Chapter 1

GENERAL ASSESSMENT OF THE MACROECONOMIC SITUATION

Overview

The contraction of the OECD economy is slowing, but the ensuing recovery will be weak

For the first time since June 2007, the projections in this Economic Outlook have been revised up for the OECD area as a whole compared with the previous issue. The contraction of output is now moderating from the exceptional drop in the six months to March. The slowdown in the fall of activity is driven by inventory adjustment contributing positively to growth, non-OECD countries recovering, some return of business confidence and policy stimulus providing greater support. However, financial conditions remain tight in spite of some recent easing and the bottom of the recession is likely to be reached only in the second half of the current year, after which a weak recovery is projected (Table 1.1). The OECD economy will at the end of 2010 therefore be faced with an exceptional degree of slack, with unemployment rates of 10% in the United States and more than 12% in the euro area. This will push down inflation rates to low levels in several countries, and a few will experience falling price levels.

Risks have become more balanced

Thanks to massive policy stimulus and progress in stabilising financial institutions and markets, the risks to this projection are more balanced compared with recent ones and the risk of catastrophic events

Table 1.1. **A weak recovery from widespread recession**OECD area, unless noted otherwise

Average 2008 2009 2010 1996-2005 2007 2008 2009 2006 2010 q4 q4 a4 Per cent Real GDP growth¹ 28 3.1 27 0.8 -4.1 0.7 -1.7-2.6 1.5 United States 2.8 2.0 -2.8 0.9 -0.8 1.5 3.2 1.1 -1.7Euro area 2.1 3.0 2.6 0.0 -3.6 0.9 -1.7Japan 1.1 2.0 2.3 -0.7-6.8 0.7 -4.4 -3.6 8.0 Output gap² -0.2 1.3 1.7 0.3 -5.3 -5.8 Unemployment rate³ 6.0 5.9 8.5 6.4 9.4 9.9 6.6 5.6 9.8 Inflation⁴ 3.3 23 23 32 0.6 8.0 24 0.7 0.6 Fiscal balance⁵ -2.2 -1.3 -14-32 -77 -88 Memorandum Items World real trade growth 6.9 9.5 7.1 2.5 -16.0 2.1 World real GDP growth⁶ 3.7 4.7 4.5 24 -2.2 23

- 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
- OECD countries plus Brazil, Russia, India and China only, representing 81% of world GDP at 2005 purchasing power parities. Fixed weights based on 2005 GDP and purchasing power parities.
 Source: OECD Economic Outlook 85 database.

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has become more remote. Nonetheless, the financial system may be more vulnerable to weaknesses in the real economy than assumed in the projection which in turn would have negative repercussions on growth. This risk of a negative spiral would be amplified if households and businesses were to expect that a sustained period of deflation was imminent, in contrast with assumptions behind the Secretariat's medium-term reference scenario (see Chapter 4). Other downside risks include a faster increase in bond yields due to sharply deteriorating public finances and a stronger response of household spending to higher unemployment. Stacked against these negative risks is the possibility that problems in financial markets will be resolved earlier than assumed, with financial conditions continuing to improve in the current year rather than stabilising at their current level as assumed, or that the unprecedented policy stimulus will prove more effective than expected. In addition, a general reduction in uncertainty could stimulate spending of households and businesses beyond what is projected.

Policy requirements at present are:

Against the background of these projections and the associated risks, the policy requirements at present are as follows:

... swift recognition of losses in banks and accompanying capital injections... • Financial policy. Earlier actions that have contributed to ease financial market conditions need to be followed up by additional measures to put banking systems on a solid footing. These should ensure the recognition of likely losses associated with current and future impaired bank assets, swift treatment of impaired assets and re-capitalisation of systemically-important banks so that their solvency is not in doubt. Loss recognition and re-capitalisation can be achieved in different ways, and countries may adopt different approaches to deal with impaired assets. However, it is critical for governments to be seen to have a clear, effective and comprehensive strategy to deal with these issues, and ensure up-front that they have the financial means to accomplish the task.

... very easy monetary policy...

• Monetary policy. Policy interest rates should be maintained close to zero throughout 2009 and 2010 in the economies that have already fully exploited the use of traditional monetary policy, and elsewhere rates should be set as conditions permit. To strengthen the impact of close-to-zero interest rates, the monetary authorities could signal their intention of maintaining this stance until particular conditions are fulfilled. In view of the exceptional slack throughout the OECD area, non-conventional measures, such as purchases of longer dated government bonds and selected private securities, should be maintained until a recovery is underway and financial market conditions normalise.

... avoiding premature withdrawal of fiscal stimulus where the scope exists...

• Fiscal policy. The dramatic deterioration of fiscal positions and the rapid build-up of public debt in many countries constrain the further use of fiscal policy to support the economy. However, it is necessary to balance concerns about fiscal sustainability with the need to avoid an overly rapid phase-out of fiscal support. Although underlying fiscal positions are set to deteriorate in 2010, the growth impulse from fiscal policy is scheduled to fall, though implementation problems, notably with respect to increasing infrastructure spending, may delay this element of stimulus. Countries with relatively low debt (including Germany, Canada, some Nordic countries and Switzerland) have scope for further discretionary policy easing in 2010 to offset any programmed tightening, augment a timid fiscal impulse or respond to unexpected economic weakness By contrast, the state of government finances in some other countries (Japan, Italy, Greece, Iceland and Ireland) does not permit any further extension of the current level of support or an introduction of support without risking strong adverse reaction in financial markets.

... and structural policy settings to limit increases in structural unemployment

• Structural policy. An important task for structural policy is to counter the tendency for cyclical unemployment to become structural. Although measures have already been taken in many countries that are suitable in that respect, more needs to be done, notably to strengthen re-employment measures. So far, only a small proportion of overall fiscal support packages have increased appropriations for re-employment services and incentives. It is also important that the necessary process of structural adjustment not be delayed by targeted support to sectors and firms that are not viable. In particular, being mindful of historical experiences, governments should avoid taking measures that discriminate against foreign producers of goods and services (including financial services).

Recent developments

News on activity are no longer all bad

Over the three quarters to mid-2009, most OECD countries will have experienced the steepest consecutive fall in GDP in their post-war history, with area-wide GDP falling by 4¼ per cent. There are, however, signs that the severity of the downturn is moderating. Successive mechanical projections from the OECD's indicator models¹ confirm that GDP estimates based on incoming information on high frequency indicators of activity have deteriorated at a slower pace or even ceased to deteriorate in the United States, whereas the evidence is less clear for the euro area (Figure 1.1).

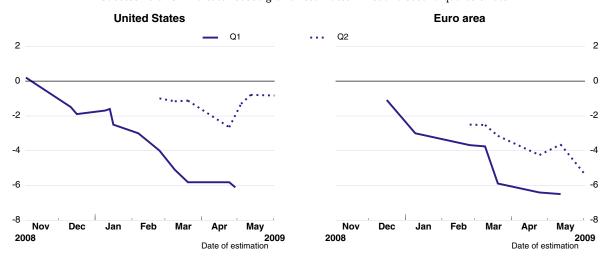
Adjustment may be most rapid in manufacturing

A feature of the recent slump in activity was the precipitate fall in industrial production (Figure 1.2) and in world trade. Indeed, among the major countries, the fall in GDP was most pronounced in those which previously relied most on export growth and where manufacturing accounts for a larger share of output (notably Japan and Germany) than in

1. The OECD indicator models give an estimate of GDP growth based on high frequency data, see Pain and Sédillot (2005).

Figure 1.1. High frequency data have deteriorated less

Successive OECD indicator-based growth estimates - first and second quarters 2009

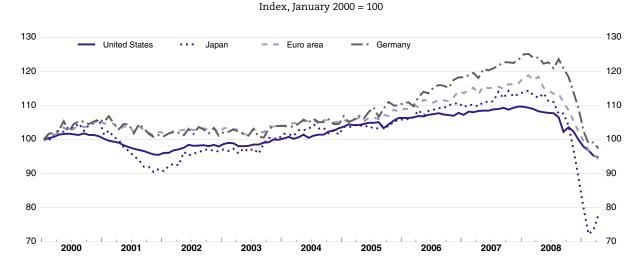


Note: Estimates based on models that translate high-frequency economic indicators into estimates of GDP growth in current and following quarters.

Source: Datastream; and OECD calculations.

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Figure 1.2. Industrial production has plunged



Source: Datastream.

StatLink http://dx.doi.org/10.1787/656187707782

those more closely associated with the financial crisis (United States and United Kingdom).² In some countries, notably Japan and Korea, monthly data suggest that industrial output may be stabilising or even registering

2. Among OECD countries, with Iceland as a glaring outlier, there is a significant positive correlation between the size of recent GDP falls and the share of manufacturing in total value added. Apart from Iceland, three of the four countries – namely Japan, Germany and Ireland – experiencing the largest GDP losses over this period have a share of manufacturing output in GDP well above the average for the OECD.

modest increases (albeit from very low levels). While for most OECD economies the manufacturing sector accounts for less than one-quarter of value added, implying that an upturn in industrial production will not necessarily coincide with an upturn in total GDP, business survey indicators related to future prospects for the economy as a whole have levelled off or have turned up (Figure 1.3).

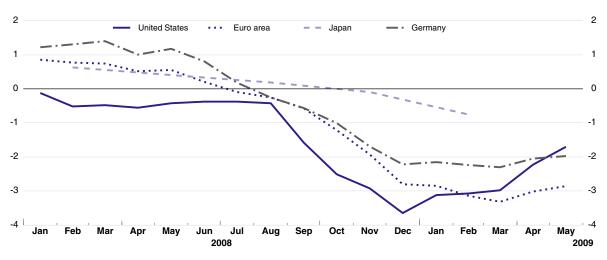


Figure 1.3. Business confidence shows signs of turning

Note: Series have been normalised at the average for the period starting in 1985 and are presented in units of standard deviation. Monthly data for United States, euro area and Germany. Quarterly data for Japan.

Source: Datastream; and OECD, Main Economic Indicator database.

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The inventory cycle has played an important role

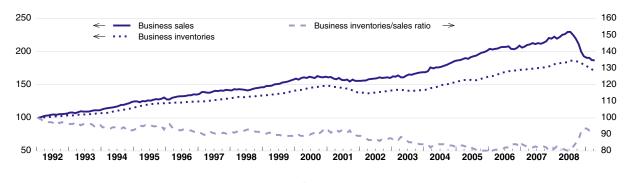
The inventory cycle has had strong impact on demand developments. In the initial phase of the recession, stockbuilding moderated the downturn in many countries as cut-backs in production failed to keep up with declines in sales (Figure 1.4). As the recession continued, producers attempted to bring stock levels better into line with sales, which implied destocking in most countries imparting a negative effect on growth. This dragged down growth significantly in the first quarter in most countries. However, with this adjustment likely to moderate, the growth contribution should turn mildly positive.

Housing is a continuing brake on growth

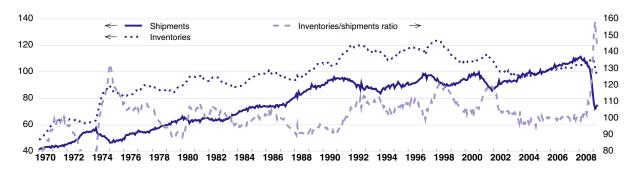
The drag on activity coming from the downturn in housing intensified going into 2009 and should reach a maximum this year. Housing investment is likely to be falling at an annualised rate of more than 10% in about half of OECD countries in the first half of 2009, with particularly large falls in the United States, Japan, New Zealand, Iceland, Ireland and Spain (Figure 1.5). Substantial drops in housing permits suggest that weakness will continue in the near term. Nonetheless, recent indicators for the United States show house sales and permits starting to flatten out, albeit at very low levels, and the stock of unsold new houses

Figure 1.4. Inventories have risen steeply

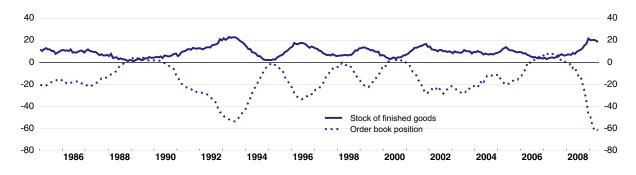
United States



JapanMining and manufacturing, index 2005=100



Euro area Net balance, relative to normal



Source: Datastream; and OECD calculations.

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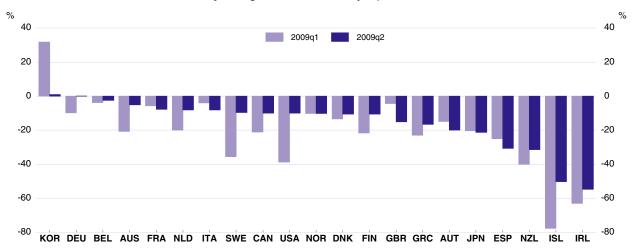
continuing to fall significantly (Figure 1.6). Affordability has also improved with a notable fall in mortgage rates but this is tempered by very tight credit conditions and by the recent back-up in long bond yields.

Real house prices are falling in nearly all countries

Year-on-year real house prices are now falling in all OECD countries for which data are readily available except in Switzerland (Table 1.2). In the United States, data for early 2009 is mixed, with the two major price indices moving in opposite directions. Despite recent falls, on simple benchmarks, such as relative to per capita incomes or rents, house prices

Figure 1.5. Housing investment is falling in almost all countries

Quarter-on-quarter growth rate, seasonally adjusted at annual rate

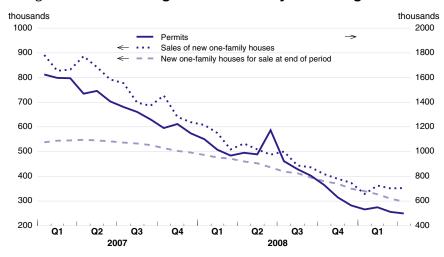


Note: 2009q1 and 2009q2 are forecasted for most countries.

Source: OECD Economic Outlook 85 database.

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Figure 1.6. US housing construction may be nearing a bottom



Source: Datastream.

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remain elevated in many OECD countries. Moreover, historical experience across the OECD indicates that the contraction phase of the real house price cycle is typically around five years.³ Negative effects of falling house prices on consumption are likely to be larger among those countries where mortgage markets have in the past facilitated housing equity

3. The main characteristics of real house price cycles from 1970 to the mid-1990s can be summarised as follows: the average cycle lasted about ten years; during the expansion phase of about six years, real house prices increased on average by close to 40%; and in the subsequent contraction phase, which lasted around five years, the average fall in prices was of the order of 25% (Girouard et al., 2006).

Level relative to

Table 1.2. Real house prices are falling almost everywhere

Per cent annual rate of change long-term average Drice to Drice to Lactort

	2000- 2006	2007	2008 ²	Latest quarter ³	Price-to- rent ratio	Price-to- income ratio	Lastest available quarter
United States	5.3	-0.6	-6.1	-3.2	117	99	Q1 2009
Japan	-4.3	-1.1	-2.9	-3.3	67	66	Q1 2009
Germany	-2.9	-1.2	-2.7	-1.8	71	64	Q4 2008
France	9.5	4.9	-1.8	-7.3	146	127	Q1 2009
Italy	6.1	3.1	-1.1	-2.9	123	112	Q3 2008
United Kingdom	8.8	8.4	-4.3	-15.0	134	126	Q1 2009
Canada	6.7	8.5	-3.4	-11.0	161	116	Q1 2009
Australia	7.1	8.8	0.2	-9.0	154	120	Q1 2009
Denmark	7.9	2.0	7.0	-13.1	144	132	04.0000
		2.9	-7.9				Q4 2008
Finland	4.7	5.6	-2.4	-8.8	140	97	Q1 2009
Ireland	8.3	-1.8	-11.6	-13.5	154	121	Q4 2008
Netherlands	2.9	2.6	0.7	-2.1	152	145	Q1 2009
Norway	5.5	11.4	-5.2	-10.7	149	117	Q4 2008
New Zealand	9.2	8.3	-8.0	-11.9	140	135	Q4 2008
Spain	11.2	2.6	-3.7	-7.3	172	138	Q1 2009
Sweden	6.7	8.6	0.0	-4.4	155	119	Q4 2008
Switzerland	1.7	1.3	0.2	5.3	86	77	Q1 2009
Euro area ^{4,5}	4.6	2.0	-2.3	-4.5	122	106	
Total of above countries ⁵	4.2	1.5	-4.1	-4.9	116	100	

Note: House prices deflated by the Consumer Price Index.

- 1. Long-term average = 100, latest quarter available.
- 2. Average of available quarters where full year is not yet complete.
- 3. Increase over a year earlier to the latest available quarter.
- 4. Germany, France, Italy, Spain. Finland, Ireland and the Netherlands.
- 5. Using 2005 GDP weights.

Source: Girouard et al. (2006); and OECD.

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withdrawal⁴ and the ratio of housing wealth to disposable income is relatively high. Data for the G7 countries suggest that there could be a particularly large hit to consumption in the United Kingdom, where the ratio of housing wealth to disposable income is more than 400%, compared with around 200% in the United States and 300% in Canada.

There are signs that the severity of the downturn is moderating in the United States...

Under the influence of the factors above, and after continuing to decline rapidly in the first quarter of 2009, activity in the United States has fallen at a more moderate pace in the second quarter. The downturn in business investment has become less steep, reflecting somewhat easier credit conditions and less downbeat business confidence. The fall in housing investment has also moderated markedly, but the effect on GDP is

4. This has been the case, for example, in the United States, United Kingdom, Canada, Australia, New Zealand and some Nordic countries. These also tend to be the countries where consumption is most strongly correlated with house prices (Catte et al., 2004).

limited by the fact that the share of residential investment in GDP is now lower than it has ever been in 50 years. Inventories adjustment accounted for nearly half of the fall in GDP in the first quarter as businesses reduced their stocks to bring them more in line with lower sales; in the second quarter, this negative drag on growth is likely to have disappeared. Offsetting to some degree the relatively favourable developments in investment and stockbuilding, private consumption has shown some renewed weakness after a modest growth in the first quarter. Consumption has received a boost from tax cuts in April, but the positive effects from higher disposable income seem to have been more than outweighed by higher saving due to the deteriorating labour market and lower wealth.

... Japan...

The severe contraction in Japanese activity appears to be moderating in the second quarter. The above-mentioned signs of a modest pick-up in industrial production are consistent with a slowing in the rapid rate of decline in export volumes – down by more than 30% between the third quarter of 2008 and the first quarter of 2009 – as well as evidence that the adjustment of inventories is advancing though their level remains high relative to shipments. Business investment has fallen massively, but may decline less precipitately as industrial production and exports begin to recover and business confidence stabilises. Increases in government investment could add a percentage point to annualised growth in the second quarter. Consumption is likely to have risen in the second quarter, boosted by government one-off payments to households, after contracting sharply in the first quarter. However, residential investment is likely to remain a drag on growth in the second quarter.

... and the euro area

The decline in euro area activity is likely to have become less steep compared with the contraction earlier in the year. The inflection looks set to be notable in exports and business investment, which has responded to some improvement in financial market conditions and some regain in confidence as uncertainty has diminished. The likely decline in the drag to growth from inventory adjustment will also contribute to a less strong decline in GDP. However, there have been few signs of moderation in the slide of consumption, as it is weighed down by low consumer confidence and the deteriorating labour market. Also, the construction sector has continued to suffer as a number of countries – including Spain, Ireland, the Netherlands, Greece, Finland and Austria – experience very severe declines in housing investment. Recent business surveys suggest some improvement in the economic outlook: monthly surveys of Purchasing Managers (PMI) indicate moves towards stabilisation, and the European Commission's survey of confidence in the industrial and services sector has inched up.

The recovery is more rapid in the non-OECD area, especially in China...

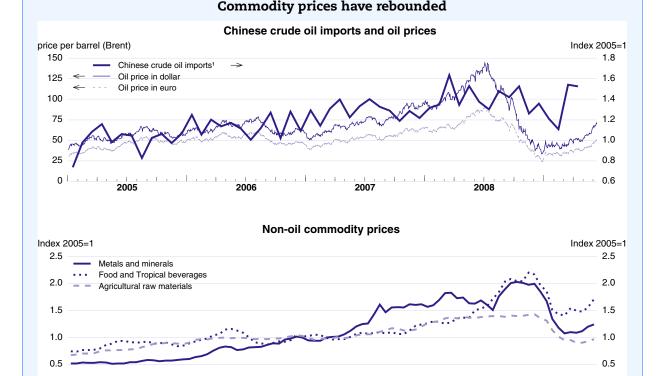
While there was a high degree of synchronicity in the fall in growth rates between the OECD and non-OECD regions around the turn of the year, the simultaneity now appears to diminish with, in particular, China and, to a lesser extent, dynamic Asia recovering more rapidly. In China, although exports have not yet started to grow again, monthly industrial production was picking up early in the year and this has been matched by optimistic

readings from business surveys. Underlying this pick-up is massive government stimulus, in terms of a substantial increase in government outlays, including investments both by general government as well as by the non-commercial state enterprise sector. Further support has been provided by a rapid increase in bank lending, increasing since the turn of the year at annual rates of about 50%. Overall, demand in China, especially in the infrastructure sector, has picked up and has also contributed to the significant recent rebound in oil and other commodity prices (Box 1.1).

Box 1.1. Commodity prices have rebounded

Oil prices have rebounded but are unlikely to return to pre-crisis peak levels

While oil prices stand about 50% below their July 2008 peak they significantly rebounded in recent months, with the price of Brent having risen by 75% between December 2008 and mid-June 2009 (Figure below, upper panel). Falling oil supply was a major factor behind this development, with OPEC crude oil production in the first quarter 2009 having recorded the largest fall in 20 years. More recently, market sentiment that the slump in economic activity might bottom out soon and stronger Chinese crude oil imports, which increased by almost 40%, not seasonally adjusted, between February and March 2009, might also have played a role. While this may largely reflect restocking of strategic reserves at a period of relatively low crude oil prices, it also hints at some firming in Chinese economic activity in the near term.



2005

2006

Chinese imports in volume terms, not seasonally adjusted.
 Source: OECD, Main Economic Indicators database; and Datastream.

2004

2003

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2008

2007

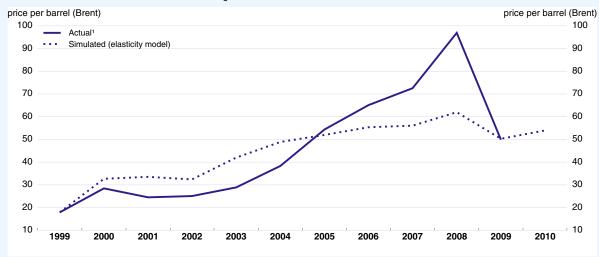
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2002

Box 1.1. Commodity prices have rebounded (cont.)

The projections presented here are based on the usual technical assumption that the Brent price stays close to its level before the cut-off date for information, in this case \$65 per barrel. But there are also some substantive arguments backing this assumption. Thus, relatively high spare capacity and crude oil inventories as well as subdued oil demand on account of weak macro-economic activity will contribute to keeping oil prices significantly below the elevated levels witnessed in the recent past. Moreover, conditional on the economic growth projections in this Economic Outlook, a simple model of demand and supply for oil, calibrated with reasonable values for price and income elasticities, suggests a price of around \$50 and \$55 per barrel Brent for this year and next, respectively (Figure below). However, with high oil price volatility and considerable uncertainty about supply and demand actual oil price developments are subject to a large degree of uncertainty. In particular, there is a considerable risk that rising oil demand outside the OECD area, notably from China, in combination with OPEC supply restraint could put further upward pressure on prices. Indeed, the oil futures curve suggests further price increases over the next two years. However, the predictive power of oil futures for spot prices is notoriously low.

Oil price: Actual and simulated



2. The value for 2009 corresponds to the average between January and mid-June 2009. Source: Datastream; and OECD calculations.

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Non-oil commodity prices have also increased

The downturn in world economic growth and more favourable seasonal conditions for agricultural production have also led to large falls in prices for minerals, ores and metals and for agricultural raw materials and food, respectively, from their peak levels in spring and summer 2008 (first Figure, lower panel). However, prices for all important industrial metals have bottomed out and most of them have posted strong gains over recent months. Again, this recovery is in part attributable to rising Chinese imports, which for some metals reached record levels in March. Food prices have rebounded as well, reflecting strong Chinese import demand for grains, weather concerns and planting delays. Prices for non-oil commodities are assumed to stabilise around current levels. However the risk distribution appears to be skewed to the upside.

- 1. These price simulations are subject to large uncertainties due to difficulties in estimating price and income elasticities, shifts in economic structures and lacking information about relevant variables such as capacity utilisation. For detail about the model, see Wurzel et al. (2009).
- 2. In addition, analysis by the International Energy Agency (IEA, 2008)) suggests that project delays will remain a major factor restraining oil supply in the medium term. More recent information suggests that project cancellations and slippage in upstream spending levels for 2009 appear to be increasing due to relatively low oil prices.

... but elsewhere as well

Aided by supportive macroeconomic policies, recoveries also appear to be underway in many other non-OECD countries. In India, the slowdown in growth bottomed out in the fourth quarter of 2008 and a pick-up was already evident earlier this year. In Brazil, the global recession resulted in a decline in output but there are signs of a recovery in the second quarter. In the Russian Federation, after collapsing earlier in the year, output has bounched back as confidence has been revived by back-up in oil prices. In Indonesia, growth rates seem to have turned up in the second quarter after declining in the previous two quarters. However, there are no signs as yet of recovery in a number of other non-OECD countries, including Estonia, Slovenia, and South Africa.

World trade is still contracting

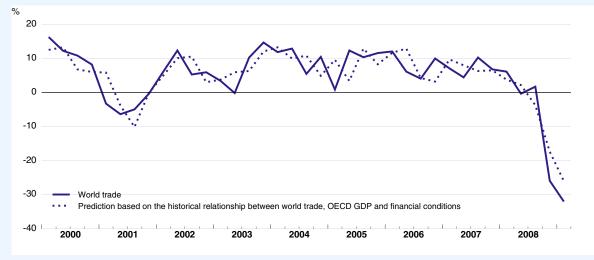
In line with growth developments in individual countries and regions, the fall in world trade seems to have moderated after the collapse in the fourth quarter of 2008 and first quarter of 2009. Nonetheless, OECD exports and imports have most likely been falling at double-digit rates in the second quarter, the decline being less pronounced for the non-OECD area. A feature of the downturn in trade is that it seems to have been directly affected by the tightening of financial conditions as they affected trade-intensive activities and limited the availability of trade credit (Box 1.2).

Box 1.2. The role of financial conditions in driving trade

The collapse in world trade observed in the last quarter of 2008 intensified in the first quarter of 2009, but the trough in growth rates has likely been reached; positive quarterly growth rates are expected by the end of 2009. The deep fall in world trade is partly linked to the nature of the recession: the sectors most affected (i.e. manufacturing and capital goods) account for a larger share of world trade than world output, in part due to vertical supply chains. In addition, the availability of trade finance is reported to have contracted sharply in late 2008. Indeed, introducing a proxy for global finance availability improves the fit of the OECD model of world trade over the recent past, accounting for close to a third of the fall in world trade in the fourth quarter of 2008 and first quarter of 2009. However, the collapse cannot be fully explained by the extended model (see Figure below).¹

World trade growth has collapsed

Quarterly growth rates annualized



Source: OECD Economic Outlook 85 database.

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Box 1.2. The role of financial conditions in driving trade (cont.)

The trade projections in this *Economic Outlook* are in line with this global model, under the following assumptions: i) that the unexplained part of the trade contraction is a one-off shift in the trade level for which the main reasons still need to be identified, and ii) that credit conditions will remain at the levels observed in the second quarter of 2009 for the rest of the year and then improve gradually in 2010 to get back to their 1995-2008 average. In a scenario where credit conditions begin to improve already in the course of 2009 (see Box 1.4), world trade would be slightly less depressed in 2009 and then would pick up faster in 2010 (table below). This comes from two effects: first, GDP growth in the OECD is stronger (see Box 1.4);² second, there is a direct positive impact of the earlier improvement in financing conditions.

World trade growth in different scenarios

	2009	2010
Economic Outlook	-16.0%	2.1%
Model forecast (1)	-16.3%	2.5%
Model forecast with financial conditions improving faster (2)	-15.6%	4.9%
Difference in trade growth (2) - (1)	0.7%	2.5%
of which - due to higher GDP growth	0.2%	1.2%
- due to direct impact of financing conditions on trade	0.5%	1.2%

Note: The model is applied only after 2009Q1. *Source:* OECD calculations.

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- 1. The model is based on the historical relationship between world trade growth and OECD GDP growth. To account for the possibility that credit conditions may have a larger effect on trade flows when financial conditions are constrained, the proxy used is the product of US credit standards and the US high-yield spread. This amplifies the role of credit availability during times of tight financial conditions. Using this variable instead of the US credit standards alone or no proxy for trade finance at all reduces the forecast error over the recent past.
- 2. The assumption made here is that the impact of better financial condition on the OECD GDP level is a weighted average of the calculated impact for the United States, Japan and the euro area reported in Box 1.4.

Current-account imbalances have narrowed significantly during the crisis period, reflecting differential demand developments and terms-of-trade changes. Thus, the US deficit and the Japanese surplus have been more than halved, while the small euro area deficit has widened somewhat. The Chinese surplus has remained elevated, however.

Labour market conditions are rapidly deteriorating

Following the slump in activity, employment has declined sharply in almost all OECD countries. The rate of decline in employment during the first quarter was at a post-war high in the United States, the euro area and for the OECD as a whole; in the course of the second quarter, it has moderated significantly in the United States, continued at the same pace in the euro area but steepened sharply in Japan (Table 1.3). Unemployment has correspondingly increased sharply, with the areawide unemployment rate exceeding 8% in the second quarter, greater than the high point experienced during the recession in the early 1980s. In the United States, the unemployment rate has already surpassed 9% in the second quarter, a level last experienced in the early 1980s. In the euro

Table 1.3. Labour markets conditions are sharply deteriorating

	2005	2006	2007	2008 q3	2008 q4	2009 q1	2009 q2		
	Percent	age change	from previo	us period, s	easonally ac	ljusted at an	nual rates		
Employment									
United States	1.8	1.9	1.1	-1.9	-3.4	-6.7	-2.8		
Japan	0.4	0.4	0.5	-2.0	0.4	-0.6	-4.4		
Euro area	1.1	1.6	1.8	-0.4	-1.1	-3.6	-3.6		
OECD	1.3	1.7	1.5	-0.6	-1.0	-4.2	-3.3		
Labour force									
United States	1.3	1.4	1.1	1.0	0.0	-1.7	2.7		
Japan	0.1	0.1	0.2	-1.9	0.2	1.4	-1.7		
Euro area	1.1	0.9	0.9	0.3	0.8	0.3	-0.4		
OECD	1.0	1.1	1.0	0.5	0.9	-0.1	0.5		
Unemployment rate	Per cent of labour force								
United States	5.1	4.6	4.6	6.0	6.9	8.1	9.3		
Japan	4.4	4.1	3.9	4.0	4.0	4.5	5.2		
Euro area	8.8	8.2	7.4	7.5	7.9	8.8	9.6		
OECD	6.6	6.0	5.6	6.0	6.4	7.4	8.3		

For 2009 q1 and q2, partly estimates and projections. Source: OECD Economic Outlook 85 database.

StatLink http://dx.doi.org/10.1787/658548557270

area, unemployment hikes may have been delayed by temporary work-sharing schemes (see below) but the rate is approaching double digits and a decade-high. The rise in the unemployment rate is less dramatic in Japan. The weakening of the labour market in the OECD area has been accompanied by signs of moderating wage pressures.

Headline and core inflation are falling

Headline inflation has fallen sharply since mid-2008 mainly as a consequence of the collapse in commodity prices, to annual rates of around ½ per cent in the United States and euro area (Figure 1.7). The fall in commodity prices also has had some impact on measures of underlying inflation. Overall, it appears that some notion of "true" underlying inflation has declined, but not nearly to the same extent as headline inflation and in many countries it may still be in the 1½ to 2% range. Survey measures (from consumers and professional forecasters) of longer-term inflation expectations over the next five to ten years for most large OECD economies have held up during the period of disinflation and do not provide any evidence of expected deflation, but the risk of deflation should not be discounted (see Box 1.3). For Japan, both headline and core inflation (excluding food and energy) are below zero. Consumer prices are also falling in China.

Financial markets remain tight in spite of recent improvements

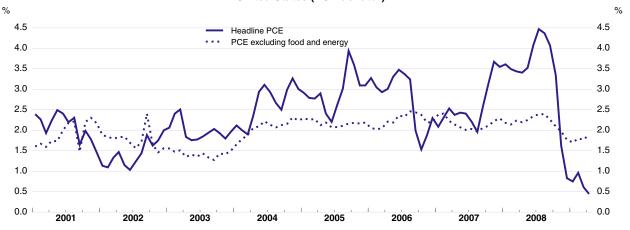
The financial crisis has eased...

Financial conditions have eased in the course of the first half of 2009. An increase in risk appetite has led to a rally in stock prices and a compression in corporate bond spreads. Money market interest rates have

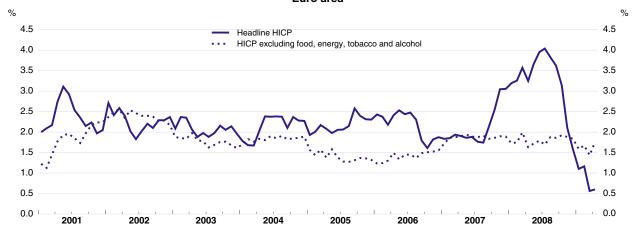
Figure 1.7. Inflation is falling

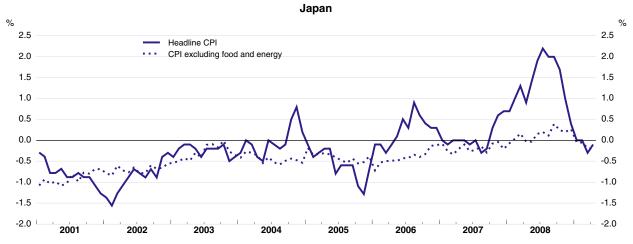
12-month percentage change

United States (PCE deflator)



Euro area





Note: PCE refers to personal consumption expenditures, HICP to harmonised index of consumer prices and CPI to consumer price index. Source: OECD, Main Economic Indicators database.

StatLink http://dx.doi.org/10.1787/656332370730

Box 1.3. The risk of deflation

Deflation is an on-going process of fall in the general price level, as measured by indicators, such as the consumer price inflation (CPI) or the core CPI. Periods of deflation, as distinct from short periods of declining prices triggered, for example, by falling oil prices, can have negative effects on macroeconomic performance but are rare among OECD economies in recent history, with the exception of Japan.

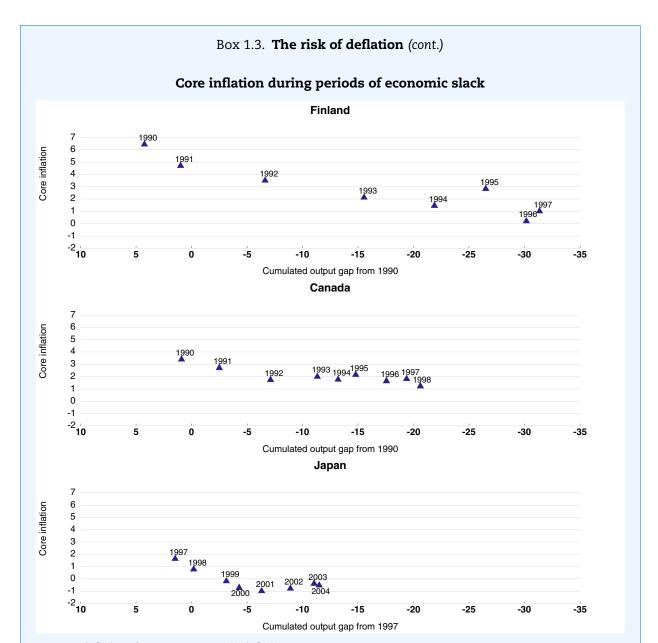
As nominal interest rates cannot be reduced below zero, deflation may make it harder for central banks to react to a downturn. Deflation may also result in excessively high real interest rates, raising the real burden of debt and so redistributing wealth from debtors to creditors. The rise in real debt burden (as well as possible losses in the value of collateral due to falling prices) may make it harder for households and companies to service debt and remain solvent, increasing the extent of any economic downturn. Also, to the extent debtors have a higher marginal propensity to consume out of wealth than creditors and there has been a redistribution of wealth to creditors, this would lower consumption. Deflation can also increase real wage costs, if workers are unwilling to accept nominal pay cuts. This may cause the shedding of labour, increasing any falls in employment and amplifying the downturn. More generally, to the extent there are downward price and wage rigidities, allocation of resources in the economy will be less efficient.

With the rate of price increases recently falling dramatically in many OECD countries in response to a fall in the level of commodity prices (until recently), the prospect of substantial economic slack over a long period has raised concerns about possible future sustained deflation. One useful framework for assessing the risk of deflation is the Phillips curve which characterises inflation as being driven by expected inflation adjusted for the amount of slack in the economy. If inflation expectations are "unanchored" (i.e. equal to past inflation rather than anchored to an inflation target, for example), deflationary spirals are possible as a severe recession can push inflation into negative territory. However, historical experience suggests that it is possible to have major recessions, with large and sustained negative output gaps, and yet not have deflation (e.g. Finland in the early 1990s – see Figure). There have also been other episodes of significant slack in the economy but where inflation has been fairly stable (e.g. Canada over much of the 1990s). Even when deflation has occurred during a period of extremely poor growth (e.g. in Japan over the recent past and the United States during the depression), a deflationary spiral did not develop.¹

With spare capacity seeming to have a limited effect on inflation beyond some point, these experiences suggest that inflationary expectations remained well anchored (though factors like an exchange rate depreciation in Finland also played a role). Expectations are likely to have been well anchored in Canada and Finland as they had inflation targets during much of the 1990s and the presence of a gold standard at the onset of the depression in the United States is likely to have led to an expectation of inflation after a period of deflation. This suggests policy makers can avoid large and sustained periods of deflation by having a well communicated and credible commitment to low positive rates of inflation so that even in a severe recession it is expected that the authorities will take actions to achieve this target.²

There are a number of indications to suggest that inflation and inflation expectations remain well anchored in the current situation for most major countries and so deflation is unlikely. First, survey measures of long term inflation expectations have remained relatively stable in the United States and the euro area. For these economies and the United Kingdom, expectations are also still relatively high (at least 2%). Second, studies suggest that inflation is less responsive to slack than previously, a result which has been attributed to the forces of globalisation and may also reflect the greater credibility attached to central bank commitments to maintain stable inflation.³

In the current conjuncture Japan would appear to be the large country most clearly at risk, and a fall in prices is forecast over the projection horizon. However, recent Japanese experience suggests that nominal wage and price rigidities result in price movements being even less sensitive to slack when there is deflation or very low inflation (Mourougane and Ibaragi, 2004) and so even with falling prices in Japan over the next couple of years, a deflationary spiral is unlikely.



Note: Core inflation relates to consumer price inflation.

Source: OECD Economic Outlook 85 database.

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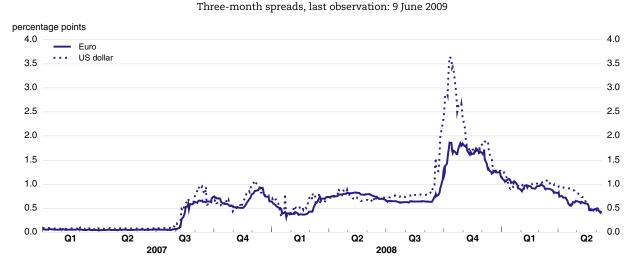
- 1. Yellen and Akerlof (2004) and Williams (2009) provide a more detailed account of the historical inflation experience of a number of countries undergoing downturns.
- 2. Other evidence also suggests that well anchored expectations can help mitigate the risk of deflation. Based on output gaps projected in this Economic Outlook and assuming an inflation target of 2% and an inflation output elasticity of 0.2 (see Table 3.1 of IMF, 2006), simple calculations predict underlying inflation would be 1% in the United States and ¾ per cent in the euro area in 2010 if expectations are perfectly anchored. With unanchored expectations, underlying inflation would be 0% in the United States and –½ per cent in the euro area.
- 3. See for example Pain et al. (2006) and Chapter 3 of IMF (2006).

also fallen and securities markets have posted some signs of vitality. Nevertheless, confidence in the banking system remains depressed, and bank lending continued losing impetus in the course of the second quarter of 2009. It will take some more time for the unprecedented measures implemented so far to bear fruit and translate into a durable normalisation of financial markets.

... with many segments of financial markets improving markedly...

Money markets have shown signs of further normalisation in the course of the second quarter of 2009. Spreads between unsecured interbank and expected overnight rates have fallen substantially and are now lower than before the bankruptcy of Lehman Brothers (Figure 1.8). The earlier stress in commercial paper rates has also subsided considerably. And, credit spreads across various segments of the market generally seem to have eased to some extent. Outright purchase of assets by central banks appears to have had some effects on long-term interest rates as well. In the United States, mortgage rates have responded particularly strongly to the Federal Reserve's purchase of mortgagebacked securities, with mortgage refinancing activities increasing apace. Both in the United States and in the United Kingdom, long-term yields on government bonds fell immediately following the announcements from central banks. However, long-term interest rates have since then increased as the outlook for fiscal deficits deteriorated and extreme risk aversion abated. The fact that this increase in yields has been relatively modest even as expected public deficits soared is consistent with some dampening effect from central bank purchases.

Figure 1.8. Money market conditions have improved significantly



Note: Spread between three-month EURIBOR and EONIA swap index for euro area; spread between three-month LIBOR and overnight indexed swap for the United States.

Source: Datastream.

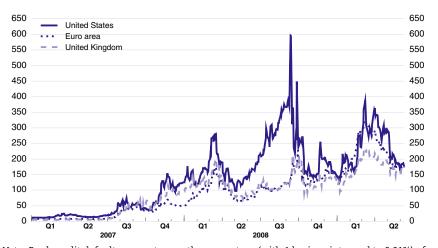
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... even though concerns about banks remain...

Nevertheless, confidence in the health of the banking system remains fragile in spite of recent improvements, with the cost of insuring bank debt against default remaining high despite some recent easing (Figure 1.9). As an encouraging sign, concerns reflected in bank credit default swap rates have become less systemic and more institution-specific with the standard deviation among individual contracts underlying the US index rising from 50 basis points in January to above 120 basis points in May.

Figure 1.9. Bank credit default swap rates are falling but remain high

Basis points; last observation: 10 June 2009



Note: Bank credit default swap rates are the percentage (with 1 basis point equal to 0.01%) of a notional amount to be insured the buyer pays annually over the agreed length of the contract in order to protect the notional amount against default.

Source: Datastream.

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... and coming capitalisation needs are substantial There are still substantial banking capitalisation needs going forward. Capital injections in banks have helped compensating for losses and write-downs that have been realised so far. But banks will still need to absorb accumulating credit losses, especially as a result of the economic downturn that is putting upward pressure on default rates across the various types of loans, in particular real estate. Indeed, commercial property loans might pose a clear risk of bank losses in the near term since bank charge-off rates on commercial mortgages in the United States have been strongly correlated with negative output gaps in the past (Figure 1.10). Moreover, bank capital will also have to be raised to levels that help rebuild confidence in the sector and are consistent with

- 5. See the IMF (2009) for an estimation of potential write-downs in the United States, Europe and Japan.
- 6. Since mid-2007, the 70 largest banks globally have raised \$835 billion in capital, which exceeds the near \$800 billion in losses and write-downs over the same period.
- 7. If charge-off rates increased in line with past correlations, they would rise from 3.2% in 2009 to 3.6% in 2010. Such developments would entail \$120 billion in additional charge-offs for commercial banks in addition to what has already been recognised.

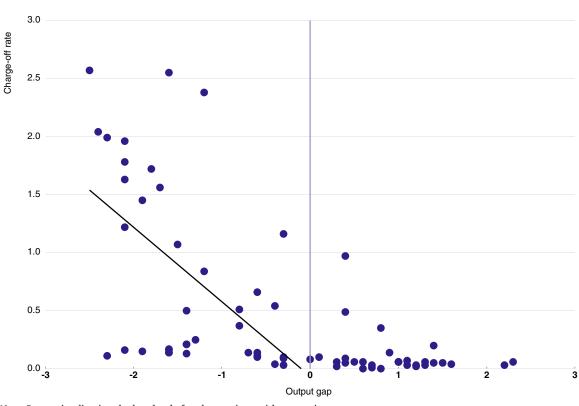


Figure 1.10. Charge-off rates on commercial mortgages rise with growing economic slack Quarterly observations, 1991-2008, per cent

Note: Regression line is calculated only for observations with a negative output gap.

Source: Datastream and OECD.

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emerging regulatory changes. However, ongoing spreads between relatively elevated lending rates and near zero short-term rates translate into large operating surpluses which will be a strong source of additional capital for banks in 2009-10. Furthermore, where it is planned, and possibly also when it is not currently planned, the conversion of government preferred shares and other quasi-debt instruments into common equity will contribute to repairing the core capital position of banks (albeit at the cost of diluting existing shareholders).

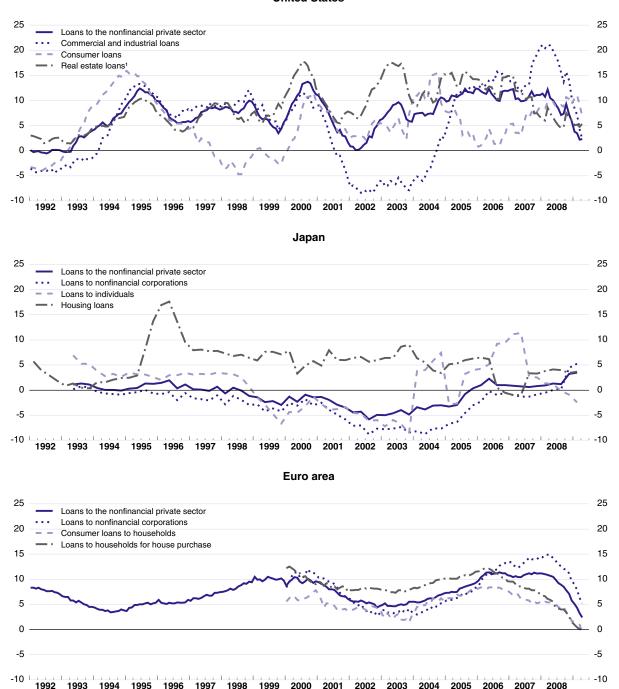
Bank lending keeps weakening...

Bank lending has continued to lose steam up to the second quarter of this year. Indeed, credit to the private sector has weakened further across all segments of borrowers in the United States and the euro area, including consumer loans in the United States, a category that had been very resilient until very recently (Figure 1.11). In Japan, loans to nonfinancial corporations have trended up recently as firms started relying more heavily on previously committed credit lines and the Bank of Japan implemented a programme to provide liquidity to banks against the collateral of corporate debt at the current policy rate. Monthly information shows that loan growth have turned negative in both the United States and the euro area (Figure 1.12). Credit is likely to remain subdued until

Figure 1.11. Bank lending is slowing down

Year-on-year growth rate

United States



Note: Data refer to commercial banks for the United States; to monetary financial institutions (MFIs) for the euro area; to all banks for Japan. Year-on-year growth rates are calculated from end-of-period stocks. For the euro area, these are adjusted for reclassifications, exchange rates variations and any other changes which do not arise from transactions.

1. The definition of real estate loans for the United States is broader than housing loans as it includes also loans related to commercial real estate. Moreover, both for the United States and for Japan real estate/housing loans can include also loans to the corporate sector.

Source: Datastream.

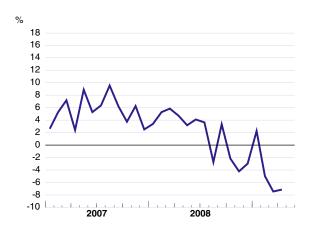
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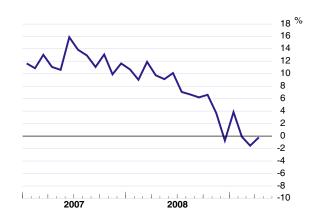
Figure 1.12. Credit is contracting

Annualised monthly rate of change of seasonally adjusted stocks, per cent

Total US consumer loans

Euro area bank loans to the private sector





Note: Euro area data are adjusted for the impact of securitisation.

Source: Datastream and ECB.

StatLink http://dx.doi.org/10.1787/656454465561

economic activity starts gathering momentum, house prices reach a bottom, and bank lending standards become less constraining.⁸

... but long-term capital market funding has increased

Long-term securities markets have shown positive signs since the start of the year, especially in countries where aggressive policy measures have been taken. Market-based credit is beginning to flow again to non-financial firms in the United States, where since the trough in September 2008, bond issuance by non-financial US corporations increased threefold to reach in March 2009 a monthly level equal to almost twice its ten-year average. Similarly, UK non-financial corporate bond issuance nearly tripled between the last quarter of 2008 and the first quarter of 2009 to a quarterly level more than twice as large as its five-year average. In the case of the euro area, the annual growth rate of outstanding debt securities accelerated at the beginning of the year both for financial and nonfinancial corporations. Short-term debt markets have been less dynamic with the amounts of commercial paper contracting in the United States in the first half of 2009. In the euro area, the total amount of short-term debt instruments rose markedly in the first few months of the year but has been stable since then. The relative sluggishness of short-term debt markets can be interpreted at least partly as a correction of the shift towards short-term funding that had

- 8. Evidence for the euro area indicates that the share of banks tightening lending standards decreased in the first quarter of 2009 for both enterprises and households. In the case of the United States, the share of banks tightening lending policies also edged down for almost all credit types during the first quarter of this year, the exception being residential mortgages. In Japan, credit conditions have remained broadly stable, with a slight improvement for medium-sized firms.
- These ratios have been calculated after adjusting Federal Reserve and Bank of England statistics for seasonality.

occurred at the peak of the crisis in the fourth quarter of 2008 when issuing long-term bonds was very difficult.

Financial conditions have eased or stabilised but remain very tight...

All in all, financial conditions have improved somewhat or stabilised in the key OECD areas. As gauged by the OECD indicator of financial conditions that is designed to capture the impact of a range of financial and asset price influences on economic activity, conditions have improved the most in the United States (Figure 1.13). 10 In the euro area, after having deteriorated in the first quarter of this year, financial conditions posted the first significant increase in April. Less restrictive bank credit conditions and lower corporate bond spreads have positively contributed to this outcome. In Japan, a slight increase in household equity wealth has resulted in a negligible improvement in financial conditions, while in the United Kingdom, after the improvement in the first quarter, conditions stabilised as the appreciation of the currency offset the improvements in credit conditions and lower interest rate spreads. Overall financial conditions for main countries in the OECD area are now ahead of the assumptions underlying the OECD Interim Economic Outlook from March 2009. Even so, conditions remain tight and the tightening in financial conditions during 2008 will continue to act as a drag on economic activity in the course of 2009 and into 2010 since there is a lag of four to six quarters before the full effect of changes is felt on GDP and because the most severe tightening occurred in the third quarter

6 United States
Euro area
4 -- Japan
-- United Kingdom
2
2
4
-- Japan
-- United Kingdom
-- United King

Figure 1.13. Financial conditions have turned up

Note: A unit decline in the index implies a tightening in financial conditions sufficient to produce an average reduction in the level of GDP by ½ to 1% after four-six quarters. See details in Guichard et al.(2009).

Source: Datastream; and OECD calculations.

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10. The index captures the impact of corporate bond spreads, bank lending standards, house prices, equity prices, policy interest rates, government bond yields and exchange rates.

of 2008.¹¹ Going forward, the assumed stabilisation of financial conditions in 2009 and their gradual normalisation in 2010 will contribute positively to economic activity in the second half of 2009 and through 2010 (Box 1.4).

... and pressures on emerging markets have abated though they are still high Pressures on emerging market bonds and currencies have eased recently as increases in risk appetite and support from international organisations have led to a significant reduction in spreads. Although remaining high compared with the 2005 to mid-2007 period, the spreads are below the highs observed in previous crisis episodes (Figure 1.14). Similarly, emerging market currencies have bounced back since March, reversing part of the depreciation they suffered as a result of the intensification of the crisis. An exception is the Latvian currency board

Box 1.4. The impact of financial conditions on economic activity

This box presents the results for economic activity of different assumptions regarding financial market conditions. The OECD financial conditions indicator (FCI) summarises the effects of a wide range of financial variables and asset prices on economic activity, including corporate bond spreads, bank lending standards, housing and financial wealth, policy interest rates, government bond yields and exchange rates. An advantage of the indicator is that it provides a measure of the net effect of these often opposing influences on overall financial conditions. Changes in the FCIs can be used to compare the impact of financial conditions on future GDP growth across countries. Moreover, estimated relationships between FCIs and activity can be used to illustrate the effect of different assumptions concerning financial conditions. Indeed, based on such estimated relationships the effects on activity of three different sets of assumptions concerning financial conditions can be quantified.

More specifically, under the baseline scenario, interest rates follow the path assumed in this Economic Outlook (see Box 1.5) and exchange rates and wealth are assumed constant.² Credit conditions and spreads also stabilise at the latest observed (mid-June) level throughout 2009 and then improve linearly to reach a zero influence on growth late in 2010. The impact on activity of the financial conditions in the baseline scenario can then be compared with the impact on activity that would arise from the assumptions made in the March 2009 OECD Interim Economic Outlook in which credit conditions, spreads and wealth were maintained at their first quarter value through the rest of 2009. The improvement in financial conditions since the March Interim Economic Outlook imply a positive ¾ percentage point contribution to annual growth in both 2009 and 2010 in the United States (½ percentage point in both years in the euro area, and ⅓ and ¾ percentage point in Japan in 2009 and 2010, respectively).

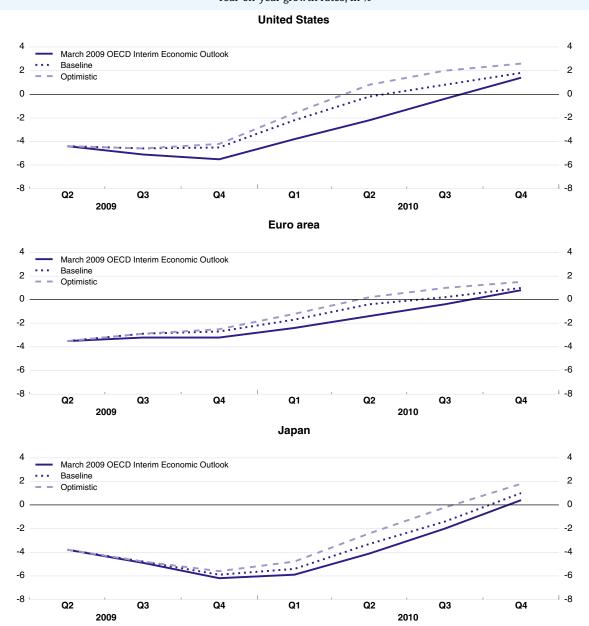
An upside risk to the projection is that financial conditions improve faster than assumed under the baseline case. In a more optimistic scenario credit conditions and spreads improve already in 2009, prolonging the increase observed through the second quarter until the end of 2009 at the same rate and then converging linearly to zero towards the end of 2010. For Japan, as there has been almost no improvement since the start of the year, credit conditions and spreads are assumed to improve linearly from the latest observation in the second quarter of 2009 reaching a zero level at the end of 2010. The remaining components of the index maintain the levels assumed in the baseline scenario. This more optimistic scenario would boost annual growth by around ¼ percentage point in 2009 and ¾ percentage point in 2010 in both the United States and Japan, compared to the baseline case (Figure). Growth would be raised by ¼ and ½ percentage points in the euro area in 2009 and 2010, respectively.

^{11.} For further explanation of how changes in the FCIs translate into effects on the GDP growth rate, see Guichard *et al.* (2009).

 ${\tt Box}\ 1.4.$ The impact of financial conditions on economic activity (cont.)

Impact of financial conditions on economic growth

Year-on-year growth rates, in %



Note: The figures show the impact of different assumptions on financial conditions on economic growth. Other factors can have an impact on economic activity, making the final outturn for GDP growth differ from that presented here, even if financial conditions remain at the levels assumed in the simulations.

Source: OECD Economic Outlook 85 database; Datastream; and OECD calculations.

StatLink http://dx.doi.org/10.1787/656706703512

- 1. See Guichard et al. (2009).
- 2. Holding wealth constant is not fully consistent with the short-term projections as they incorporate changes in house prices.

1800 - - EMBI Asia EMBI Composite EMBI Europe **EMBI** Latin America 1600 1400 1200 1000 800 600 400 200 1998 2001 2002 2003 2004 2005 2006

Figure 1.14. **Emerging market bond spreads have eased**Basis points; last observation: 10 June 2009

1. Spreads show yield difference in basis points over US Treasury bonds. Source: JP Morgan.

StatLink http://dx.doi.org/10.1787/656475868373

arrangement which remains under some pressure but so far contagion effects for other currencies have been manageable.

Growth prospects

The recession will bottom out in late 2009 followed by a mild recovery

The recession in the OECD area is projected to bottom out in the second half of 2009, making it the longest and deepest for the area for decades (Figures 1.15 and 1.16). A slow recovery in activity is projected to start towards the end of 2009, with stimulatory policy settings (Box 1.5) together with a gradual normalisation of financial conditions and a pick-up in growth in the non-OECD area helping support consumption and investment growth which will gradually gather strength in 2010. Large rises in unemployment to 10% in the United States and more than 12% in the euro area (Figure 1.17) will imply significant slack, notwithstanding likely increases in structural unemployment rates due to the labour shake-out (see Chapter 4). The large slack will reduce inflation to very low levels this year and next (Figure 1.18).

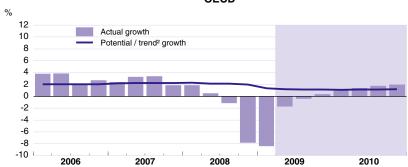
The recovery will be driven by policy in...

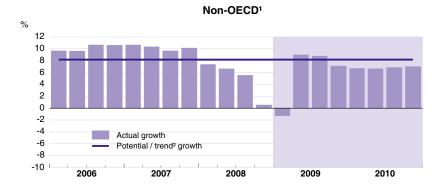
The salient features of the economic outlook for the major OECD economies are:

... the United States...

US activity is expected to stabilise during the second half of this year, with policy stimulus helping to support the economy. As financial conditions improve in 2010, business and residential investment will strengthen. However, growth is projected to be very moderate, as a weak labour market and declines in equity and housing wealth weigh on consumer spending. Even so, with potential growth reduced by the slowdown in capital accumulation, the recovery should be sufficient to stabilise unemployment.

Figure 1.15. The recovery in the non-OECD will be faster OECD





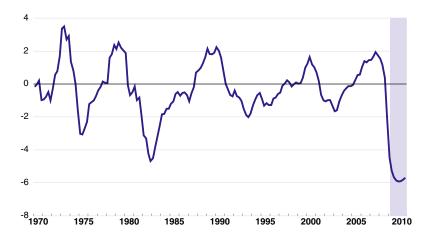
- 1. The non-OECD region is taken here to be a weighted average, using 2005 GDP weights and PPPs, of Brazil, China, India and the Russian Federation which together accounted for more than half of non-OECD output in 2005.
- 2. Trend growth for the non-OECD is the average over the period 2000-07.

Source: OECD Economic Outlook 85 database.

StatLink http://dx.doi.org/10.1787/656508552316

Figure 1.16. The OECD output gap will be the largest in four decades

In percentage of potential output



Source: OECD Economic Outlook 85 database.

StatLink http://dx.doi.org/10.1787/656510275068

Box 1.5. Policy and other assumptions underlying the projections

Fiscal policy assumptions are based as closely as possible on legislated tax and spending provisions (current policies or "current services"). Where policy changes 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. For the present projections, the implications are as follows:

- For the United States, the American Recovery and Reinvestment Act of 2009 is estimated to add more than 2% of GDP to the federal government deficit over this year and next. It is also assumed that some Alternative Minimum Tax relief will be extended in 2010. In these projections the funds disbursed under the Housing and Economic Recovery Act and the Troubled Asset Relief Program (TARP) have some impact on the government financial balance. As the federal government purchased assets at prices that were higher than what would have been available in the private market, some of the purchases have been recorded as capital transfers following the methodology adopted by the BEA and the US Treasury.
- For Japan, the projections include the supplementary budgets in 2008 and 2009, the Fiscal Year (FY) 2009 budget plan and the medium-term fiscal reform plan. The pension contribution rate will continue to rise each year under the FY 2004 reform.
- For Germany, the two fiscal stimulus packages as well as additional measures, such as the lowering of unemployment insurance contributions, an increase in child benefits and allowances, a scheduled increase in the tax deductibility of health and long-term care contributions and the re-introduction of tax allowances for commuters have been built into the projections. For France, the combination of the economic stimulus package, subsequent measures (e.g. to boost youth employment and lower the VAT rate on restaurant meals), and the loss of exceptionally buoyant tax revenues associated with falling asset prices is assumed to induce a widening of the cyclically-adjusted general government deficit of around 1 percentage point of GDP between 2008 and 2010. For Italy, the projections incorporate the government's plans of a broadly unchanged structural deficit after some underlying fiscal tightening through reductions in current expenditure in 2009.

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 until the end of 2010 as inflation falls and there is substantial slack in the economy.
- In the euro area, policy rates are assumed to be set to bring the overnight rate close to zero by the third quarter, amid a severe economic downturn. They will remain at this level until the end of 2010.
- In Japan, the short-term policy interest rate is assumed to remain at 10 basis points until the end of 2010 as the economy is likely to remain in deflation.

Unconventional monetary policy measures are generally assumed to remain at current or announced levels.

Financial market conditions are assumed to remain at their current level until the end of this year and then gradually normalise over 2010, with the spread of three-month interbank rates over policy rates as well as corporate bond spreads declining and bank lending standards normalising.

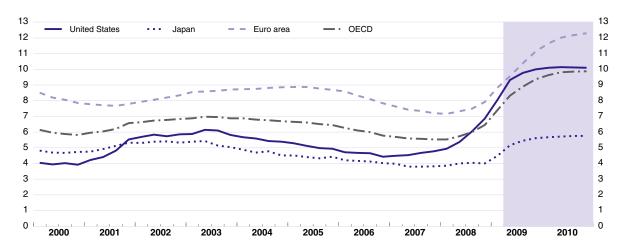
The projections assume generally unchanged exchange rates from those prevailing on 3 June 2009, at \$1 equals to \$95.78, \$0.71 (or equivalently, \$1 equals \$1.42) and CNY 6.83.

Over the projection period the price for a barrel of Brent crude is assumed to be at a level close to \$65. Non-oil commodity prices are assumed to stabilise around current levels.

The cut-off date for information used in the projections is 11 June 2009. Details of assumptions for individual countries are provided in Chapter 2, "Developments in individual OECD countries", and Chapter 3, "Developments in selected non-member economies".

Figure 1.17. **Unemployment will rise substantially**

In percentage of labour force

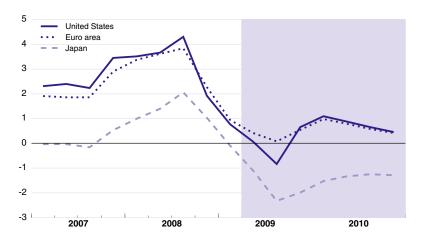


Source: OECD Economic Outlook 85 database.

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Figure 1.18. Inflation will fall to very low levels

Year-on-year growth rate, %



Note: Personal consumption expenditures deflator for the United States; Harmonised index of consumer prices for euro area; Consumer price index for Japan.

Source: OECD Economic Outlook 85 database.

StatLink http://dx.doi.org/10.1787/656525174571

... Japan...

• Japanese output may start to grow in the second half of the year, primarily due to strong fiscal stimulus. In the short term, the external sector is unlikely to contribute to growth due to the weakness of trading partner growth and the high level of the yen. A resumption of moderate export growth in late-2009 should reverse the contraction in business investment and support a modest increase in consumption in 2010. Residential investment should recover towards the end of 2009. However GDP growth will be low, at around ¾ per cent in 2010. With

unemployment expected to rise significantly, deflation is projected to persist.

... and the euro area where stronger external demand will also be important

• Activity in the euro area will continue to contract over the rest of 2009, with private investment and consumption continuing to fall amidst rising unemployment, tight financial conditions and on-going housing market corrections in some countries. However the pace of decline will be more moderate, as strong government demand will provide some support to activity. In 2010, strengthening growth in world trade will help support a turnaround in exports, and policy support and an easing of financial conditions will help boost business investment. The decline in residential investment will most likely be arrested in the course of 2010, when also the slide in property prices may cease in many euro area countries. However the recovery in the area will be relatively sluggish with consumption being muted due to negative wealth effects and rising unemployment, which is likely to raise structural unemployment and hence lower potential growth rates.

World trade and non-OECD activity growth will recover...

After the extreme contraction in world trade over the past few quarters, trade will gradually stabilise and then slowly pick up from around the end of this year (Table 1.4). The turnaround is supported by a pronounced and relatively quick recovery in growth outside the OECD area. The Chinese economy is already recovering from the slowdown of late last year (see above), with growth expected to rise to roughly 9¼ per cent in 2010. Indian activity will progressively gain greater momentum. Activity in Brazil is expected to strengthen in the second half of this year as domestic demand firms due to improving credit conditions and fiscal stimulus. After the rebound from the slump at the start of the year, Russian activity is projected to grow at moderate rates, supported by the rebound in commodity prices and policy stimulus.

... and imbalances remain smaller than previously

While some aspects of the crisis have aided the adjustment of global imbalances, with private saving increasing in the United States and lower oil prices reducing imbalances between oil importers and exporters, other developments, notably the deterioration in US public finances, have worked against rebalancing. Imbalances are not expected to narrow further by the end of 2010, when the US current account deficit will stand at about 2½ per cent of GDP. While there may be a fall in the Chinese current account surplus, it will remain large, and the Japanese current account surplus may increase to 2¼ per cent of GDP.

Risks are on both sides

The risks remain substantial but have become more balanced in recent months. Large fiscal and monetary policy stimulus, together with progress in dealing with problems in the financial sector, have lessened the likelihood of extremely negative outcomes. Financial market developments also suggest that there are some upside risks to the projections. Activity could recover more rapidly than projected if financial conditions improve more swiftly than assumed (see Box 1.4) or if policy

Table 1.4. World trade will recover and imbalances remain lower than before

	2006	2007	2008	2009	2010
Goods and services trade volume		Percentage ch	ange from pre	evious period	
World trade ¹	9.5	7.1	2.5	-16.0	2.1
of which: OECD	8.3	5.3	1.2	-15.6	1.0
NAFTA	6.9	4.6	0.4	-15.3	1.5
OECD Asia-Pacific	7.9	7.6	3.2	-17.7	4.9
OECD Europe	9.0	5.1	1.2	-15.2	0.0
Non-OECD Asia	14.2	10.6	3.9	-16.4	5.9
Other non-OECD	9.3	11.1	6.7	-17.6	2.2
OECD exports	8.7	6.0	2.0	-16.5	1.0
OECD imports	7.9	4.6	0.5	-14.6	1.0
Trade prices ²					
OECD exports	3.7	8.4	9.1	-8.6	2.5
OECD imports	4.8	7.9	10.8	-11.5	2.6
Non-OECD exports	8.0	8.3	14.2	-13.0	2.7
Non-OECD imports	4.0	7.7	12.6	-9.4	2.4
Current account balances		Pe	er cent of GDF	>	
United States	-6.0	-5.3	-4.7	-2.3	-2.4
Japan	3.9	4.9	3.2	1.4	1.9
Euro area	0.6	0.5	-0.4	-1.1	-1.0
OECD	-1.5	-1.3	-1.4	-0.9	-0.9
			\$ billion		
United States	-788	-731	-673	-318	-343
Japan	172	213	157	69	94
Euro area	59	55	-58	-132	-128
OECD	-574	-522	-602	-366	-378
China	250	372	426	450	398
Dynamic Asia ³	122	165	136	182	207
Other Asia	-7	-9	-3	54	43
Latin America	49	22	-8	-36	-39
Africa and Middle East	276	245	240	-180	-79
Central and Eastern Europe	62	18	65	79	80
Non-OECD	752	813	857	548	610
World	178	291	255	182	232
-					

Note: Regional aggregates include intra-regional trade.

Source: OECD Economic Outlook 85 database.

StatLink http://dx.doi.org/10.1787/658552631854

stimulus provides a bigger boost to demand than anticipated. In addition, a general reduction in uncertainty may, to a greater extent than expected, induce households and businesses to bring forward spending that was postponed in a more uncertain environment. However, significant downward risks remain. There could be an intensification of problems in the financial sector, for example associated with the weakness seen in the commercial property sector or resulting from a surge in default rates as the recession continues. Other negative risks include higher-than-assumed oil and non-oil commodity prices and the possibility that the pandemic influenza A (the "swine flu") has serious adverse consequences for growth beyond Mexico, where it has already proved to be costly.

^{1.} Growth rates of the arithmetic average of import volumes and export volumes.

^{2.} Average unit values in dollars.

^{3.} Dynamic Asia includes Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; Philippines; Singapore and Thailand.

Policy requirements

Economic policies need to support demand and limit cuts in productive potential

The depth of the recession and dysfunctional financial markets have overwhelmed the capacity of traditional counter-cyclical macroeconomic policy to inject a sufficient stimulus. Thus, after exhausting the scope to reduce interest rates, many countries have used discretionary fiscal policy and non-conventional monetary policy to stimulate aggregate demand. They have also sought to ease financial market conditions by addressing problems in the banking system. Given the very high degree of slack expected in coming years, policy stances will need to be as supportive of aggregate demand as feasible. At the same time, structural policies need to limit the extent to which cyclical increases in unemployment translate into higher structural unemployment rates and hence undermine the productive capacity of the economy with implications for fiscal and monetary policies.

Financial market policies

More is needed to stabilise financial markets

Stabilising the banking system is a priority so that banks can resume their normal lending activity. Substantial efforts to support financial institutions have been deployed so far by countries within and outside the OECD area, including bank recapitalisation using public funds, deposit guarantee extensions, debt guarantees and the provision of credit and liquidity to the financial system (Table 1.5). Going forward, policy initiatives have to ensure a steadfast cleansing of financial institutions' balance sheets coupled with the provision of sufficient capital to viable banks, when it is not available from the market.

Dealing with problem assets can unlock bank lending...

Dealing with banks' troubled assets is important to remove uncertainty surrounding banks' balance sheets that compromises their ability and willingness to lend and to attract additional capital, and exacerbates the negative feedback loop between economic activity and financial fragility. Steps have already been announced and in some cases implemented by a few governments across the OECD to remove or contain the risk of problem assets on financial institutions (Box 1.6).

... and may involve ring-fencing...

Two main approaches have been implemented by OECD governments so far. The United Kingdom has implemented a ring-fencing strategy, which has also been used by the United States in a few cases, which essentially provides a public guarantee to cover a share of the potential losses associated with a pre-specified pool of assets for a given institution. Under such a scheme, after banks have absorbed a lump sum amount, the government absorbs most of the remaining losses. An advantage of ring-fencing is that it does not require an upfront disbursement of public money, but it can prove highly costly over time in the event these losses materialise. This is because under the current design the thresholds above which governments start facing losses is relatively low. However, by limiting losses for banks, this approach may reduce the need for public capital injections in the future.

Table 1.5. Governments have introduced a wide array of financial relief measures since mid-2008

	Bank liabilities			Bank assets					
	Increase deposit insurance	Guarantee or buy bank debt	Inject capital ¹	Nationalise ²	Ring-fence bad assets	Plan to purchase toxic assets	Fund commercial paper	Fund asset- backed securities	Ban or restrict short- selling
United States	Х	Х	х	Х	Х	Х	х	Х	х
Japan			Х				х	Х	Х
Euro area	Х								
Germany	Х	Х	Х			Х			Х
France	already high	Х	Х						Х
Italy	Х		Х						Х
United Kingdom	х	Х	Х	Х	Х		Х	Х	Х
Canada		Х					х	Х	Х
Australia	х	Х						Х	Х
Austria	х	Х	Х						Х
Belgium	х	Х	Х						Х
Czech Republic									
Denmark	Х	Х	Х					Х	Х
Finland	х	Х	Х				х		Х
Greece	х	Х	Х						
Hungary	х	Х	Х						
Iceland	х		Х	Х					Х
Ireland	х	Х	Х	Х		Х			
Korea		Х				Х			
Luxembourg	х	Х	Х						
Netherlands	х	Х	Х	Х					Х
New Zealand	Х	Х							
Norway	already high	Х	Х						
Slovak Republic	х								
Poland	х		Х						
Portugal	х	Х	Х						
Sweden	Х	Х	Х					Х	
Spain	Х	Х						Х	Х
Mexico		Х							
Switzerland	Х		х			Х	х	Х	
Turkey									

Note: the coverage of nationalisations and measures to ring-fence bad assets is incomplete.

StatLink http://dx.doi.org/10.1787/658574657433

... or removing bad assets from banks' balance sheets

A number of countries (Germany, Ireland, Korea, Switzerland and the United States) have chosen an approach which consists of buying problem assets and parking them in asset management companies. While in most cases removing uncertainties surrounding the value of these assets from banks' balance sheets, the impact of this approach on their net worth depends on the price at which assets are transferred. If transferred at book

^{1.} Capital has already been injected in banks, or funds have been allocated for future capital injections.

^{2.} Nationalisation is defined as the government taking control of a substantial share of banking activities (defined in a broad sense). The cell for the United States is marked to acknowledge the actions taken by the authorities to take control of Fannie Mae and Freddie Mac and unwind Washington Mutual. Source: OECD.

Box 1.6. Dealing with impaired assets across the OECD

Governments across the OECD have designed and implemented different initiatives to deal with troubled assets that weigh on banks' balance sheets and compromise their ability to lend even to creditworthy borrowers. The main characteristics of the programmes implemented so far are the following:

- In Germany, under a draft bill, banks would be allowed to remove toxic assets from their balance sheets, by parking them in several bank-specific special purpose vehicles (SPVs) for a period of up to 20 years. Problem assets would be transferred to the special purpose vehicles at 90% of the book value. In exchange, the vehicles provide banks with a bond guaranteed by the Special Fund Financial Market Stabilization (SoFFin) created in October 2008. In return for the guarantee, banks must pay a cash charge out of future profits to SoFFin. In particular, banks will have to pay an annual fee corresponding to the difference between the transfer price of the toxic asset and its intrinsic value, minus a risk deduction. If, at maturity, asset turns out to be worth less than the intrinsic value, the bank must make up the difference out of future profits or transfer equity stakes.
- In Ireland, a commercial semi-state entity (National Asset Management Agency) will buy real estate assets from banks. Assets covered are all loans in respect of the purchase of land for development and associated work in progress and certain property investment loans. Assets will be purchased at discount prices determined by the authorities depending on the risks involved. Though participation in the programme is optional, future legislation may provide for a mandatory power to purchase assets from banks. The agency will be capitalised by the government and is expected to hold €80-90 billion in assets (in book value terms). For some institutions, arising capitalisation needs are expected to be provided by the government in the form of ordinary shares. Legislation including further operational details is expected in mid-2009.
- In Korea, the authorities have established a new Restructuring Fund under the Korea Asset Management Corporation (KAMCO). The Corporation was founded in 1962 and was authorised by the authorities to function as a bad bank in 1999 to deal with troubled assets originated during the 1997 financial crisis. To finance the new Fund KAMCO will issue a government guaranteed bond of a maximum amount of KRW 40 trillion. The Fund will in turn purchase non-performing loans and troubled assets of financial institutions and companies under restructuring, respectively. Gains from the KAMCO will accrue to the government.
- In Switzerland, the central bank created a special purpose vehicle (SNB StabFund limited partnership for collective investments) to transfer illiquid securities and other assets (mainly debt instruments backed by US residential and commercial mortgages) away from UBS's balance sheet. The entity is funded by UBS with equity in the amount of 10% of the purchase price of the assets (which serves as a first protection against losses). The SNB finances the remaining 90% by granting the fund a non-recourse loan (for eight years but which can be extended to a maximum of 12 years) and obtains control over the entity. Since assets are primarily denominated in dollars, the loan was granted in that currency. The SNB will receive \$1 billion in profits plus 50% of any remaining equity value, after the SNB loan has been repaid in full. As part of these measures, UBS has agreed to strengthen its capital base and to comply with best practices for compensation schemes and policies. The total volume of assets transferred to the fund's portfolio amounts to \$38.7 billion and the transfer price was determined on the basis of valuations carried out by independent experts and is slightly below the book value of the assets as at 30 September 2008.
- In the United Kingdom, the authorities have adopted a ring-fencing strategy to deal with problem assets. The Asset Protection Scheme provides protection against future losses on risky assets for two of the largest UK banks (Lloyds TSB and Royal Bank of Scotland). Banks receive protection for a part of their balance sheets so that the healthier core of their commercial business can continue to lend to creditworthy businesses and households. The assets are ring-fenced on a bank's balance sheet, with separate management and governance arrangements. Under the scheme, the UK Treasury absorbs 90%

Box 1.6. Dealing with impaired assets across the OECD (cont.)

of the losses above a "first loss" amount to be borne by the institution. Banks were required to pay a fee and enter into legally binding agreements to increase the amount of lending they provide to homeowners and businesses. Banks have been asked to develop a sustainable long-term remuneration policy and to meet high standards of transparency. The immediate effect of the scheme was to reduce the banks' risk weighted assets, boosting the capital ratio. The assets guaranteed at Lloyds TSB and Royal Bank of Scotland amount to 38% of UK GDP.

In the United States, the authorities have launched a Public-Private Investment Program (PPIP) to clean banks' balance sheets by buying both toxic loans and securities from banks to create a market for illiquid assetbacked securities. The public-private fund will receive \$75 to \$100 billion in capital from the TARP and capital from private investors. Together, this is expected to generate \$500 billion in purchasing power with the potential to expand to \$1 trillion over time. The PPIP has a loan and a securities component. Under the loan component, the steps to purchase assets are the following: i) Banks identify assets they wish to sell. The Federal Deposit Insurance Corporation (FDIC) determines the amount of funding to guarantee, with leverage capped at a 6-to-1 debt-to-equity ratio. ii) Pools of assets are auctioned off to the highest bidder. The US Treasury contributes with 50% of the equity. iii) If the seller accepts the purchase price, the buyer issues debt guaranteed by the FDIC up to the amount determined in the first step (collateralised by the purchased assets and receiving a fee in return). And iv) Private fund managers will control and manage the assets until final liquidation, subject to FDIC oversight. However, in early June, the US authorities postponed the implementation of the loan component of PPIP, reflecting the ease at which banks had raised capital. Regarding the securities programme, the Treasury and the Fed have created a lending programme under the Term Asset-Backed Securities Facility (TALF) to provide non-recourse loans to management funds with haircuts reflecting the riskiness of the assets provided as collateral. Moreover, a few asset managers will buy troubled assets using both private and public capital (matched one-for-one) and will be able to subscribe senior debt from the United States Treasury in the amount of 50% of total equity capital of the fund (up to 100% subject to further restrictions). Eligible assets are confined to AAA securities.

Source: OECD based on information from the Bank of England, the Department of Finance of Ireland, Financial Services Commission of Korea, the Swiss National Bank, and the US Federal Reserve.

value, no losses are recognised at the level of the bank and all losses are assumed by the asset management companies and eventually the government. This amounts to providing public subsidies to banks to strengthen their balance sheets and implies that less public capital injections may be needed in the future. On the other hand, transferring assets at market prices or prices well below book value forces banks to recognise losses, but the weakening of banks' balance sheets may force governments into providing public support in the form of new equity. While implementation details are still lacking about the Irish model to deal with troubled assets, the authorities have announced the intention to buy the assets at appropriate discounts based on an analysis of the risks involved. In Switzerland, assets from UBS have been transferred roughly at the depressed market values of September 2008. In Germany, assets will be transferred at a 10% discount from the book value with any remaining losses absorbed by bank shareholders over the following 20 years. ¹²

12. While earnings uncertainty associated with the remaining losses is borne by existing shareholders, it should not prevent banks from raising equity capital, *e.g.* in the form of preference shares.

Private participation has been sought to value troubled assets...

Private participation can help to value troubled assets and hence facilitate their transfer from banks' balance sheets. This is the case of the Public-Private Investment Program (PPIP) launched by the US authorities. It aims at removing problem assets from banks' balance sheets by buying both problem loans and securities, relying on market price discovery mechanisms. Private involvement is intended to make the process transparent. The public authorities encourage private participation by taking equity stakes alongside private investors and offering non-recourse loans so that the maximum possible losses to private investors are confined to their original capital investment. A benefit of this scheme is that the public authorities can rely on prices determined by private investors for the assets they are purchasing alongside them. On the other hand, by choosing the amount of non-recourse leverage they offer, the public authorities can in effect influence the price at which investors are willing to purchase the assets.

... though relaxation of mark-to-market rules reduces incentives to sell

Successful strategies to deal with troubled assets have to make sure that banks have the right incentives to participate in the programme. In the case of Ireland, while participation is in principle optional, current legal provisions include the possibility of future legislation giving the government authority to force banks to sell their assets to the scheme. In the case of the United States, banks may not have strong incentives to sell troubled assets at substantially discounted values. They may be particularly reluctant to do so when loans are held at a book value which considerably exceeds market values, which is possible due to recently relaxed mark-to-market accounting rules for certain illiquid assets. ¹⁶ In this regard, the stress tests performed by US authorities implied that many big banks were relatively healthy, even in a tougher economic environment, when the troubled assets could be kept on their balance sheets at book value.

Stress tests can clarify banks' capital needs

The US stress tests have aimed to measure in a transparent manner the amount of bank capital needed to ensure that banks will continue lending even under relatively adverse economic conditions. They appear to have helped rebuild confidence in the banking industry, putting banks

- 13. However, the US authorities decided in early June to postpone the implementation of the PPIP for problem loans.
- 14. Though in its initial phase, the Legacy Securities component of the PPIP (described in Box 1.6) has already attracted more than 100 applications from potential fund managers interested in participating in the programme.
- 15. Given a probability distribution of outcomes (and the resulting expected payoff), the price at which a buyer makes an expected zero profit increases with the degree of non-recourse leverage. This is because non-recourse leverage increases the rewards if the asset does well without increasing the loss to the private investor if it does badly.
- 16. The Federal Accounting Standards Board (FASB) decided on 2 April 2009 to relax mark-to-market accounting rules retroactive to 15 March. The new rules give banks more freedom to use models to value assets traded in illiquid markets and also grant banks more flexibility regarding the recognition of losses on longer term assets.

in a better position to raise capital from private investors, and to lend and contribute to a full normalisation in financial conditions. Nevertheless, if loan losses turn out to be higher than those expected in the tests, capitalisation needs could rise substantially. Moreover, going forward it will be important to closely monitor the evolution of bank earnings, which in the tests are expected to cover more than half of the potential write-downs. In the event that operational earnings prove to be less buoyant than expected, alternative sources of capital will be needed. In countries where stress testing is implemented on a regular basis, like in EU countries, it is important to be transparent about the underlying assumptions. Moreover, it is also important that the tests be performed on a timely basis and that the results be publicly available, so as to strengthen confidence in the financial system. Finally, banks that are found to be at risk in such tests should be required to strengthen their capital base.

A clear, prompt and adequate response is needed to reduce future financial risks Whatever strategy the authorities follow to deal with troubled assets, it is important that it is adequately funded and that the authorities are perceived as being ahead of the game, so as to boost confidence in the financial system and economic activity. Relaxing accounting rules at best provides a temporary boost to banks' profitability. Moreover, previous crisis experiences show that the more the policy response is delayed, the higher the associated fiscal costs will be. Hence, early rather than late policy action will help contain the fiscal cost of financial rescue packages and measures to deal with troubled assets in a context where automatic stabilisers and discretionary fiscal policy are imposing already a sizeable burden on public finances. For the financial system to start lending again, losses must be recognised and dealt with clearly at some point, and the sooner it comes the more sound the recovery will be.

Monetary policy

Central banks are responding strongly to the crisis

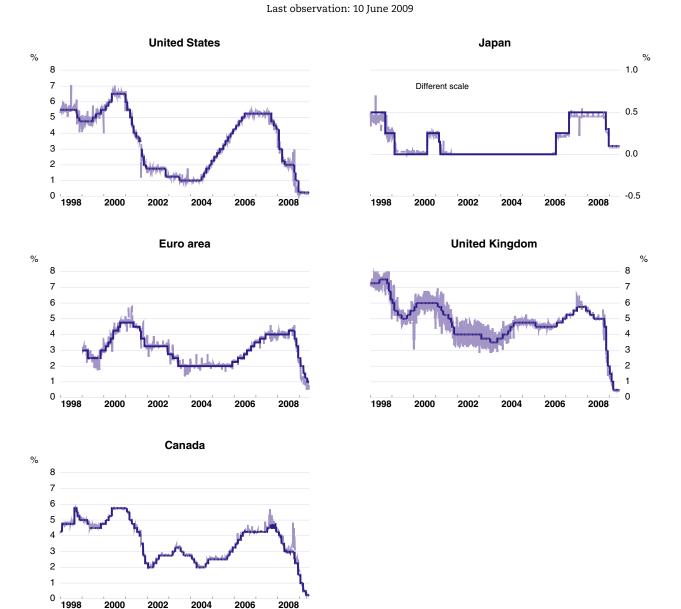
Since the start of the global financial crisis in mid-2007, and particularly after its intensification in mid-September last year, central banks across the OECD area have responded in an unprecedented manner, both by way of conventional rate cuts and unconventional measures.

Conventional monetary policy

Policy rates are exceptionally low...

Central banks across the globe have forcefully acted by cutting policy target rates to historical low levels, bringing policy rates very close to zero in most major OECD economies (Figure 1.19). Differences appear to exist, however, as to the perceived necessary minimum policy rates that will allow money markets to function. The bleak growth outlook argues for using additional room, where it still exists, for interest rate cuts and warrants keeping exceptionally low policy rates for a substantial period of

Figure 1.19. Policy rates are very close to zero in most major OECD economies



Note: The dark line represents the main policy rate of the central banks. The light line plots the effective overnight rate. Source: Bloomberg, Bank of Japan, Datastream, ECB.

StatLink http://dx.doi.org/10.1787/656585873210

time. It is also important for central banks to communicate this explicitly so as to affect interest rates at longer maturities. ¹⁷

17. When the Bank of Japan conducted its quantitative easing policy between 2001 and 2006, one of the most important elements was the commitment to keep this policy until the year-on-year changes in core consumer price inflation turned positive. Empirical evidences show that this commitment had the effect of lowering the yield curve over the short to medium term (Ugai, 2007, Oda and Ueda, 2005).

... in the United States...

• The US Federal Reserve (the Fed) has established a target range for the federal funds rate of 0 to 0.25 % since December 2008 and has communicated its intention to keep policy rates exceptionally low for an extended period. Once financial conditions have normalised and economic recovery is well underway, the Fed will need to withdraw excess liquidity and eventually start raising interest rates to keep inflationary pressure in check. Still, the outlook for a sluggish recovery with low inflation and sizeable slack suggests that interest rate hikes should not become necessary before 2011.

... Japan... • The Bank of Japan has already used its limited scope for manoeuvre to cut rates to 0.1%. The outlook indicates the need to maintain this rate, and to communicate this more explicitly, until the economic recovery is firmly in place and inflationary pressure clearly emerges, likely beyond 2010.

... the euro area... • The European Central Bank (ECB) has cut its main policy rate less aggressively, with the rate on the main refinancing operations at 1%. 18 The grim outlook for economic activity in the euro area and widespread evidence of falling inflation call for exhausting the remaining scope for cutting the rate on the main refinancing operations sooner rather than later 19

Canada

... the United Kingdom and • The Bank of England (BoE) has lowered policy rates to ½ per cent. The Bank of Canada has cut the interest rate to ¼ per cent, and has also conditionally committed to hold this rate until the end of the second quarter of 2010. In both countries, the projections warrant keeping the policy rate as close to zero as possible up to end-2010.²⁰

Non-OECD countries have also substantially eased conventional monetary policy

Many non-OECD countries have also eased the stance of conventional policy since last September. For example, policy interest rates have been reduced substantially in Brazil, Chile, China, India, Israel and South Africa, and minimum bank reserve requirements have been cut in Brazil, China, India and Indonesia. In some of these countries, there is still scope to reduce interest rates to strengthen recoveries or respond to unexpected

- 18. The actual overnight interest rates, however, have fallen below the rate on the main refinancing operations. Since the introduction of the scheme of unlimited liquidity supply at the fixed main refinancing operation rate last October, actual overnight rate has tended to hover between the refinancing rate, which effectively acts as a cap for interbank overnight lending, and the deposit rate, which serves as a floor.
- 19. Given that the rate on the deposit facility has already reached very low levels at 14 per cent, further reduction in the main refinancing rate implies that the difference between these rates would decrease, which poses a risk of discouraging interbank lending. However, the experience of other major OECD economies where central banks with very low policy rates now operate with either no or a very small margin suggests that this is not necessarily the case as, for instance, US interbank lending has increased and rates have fallen despite a near zero margin.
- 20. Other OECD central banks whose policy rates have come down to very low levels are Switzerland (at somewhat below ½ per cent) and Sweden (at ½ per cent).

weakness. China also raised the ceiling on bank lending, and relaxation of maximum leverage restrictions for off-budget local government entities and locally-owned public enterprises, implemented in November contributed to credit expansion of 50 per cent (at annual rates) in the five months to April.

Unconventional monetary policy

Unconventional measures are increasingly used...

Because a need for demand stimulation remains as most major OECD central banks have nearly or fully exhausted the room for further reduction in policy rates and because financial markets in a number of ways remain impaired, the focus of monetary policy is shifting away from the conventional targeting of short-term interest rates to more unconventional measures. Unconventional measures as implemented to date can be generally considered as falling into three broad categories. Firstly, central banks may seek to provide the banking sector with greater access to liquidity than would normally be required to keep market shortterm rates in line with policy targets.²¹ Secondly, central banks may more explicitly aim at expanding money supply through the creation of excess reserves – this type of policy is often called quantitative easing. Thirdly, central banks may as well intervene directly in broader segments of credit markets beyond the traditional counterparty of banks and aim at easing overall credit conditions in the economy. These measures are often referred to as credit' easing. In fact, partly reflecting dissimilarities in their financial systems and operational frameworks, central banks differ in their actual implementation of unconventional measures as follows:

... in the United States...

• The Fed has taken a multifaceted approach in its implementation of unconventional measures, all with a view to restoring the flow of credit to ultimate borrowers. Reflecting the importance of direct financing from capital markets, the Fed has been intervening directly in dysfunctional key segments of the credit market, such as the ones for commercial paper and securitised products, where the Fed is now effectively lending to the ultimate borrowers by providing investors in those markets with a means to refinance their investment. In addition, it has started to conduct or expanded outright open-market purchases of mortgage-backed securities, agency bonds and, more recently, longterm government bonds, with the aim of lowering long-term interest rates.

- ... Japan... The Bank of Japan has also introduced measures aimed at providing ample liquidity to the financial system and consequently to support
 - 21. The existence of excess reserves would exert substantial downward pressures on overnight interest rates in the interbank market. In order to retain the controllability of short-term interest rate, interest rates paid on excess reserves have assumed an importance, as they should impose a lower bound on market rates. Indeed, central banks that formerly did not allow excess reserves to earn interests (such as the Fed and the Bank of Japan) have recently started doing so.

credit flows to the economy at large, including a temporary facility that provides unlimited funds against the collateral of corporate debt at the target overnight rate. The Bank has also set out a scheme for outright purchases of commercial paper and corporate debt and increased the pace of buying long-term government bond. Moreover, the Bank has gone further in its direct support of the banking sector to adopt more unusual measures such as resuming a programme of buying corporate shares from banks and providing banks with additional capital though subordinated loans.

... the euro area...

• As for the ECB, partly reflecting its inherently flexible operational framework and the dominance of bank-based financing in the euro area, unconventional measures have been concentrated on easing the conditions and increasing the scale of its operations to provide liquidity to financial institutions. In particular, the ECB has eased its collateral framework and lengthened the maturity of its operations up to one year. It has also switched from a regime where a limited amount of funds was allotted by competitive bidding to supplying liquidity without limit at fixed rates. In addition, it has recently announced a new programme of direct purchase of covered bonds with the view to reviving the functioning of this impaired market segment.

... and the United Kingdom

 The Bank of England has initiated, and recently expanded, a large-scale programme to purchase government bonds and, to a lesser extent, corporate bonds, with the aim of rapidly expanding the monetary base.²² It has also in place a scheme to purchase commercial paper to support the function of this market.²³

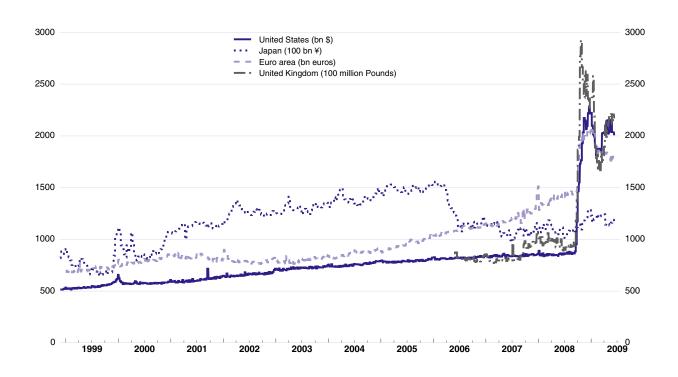
Unconventional measures have resulted in dramatic changes in central bank balance sheets...

These unconventional measures have resulted in a significant expansion of central banks' balance sheets (Figure 1.20) involving the creation of excess reserves, with base money increasing twofold in the United States and by about 20 and 8% in the euro area and Japan, respectively, over the past year. Significant compositional changes have also occurred on the asset side.²⁴ Indeed, the quality of assets held by central banks has changed considerably following the significant relaxation

- 22. The quantitative easing policy implemented by the Bank of England is similar to the policy implemented earlier in the decade by the Bank of Japan in its focus on excess reserves. The large size of the purchase equivalent to almost 9% of GDP to be made within six months implies, however, that the expected pace of increase in the base money is significantly more rapid in the case of the United Kingdom. In addition, the Bank has recently announced its intention to expand liquidity provision to corporations, such as through purchases of asset-backed commercial paper.
- 23. The Swiss National Bank has also initiated unconventional policies which consist of outright purchase of corporate bonds and intervention in the foreign exchange market to prevent further appreciation of the Swiss Franc against the euro
- 24. The relative importance of the asset side is a major element that distinguishes current measures from the quantitative easing policy taken by the Bank of Japan in 2001-06.

Figure 1.20. Unconventional measures have led to expansion of central banks' balance sheets

Latest available date: 11 June 2009



Source: Datastream.

StatLink http://dx.doi.org/10.1787/656622052558

of collateral rules in terms of maturities, asset types and classes, and the outright purchases of public and private financial assets.²⁵

... which may have implications for the credibility and independence of central banks Central banks are therefore taking on more credit and interest rate risk, and losses can occur, even when operations are collateralised. This again could, in principle, pose a risk to the credibility and ultimately the independence of central banks. In addition, the implementation of unconventional measures that can affect credit allocation has led to a situation where the distinction between monetary policy and fiscal policy has become increasingly blurred.

Although many measures are of temporary nature...

These unconventional measures have been dictated by the need to alleviate the extreme stress in the financial market. Thus, they need to be gradually scaled back as conditions in financial markets normalise, arguably even before central banks start raising policy rates. It is

^{25.} For instance, while securities held outright by the Fed used to be almost exclusively comprised of risk-free US Treasury securities before the crisis, most recent data show that more than 40% are now held as agency bonds and mortgage-backed securities. For the ECB, annual data show that in 2008, 28% of collaterals it assumed were asset-backed securities, in comparison with 16% in 2007.

important to note that most of these unconventional measures have been designed and implemented in ways that facilitate their orderly removal. For instance, most measures have already been announced as temporary, with specific deadlines. Furthermore, through the requirement of upfront payment of premia or the imposition of stringent haircuts, programmes have generally been designed in such a way that market participants' incentives for using them diminishes as conditions in credit markets improve.

... exit strategies must be carefully planned to avoid inflationary consequences

Still, the orderly removal of these unconventional measures can pose a number of challenges, requiring a careful planning of an exit strategy, particularly given that unconventional measures have likely led central banks to hold more longer-term assets than in normal times. The exact timing and the pace of implementing such a strategy may be difficult to plan in advance, given a high degree of uncertainty in the pace of normalisation of the financial conditions: the fact that expiry dates for many of the temporary programmes have already been extended several times over attests to this point. Abrupt and too early withdrawal would hamper an economic recovery that is most likely to be fragile, as it would effectively constitute monetary tightening. Thus, for instance, longerterm maturity assets should be sold gradually. Yet, there is a concern that unless liquidity is withdrawn at a pace commensurate with the eventual improvement in financial markets, financial conditions could become too easy and thereby destabilise inflation expectations and ultimately inflation. In this respect, it is important to prepare instruments that will make it possible to withdraw excess reserves without necessarily having to sell assets and contract the overall size of central banks' balance sheets. For this purpose, additional reserve management tools, such as issuance of central bank bonds, may be desirable, so that unconventional measures can be unwound smoothly.²⁶

Current monetary policy frameworks have weaknesses...

Over a longer horizon, when the economic recovery is firmly in place, monetary policy frameworks may need to be reassessed as part of a greater effort to prevent another crisis. One of the most important lessons from the current crisis is that financial bubbles, characterised by rapid increases in asset prices, credit availability and risk appetite, can be very destabilising and costly. While targeting asset prices is fraught with difficulty and probably not desirable as such, monetary policy frameworks nonetheless will have to put a greater weight on asset market developments, as well as overall credit conditions, even when general consumer price inflation in general is expected to remain within the target. In addition, current monetary policy frameworks have been associated with deflation in Japan in 2000-07, a threat of deflation in the United States in 2003 and a risk of deflation in coming years in many OECD countries (see Box 1.3).

^{26.} In the eventuality that central banks start to raise interest rate, interest paid on excess reserves should facilitate the control of market rates.

... and need to be reassessed in the future

This suggests that the objectives of monetary policy may need to be reassessed. One possible option to reduce deflation risk, and the influence this asymmetric risk may have on monetary policy in an inflation-targeting regime, would be to lift inflation targets. However, such a change could compromise hard-earned confidence in the ability and resolve of central banks to keep inflation in check. An alternative option would be to target a price level path instead of an inflation rate because a credible price-level targeting regime can practically eliminate the risk that policy rates may be constrained by the zero floor (Cournède et al., 2009). An important caveat is that any changes in monetary policy frameworks should occur only once the economy has stabilised and current objectives are attained for fear of undermining confidence in central banks.

Fiscal policy

Fiscal positions are worsening dramatically...

Across the OECD, fiscal deficits are projected to increase markedly from 2007 to 2010 (Table 1.6). In four countries (Ireland, Spain, United States and United Kingdom), the deficit is expected to exceed the OECD average of 8% per cent of GDP in 2010, while in a further 13 countries the deficit is projected to exceed more than 5% of GDP. The deterioration in fiscal balances will sharply push up government debt. On top of deficits,

Table 1.6. **Fiscal positions are deteriorating dramatically**Per cent of GDP / Potential GDP

	2006	2007	2008	2009	2010		
United States							
Actual balance	-2.2	-2.9	-5.9	-10.2	-11.2		
Underlying balance ²	-3.0	-3.5	-5.8	-7.7	-8.5		
Underlying primary balance ²	-1.0	-1.4	-3.8	-6.2	-6.8		
Gross financial liabilities	61.7	62.9	71.1	87.4	97.5		
Japan							
Actual balance	-1.6	-2.5	-2.7	-7.8	-8.7		
Underlying balance ²	-4.0	-3.8	-4.3	-5.9	-6.0		
Underlying primary balance ²	-3.3	-3.1	-3.5	-5.0	-4.7		
Gross financial liabilities	172.1	167.1	172.1	189.6	199.8		
Euro area							
Actual balance	-1.3	-0.7	-1.9	-5.6	-7.0		
Underlying balance ²	-1.6	-1.4	-1.9	-2.6	-3.8		
Underlying primary balance ²	1.0	1.2	0.7	0.0	-1.2		
Gross financial liabilities	74.6	71.2	73.4	82.5	89.2		
OECD ¹							
Actual balance	-1.3	-1.4	-3.2	-7.7	-8.8		
Underlying balance ²	-2.4	-2.5	-3.8	-5.5	-6.2		
Underlying primary balance ²	-0.5	-0.6	-2.0	-3.8	-4.4		
Gross financial liabilities	75.0	73.5	78.7	91.6	100.2		

Note: Actual balances and liabilities are in per cent of nominal GDP. Underlying balances are in per cent of potential GDP. The underlying primary balance is the underlying balance excluding the impact of the net debt interest payments.

Source: OECD Economic Outlook 85 database.

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^{1.} Total OECD excludes Mexico and Turkey.

^{2.} Fiscal balances adjusted for the cycle and for one-offs.

transactions related to rescues of financial institutions will further increase the gross debt burden. From 2007 to 2010, gross financial liabilities are expected to rise by more than 25 percentage points of GDP in seven countries, with rises of between 15 and 25 percentage points in a further eight countries. Outside the OECD area, the evolution of fiscal balances is expected to differ across countries: only minor, if any, deterioration in Brazil, India and Indonesia, and sharp deteriorations in China, Chile and the Russian Federation (the latter two mainly due to weak commodity prices).

... due to both cyclical and structural factors

The recession is having a strong negative effect on fiscal positions. For the 20 countries with a fiscal stimulus package and available data, the cumulative change in automatic stabilisers accounts on average for about a half (on an unweighted basis) of the cumulative deterioration of the fiscal balances over 2009 and 2010 (Figure 1.21).²⁷ The remainder is due to a structural deterioration. This includes discretionary measures in response to the financial crisis, which on an (unweighted) average account for a fifth of the change.²⁸ The other structural component encompasses other effects, such as the disappearance of exceptional revenues related to the asset price boom and buoyant growth in construction and financial services, and discretionary fiscal policy measures other than those in response to the crisis.

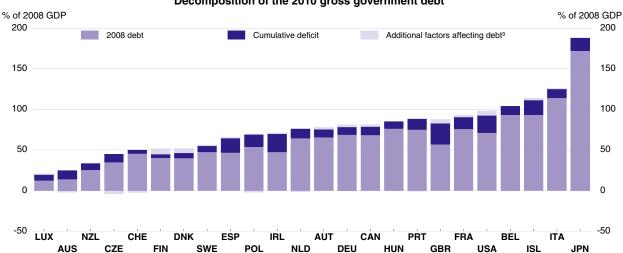
Contingent liabilities and credit risk have grown

Measures to support the financial sector, including risk-sharing with the private sector against further price declines of troubled assets as well as central bank purchases of private sector securities and longer-term lending, have increased both the contingent liabilities and credit risk that governments face. In addition, further bank losses may well require substantial further capital injections by governments. As a rough guide, estimated bank losses this year and next may imply further capital injections by governments of around 1 to 3%, 2 to 5% and 3 to 9% of GDP in the United States, the euro area and the United Kingdom respectively.²⁹

- 27. Compared with the *Interim Economic Outlook* from March 2009, potential growth rates have been revised down because of the crisis. This implies that the decomposition of deficits into structural and cyclical parts changes, with a smaller cyclical component and a large structural component.
- 28. Some countries, such as Italy, have changed the composition of revenue or spending items in response to the crisis without affecting fiscal balances.
- 29. This is based on IMF estimates (IMF, 2009) of future bank losses over 2009 and 2010 of \$550 billion, \$750 billion and \$200 billion in the United States, euro area and the United Kingdom respectively. It further assumes that greater risk-aversion will require banks to raise enough capital to return leverage ratios to the lower levels observed in the 1990s in the United States prior to the 2000s credit boom. The lower end of the range assumes governments would have to contribute 25% of the required capital and the upper end of the range that 75% of bank capital needs would need to be provided by the public sector.

Decomposition of cumulative changes in government balance, 2009-101 % of 2008 GDP % of 2008 GDP 20 20 Cyclical Fiscal package Other² Cumulative change in deficit 15 15 10 10 5 5 O 0 -5 -10 -10 -15 -15 -20 -20 ISL ITA POL PRT BEL USA ESP FIN NLD NZL HUN CZE JPN AUS **SWE GBR** CHE IRL DEU CAN DNK Decomposition of the 2010 gross government debt 200 200 2008 debt Cumulative deficit Additional factors affecting debts

Figure 1.21. Fiscal positions are worsening markedly



- 1. Sum of 2009 and 2010 deviations from 2008 levels of government balances.
- Cumulative changes in deficit minus the sum of the fiscal package and the cyclical components. This captures effects such as discretionary fiscal policy measures other than those in response to the crisis and the disappearance of exceptional revenue buoyancy.
- 3. 2010 debt minus the sum of 2008 debt and the cumulative deficit for 2009-10. This includes debt-increasing equity participations in companies.

Source: OECD Economic Outlook 85 database.

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For most countries fiscal positions remain expansionary this year and next

On average, fiscal stances, as measured by the change in structural balances, are expansionary in both 2009 and 2010 although less so in 2010. In Germany and Italy as well as in the euro area as a whole, the fiscal stance will be more expansionary in 2010 than in 2009. On the other hand, in a few countries (including Australia, Portugal and Spain), the fiscal stance becomes contractionary owing to fiscal consolidation measures. The expansionary stance in 2010 reflects other factors than the crisis measures, the size of which will fall by around half a percentage point of GDP from 2009 to 2010 (for the size, composition and timing of

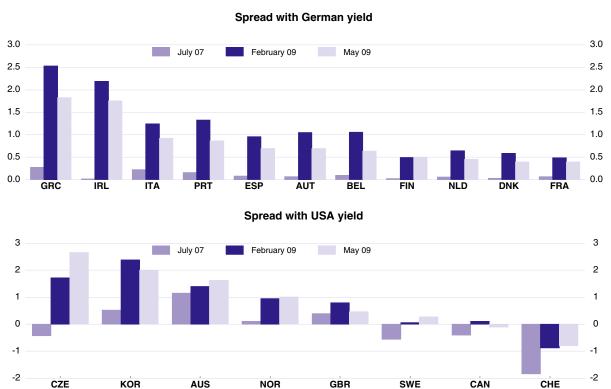
fiscal packages, see Appendix 1.A1). That said, a few countries are finding it difficult to implement spending increases according to plan, which may eventually result in a larger share of fiscal packages being spent in 2010 and, hence, higher than expected deficits in that year.

A balance must be struck between cushioning the recession and sustainability... Future discretionary action needs to balance the risk of premature withdrawal of stimulus against the risk of further destabilising fiscal position. While economic growth in most OECD countries is likely to move into positive territory around the turn of 2010, the path of recovery is set to be shallow and considerable risks to the downside remain. This suggests that a tighter stance should be pursued only where debt sustainability concerns are important. Where this is the case, a loosening of the stance would risk adverse reactions in financial markets, thereby crowding out private spending and increasing debt-sustainability problems (see Chapter 4).

... taking into account market reaction...

Financial market responses to the deteriorating fiscal situation appear so far to have been muted in the United States and Japan. However, the rise in the spreads between benchmark sovereign bond yields in Germany and the United States and other OECD countries since mid 2007 highlights that markets have become more discriminating in their assessment of risk since the onset of the financial crisis (Figure 1.22). Although these spreads have

Figure 1.22. Sovereign bond spreads have increased in most countries



Source: Datastream.

StatLink http://dx.doi.org/10.1787/656652618185

declined somewhat since their peaks in March they remain at elevated levels and are unlikely to fall to pre-crisis levels when general risk aversion in financial markets was abnormally low. In the more risk-averse post-crisis world, governments will likely face greater market discipline of their policies than they have been used to in recent years.

Policy requirements need to be tailored to individual circumstances

The balance of these considerations varies considerably across the OECD implying a range of responses from not allowing the automatic stabilisers to fully operate to further discretionary stimulus. In a few countries (including Greece, Hungary, Iceland and Ireland), the state of public finances restricts the scope to allow automatic stabilisers to fully operate and requires more immediate action to reduce the deficit. By contrast, some low-debt countries have scope to implement further discretionary fiscal policy stimulus to offset any programmed tightening, augment a timid fiscal impulse or respond to unexpected weakness in activity in 2010 (Germany, Canada, some Nordic countries and Switzerland), as reactions in financial markets would most likely be muted. However, even in these cases the benefits of additional discretionary stimulation packages beyond those already announced would need to be carefully weighed against the future debt servicing costs, declining programme effectiveness and potential implementation lags.

Structural policy

Structural policy needs to limit increases in structural unemployment

An urgent task for structural policy is to limit the extent to which increases in cyclical unemployment result in hikes in structural unemployment. This is a crucial aim in itself but also derives from the fact that higher structural unemployment will make the medium-term fiscal consolidation process much more difficult (see Chapter 4). The experience from earlier recessions is that the unemployed become gradually disenfranchised from the labour market, due to increased discouragement, losses of basic and professional skills, and wage determination mechanisms that favour "insiders". At the same time, it is necessary to avoid that potential output is undermined by changes in product market policies, most notably actions restricting cross-border trade.

Crisis-related changes in labour market policy have involved:...

Labour market policy has been adjusted in most OECD countries in the wake of the crisis to stimulate labour demand, assist the unemployed with job search and enhance their prospects of finding a job, and increase income support for particular groups or job losers in general.³⁰

... enhanced labour demand support...

 Labour demand support has taken various forms: reduction in labour costs in general, hiring subsidies, short-time subsidies and direct job creation. These measures have helped to limit job losses in the short

^{30.} For details of changes in labour market policy in response to the economic downturn, see OECD (2009).

term, but their effectiveness may be reduced in the long run due to dead-weight losses. Short-time working subsidies (such as income support to workers in companies that have reduced working hours per person) may be suitable when firms are faced with temporary cuts in product demand and a dysfunctional financial system, but in the longer term they would reduce labour utilisation, hamper reallocation and undermine productive potential.

... stronger activation requirements and assistance with job search and improving job prospects...

• Measures to help unemployed persons find jobs have included stronger activation requirements (e.g. earlier intervention and personalised counselling), enhanced job-search assistance and matching, and greater capacity to train and provide work experience, often targeted at disadvantaged job seekers. These measures have been found to be effective in increasing re-employment opportunities in the past but their effectiveness has not been tested in a deep downturn. They are, however, likely to be particularly important as the recovery starts, and countries need to have adequate resources in place for this activity at that stage, which may require action now.

... and changes in income support systems...

Enhanced income support for job losers has included relaxing eligibility requirements for unemployment benefits and increasing the generosity of unemployment and other related benefits. In some countries, where reforms of job protection in the past had focused on liberalising rules for temporary and irregular workers, these groups have usually been the first to lose jobs and have frequently been ineligible for income support. Hence, changes in eligibility requirements have aimed at giving temporary and irregular workers stronger entitlement to income support, which could strengthen the attachment of such workers to the labour market in addition to being needed on social grounds. At the same time, increased generosity of unemployment benefits, either higher benefit levels or longer maximum duration of benefits, in some countries have aimed to reduce the risk of hardship for job losers in the recession. However, given the evidence that higher generosity tends to increase unemployment, such measures will need to be scaled back or counter-balanced by stronger activation measures as the recovery takes hold.

... but more needs to be done

While some of the measures listed above will prove helpful in limiting the extent of future increases in structural unemployment, it is doubtful if they go far enough. In particular, although resources have been increased in public employment offices that manage the delivery of support to the unemployed, the increase has been proportionally less than the increase in the number of unemployed. In general, additional discretionary public spending related to active labour market policy amounts only to around 25% of normal annual spending on such measures on average across OECD countries (or around 0.15% of GDP).

Strong domestic and international competition in product and financial markets needs to be

Stronger competition in product and financial markets would be beneficial for employment and the economy more generally. However, there is a risk that emergency measures taken during the crisis will distort and weaken competition in these markets. Increased public ownership of financial institutions could result in misallocation of credit in the economy, as seems to have been the case with public ownership in this area in the past. Moreover, financial support to private institutions has in some countries been made conditional on increased focus on domestic operations, which may undermine cross-border competition in financial services. As for product markets, government support to companies and sectors in financial difficulties has distorted competition by preventing exit of less efficient producers. This has been most prominent for the car industry but extends to other activities as well. If seen as discriminating against foreign producers, this risks giving rise to retaliation and fuelling protectionist sentiment. Indeed, import-restraining measures, such as antidumping, countervailing duties and safeguards, have risen sharply during the crisis, initiated by both OECD and non-OECD countries (Bown, 2009). To limit the spread of harmful import restraining measures, governments need to closely monitor such measures on a multilateral basis.

APPENDIX 1.A1

Size, timing and composition of fiscal packages

The two tables (Tables 1.7 and 1.8) in this Appendix on discretionary fiscal responses to the crisis update corresponding tables in Chapter 3 of the *Interim Economic Outlook* from March 2009. For the methodological principles applied in measuring fiscal packages, see Appendix 3.1 of the Interim report.

Table 1.7. The size and timing of fiscal packages

	2008-2010	net effect on fisc	Distrib	oution over the 2008-2010	Memorandum item: Measures affecting the timing		
	Spending	Tax revenue	Total	2008	2009	2010	of payments ²
	Per cent of 2008 GDP			Perd	cent of total net	Per cent of 2008 GDP	
Australia	-4.1	-1.3	-5.4	13	54	33	
Austria	-0.4	-0.8	-1.2	0	79	21	
Belgium	-1.1	-0.3	-1.4	0	51	49	-0.1
Canada	-1.7	-2.4	-4.1	12	41	47	
Czech Republic	-0.3	-2.5	-2.8	0	56	44	
Denmark	-2.6	-0.7	-3.3	0	33	67	
Finland	-0.5	-2.7	-3.2	0	47	53	
France	-0.6	-0.2	-0.7	0	68	32	-0.5
Germany	-1.6	-1.6	-3.2	0	48	52	0.1
Greece ³	0.0	0.8	0.8	0	100		
Hungary	7.5	0.2	7.7	0	51	49	
Iceland	1.6	5.7	7.3	0	28	72	
Ireland	2.2	6.0	8.3	6	39	55	0.3
Italy	-0.3	0.3	0.0	0	15	85	0.0
Japan	-4.2	-0.5	-4.7	2	74	25	
Korea	-3.2	-2.8	-6.1	17	62	21	
Luxembourg	-1.6	-2.3	-3.9	0	65	35	0.0
Mexico ³	-1.2	-0.4	-1.6	0	100		0.0
Netherlands	-0.9	-1.6	-2.5	0	49	51	0.0
New Zealand	0.3	-4.1	-3.7	6	54	40	0.0
Norway ^{3,4}	-0.9	-0.3	-1.2	0	100		
Poland	-0.8	-0.4	-1.2	0	70	30	
Portugal			-0.8	0	100	0	
Slovak Republic	-0.7	-0.7	-1.3	0	41	59	-0.8
Spain	-2.2	-1.7	-3.9	32	44	23	-1.0
Sweden	-1.7	-1.7	-3.3	0	43	57	-1.0
Switzerland	-0.3	-0.2	-0.5	0	68	32	
Turkey	-2.9	-1.5	-4.4	17	46	37	
United Kingdom	-0.4	-1.5	-1.9	11	85	4	
United States ⁵	-2.4	-3.2	-5.6	21	37	42	
Major seven	-2.1	-2.0	-4.1	15	47	38	
OECD averages	-Z. I	-2.0	-4.1	15	77	30	
All (unweighted) ⁶	-0.9	-0.9	-1.7	12	60	28	
All (weighted) ⁶	-2.0	-1.9	-3.9	15	48	37	
Positive stimulus only	-2.0	-1.9	-3.8	10	40	31	
(unweighted) ⁷	-1.5	-1.6	-3.1	9	53	38	
Positive stimulus only (weighted) ⁷	-2.2	-2.0	-4.3	15	48	37	

Note: Cut-off date for information is 11 June 2009.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/658630235826

Includes only discretionary fiscal measures in response to the financial crisis. Estimates provided here do not include the potential impact on fiscal balances of recapitalisation, guarantees or other financial operations. They also exclude the impact of a change in the timing of payment of tax liabilities and/or government procurement. Negative sign: fiscal balance deteriorates.

Several countries have changed the timing of payment of government procurement and/or tax liabilities. When applying the accrual principle, such measures should not be reflected in the national account data. Still, they affect fiscal balance measures on a cash basis and may have an impact on the economy. They have not been included in the size of fiscal packages.

^{3.} Data not available for 2010.

^{4.} Norwegian data are shown as a percentage of 2008 mainland GDP.

^{5.} Figures for the United States refer to the federal government. Available information indicates that a few states, including California, have passed restrictive fiscal measures which are not included here.

^{6.} Average of above countries excluding Greece, Mexico, Norway and Portugal.

^{7.} Average of above countries excluding Greece, Hungary, Iceland, Ireland, Italy, Mexico, Norway and Portugal.

Table 1.8. Composition of fiscal packages

Total over 2008-2010 period as % of GDP in 2008

	Tax measures					Spending measures						
	Net effect	Total	Indivi- duals	Busi- nesses	Consump- tion	Social contri- butions	Total	Final consump- tion	Invest- ment	Transfers to households	Transfers to businesses	Transfers to sub-national government
Australia	-5.4	-1.3	-1.1	-0.2	0.0	0.0	4.1	0.0	3.0	1.1	0.0	0.0
Austria	-1.2	-0.8	-0.8	-0.1	0.0	0.0	0.4	0.0	0.1	0.2	0.0	0.1
Belgium	-1.4	-0.3	0.0	-0.1	-0.1	0.0	1.1	0.0	0.1	0.5	0.5	0.0
Canada	-4.1	-2.4	-0.8	-0.3	-1.1	-0.1	1.7	0.1	1.3	0.3	0.1	
Czech Republic	-2.8	-2.5	0.0	-0.7	-0.4	-1.4	0.3	-0.1	0.2	0.0	0.2	0.0
Denmark	-3.3	-0.7	0.0	0.0	0.0	0.0	2.6	0.9	0.8	0.1	0.0	0.0
Finland	-3.2	-2.7	-1.9	0.0	-0.3	-0.4	0.5	0.0	0.3	0.1	0.0	0.0
France	-0.7	-0.2	-0.1	-0.1	0.0	0.0	0.6	0.0	0.2	0.3	0.0	0.0
Germany	-3.2	-1.6	-0.6	-0.3	0.0	-0.7	1.6	0.0	0.8	0.3	0.3	0.0
Greece ¹	0.8	8.0	8.0	0.0	0.0	0.0	0.0	-0.4	0.1	0.4	0.1	0.0
Hungary	7.7	0.2	-0.6	-0.1	2.3	-1.5	-7.5	-3.2	0.0	-3.4	-0.4	-0.5
Iceland	7.3	5.7	1.0				-1.6					
Ireland	8.3	6.0	4.5	-0.2	0.5	1.2	-2.2	-1.8	-0.2	-0.1	0.0	0.0
Italy	0.0	0.3	0.0	0.0	0.1	0.0	0.3	0.3	0.0	0.2	0.1	0.0
Japan	-4.7	-0.5	-0.1	-0.1	-0.1	-0.2	4.2	0.2	1.2	0.6	1.5	0.6
Korea	-6.1	-2.8	-1.4	-1.1	-0.2	0.0	3.2	0.0	1.2	0.7	1.0	0.3
Luxembourg	-3.9	-2.3	-1.5	-0.8	0.0	0.0	1.6	0.0	0.4	1.0	0.2	0.0
Mexico ¹	-1.7	-0.4	0.0	0.0	-0.4	0.0	1.2	0.1	0.7	0.1	0.0	0.0
Netherlands	-2.5	-1.6	-0.2	-0.5	-0.1	-0.8	0.9	0.0	0.5	0.1	0.0	0.0
New Zealand	-3.7	-4.1	-4.0	0.0	0.0	0.0	-0.3	0.1	0.6	-0.6	0.0	0.0
Norway ^{1,2}	-1.2	-0.3	0.0	-0.3	0.0	0.0	0.9	0.0	0.4	0.0	0.0	0.3
Poland	-1.2	-0.4	0.0	-0.1	-0.2	0.0	0.8	0.0	1.3	0.2	0.1	0.0
Portugal	-0.8							0.0	0.4	0.0	0.4	0.0
Slovak Republic	-1.3	-0.7	-0.5	-0.1	0.0	-0.1	0.7	0.0	0.0	0.1	0.6	0.0
Spain	-3.9	-1.7	-1.6	0.0	0.0	0.0	2.2	0.3	0.7	0.5	0.7	0.0
Sweden	-3.3	-1.7	-1.3	-0.2	0.0	-0.2	1.7	1.1	0.3	0.1	0.0	0.2
Switzerland	-0.5	-0.2	-0.2	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0
Turkey	-4.4	-1.5	-0.2	-1.1	-0.2	0.0	2.9	0.6	1.2	0.0	0.3	0.6
United Kingdom	-1.9	-1.5	-0.5	-0.2	-0.6	0.0	0.4	0.0	0.4	0.2	0.0	0.0
United States	-5.6	-3.2	-2.4	-0.8	0.0	0.0	2.4	0.7	0.3	0.5	0.0	0.9

Note: See note on Table 1.7.

Total columns are not the sum of columns shown because some components either have not been clearly specified or are not classified in this breakdown.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/658647186571

^{1.} Data not available for 2010.

^{2.} Norwegian data shown as a percentage of 2008 mainland GDP.

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