pressure. As a consequence, investors would start demanding compensation for possible exchange rate risk in the form of higher interest rates on public and private debt in other vulnerable countries that remain members of the euro area. There would also be strong incentives for households and businesses to withdraw deposits from these vulnerable countries, creating a potential for bank runs to add to economic instability.

… and would entail huge costs for all euro area countries

If everything came to a head, with governments and banking systems under extreme pressure in some or all of the vulnerable countries, the political fall-out would be dramatic and pressures for euro area exit could be intense. The establishment and likely large exchange rate changes of the new national currencies could imply large losses for debt and asset holders, including banks that could become insolvent. Such turbulence in Europe, with the massive wealth destruction, bankruptcies and a collapse in confidence in European integration and cooperation, would most likely result in a deep depression in both the exiting and remaining euro area countries as well as in the world economy.

Upside scenarios

Ring-fencing can take various forms that differ in terms of cost and effectiveness…

A credible commitment by euro area governments that contagion will be blocked, backed by resources that were seen to be adequate, could serve as a trigger for an upside scenario. The measures announced at the October Euro Summit and EU Council meeting go some way towards this objective, but have not proved sufficient to damp market tensions. Fully-credible commitments to halt contagion to otherwise solvent sovereigns should result in a significant reduction in long-term rates in the countries concerned, with improved confidence and lower uncertainty prompting households and businesses to increase spending. Various ring-fencing mechanisms have different intermediate aims and would require significantly different resource commitments, and include the following:

- Taking full control of government bond yields in Italy, Spain and Belgium would require the euro-area authorities to be ready to buy all debt that investors were not ready to hold at a given price. This would go beyond the measures announced at the recent Euro Summit. To be credible, such a policy would need to be backed by an ample level of resources – even if credibility would imply that few resources would have to be actually disbursed. This might imply a sizeable share of the combined size of the bond markets in the three countries, which amounts to around €3 trillion (around 30% of GDP in the euro area)

15. Empirical estimates made after a decade of monetary union in Europe suggested that the combined direct and indirect benefits on area-wide productivity from the move to a single currency could be as high as 5% in the long run (EC, 2008). The break-up of the euro area would put such gains at risk.

(Figure 1.13, Panel A). A full guarantee of public debt of these countries would imply similarly large outlays in case of default and would therefore have to be backed by a similar level of resources to be credible, though outlays would be delayed compared with direct interventions to control the bond markets. Partial guarantees would require fewer resources, but would also likely be less effective in reducing yields.[16] In the longer term, jointly issued or jointly guaranteed euro-bonds could achieve the same effects but would likely take time to introduce and would raise similar types of moral hazard concerns.

- Decoupling public finance developments from the government bond markets could be achieved if euro-area authorities were to satisfy the funding needs (*i.e.* roll-over of debt plus government deficits) of governments exposed to strong contagion in the same way as for the IMF/EU programme countries at present. In the cases of Italy, Spain and Belgium for 2012 and 2013, this would require resources equivalent to around €1 trillion (10% of GDP in the euro area) (Figure 1.13, Panel B). However, such interventions would not necessarily imply low yields in secondary markets for government bonds, as demonstrated by the currently high yields in the programme countries, and knock-on effects on domestic banking systems could increase public funding requirements considerably. In addition, high yields would have adverse effects on creditor banks in other euro area countries.
- Guaranteeing the value of sovereign bonds in banks' portfolios throughout the euro area would not address the feedback loop between higher yields and public finances, but would switch off the interaction between weakening banking systems and flagging confidence in government finances. Again using Italy, Spain and Belgium as an example, the resources required for this, if the guarantee became effective, would be equal to EU bank holdings of sovereign debt of the 3 countries, amounting to around €0.7 trillion (7% of GDP in the euro area) (Figure 1.13, Panel C).

Whether the second or third option would be sufficient to completely arrest contagion to and from the vulnerable countries is questionable, especially given recent signs of contagion becoming more generalised and also affecting fiscally healthy countries.

16. The impact of partial guarantees, *e.g.* guaranteeing losses up to a certain per cent, would depend on the scope of such programmes. Guaranteeing a certain percentage of all existing and new debt should lead to a reduction in yields, although the impact is uncertain and depends on which combination of loss-given-default and probability of default is reflected in current spreads and on how the probability of default would be reassessed after the introduction of a guarantee. As an illustrative example, Italian government bond spreads over swaps as of 18 November 2011 can be interpreted as reflecting an implied probability of default of 6.1% a year over the next ten years using the value-weighted average loss-given-default rate of 69%, *i.e.* the average of the episodes of default surveyed in Moody's (2011). Under this assumption, a 20% guarantee would reduce yields by less than 140 basis points. If, alternatively, loss-given-default is assumed to be equal to the un-weighted average of 47% in the study, the associated implied probability of default is 10.9% a year and the yield reduction for a 20% guarantee would reach almost 200 basis points.

Figure 1.13. **Belgium, Italy, Spain and euro area programme countries: bond-market size, government funding needs and banks' holding of sovereign bonds**

1. Based on the ESA95/SNA (as opposed to Maastricht) definition. For Greece, Portugal and Ireland see Box 1.2 in the main text.

Source: OECD Economic Outlook 90 database; Bloomberg; and European Banking Authority bank reports, August 2011, stress test.

StatLink http://dx.doi.org/10.1787/888932540562

... and resources can come from different institutions...

The vast resources involved could come from increasing or leveraging existing EFSF funds, as currently proposed, an increased use of the ECB balance sheet, directly from national authorities, or from the rest of the world through loans that could be channelled through the IMF. Indeed, the different actors could be assigned different tasks in ring-fencing strategies with many different permutations possible.[17] Successful ring-fencing with official means would limit potential losses for private banks. Even so, strengthening the resilience of the banking system via higher capital cover, as currently planned, would still be essential.[18]

... but the ECB would most likely have to play a key role

Relying extensively on EFSF funds would arguably be more appropriate in the ring-fencing process as it would make the potential fiscal costs more transparent and would assign it to the fiscal authorities. However, it might prove difficult in practice to raise the capacity of the EFSF sufficiently, especially if funds were needed to support a large number of countries and private banks. Because of practical, legal and political economy barriers, the ECB would most likely have to play a key role in providing the required resources – possibly via the EFSF which would help ensure a more appropriate allocation of credit risk. The ECB can sterilise any expansion of its balance sheet and, more to the point, can use its deposit rate to steer market interest rates independently of outstanding liquidity should this become necessary. However, such a strategy could come at the cost of the ECB becoming heavily engaged in quasi-fiscal operations, and moral hazard could be created that could render inflation control difficult in the future. Set against this, a credible and decisive programme may not increase ECB exposure compared with the end result of the current drip-wise intervention under the Securities Market Programme. Irrespective of the institutional mechanisms employed, access to resources should only be made with strict conditionality, so that strong corrective action is taken by the receiving country.

Future fiscal governance in the euro area needs to be decided

At the same time as mobilising adequate resources, it is important to continue to progress on steps to strengthen future fiscal governance in the euro area. In particular, it is necessary to establish mechanisms to counter the potential moral hazard from intervening to block contagion. There are various options available to attain that end: stronger adherence to central rules and automatic penalties for non-compliance, *e.g.* monetary fines or the federation taking control of national VAT rates to attain targets; blue/red bonds that would provide countries with incentives to prevent their debt exceeding a certain limit where they could no longer benefit from low interest rates backed by a federal guarantee; increased use of market mechanisms to

17. For example, the EFSF could be tasked to deal with current programme countries and bank recapitalisation in vulnerable countries, national authorities with capital injections into banks in the stronger countries, and the ECB with ensuring that bond yields in vulnerable countries do not turn too high; the ECB could ensure low sovereign bond yields in both programme and vulnerable countries, thereby minimising losses for the European banking system, with the EFSF's role being limited to inject the capital into banks that might still be needed in vulnerable countries, *etc.*
18. Capital injections into banks from private sources, if that were possible, would reduce the amount of public resources needed for ring-fencing.

discipline fiscal behaviour, which would require establishing a framework for orderly sovereign default; etc. These options differ in terms of the extent of administrative and market control, and the ultimate arrangement will depend on members' preferences in these matters, but the multiplicity of possible solutions should not delay the adoption of adequate arrangements. At its October 2011 meeting, the EU Council agreed to expand administrative controls to limit the risk of excessive deficits of individual member countries in the future (see Box 1.4) and further measures are under discussion.

Successful action would offer near-term benefits

A successful blocking of contagion and the establishment of strengthened incentives to pursue sound medium-term fiscal policies, could offer significant near-term benefits for the economic outlook. In particular, there would likely be a marked reduction in long-term government bond spreads in many euro area countries, as well as a more general improvement in financial conditions and restoration of confidence. An illustrative scenario is set out in Box 1.6, incorporating a reduction in euro area government bond yield spreads and the rapid reversal of the decline in financial conditions since August. The results suggest that OECD output growth could be 1¼-1½ percentage points higher in 2013 than in the muddling-through projection, and considerably higher than would be the case if a downside scenario had materialised.

Box 1.6. **Calibrating a stylised upside scenario in the euro area**

The scenario set out below provides an illustrative NiGEM simulation of the possible short-term economic effects of a stylised upside scenario in the euro area, with governments having made a fully credible commitment which ensures that any potential contagion to otherwise solvent governments is blocked. The effects shown should be seen relative to the muddling-through projection, which incorporates the impact of the deterioration in financial conditions and the rise in long-term government bond yields that has occurred since the summer. They do not incorporate any potential near-term effects from structural reforms announced as part of a package to help restore market confidence.

It is assumed that the long-term government bond yields of Italy, Spain, Belgium, France and Austria decline from their level in the muddling-through projection to 50 basis points above that of Germany, and that there is a 5 percentage point reduction in the level of 10-year government bond rates in Ireland, Portugal and Greece. In all economies, allowance is also made for an assumed rise of 20% in equity prices and small reductions in risk premia and private sector interest rate spreads. The latter reductions correspond to approximately one-quarter of the increases included in the downside scenario (Box 1.5), broadly taking these financial variables back to their level in the six months to July this year before risk aversion was heightened in August. Thus, there is an easing in financial conditions outside the euro area as well as inside. In the macroeconomic model simulation of this scenario, all shocks are assumed, for simplicity, to persist fully for two years. Policy interest rates are assumed to remain at their baseline settings. Budget solvency rules are turned off other than In the three euro area programme countries plus Italy, Spain and Belgium, who are assumed to continue to meet their target headline budget balances, implying a modest fiscal easing in these countries relative to the muddling-through projection.

Model simulations suggest that such changes might raise OECD output growth by between ¾-1 percentage point in 2012 and between 1¼-1½ percentage points in 2013 (see the Table below). Global trade volumes would be around 5% higher after two years; this and the heightened asset values in the OECD economies should boost activity in the emerging market economies as well. The largest benefits are felt in

Box 1.6. Calibrating a stylised upside scenario in the euro area *(cont.)*

the euro area, though these take some time to emerge, in part reflecting the relative openness of the euro area economy, with stronger euro area domestic demand offset by a large increase in the volume of imports. Thus, in the first year, the euro area GDP increase is only marginally faster than in the rest of the OECD. Overall, when combined with the muddling-through baseline, the upside scenario would imply the euro area growing at more than twice its estimated potential growth rate in 2013.

The boost to output could help to lower the unemployment rate, by around 1-1¼ percentage points in the euro area after two years and by some ¾-1 percentage point in the OECD overall. Inflationary pressures would be somewhat stronger, but not strong in an absolute sense given the disinflationary pressures in the muddling-through projection. There would also be improved fiscal outcomes in the euro area, with the budget balance improving by over 1% of GDP by 2013. Such an outcome would also likely be accompanied by improvements in private sector confidence and reductions in uncertainty, which would also be expected to boost expenditure relative to the muddling-through projection.

A stylised euro area upside scenario: macroeconomic model simulation results

Difference from baseline

	2012	2013
United States		
GDP growth (%)	0.76	0.95
Inflation (%)	0.07	0.89
Unemployment rate (%)	-0.22	-0.72
Budget balance (% of GDP)	0.24	0.66
Current balance (% of GDP)	0.06	0.07
Euro area		
GDP growth (%)	1.08	1.86
Inflation (%)	0.11	1.08
Unemployment rate (%)	-0.41	-1.19
Budget balance (% of GDP)	0.49	1.12
Current balance (% of GDP)	-0.55	-1.22
Japan		
GDP growth (%)	0.77	0.69
Inflation (%)	0.02	0.31
Unemployment rate (%)	-0.07	-0.42
Budget balance (% of GDP)	0.20	0.69
Current balance (% of GDP)	-0.04	0.03
China		
GDP growth (%)	0.38	0.74
Inflation (%)	0.06	0.69
Current balance (% of GDP)	0.13	0.24
OECD		
GDP growth (%)	0.87	1.28
Inflation (%)	0.06	0.82
World		
GDP growth (%)	0.58	0.93
Trade growth (%)	2.10	2.59

Note: Equity prices go up by 20%, investment risk premiums go down by one quarter of their increase in the downside scenario in Box 4. Household borrowing-lending wedges go down by 100bp in the Euro area, 25bp in Japan and 50bp elsewhere. Equity risk premiums go down by 80bp in the euro area, 20bp in Japan and 40bp elsewhere. Short-term interest rates and nominal exchange rates are held fixed. Budget solvency rules turned off except in Belgium, Portugal, Italy, Ireland, Greece and Spain. The simulation results are based on the model run in backward-looking mode.

Source: OECD calculations, using NiGEM.

StatLink http://dx.doi.org/10.1787/888932541835

Rebalancing and structural reform to ensure the viability of the monetary union

Structural reforms are urgent in the euro area…

The present crisis has its origins in the economic imbalances that have built up gradually among the euro area economies. Symptoms amongst the weaker economies have included: weak competitiveness, loss of market shares and external deficits; low growth that has exacerbated fiscal imbalances through adverse debt dynamics; and over-reliance on domestic demand to drive growth. Amongst the stronger economies, growth has been excessively reliant on exports, and domestic saving has been used only partially to finance domestic investment (which has fallen relative to GDP), with surplus saving flowing to finance consumption and investments, with sometimes very weak or even negative returns, in weaker economies. Going forward, there is a need to not only establish sound fiscal policies, but also to: ensure that private saving and investment decisions are based on sound incentives; ensure that cumulated competitiveness positions converge quickly towards levels that are sustainable in the long term; and ensure that growth is not held back by policy barriers. The more rapidly such adjustments occur, the shorter the period in which weaker economies have to live with high unemployment and depressed activity. Structural reforms are crucial for achieving rebalancing and for speeding up the process of adjustment. In addition, structural reforms will also help economies to cope with, and adjust more flexibly to, future economic shocks.

… to improve growth prospects…

In addition to contributing to higher living standards, stronger growth in the euro area would help to improve debt dynamics. The potential growth rate is estimated to be around 1¼ per cent in the euro area as a whole, with markedly lower rates in some of the countries facing intense market pressure. Although implementing growth-enhancing structural reforms is important in all euro area countries, it is particularly urgent to introduce reforms in the countries faced with serious credibility problems. In addition, at the EU level; reforms to strengthen and deepen the Single Market; the effective implementation of the new procedure for the surveillance and correction of macroeconomic imbalances, and financial sector reforms all have an important role to play. In the financial sector, a truly unified banking system, where all regulatory and supervisory responsibilities are transferred to the euro area level, is especially necessary to eliminate the return of adverse feedback loops between national banking systems and sovereign debt.

… and to tackle imbalances…

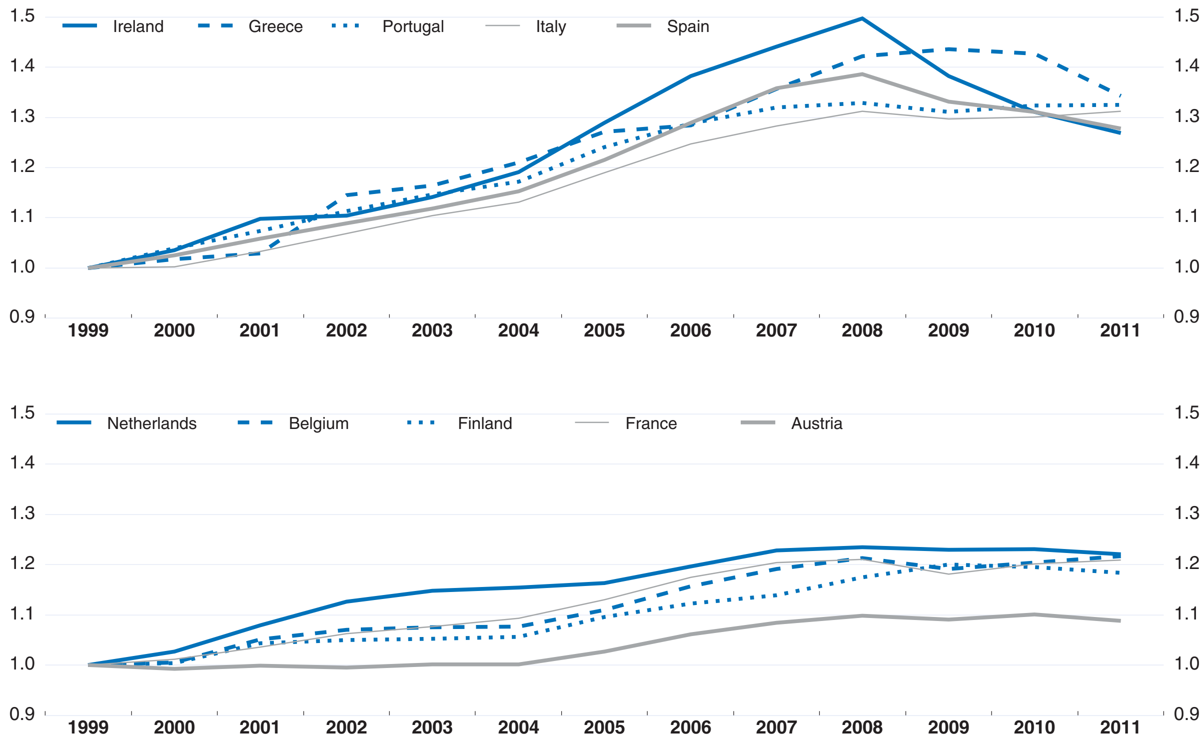
Structural reforms are also much needed in all euro area countries to help with the restoration of appropriate levels of competitiveness and to establish sustainable levels of saving, investment and current account positions (OECD, 2010).

… both in external deficit economies…

- In the euro area external deficit countries, reversing the large deterioration in cost competitiveness that has taken place since the start of the monetary union (Figure 1.14) would help to reduce current

Figure 1.14. **The evolution of intra-euro area unit labour costs**

Domestic unit labour costs relative to German unit labour costs, index 1999=1



Note: Economy-wide unit labour costs. 2011 incorporates the muddling-through projection.

Source: OECD Economic Outlook 90 database.

StatLink http://dx.doi.org/10.1787/888932540429

account deficits and stimulate foreign demand at a time when fiscal consolidation is depressing domestic demand. However, against the backdrop of extremely weak area-wide inflation, progress in rebalancing competitiveness may be modest in some countries, reflecting downward rigidities in wages and prices. Structural reforms that boosted productivity growth would clearly help. The actual and planned implementation of structural reforms to enhance product and labour market flexibility would also support the necessary adjustment of the real exchange rate required to regain external competitiveness. Amongst the programme countries, adjustment is continuing to proceed relatively rapidly in Ireland, in part reflecting the relatively low level of rigidities in Irish labour and product markets. Declines in unit labour costs are also projected in Greece and Portugal in both 2012 and 2013. Other external-deficit countries in the euro area (including Italy and Spain) also have significant scope to reform labour and product markets to strengthen competitiveness and growth prospects, starting with reductions in labour-market dualism and regulatory barriers to competition.

… and in external surplus economies

- At the same time, chronic external-surplus countries (including Germany and the Netherlands) can contribute to reducing external imbalances, as well as increasing their GDP per capita, by removing obstacles to investment, notably in the services sectors, by reducing barriers to entry and operational regulations.

Alternative fiscal policy scenarios for the United States

US fiscal policy could be considerably tighter than assumed in the projection...

As discussed above, a second key downside risk around the projection stems from uncertainty about the likely path of fiscal policy in the United States. Existing legislation, including the Budget Control Act of August, implies that in the absence of offsetting action there could be a fiscal tightening of, respectively, up to 2 and 3 per cent of GDP in 2012 and 2013 (when the extensions of the 2001-03 tax cuts are set to expire, and automatic expenditure reductions worth around ¾ percentage point of GDP would be enacted). In contrast, the normative assumptions in the projection build in a fiscal consolidation worth only ½ per cent of GDP in 2012 and 1% of GDP in 2013.

... with additional consolidation worth 1½ per cent of GDP in 2012 and just under 2% of GDP in 2013

A simulation on the global macroeconomic model NiGEM provides one means of assessing the possible short-term effects of tighter fiscal policy in the United States. In the simulation, shocks have been applied that reflect the difference between the moderate fiscal tightening in the muddling-through projection and currently programmed consolidation.[19] As in the euro area downside scenario (Box 1.5), the full effect of the downturn is assumed to be reflected in the automatic stabilisers, apart from in the fiscally-vulnerable euro area countries (assumed to be the programme countries, Italy, Spain and Belgium) and Japan. For the United States, the automatic stabilisers are allowed to operate as normal, with any hit to activity implying that the *ex-post* improvement in the US budget balance may be smaller than implied by the *ex-ante* changes. Nominal short-term interest rates and the nominal exchange rate are assumed to be fixed.

The US economy would come close to recession...

The simulations suggest that if the full amount of additional consolidation was undertaken in the circumstances of the already-subdued growth in the muddling-through projection, the likely outcome would be that the US economy would move close to recession in 2012 and experience only weak growth in 2013 (Table 1.9). The pattern of the activity effects in the simulation reflects the contrasting natures of the shocks applied in 2012 and 2013; the near-term effect on activity from a direct cut in government consumption (which weighs heavily in 2012) is much larger than the near-term multiplier effect from a rise in household income taxes (which weighs heavily in 2013), particularly in circumstances in which much of the revenue is likely to come from middle-to-high income earners with a lower propensity to consume.[20] Even so, activity remains well below

19. Government final consumption is reduced relative to the baseline by 1½ per cent of GDP in 2012 and ¼ per cent of GDP in 2013, and personal income tax revenue is raised (*ex-ante*) by 1½ per cent of GDP in 2013, hitting household incomes.
20. This abstracts from possible longer-term differences in the effects on economic growth of changes in government consumption expenditure and taxes on income. The size of the simulation responses might also vary if forward-looking behaviour was allowed for in the simulations.

Table 1.9. **The impact of stronger US fiscal consolidation**

Difference from baseline

	2012	2013
United States		
GDP (%)	-1.70	-1.18
Inflation (%)	-0.46	-1.05
Unemployment rate (%)	0.62	0.59
Budget balance (% of GDP)	1.05	1.97
Current balance (% of GDP)	0.56	0.30
Euro area		
GDP (%)	-0.17	-0.15
Inflation (%)	-0.12	-0.24
Unemployment rate (%)	0.03	0.02
Budget balance (% of GDP)	-0.04	-0.06
Current balance (% of GDP)	-0.03	-0.01
Japan		
GDP (%)	-0.36	-0.28
Inflation (%)	-0.04	-0.16
Unemployment rate (%)	0.05	0.10
Budget balance (% of GDP)	-0.10	-0.06
Current balance (% of GDP)	-0.01	0.03
China		
GDP (%)	-0.27	-0.28
Inflation (%)	-0.13	-0.39
Unemployment rate (%)	-0.07	-0.03
OECD		
GDP (%)	-0.85	-0.63
Inflation (%)	-0.26	-0.58
World		
GDP (%)	-0.51	-0.40
Trade (%)	-1.04	-0.51

Note: Government consumption reduced by 1.5% of GDP in 2012 and 0.25% of GDP in 2013. Personal income taxes go up by 1.5% of GDP in 2013. Short-term interest rates and nominal exchange rates held fixed. Budget solvency rule turned off except in Greece, Portugal, Ireland, Spain, Italy, Belgium and Japan. Model run in backward-looking mode.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888932541778

its baseline level in 2013, with the US unemployment rate rising by over ½ percentage point. This would have negative, but relatively mild, spillover effects elsewhere, damping output growth in other economies by around ¼ percentage point in 2012, and reducing the level of world trade by around 1% that year. If the additional fiscal consolidation in the United States were to also lead to a depreciation of the US dollar, then the effects on US activity would be muted, while the effects on activity in other economies would be somewhat larger.

... with especially severe consequences if coinciding with the euro area downside scenario

In the event that additional fiscal consolidation in the United States occurred at a time in which the euro area downside scenario was materialising, there would be a prolonged and severe recession in the OECD economies and a large downturn in world trade. The results of a combined simulation on NiGEM of the euro area downside scenario (Box 1.5) and the tighter US fiscal policy described above are shown in Table 1.10. In the OECD as a whole, GDP would be lower by around 6% after two years, and the level of world trade would be reduced by around 10½

Table 1.10. **The combined impact of stronger US fiscal consolidation and a stylised euro area downside scenario**

Difference from baseline

	2012	2013
United States		
GDP growth (%)	-3.82	-2.55
Inflation (%)	-0.78	-3.56
Unemployment rate (%)	1.25	2.75
Budget balance (% of GDP)	0.33	1.00
Current balance (% of GDP)	0.60	0.61
Euro area		
GDP growth (%)	-2.25	-3.69
Inflation (%)	-0.42	-2.39
Unemployment rate (%)	0.79	2.20
Budget balance (% of GDP)	-1.05	-2.64
Current balance (% of GDP)	1.12	2.29
Japan		
GDP growth (%)	-2.20	-2.08
Inflation (%)	-0.11	-0.94
Unemployment rate (%)	0.21	1.15
Budget balance (% of GDP)	-0.53	-1.28
Current balance (% of GDP)	0.23	0.36
China		
GDP growth (%)	-1.13	-1.66
Inflation (%)	-0.31	-2.02
Current balance (% of GDP)	-0.33	-0.56
OECD		
GDP growth (%)	-2.89	-3.00
Inflation (%)	-0.51	-2.61
World		
GDP growth (%)	-1.83	-2.09
Trade growth (%)	-5.30	-5.05

Note: This simulation combines all the shocks of the sustained 2012/13 financial crisis with the US fiscal consolidation. Short-term interest rates and nominal exchange rates are held fixed. Budget solvency rules turned off except in Belgium, Portugal, Italy, Ireland, Greece, Spain and Japan. Model run in backward-looking mode.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888932541797

per cent. Unemployment would rise sharply, by more than 2½ percentage points in the United States and by over 2 percentage points in Europe. With the induced reduction in inflation coming on top of the already low rate of price increases in the muddling-through projection, deflation would likely be widespread. In such a situation, a broad strategic policy response across countries would be called for to arrest the decline in output. The available macroeconomic and structural policy options at the national level to respond to much greater weakness than embodied in the muddling-through scenario are set out below.

The OECD Strategic Response to an economic relapse

The OECD has prepared country-specific strategic responses in case a new crisis were to take place…

As part of its Strategic Response to a potential relapse in economic activity, the OECD has identified key macroeconomic policies as well as structural reforms which, while desirable in any case, would become more urgent should the economy turn out to be much weaker than projected. The country-specific policy recommendations are presented in

Chapters 2 and 3. In general, the structural policy recommendations build on analyses reported in *Going for Growth* on the most effective measures to adopt in a crisis. While these reforms would be beneficial in other, more clement, states of the world, they would have added urgency if activity relapsed. They should be accompanied by multilateral confidence-building measures, such as the conclusion of the Doha trade round and the further strengthening of the global financial system as planned by the G20. The country-specific macroeconomic and structural policy recommendations are briefly summarised below.

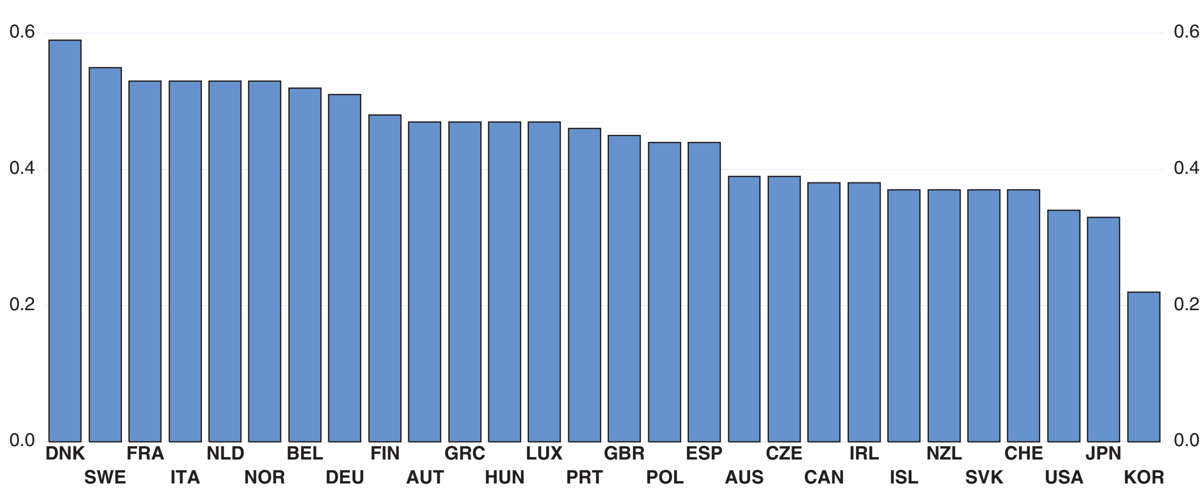
… fiscal stimulus when possible…

In most countries, public finances are sufficiently sound and credibility sufficiently strong to allow government budgets to support the economy in the event of a serious downturn in activity.

- Around half of all OECD countries would be in a position to give a temporary discretionary stimulus to aggregate demand, implying either declines in underlying net lending (including Germany, Canada, Australia and Korea) or tempering planned reductions in underlying deficits (*e.g.* the United Kingdom and the United States) whilst maintaining medium-term targets. Within this group, the need for accommodative fiscal action along these lines would be greater in countries where automatic stabilisers are relatively low, such as Korea, the United States and Canada (Figure 1.15).
- In most other OECD countries, weak government finances would not permit fiscal support to go beyond allowing the automatic stabilisers to work around a trajectory of structural improvements in budget balances, and then, in some cases (including France and Austria), only partially. In view of its high indebtedness, Japan would have to at least partly offset the automatic stabilisers and they are, in any case, relatively small.

Figure 1.15. **The size of the automatic fiscal stabilisers**

Change of the budget balance in per cent of GDP in response to a one percentage point change in the output gap



Source: Girouard and Andre (2005).

StatLink http://dx.doi.org/10.1787/888932540581

- A small group of countries, consisting of Italy, Spain, Greece, Ireland and Portugal, would not have any scope to buffer the impact of a crisis on the economy, with adherence to planned consolidation targets (in nominal terms or relative to GDP) likely to be necessary to avoid further losses in confidence.
- Outside the OECD, given their comparatively low debt ratios and strong budget positions, Brazil, China, India and Indonesia have the capacity to provide a demand stimulus to their economy. In contrast, the fiscal situation only warrants allowing the operation of the automatic stabilisers in the Russian Federation and South Africa.
- In all countries, a priority for fiscal policy would have to be to ensure the integrity of the financial system. Likewise, ensuring adequate social protection would be crucial. Depending on countries' fiscal room for manœuvre, such priority spending would either have to be offset or could be allowed to affect the overall budget balance.

... backed by greater transparency of future public finances and independent fiscal councils

To strengthen confidence in the soundness of public finances in the medium term, and thereby create more scope to support the economy temporarily in a crisis, governments should strive to increase transparency and shift to multi-year annual budgeting. Increased transparency would be facilitated by independent fiscal councils that would prepare economic projections to be used as a basis for the budget and the monitoring of fiscal outcomes relative to plans. Multi-year budgeting could prove to be a useful tool to link short-term budgetary developments to medium-term targets.

Monetary policy has still scope to provide support in most areas

In the event of a crisis, monetary policy could provide further support to demand in many countries. The muddling-through projection already assumes that policy interest rates are taken down to, or maintained at, close-to-zero levels in most OECD areas. However, there would still be scope in a number of countries to reduce official interest rates, including in Canada, Australia, Korea, Mexico, Norway, Sweden and Turkey. In addition, many countries and areas (including the United States, Japan, the euro area and the United Kingdom) could make further use of unconventional monetary measures, such as increasing purchases of domestic government debt. Such strategies would risk being subject to diminishing returns, possibly requiring the use of additional unconventional instruments, such as commitment and communication policies, or even purchases to be concentrated in more risky private securities. As an ultimate recourse, fiscal instruments could be used to generate negative real after-tax interest rates. Outside the OECD area, there is significant scope in most countries to relax monetary policy to offset a renewed unexpected weakness.

Structural policies have a key role in cushioning a possible downturn, including...

Some structural policy reforms could boost near-term confidence and even have a direct positive impact on short-term aggregate demand developments, in addition to increasing potential output in the long term. Moreover, the effect on potential output may increase the scope for near-term fiscal policy. Key structural reforms that would become particularly urgent in the event of a flagging economy include:

... product market reforms...

- Product market reforms targeted at increasing competition in general, or in network industries (*e.g.* France, Mexico and Turkey), professional services (Germany, France, Italy) and retail services (*e.g.* France) in particular, would spur growth and encourage innovation activity. Increased privatisation would also be an appropriate reaction to a crisis in some countries (including Italy and Poland). In the European Union, further integration of national markets, notably services, could provide a boost to demand and confidence. Outside the OECD area, product market reforms would be called for in China and South Africa.

... stronger public sector efficiency...

- Increasing the drive for public sector efficiency, including in the United Kingdom (notably in the National Health Service that has been protected from consolidation so far) and New Zealand, could help to generate increased space for fiscal manoeuvre in the near term.

... increased openness...

- Increased international openness would be appropriate *inter alia* in Japan and Korea, as well as in the Russian Federation and India. Higher inward foreign direct investment could boost investment levels and increased trade openness in countries with robust activity should raise real incomes and support exports from countries with weaker activity.

... labour market reforms...

- Labour market reforms can raise long-term sustainable employment levels and provide fiscal room for manoeuvre while also easing adjustment processes; therefore they become more urgent in a crisis. Such reforms are warranted in around half of all OECD countries (including Italy, United Kingdom, Canada, Belgium, Estonia, Ireland, Portugal, Slovenia, Spain, Sweden and Turkey) and outside the OECD area, in Indonesia and South Africa.

... pension reforms...

- Pension, early-retirement and disability/sickness reforms would be called for in several countries (including Belgium, Denmark, Finland, Norway, the Slovak Republic and Slovenia) to reduce the future public costs of population ageing and hence increase confidence in the future strength of the public finances.

... tax reforms...

- Revenue-neutral tax reform aimed at reducing taxes on labour and corporate incomes and increasing indirect taxes and other taxes could give an important long-run stimulus to growth in several OECD countries, including Japan, Germany, France and Canada. Outside the OECD area, tax reform would be particularly urgent in Brazil.

... and financial market reform

- Rapid implementation of already decided financial reforms would become more urgent in the United States. Increasing the capacity of large banks in Switzerland to absorb losses would also become critical. In the United States, enhancing the possibility of refinancing mortgage loans at a low rate could be a particularly effective counter-cyclical device.

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