Economic Assessment of the Euro Area

WINTER REPORT 2009

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EXECUTIVE SUMMARY

The financial crisis has caused global output to decline in 2009, the first such decline since 1946. Unemployment and fiscal deficits have been increasing and inflation worldwide remains muted. However, the combination of measures to support financial markets and exceptionally stimulatory macroeconomic policies has prevented global output from continuing to fall. On the basis of the latest data available, it appears that the worst of the crisis is behind us and that global output and trade started to recover in the third quarter. In addition, conditions in financial markets are slowly improving. We expect economic conditions to continue to improve during the rest of this year and into 2010.

We anticipate that the recovery in output will be slow owing to the severity of last year's economic shock. Behavioural adjustments, such as households' and firms' efforts to decrease indebtedness, will weaken the pick-up in aggregate demand. Consequently, unemployment and fiscal deficits will reach very high levels in the United States and Europe.

Simulation exercises in the Report outline the impact of the fiscal packages in North America and Asia, in particular focussing on the spillover effects to the Euro Area. Overall, the effect on Euro Area output from the North American fiscal stimulus is quite small with open economies being the most affected. In terms of the Asian fiscal packages, spillovers to US exports are much stronger than they are to Euro Area exports, as the high share of intra-Euro Area trade insulates the region to a significant degree from developments in the rest of the world. We estimate the impact on Euro Area export growth to be around 0.4% in 2009.

We forecast a tentative recovery in the Euro Area with GDP increasing by +1.0% in 2010 and +2.0% in 2011. There are several reasons for this relatively modest upturn, including the unwinding of fiscal and monetary stimulus packages, limited domestic demand growth in key trading partner countries, a strong euro exchange rate, continued adjustment of household balance sheets after the bursting of bubbles in the property market in a number of countries, and continued weaknesses in the financial sector.

Table 1: Summary of Key Forecast Indicators for the Euro Area

	2005	2006	2007	2008	2009	2010	2011
Output Growth Rate	1.8	3.1	2.7	0.6	-3.9	1.0	2.0
Inflation Rate (Harmonised)	2.2	2.2	2.1	3.3	0.3	0.5	1.0
Unemployment Rate	9.0	8.3	7.5	7.6	9.4	10.1	10.1
Govt. balance as % of GDP	-2.5	-1.3	-0.6	-2.0	-5.7	-7.2	-6.4
Govt. debt as % of GDP	70.1	68.3	66.0	69.3	79.1	84.4	88.0

As a result of the crisis, unemployment has risen in all Euro Area countries; however there are striking differences across countries in the deterioration of the labour market relative to the output fall. Part of this can be attributed to the different use of subsidised part-time unemployment schemes in countries such as Germany, Italy, Austria and the Netherlands. Unemployment will continue to rise well into 2010 and stay at a high level afterwards.

Inflation is expected to remain moderate in 2010 owing to the substantial output gap and high unemployment. Against this background, the ECB is expected to keep the main refinancing rate at 1% for the remainder of this year, but to raise it slowly in the course of next year in line with the forecast recovery. Based on GDP growth of 2% and CPI inflation of 1% in 2011, we anticipate the ECB will raise the main refinancing rate to above 2% by the end of 2011.

The pickup in economic activity has been triggered in part by fiscal stimuli which will not be continued indefinitely, given that huge public deficits are already adding to high levels of debt in many countries. While across countries national governments will have different views as to when they should switch towards fiscal consolidation, we anticipate that the fiscal stance will be close to neutral in 2010 in the Euro Area as a whole but will be significantly tightened in 2011, slowing the pace of the recovery.

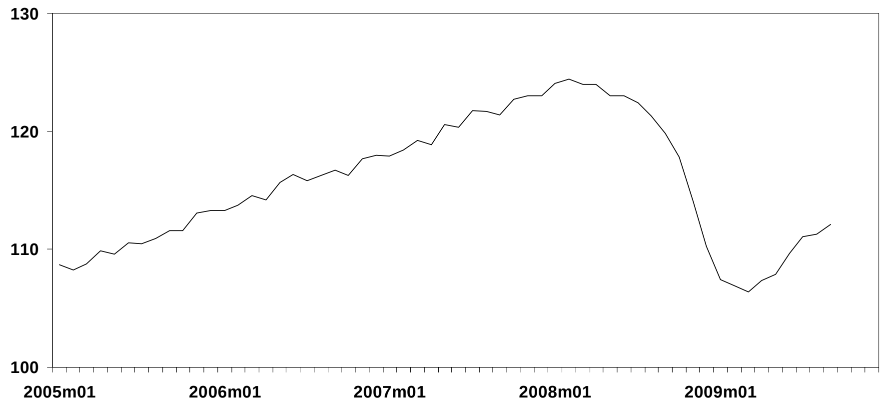
This Report also considers the impact on output of a rise in risk premia: Some of the increase in perceived risk is likely to be permanent, having a long-term impact on potential output. An illustrative 200 basis point permanent rise in borrowing risk premia could reduce the level of output in the Euro Area by around one per cent while a similar rise in the equity premium could reduce output by around 0.2 per cent. Germany and Italy are far more sensitive to borrowing premia shocks than to equity premia shocks, reflecting smaller wealth effects and more limited use of equity finance for investment. In France, the impact of a permanent equity premium shock is somewhat larger than a borrowing premia shock, reflecting the impact of wealth effects on consumption and greater dependence on equity finance.

OUTLOOK FOR THE EURO AREA

1.1 Overview

The worst of the financial crisis is behind us. The crisis has caused global output to decline in 2009. The last such decline occurred in 1946. Unemployment and government deficits are rising fast, while inflation worldwide is very low. Measures to support financial institutions and expansionary macroeconomic policy have saved the financial system from collapse and have brought the fall in output to a halt. In the third quarter, world output and world trade started to recover and leading indicators point to a continuation of this trend in the closing months of this year. The upswing is expected to continue next year, provided that the gradual return to normalcy now taking place in financial markets holds. The outlook for the following years is clouded by the necessity to reduce government deficits and exceptionally large public debt and to make monetary policy less accommodative.

Figure 1: Stunning drop in industrial output in the three months from November 2008 [a]



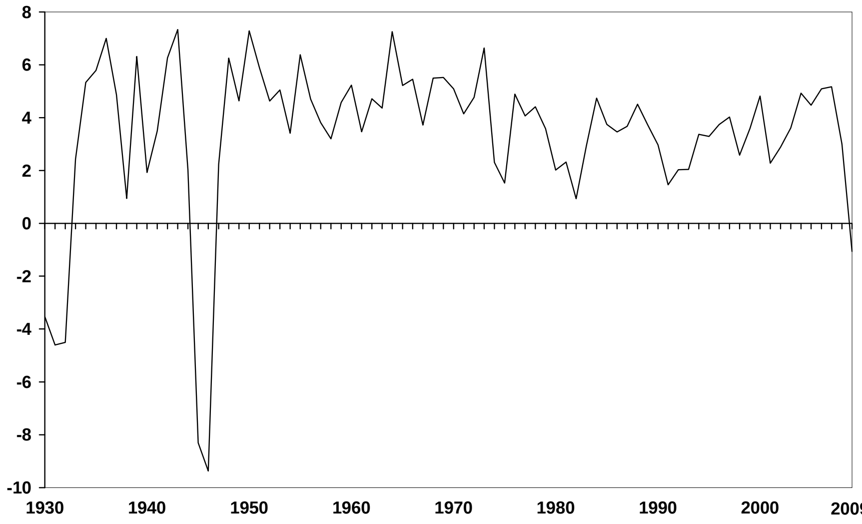
[a] World industrial production excluding construction, index 2000=100, seasonally and working-day adjusted, 2005 up to and including September 2009. Source: CPB World Trade Monitor September 2009.

1.2 Global Outlook

1.2.1 KEY DEVELOPMENTS

The sudden intensification of financial stress in the autumn of 2008, which had been building for over a year, unavoidably played havoc with the real economy. In the course of last year, households incurred a massive loss of wealth on residential property and financial assets. Both households and firms were facing tightening credit conditions, as cautious lenders turned off the tap. Confidence, already heavily eroded by a ceaseless stream of bad news, finally caved in during the autumn of 2008. The decision by the US government not to rescue investment bank Lehman Brothers from bankruptcy was the final blow. Investors panicked, consumers and producers started to cut spending and inventories were cut significantly. From last year's third quarter on, aggregate expenditure in all major economies – the United States, the Euro Area, and Japan – declined substantially. Due to the decline in domestic demand and lack of sufficient trade credit, imports slumped. Increased interconnectedness of national economies, trade financing problems and cancellation of orders caused the damage to spread fast and far. Towards the end of last year, exports from Asia, 'the world's factory', were hit particularly hard. World industrial output fell by a dazzling 9% between October 2008 and January 2009 (Figure 1). It continued to fall, at a more modest pace, up to March 2009. In the final quarter of 2008 and the first quarter of 2009, real GDP in the OECD area dropped twice by 2% from quarter to quarter (non-annualised). The collapse in global trade that started in November 2008 and lasted into January 2009, totalling a stunning 17% in real terms, is even bigger than the slump that occurred during the first year of the Great Depression.

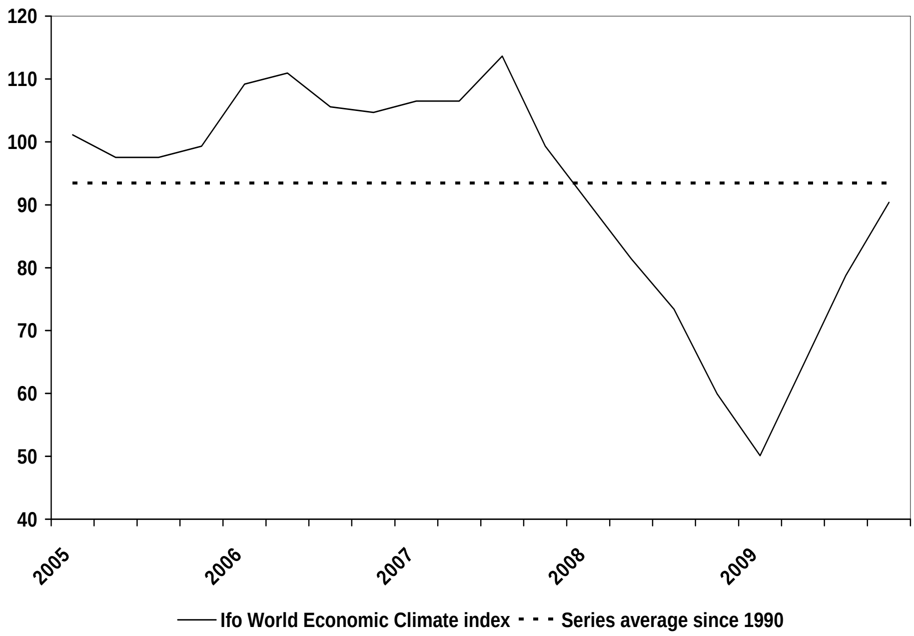
Figure 2: Global GDP drops for the first time since 1946, annual % change [a]



[a] World GDP. Sources: Angus Maddison up to 1980, IMF from 1980 onwards; 2009 figure is projection by the IMF as of October 2009.

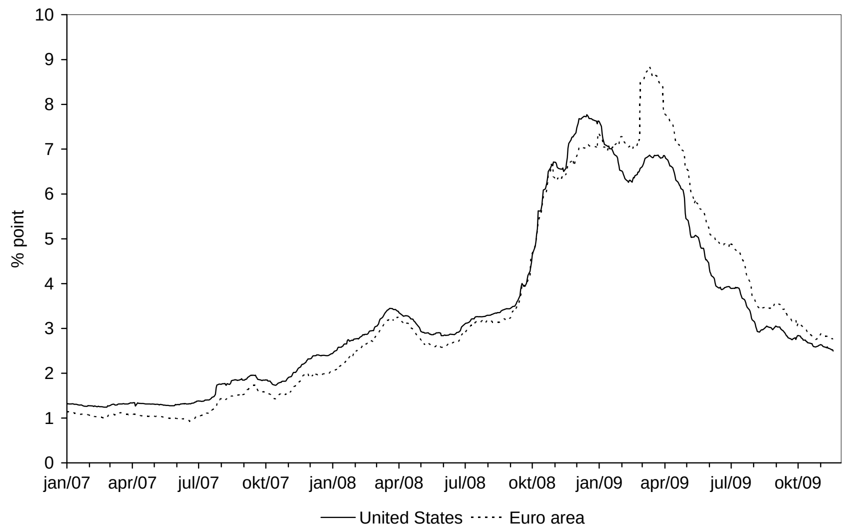
The combination of measures to support financial institutions, fiscal stimuli of unprecedented proportions and extremely stimulative monetary policy has prevented the world economy from continuing its free fall after the first quarter of 2009[1]. Financial conditions have been gradually improving since then. The colossal loss of output was not repeated in the second quarter of 2009. In some countries, GDP was even slightly higher, while in almost all other countries the second quarter production decline was much smaller. In the second quarter, global world industrial production increased by over 1% from the previous period, after contracting by 6% in the final quarter of 2008 and again by 6% in the first quarter of 2009 (non-annualised). The recovery has continued in the third quarter, when industrial production rose by around 2½%. In spite of the expected continuation of the positive growth trend, world GDP will probably fall by over 1% this year, the first drop since 1946 (Figure 2).

Figure 3: World economic climate has improved substantially in the course of 2009



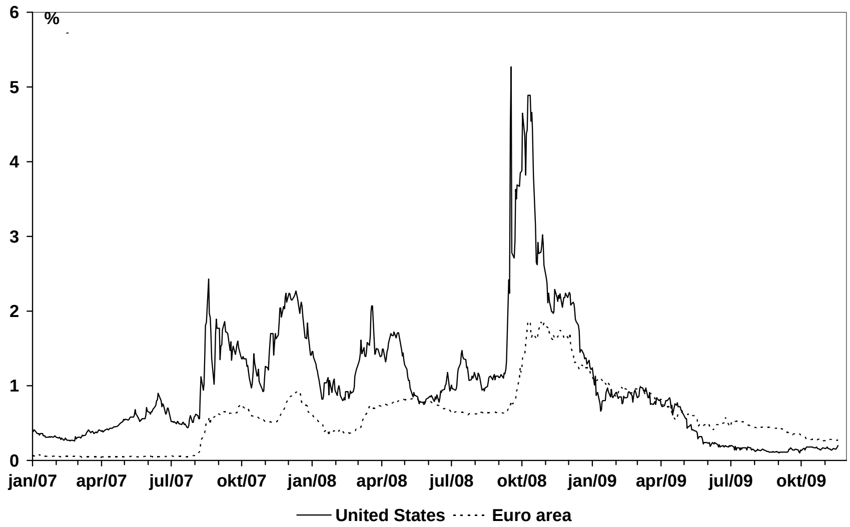
[1] See also special sections on Asian and North American fiscal stimulus packages.

Figure 4 Financial market conditions are normalising gradually
Risk premium capital market [a]



[a] Interest spread between 7-10 year BBB-rated corporate bonds and 10 year government bonds.

Figure 5: Short-term interest rate minus t-bill rate



We expect economic conditions to continue to improve during the rest of this year and into 2010. Leading indicators for major economies and more positive assessments of current and future economic conditions as indicated by business surveys (Figure 3) support this view, while conditions in financial markets keep improving gradually. Most financial market indicators confirm that after a period of near-unprecedented turmoil, conditions in financial markets have normalised considerably (Figure 4). A full return to conditions prevailing before the crisis is not in order however. Risk premiums will remain more or less elevated relative to pre-crisis levels. The current expansionary policy stance, both fiscal and monetary, will continue well into next year. Output and trade will recover slowly, owing to the severity of last year's economic shock. Behavioural adjustments, such as households' and firms' efforts to decrease indebtedness, will weaken the pick-up in aggregate demand. Consequently, unemployment and fiscal deficits will reach very high levels in the United States and Europe. In 2010, world trade will grow again on a year-on-year basis, but not strongly enough to make up for the collapse in trade that occurred in the beginning of this year. Global output could surpass the pre-crisis levels by the end of 2010 due to a strong rebound in emerging economies. Output in the advanced economies, however, will remain below previous record levels.

World GDP growth is expected to accelerate further in 2011 but not to exceed the long-term average. This also holds for the Euro area. The main driving force will be private investment. Consumption remains in check as unemployment is likely to stay high over the forecast horizon in most countries.

Inflation worldwide is very low in spite of official interest rates being close to or equal to zero and huge amounts of liquidity having been created since September 2008. In most OECD countries inflation has been on the decline since the middle of 2008 and in recent months, prices themselves have been decreasing on a year-to-year basis in the major economic regions. In the Euro area, headline inflation is expected to be ¼% only in 2009, while in the United States, it is expected to be minus ½%, which will be the first negative figure to be recorded since 1955. The other G3 country, Japan, has been on and off the brink of deflation for many years and there is no sign that this is going to change fundamentally in the near future.

The recent price decreases in the Euro area and the United States are mainly a short run phenomenon which is driven by declining energy prices. Energy inflation has been negative since the oil price has come down dramatically from the record level reached in the summer of 2008. For the slightly longer run, it must be noted that core inflation has shown a steady decline in both the United States (from 2006) and the Euro area (from the middle of 2008). The presence of large amounts of slack in most OECD economies – unemployment, unused production capacity, and (in the United States) home vacancies – will continue to have a dampening effect on wages and prices. Core inflation in the Euro area is expected to fall to close to zero by the end of 2010, after which it will start to rise slowly.

According to the dollar-based HWWI-index world commodity prices hit their all-time high in July 2008. The exact date of the peak and the extent of the appreciation was, of course, commodity dependent. Brent oil peaked on July 3rd at 144 dollar per barrel which was, surprisingly enough, more than twice as much as at the outset of the credit crisis in August 2007. In general the strong rise in commodity prices to levels well above earlier highs can be explained by an upward shift in overall demand due to increasing requirements of emerging markets, particularly China. Moreover, marginal costs of industrial and energy raw materials have risen as new cheap sources have run dry. The price increases after August 2007 were also due to the effective depreciation of the US dollar and overly optimistic demand expectations. The steep price declines after the peak were related to a rapidly deteriorating demand outlook as well as to the temporary strengthening of the US dollar being a safe haven. Most commodity prices bottomed out in the beginning of 2009 on rather high levels, considering the ensuing recession turned out to be the deepest since the 1930s. Also the rebound of the commodity prices so far this year has been surprisingly strong as activity remained weak in the industrialised countries.

Oil prices bottomed at around 35 dollars per barrel (Brent) in late December and had roughly doubled by June 2009. Since then the price has fluctuated around a slowly rising trend. The strong recovery of the oil prices was partly due to supply cuts by OPEC as well as to strong Chinese demand, a turn-around in destocking, a renewed weakening of the dollar and growing confidence of an imminent recovery in the industrialised countries. Still, inventories in the OECD countries have risen to levels exceeding the 5-year averages by a wide margin, which stresses the role of speculation for the high prices in the futures markets. Futures have been in contango (i.e. rising), signalling low risk of availability. In spite of the high inventories and the unprecedented idle capacity in the OPEC countries, we expect oil prices to rise, albeit at a moderate pace. The price of Brent is forecast to be 75 dollars per barrel in 2010 and 81 dollars per barrel in 2011 on average, but the price will probably continue to fluctuate over the forecast period.

1.2.2 RISKS AND UNCERTAINTIES

Uncertainties remain high. Even though the low point of the financial crisis has passed, many financial institutions are still struggling. Another adverse financial shock would be a deathblow to many of them, with severe consequences for the global economy. Meanwhile, governments and central banks have to think hard about an exit strategy. Governments around the world have expanded outlays in order to make up for failing private sector demand. Faced with mounting debt, they must decide when to start reducing spending or raising taxes. If the policy reversal comes too soon, the tentative recovery that is only just materialising will fall apart again. If it comes too late, a public debt-overhang will stifle economic growth for years to come. In addition, as a result of government's efforts to save banks from failure, many of these are now in fact public property. At some point in time, sooner rather than later, governments must sell their stakes and hand back control to the private sector. The question is: when exactly? Central banks are facing a similar dilemma. In September 2008, policy interest rates were lowered to zero or close to zero nearly everywhere. Since then, enormous amounts of liquidity has been pumped into the economy. Several central banks have built up large portfolios of private and public sector debt as a result of unconventional measures – generally referred to as 'quantitative easing' – to keep credit flows from running dry completely and to stimulate private sector expenditure. They also have accepted a wide range of assets as collateral for bank loans. As a result, their balance sheets have expanded enormously. The question we are facing is: how and when do they start to unwind these positions and when is the appropriate time to raise interest rates?

BOX 1: From financial crisis to severe economic recession.

In the autumn of 2008 the financial crisis deepened into a recession that in the industrialised countries turned out to be the most severe since the 1930s. Developing Asian countries, including China, also faced severe set-backs, but conditions soon improved thanks to the strong Chinese stimulus. The extent of the crisis was a big surprise to most forecasters. In September 2008, for example, consensus forecasts for the US and Euro Area GDP growth in 2009 were zero and 0.5 per cent. By November 2009 the forecasts had been adjusted down to -2.4 and -3.8 per cent, respectively.

The origin of the exceptionally severe crisis was a long-lasting global imbalance of savings over investment. Savings from China and oil producing countries were channelled to finance the consumption-driven US current account deficit. While the monetary policy was accommodative, loose monetary conditions did not lead to accelerating inflation. Instead, equity prices and especially housing prices rose very rapidly. Mortgages, especially risky sub prime mortgages became very popular, since with housing prices rising, they were very profitable for all parties involved.

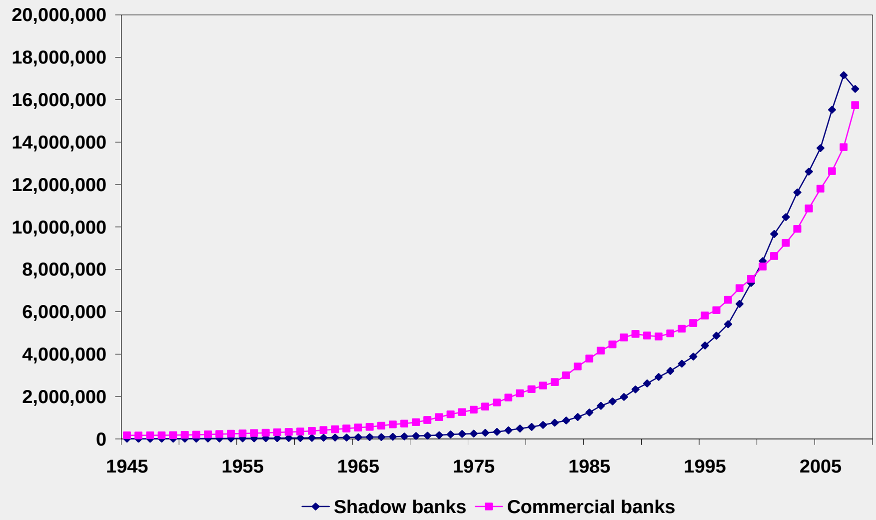
Banks took part in the game by pooling mortgages with different risk profiles into synthetic bonds, so called CDOs (collateralised debt obligation), which were often further pooled to form new financial products. Pooling was important, because it made it possible to design products with desired risk-return characteristics. On top of that, they were often insured via CDS (credit default swaps), for instance by AIG, the largest US insurance company. Since the risks involved with these products were not properly understood, their ratings were good and CDS premiums low. Credit rating agencies' favourable ratings for these products made synthetic bonds very popular world-wide.

Shadow banks used to borrow from liquid short-term markets and invested into less-liquid longer-term instruments like CDOs. While their operations were legal, they maintained inadequate risk buffers, since they were almost completely uncovered by banking regulation. Some "proper" banks had off-balance sheet vehicles like SIVs (structured investment vehicles). While they were not formally included in the banks' accounts, they often had committed liquidity lines or other guarantees from the banks.

During the housing boom, shadow banking grew more rapidly than traditional banking and outpaced the latter in terms of asset value. When the boom ended and the housing prices began to decline in the summer of 2006, the problems started to accumulate in the sub prime markets, which increased the vulnerability of the complex shadow banking system. The biggest lending boom in US history finally ended with the collapse of the shadow banking system after the investment bank Lehman Brothers had filed for bankruptcy protection in mid-September 2008. This affected strongly the proper banking sector as the value and quality of bank assets fell sharply and off-balance sheet items returned to the banks' balance sheets. Leveraging turned into deleveraging and a severe financial crisis evolved into a deep economic crisis.

Global financial markets were close to collapse and public sector authorities used all their means to calm the markets. Liquidity in the financial markets was raised markedly, central bank steering rates were decreased close to zero, banks were recapitalised and deposit guarantees were raised. Central banks began to employ unorthodox measures like quantitative easing to support the financial institutions and revive lending. Governments introduced unusually large fiscal stimulus packages to kick-start the economies. The uncertainty lasted quite a long time, however, and risk premiums have only recently returned to more normal levels. Financial markets are still, in general, very fragile and dependent on government support. Normalisation takes time and depends on a sustainable upturn of the real economy and on additional measures to make the financial system more resilient to shocks in the US as well as globally.

Figure 6: Banks and Shadow Banks Assets in the USA



BOX 2: The CPB World Trade Monitor

The Netherlands' Bureau for Economic Policy Analysis CPB produces a monthly World Trade Monitor covering international merchandise trade values, volumes and prices as well as industrial production of 85 countries. The monthly series start in 1991 and the most recent release runs up to September 2009. It is as such the timeliest source of information in this field. Another important characteristic is that missing data are estimated using all relevant information available. A summary of the data is published monthly on the CPB site[2] covering 9 major regions and the world total. It is possible to get an email alert announcing the release of the monthly world trade monitor data.

The principal goal of the monitor is to get a timely and comprehensive overview of the state of affairs in the world economy. Trade is an important binding element between national economies and the increasing interdependences clearly show up in international trade data. From the middle of the nineties national and regional trade movements show a remarkable degree of synchronization. Trend growth, of course, differs between regions as do the amplitudes of the cyclical swings around the trend. But the high degree of synchronization implies that a shock in one place is easily transferred to other parts of the world, amplifying the original effects, as we have just experienced during the latest financial crisis. The WTM helped to establish the actual downward effect of the crisis on the world economy at the end of 2008 and early 2009 in a timely fashion. Total world trade declined by a massive 17% in the months November to January. During the next 5 months world trade declined further but only marginally, indicating that a severe disaster had been staved off by massive intervention of governments and monetary authorities all over the world. Since the middle of this year world trade is growing again and the pace of the recovery is remarkable. On a seasonally adjusted annual rate world trade increased by almost 20% in the third quarter and leading indicators point to a continuation of this momentum in the fourth quarter of 2009.

Figures 7 and 8 illustrate how the monitor data can also be used for analytical purposes. It compares the momentum[3] of import and export growth in emerging Asia and the world as a whole. It shows that world trade was falling at an annual rate of approximately 40% at the beginning of this year, but that it is growing again since the middle of the year. Imports of emerging Asia, notably China, picked up appreciably earlier. As export growth of emerging Asia recently moved in line with the world average, we may conclude that domestic demand in Asia had been supporting the recovery in the rest of the world.

[1] See http://www.cpb.nl/eng/research/sector2/data/trademonitor.html

[3] Momentum is defined as the annualized rate of growth in the last 3 months over the preceding 3 months.

Figure 7: Momentum[2] of merchandise trade volumes: Imports

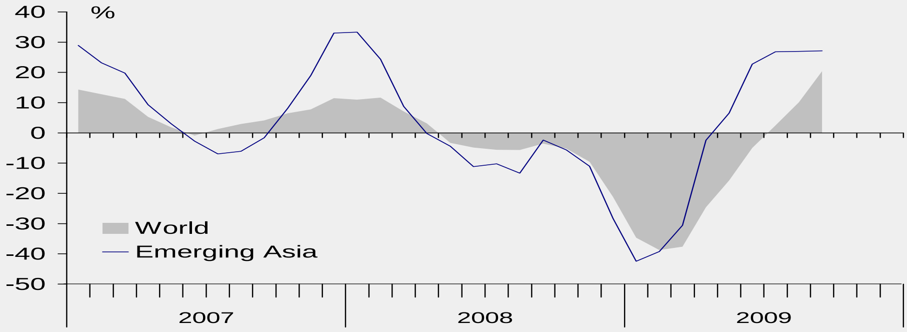


Figure 8: Momentum[2] of merchandise trade volumes: Exports

1.2.3 EXTERNAL ENVIRONMENT

Asia

Several of the economies of East Asia suffered severe output contractions at the turn of the year, but are now leading the global recovery. This points to a strengthening of domestic demand in these largely export-oriented economies, and our forecast entails some rebalancing of global demand. This will allow the large current account surpluses in China and Japan to narrow over the next few years, and help sustain the recovery in the rest of the world.

The collapse of world trade at the onset of the financial crisis impacted severely on the export-driven economies of East Asia. Japanese exports declined by 33 per cent between the third quarter of 2008 and the first quarter of 2009, exports from Taiwan declined by 26 per cent, Hong Kong exports declined by 18 per cent, and Chinese exports declined by 15 per cent. In the case of Japan, the sharp collapse is at least partly attributable to a loss of competitiveness, as the yen appreciated by 26 per cent in effective terms over the same period. Japanese exports are highly price sensitive and should be expected to respond to such a significant appreciation, but there are clearly demand factors at work on top of the competitiveness loss.

Across East Asia many countries have implemented stimulus packages including China, Japan, Korea, Vietnam and Australia. In China a large fiscal stimulus package was implemented in November 2008 and further public investment plans have been made for 2009-10. Our assumptions regarding the total size of the stimulus packages are in line with those of the IMF; we estimate a total fiscal stimulus of around 4.5 per cent of GDP, which includes 1 per cent of GDP in tax cuts and 3.5 per cent of GDP in additional spending (of which 1 per cent is support for government-owned enterprises). The stimulus was implemented from 2009 and is assumed to continue throughout 2010.

The Japanese government has taken numerous measures in response to the crisis, the total stimulus amounting to approximately 4.7 per cent of GDP. The bulk of the stimulus reflects a rise in government expenditure (4.2 per cent of GDP), which feeds though quickly into the Japanese economy. Some minor tax cuts have also been introduced. About ¾ of the stimulus is scheduled for 2009, with the remainder coming in 2010.

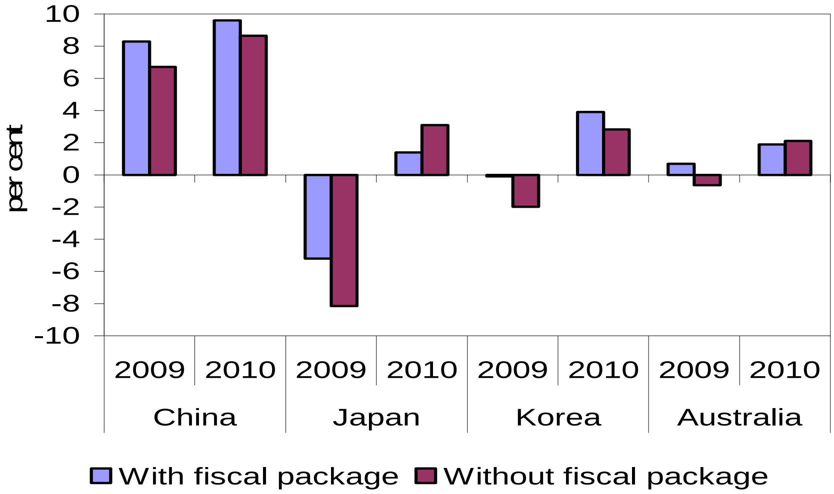
In Korea, the fiscal stimulus has exceeded those of both China and Japan, totalling around 6 per cent of GDP over 2008-2010. More than half of the stimulus is scheduled to take place in 2009, while there was an immediate support initiated in the final quarter of 2008 and about 20 per cent of the package will come in 2010. The package is distributed fairly evenly across spending and tax cuts, with additional spending worth about 3.2 per cent of GDP and tax cuts totalling 2.8 per cent of GDP.

Australia has also introduced a significant fiscal stimulus package, estimated to be worth around 5.4 per cent of GDP spread over three years. Public spending measures amount to 4.1 per cent of GDP, while tax cuts account for a further 1.3 per cent. Again, more than half of the stimulus is planned for 2009, with some initial measures introduced in the final quarter of 2008, and about 30 per cent of the package is due to arrive in 2010.

In order to assess the impact that the fiscal stimulus packages in Asia have had on the world outlook and on the Euro Area in particular, we run a simulation using the NiGEM model, removing the effects of the packages described above for Japan, China, South Korea and Australia, which are already incorporated into our baseline scenario. This allows us to compare the change in GDP we would expect with and without the implemented fiscal packages, as estimated by the NiGEM model simulations. Figure 9 illustrates the impact on

GDP growth in China, Japan, South Korea and Australia. We estimate that without a fiscal stimulus, GDP growth in China would have reached just 6.7 per cent this year, while output would have declined by 8.1 per cent in Japan, 2 per cent in South Korea and 0.6 per cent in Australia. The fiscal multiplier in Japan is somewhat higher than in the other economies, as it loses less through import leakages as the economy is less open.

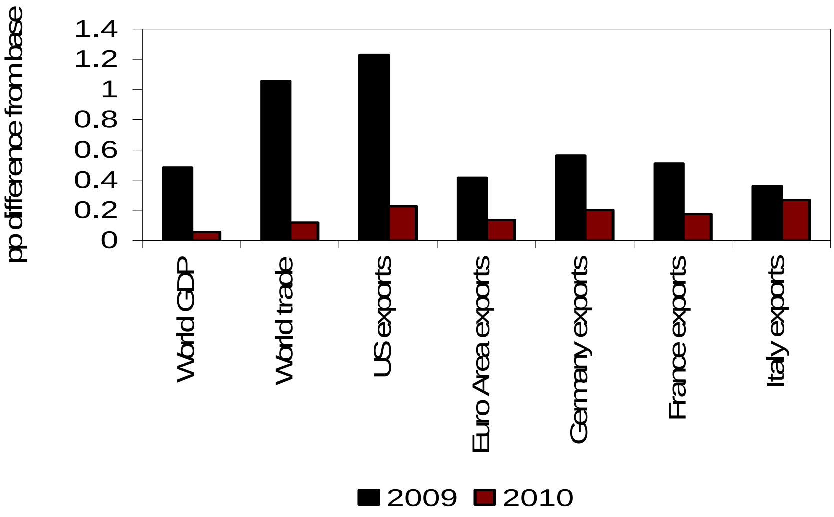
Figure 9: GDP growth with and without fiscal packages



Note: Based on current forecast (with fiscal package) and NiGEM model simulations (without fiscal package)

Figure 10 illustrates the spillovers from the Asian stimulus packages to the rest of the world, based on the NiGEM model simulations. World GDP growth is about ½ percentage point stronger in 2009 as a result, while the packages offset just over 1 percentage point of the decline in world trade. Spillovers to US exports are much stronger than they are to Euro Area exports, as the high share of intra-Euro Area trade insulates the region to a large degree from developments in the rest of the world. As a result, we would expect to see the revival in Asian domestic demand impact to a greater degree on US exports in the short-term, and this is consistent with the revival in US exports observed over the last few months.

Figure 10: Impact of Asian packages on world growth and export growth



Note: Based on NiGEM model simulations

Within the Euro Area, German exports show the strongest response to the Asian expansion, with a rise in export growth of nearly 0.6 percentage points in 2009. The packages are expected to have raised export growth from France by about 0.5 percentage points. The impact on Italian exports is slightly smaller, with an increase in export growth of about 0.4 percentage points in 2009.

As the bulk of the Asian fiscal stimulus was effected in 2009, the impact on growth in the rest of the world is somewhat smaller in 2010. Nonetheless, we see a small positive impact on export growth of about 0.2-0.3 percentage points in the largest Euro Area economies in 2010.

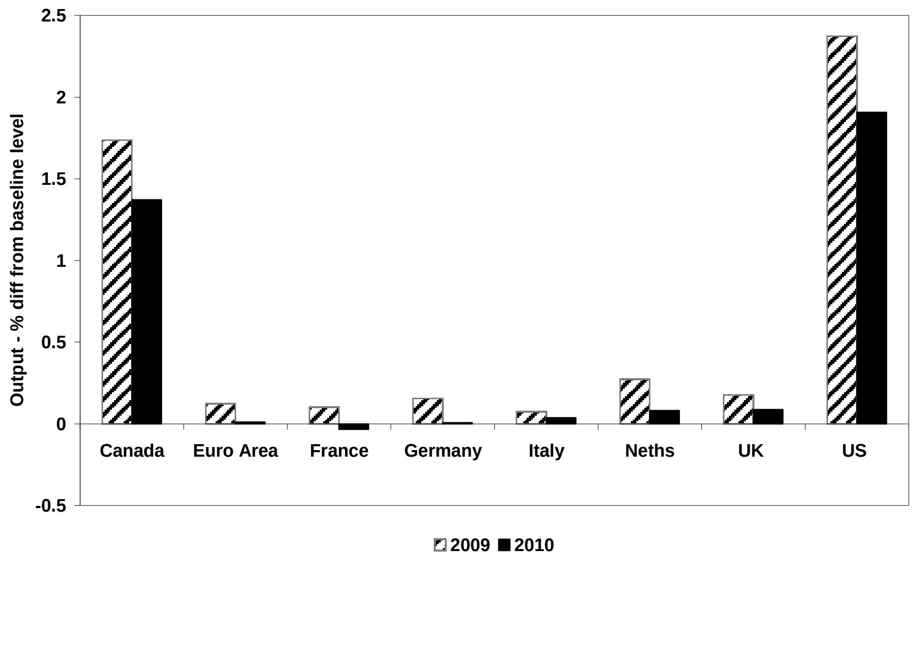
While the NiGEM model simulations help us to quantify the impact of government spending and tax measures on the world economy, they do not capture any additional impact on global confidence, which may have offset a far deeper potential decline in global production. The massive fiscal stimulus is only one of the measures taken to stabilise the global economy and avert the collapse of the economic system at the end of 2008. This was compounded by unprecedented support measures from monetary authorities, and together these massive measures of supported acted to stabilise confidence. They may have prevented further bank failures from occurring and hence stopped the crisis worsening. The analysis above should be viewed in light of these limitations.

Impacts of North American fiscal packages on Euro Area output

Fiscal policy in North America has responded strongly to the crisis, and packages worth 5.6 percent of GDP in the US and 4.1 percent of GDP in Canada, both spread over at least two years, have been introduced since the start of the year. Both packages include spending increases and tax cuts, and the latter are spread over a number of years in the US, as is explained in the Congressional Budget Office report on the policy (CBO 2009). We have taken the spending components and implemented them in NiGEM in order to gauge the scale of spillovers to the Euro Area.

In the US we have implemented a two percent of GDP increase in spending maintained for two years, with the assumption that there is no tax response to the increased debt stock until after the next presidential election. We then assume, or rather use a rule that ensures that taxes are slowly raised over the next 6 years to return the debt stock to target. In Canada we take a spending impulse of 1.7 percent of GDP in each of two years, with the same assumptions about taxes. We also assume that there is no monetary policy response for the first two years. This latter assumption is very important in determining the scale of spillovers to the Euro Area and we discuss it further. We also look briefly at two further scenarios, one where we assume tax rates and short and long term interest rates are fixed for four years, financial markets are backward looking and exchange rates do not change, and an extension of that where the number of liquidity constrained consumers rises from around 16 percent on our base to around 58 percent (half of those unconstrained become so)

Figure 11: Output effects of North American fiscal packages



Output growth in the US could be two percent higher than it would otherwise have been in 2009 as a result of the fiscal packages, giving an initial multiplier that might appear to be around one, whilst in Canada the increase in output might be around 1.7 per cent higher (Figure 11). Spillovers to the Euro Area appear to be small, with the very open economy of the Netherlands most affected, whilst German output would be 0.16 percent higher in 2009 than otherwise, and French output would be 0.1 percent higher. However, this result is heavily influenced by our assumption on interest rates. If the US Federal Reserve and the Canadian Central Bank were to follow standard policy rules in the first two years then they would raise interest rates in response to the increase in demand pressures, and as a result the exchange rate would appreciate, reducing output effects in the US and Canada by a quarter of a percentage point in each year. This flows both from higher interest rates and also from the resulting appreciation of the exchange rate. This impacts on the Euro Area, where there is a difference of almost two percentage points in the effective exchange rates in the two simulations. If interest rates rise in North America immediately in response to the fiscal policy action then output would rise by a quarter of a percent (i.e. double the effects) in the first year and the impact on the level of output would be sustained into the second year.

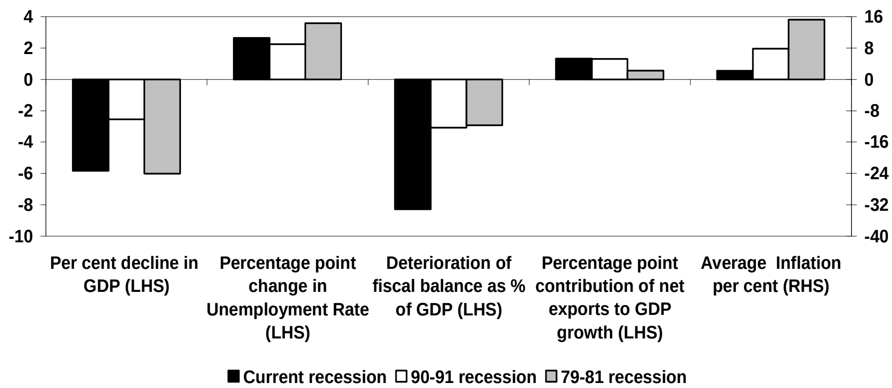
Overall we do not expect a major impact on Euro Area or UK growth from North American fiscal initiatives. This is in part because the impacts on North America are not large, with a fiscal multiplier of around 1 in the first year. This is well below the levels presumed in Romer and Bernstein (2009) and only marginally higher than the calibrated model effect in Cogan, Cwik, Taylor and Wieland (2009). We can of course change our assumptions, but in all scenarios reported here we assume consumers are not forward looking. If we shock the US alone, with fixed tax rates and monetary policy rates in the first two years, but with the exchange rate and long term interest rate forward looking the fiscal multiplier is 1.16 in the first year and 0.95 in the second year. This is in part because of leakages to imports, but the exchange rate and the long term interest rates both rise, crowding out output in the first two years. If we assume interest rates and the exchange rate are fixed for the first four years of our analysis, and hence these two sources of crowding out disappear, our multipliers are 1.18 and 1.09 in the first and second years respectively, with some of the impact of the fiscal expansion being absorbed into saving by consumers who are not borrowing constrained. If we increase the number of borrowing constrained consumers significantly (from 16% to 58%) then the multipliers increase to 1.31 and 1.15 in the fist and second years respectively, and they decline in experiments that add stimuli to subsequent years, albeit slowly until excess capacity is clearly absorbed.

In addition to limited multipliers, as the US is not particularly open, spillovers will be small. The average propensity to import goods and services in the US is around 14 percent in 2009, well below that in the Euro Area. The Euro Area takes 16 percent of these imports, and has a similar size GDP, and hence we might expect an increase in output of at most 0.4 per cent in the Euro Area if the multiplier there was around one and if there were no policy responses to offset the expansion. Our results suggest the impact will be smaller than this back of envelope calculations would suggest. If US fiscal policy were an engine for growth in Europe, the pace of recovery induced by it would be slow.

United Kingdom

The UK's recession has persisted into the third quarter of this year, with a quarterly contraction of 0.3 per cent. UK GDP has fallen 5.8 per cent from its peak in the first quarter of 2008 (Figure 12). Because of contractions in consumer spending and private sector investment, domestic demand in the UK has fallen sharply. The corresponding peak to trough fall in domestic demand is 6.8 per cent; the most severe contraction since quarterly records began in 1955. Partly off-setting this is the contribution to economic growth from net exports.

Figure 12: A comparison of recessions in the UK



Note: Compares movements from pre-recession peak to trough as defined by the fall in real GDP.

A return to economic expansion is expected in the fourth quarter of this year. The effect from the temporary reduction in the standard rate of VAT should be concentrated in this quarter as consumers bring forward spending (the VAT cut is reversed on 1 January 2010). The inventory cycle has turned: the change in inventories no longer subtracted from GDP growth in the second and third quarters of this year; while the recovery in other OECD economies should support UK economic growth. Overall, we expect GDP to have contracted by 4.6 per cent this year, in contrast to growth of 0.6 per cent in 2008. The recovery in the UK will be weak, with GDP growth of around 1 per cent next year. Underlying our forecast is the move to a more balanced UK economy. A rise in national saving spurred on private sector balance sheet adjustments shifts the focus of economic growth more towards the contribution of net exports.

Unemployment has risen by less than would have been expected given the magnitude of output falls (Figure 12). Rising unit labour costs seem to have been contained, somewhat, through weaker private sector earnings growth and reductions in working hours rather than more significant job losses. However, unemployment is expected to continue to increase over the next couple of years, rising from its current rate of 7.8 per cent to over 9 per cent in 2011 since weak demand growth will not close the output gap over the next few years.

The rate of inflation in the UK has proved persistent relative to those in much of the eurozone. The annual rate of CPI inflation has begun to increase again, rising from 1.1 per cent in September 2009 to 1.5 per cent in October 2009. Despite the appearance of a significant amount of spare capacity in the economy, the increase in the standard rate of VAT and strong import price inflation due to the depreciation of sterling should conspire to keep the inflation rate elevated. Underlying our forecast is the assumption that Bank Rate is gradually increased from around the second quarter of 2010, suggesting that monetary policy will remain expansionary for some time to come. The Bank's programme of quantitative easing (QE) was expanded at the Monetary Policy Committee's November meeting by a further £25 billion to £200 billion (14 per cent of money GDP). The completion of these asset purchases over the next two months will probably mark the end of QE expansion. Although undeniably providing a boost to nominal spending in the UK, the programme's ability to alleviate financial stress in the corporate sector has been limited by its focus on the purchase of conventional gilts[4].

The UK's fiscal position has deteriorated rapidly during the current recession (Figure 12). The financial balance under Maastricht is expected to reach around 12 per cent of GDP this year, up from just 2.7 per cent in 2007. This explosion in borrowing is due to sharp falls in revenues rather than fiscal stimulus packages. The stimulus packages presented in the final quarter of 2008 and second quarter of 2009 amounted to at most 2 per cent of GDP. Given current budgetary plans this scale of deficit is expected to continue into 2010 and 2011. This is despite some tightening of fiscal policy planned for 2011 in

[4] Asset purchase has focused on gilts of short to long maturities. To date, 98.9 per cent of asset purchases have been of conventional gilts. The Bank of England now holds 33.5 per cent of all outstanding conventional gilts of short-to long maturities.

the form of cuts to previously planned expenditure and increases in social security contributions.

Current situation and prospects for the New Member States

All New Member States of the European Union, except for Poland, have experienced a substantial contraction of GDP over the first three quarters of the year, due to a severe reduction in domestic demand. The impact of the world crisis, which is more severe for small open economies, has been magnified by serious macro imbalances accumulated over recent years. All NMS saw severe reductions in investment expenditures, the smallest contraction occurred in Hungary (around -6% yoy in the first half of 2009), while the largest was recorded in Estonia (close to -40% yoy); partly driven by the deterioration of the housing market. In light of the gloomy outlook for the coming quarters, inventories were cut strongly and made a significant negative contribution to GDP dynamics. Despite substantial falls in their exports, net exports contributed positively to GDP growth in each of the NMS due to the even stronger contraction of imported goods and services. An important differentiating factor among NMS was the reaction of consumer demand to global developments and the local situation in the labour market. In the Czech Republic private consumption was fairly neutral compared to 2008, and the overall GDP fall was relatively moderate (-4% yoy). Households in the Balkan states (Romania and Bulgaria) and in Hungary reduced their consumption to a much higher extent and their 3rd-quarter GDP fell more severely (by 5-7%). The deepest decline was noted in Estonia, Latvia and Lithuania where private consumption fell by over 20% contributing to a sharp contraction of economic activity of between -15% to -18%. The adoption of fiscal consolidation measures (Baltic states, Hungary, Romania) also contributed to the decline in domestic demand. On the other extreme, the Polish economy did not decline significantly in any quarter during the crisis and in 2009 recorded cumulative growth for 3 quarters in a row of around 1.3%. This was largely attributable to moderate consumption growth and a strong positive contribution of net exports that have served to offset small cuts in investments and a big decline in inventories. The superior experience of the Polish economy relative to other NMS is largely attributable to the resilience of the enterprise and financial sectors, the success of policies during the crisis as well as high utilisation of EU funds. All in all, in 2009, the group of NMS will register a GDP fall by nearly 3.5%.

We expect the majority of the NMS to recover slowly from the crisis in 2010. The consumption dynamic in the Baltic states and Hungary will gain momentum with some delay, as the nominal wages in those countries have been falling. The expected recovery in the global economy, especially in EU, will improve demand for exports from the NMS. Moreover, utilisation of EU funds should become an important factor in the growth revival. Acceleration of positive trends should bring positive GDP growth in 2011 in all the NMS. Altogether, we expect economic growth of nearly 1% in 2010 and close to 3% in 2011.

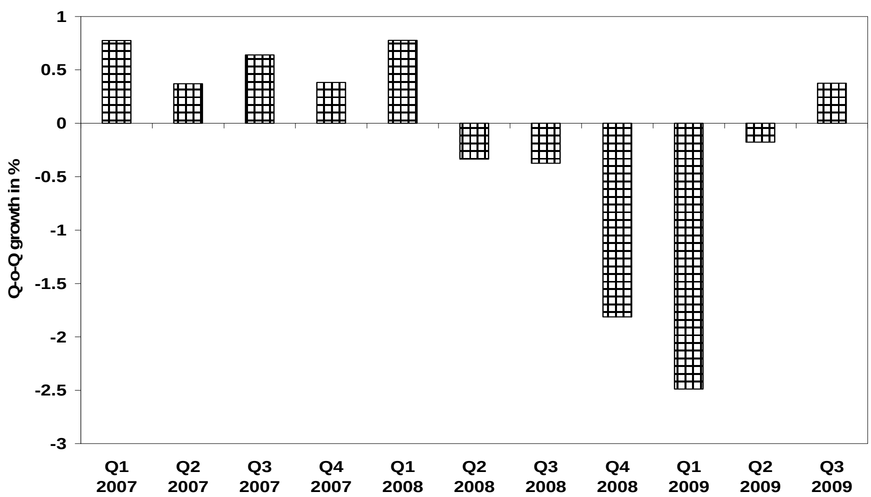
Public finances in the NMS have deteriorated due to a fall in government revenues and – in some cases (Poland, Czech Republic) – higher expenditures due to anti-crisis packages. Such a situation may postpone the euro adoption by some NMS (e.g. Poland, Baltic countries).

1.3 Euro Area Detail

EURO AREA FORECAST

The recession in the euro area seems to have come to an end in the summer of 2009. GDP started to grow again in the third quarter (Figure 13), by 0.4% in real terms against the previous quarter, and leading indicators point to continued recovery in the months ahead.

Figure 13: Real GDP growth in the Euro Area



However, with five consecutive quarters of decline the recession has been long, and with a cumulative fall in output of 5.1 % its depth is unprecedented in post World War II history. A number of factors will lead to a relatively modest upturn in 2010 and 2011 according to our forecast. These factors include limited growth of domestic demand in important trading partner countries, a strong euro exchange rate, continued adjustment of household balance sheets after the bursting of bubbles in the property market in a number of countries, the unwinding of fiscal stimulus packages, and persistent weaknesses in the financial sector that may contribute to sluggish credit growth. The forecasts for the main economic aggregates are shown in Table 2.

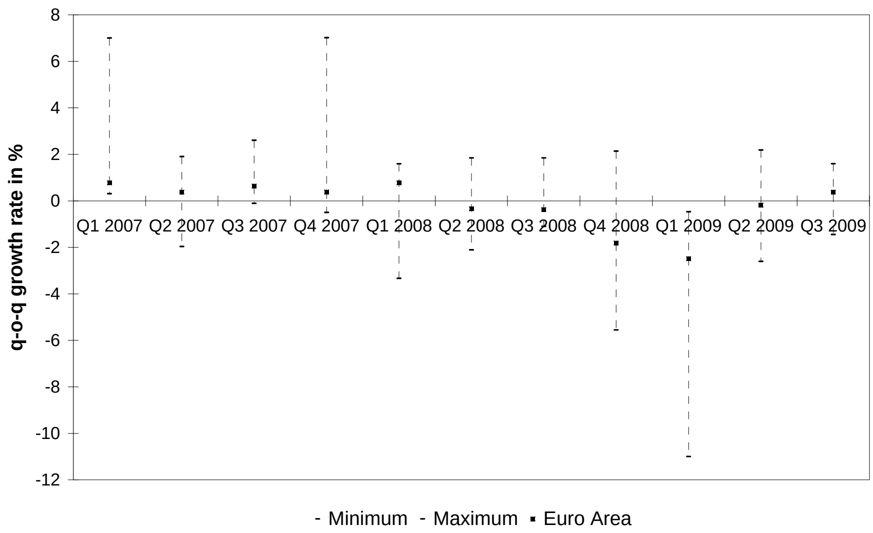
Table 2: Euro Area, Main Features of Forecast[a]

	2005	2006	2007	2008	2009	2010	2011
	Annual percentage changes						
Volumes							
Consumption	1.9	2.1	1.6	0.3	-1.0	0.8	1.4
Private investment	3.0	6.6	5.0	-0.8	-11.7	1.0	5.2
Government expenditure	1.5	1.9	2.2	1.9	2.0	1.3	1.1
Stockbuilding[b]	0.1	0.1	0.0	0.0	-0.8	0.3	0.5
Total domestic demand	2.1	3.0	2.3	0.5	-3.2	1.3	2.5
Export volumes	5.3	8.5	6.1	1.0	-13.9	7.2	8.1
Import volumes	6.0	8.4	5.2	1.0	-11.7	7.4	8.9
GDP	**1.8**	**3.1**	**2.7**	**0.6**	**-3.9**	**1.0**	**2.0**
Average earnings	2.4	2.8	2.7	3.3	1.4	2.7	2.3
Harmonised consumer prices	2.2	2.2	2.1	3.3	0.3	0.5	1.0
Private consumption deflator	2.0	2.1	2.1	2.8	-0.2	0.7	1.1
Real personal disposable income	1.4	1.8	1.7	1.3	0.4	0.8	1.0
	Levels						
Standardised unemployment %	9.0	8.3	7.5	7.6	9.4	10.1	10.1
Government financial balance[c]	-2.5	-1.3	-0.6	-2.0	-5.7	-7.2	-6.4
Government debt[c]	70.1	68.3	66.0	69.3	79.1	84.4	88.0
Current account[c]	0.1	-0.1	0.1	-1.6	-0.9	-0.4	-1.1

[a] See footnote a of Annex table 1.
[b] Change as percentage of GDP. [c] As a percentage of GDP.

Following a steep fall in the fourth quarter of 2008 and in the first quarter of 2009, euro area economic activity started to show signs of rebound in the course of the second quarter of the year with private consumption stable and external demand bottoming out. In terms of output components, the rebound was especially noticeable in the industrial sector, where production started to rise again in May on a monthly basis. From May to September 2009, euro area industrial production rose by a cumulative 3.3%, leaving the level of production some 17% below its level of early 2008. By contrast, construction output was still declining in the third quarter of 2009 and was 13.3 % below its level of early 2008. Economic sentiment indicators started to improve in the second quarter of 2009 and, while euro area real GDP posted another small decline on a quarterly basis (-0.2%), GDP started to rise in a few countries (Germany, France, Portugal and Slovakia). Economic activity strengthened further in the third quarter resulting in 0.4% growth of euro area GDP (Figure 13). However, differences across countries remained large with the outcomes (according to currently available preliminary figures) ranging from a strong rise by 1.6% in Slovakia to a continuing fall of 0.3 % in Spain and Greece and even by 1.4 % in Cyprus (Figure 14).

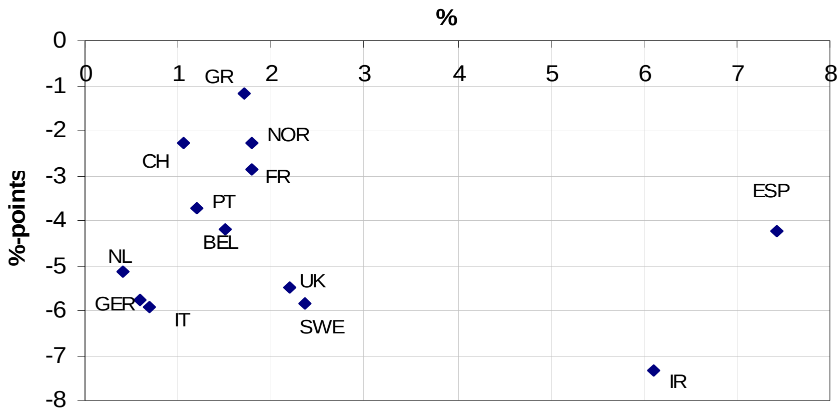
Figure 14: Real GDP growth in the Euro Area -- average and minimum and maximum outcomes for individual countries



Although detailed figures are not yet published for the euro area as a whole, the information available in several countries suggests that positive contributions to growth have come from net exports, inventory accumulation and public demand. Private consumption, by contrast, remained sluggish as real disposable incomes were eroded by declining employment and a rebound in energy prices. In addition, car buying incentives that in a number of countries had successfully ended the slump in car sales during the second quarter lost impact. Fixed investment should have continued to decline although at a more moderate pace reflecting firms' efforts to deleverage and cut costs in face of drastically reduced capacity utilisation and reduced availability of external finance.

The euro area unemployment rate rose to 9.7% in September, up from 7.2% in early 2008. This is the highest level since January 1999. Unemployment rose in all euro area countries. There are, however, striking differences in the deterioration of the labour market relative to the output fall. There seems to be no clear correlation between the depth of the recession in terms of decline of GDP and the associated rise of unemployment as measured by the change in the unemployment rate (Figure 15).

Figure 15: Change of real GDP and change in the rate of unemployment in European countries, 2009Q2 over 2008Q2



For example, while Germany has been especially hard hit in terms of output, unemployment showed the smallest increase among all euro area member states. On the other hand, the massive increase in unemployment in Spain from below 10% at the start of 2008 to almost 20% in September 2009 was associated with a decline in real GDP which was slightly below the euro area average. The differences in the reaction of unemployment to the recession are the result of a different degree of "labour hoarding" as well as differences in economic policy responses. As a result, the evolution of productivity per head displays huge differences across countries ranging from an increase in Spain to a collapse by almost 10 percent in Germany. Part of this can be attributed to the different use of subsidised part-time working employment schemes which are traditionally widely used in Germany and have been adopted during this recession by a number of countries, for instance Austria and the Netherlands. However, changes in hourly productivity also vary widely across countries suggesting that other factors are important. One explanation may be that different sectors are at the centre of the recession in different countries. In some countries, such as Germany, the recession has been concentrated in the manufacturing sector where firms may be particularly reluctant to lay off workers as they are on average relatively qualified and equipped with relatively high firm-specific human capital. By contrast, in countries like Spain and Ireland the construction sector has also been shrinking severely. Here firms may have been quick to adjust the number of employees as human capital is less important and the decline in output may be expected to be more persistent. However, there are also similar differences in the pace of adjustment of employment to the decline in output across countries if we look at developments in industry alone. One possible explanation for this could be the different relative performance of unit labour costs in the years preceding the crisis. While unit labour costs in Spain had been rising swiftly until 2008, German wages fell behind productivity for a number of years which resulted in a substantial decline in the labour share and left companies in a position to bear a significant rise in unit labour costs, at least temporarily.

The euro area inflation rate has been declining rapidly since mid-2008 mainly as a result of lower energy and food prices. HICP inflation has even decreased on a year-on-year basis between June and October 2009. However, on a month-on-month basis the inflation picture is slightly different: The drop in the level of consumer prices which resulted from a collapse in commodity prices took place in autumn last year and early 2009. Since then, monthly changes in consumer prices have almost consistently been slightly positive. With the low level of prices at the end of last year becoming the base of comparison, the annual inflation rate has turned positive again in November to a preliminary 0.6 % and can be expected to pick up further in the course of the coming months. That said, core inflation (HICP excluding unprocessed food and energy) which may be regarded as an indicator of domestic price dynamics is still slowing, albeit modestly, and stood at 1.0 % in October compared with 1.6% at the start of the year and 2.5% a year ago. We expect core consumer price inflation to soften further for some time to come reflecting low wage growth and low pricing power of firms. Given our assumption of only modest further rises in crude oil prices, overall inflation is forecast to drop to 0.3% in 2009 and stay at a low 0.5 % in 2010 before picking up slightly to 1 % in 2011. Thus, despite the partial reversal of the fall in energy prices, the inflationary environment is expected to remain benign which should support purchasing power and hence private consumption.

Leading indicators suggest that the economic recovery in the euro area will continue in the months to come. New orders in the manufacturing sector are on a rising trend and the expectations component in confidence indicators continued to improve suggesting that the economic recovery will stay on track in the fourth quarter and into 2010. While we expect the economy to continue expanding in the more distant future of the forecast horizon, we expect the recovery to be modest as a number of factors should dampen economic momentum. The current recovery is to a large extent supported by fiscal and monetary stimuli that can be expected to be gradually withdrawn over the forecast horizon. While exports should pick up significantly, the expansion of external demand will be moderate compared to the decline experienced during the crisis. The reason is that domestic demand in major euro area trading partner countries will grow more modestly than in preceding boom years for some time to come due to the unwinding of macroeconomic imbalances. For instance, we expect the private sector in the US, the UK and in a number of Central and Eastern European countries to reduce their debt burden with negative consequences for import demand.

There are also a number of factors weighing on domestic demand in the euro area over the forecast horizon. The pickup in economic activity has been triggered in part by fiscal stimulus which will not be continued over an extended period of time, given huge public deficits adding to already high levels of debt in many countries. While the attitude of governments on when they will switch towards fiscal consolidation currently differs across countries, the fiscal stance will be close to neutral in 2010 in the euro area as a whole and will be significantly tightened in 2011, together with a gradual removal of extraordinary monetary stimulus. Unemployment will continue to rise well into 2010 and stay on a high level afterwards. The weakness in the labour market, in combination with credit constraints and the desire of households to restore their balance sheets in a number of countries that have experienced the bursting of a house price bubble, should limit the annual rate of expansion of private consumption to below 1%. Fixed investment is expected to start rising again in the course of next year, but given extremely low rates of capacity utilisation investment will largely be confined to replacing old capital stock rather than increasing capacities. Finally, the banking sector remains distressed in a number of countries and there is a danger that credit supply will be reduced further in response to the substantial write-downs on nonperforming loans that can be expected to be necessary over the next couple of years as a fallout from the crisis, especially in countries with low levels of bank capital such as Germany. All in all, after a steep decline of close to 4 % in 2009, we expect real GDP in the Euro Area to rise by 1 % next year and 2 % in 2011. These rates are still below or close to the rate of potential output growth usually estimated before the financial crisis and they will leave the real GDP level well below the pre-crisis level in 2011.

Box 3: Impact of risk on the real economy

The world economy is slowly recovering from the most severe financial crisis since the Great Depression and the deepest recession in sixty years. Sparked off by the subprime crisis in the US, it became apparent that lenders and rating agencies had grossly underestimated the likelihood of default on certain types of loans. The losses were buried in complex financial instruments, obscuring the direct exposure of individual banks to potential losses. At the same time, bank balance sheets were not adequately buffered against the potential losses, as capital adequacy and liquidity ratios had been trending downward for several years in many countries, as banks squeezed safety margins to take advantage of lucrative investment opportunities. The sharp rise in uncertainty regarding exposure of individual banks to losses and the very real probability of bankruptcy following the collapse of Lehman Brothers led to a sharp rise in the premia demanded by lenders and essentially a freeze in interbank lending. This rise in risk premia and associated lack of access to finance and sudden destocking pushed the global economy into recession. We expect part of the recent rise in risk premia to be permanent, having a long-term impact on potential output.

There are two types of risk premia that determine the capital output ratio and drive investment through the user cost of capital, reflecting the two types of financing options open to firms: the premium on equity finance and the premium on borrowing, which reflects both bond finance and bank finance. As a proxy for the borrowing premium, we use corporate bond spreads, calculated as the absolute difference between BAA corporate bond yields and yields on 10-year government bonds. These spreads fell to very low levels over the period 2003-2006, which was associated with a period of strong investment in the major economies. With the onset of the US subprime crisis, risk premia were reassessed, leading to a rise in corporate spreads of about 200 basis points (see figure 4 in the overview section). Following the bankruptcy of Lehman Brothers, corporate spreads widened to their highest level since the Great Depression and global investment collapsed. However, largely due to state intervention in credit markets, corporate spreads have receded rapidly since April 2009, reverting to pre-Lehman levels. Assuming spreads stabilise at current levels, this can be viewed as a permanent rise in borrowing risk premia of about 200 basis points, combined with a sharper temporary rise of about 350 basis points. We have used these values to calibrate the shock to risk premia related to the financial crisis.

In addition to their impact through the user cost of capital, equity premia also have a direct impact on consumer spending through the value of financial wealth. A rise in equity risk premia will push equity prices down (holding all else equal), reducing the value of financial wealth holdings.

In order to estimate the impact that recent developments in corporate spreads and risk premia have had on the Euro Area economy, we have run a simulation using the NiGEM model. Table 3 reports the impact of shocks to borrowing risk premia and equity risk premia. Temporary shocks reflect a rise of 350 basis points for three quarters, and permanent shocks reflect a permanent rise of 200 basis points. The impact of temporary shocks on output has more or less dissipated after 5 years. However, under the assumption that agents understand that the shock they are observing is temporary and will soon be reversed, temporary shocks tend to have a bigger impact on output initially, as interest rates do not adjust to the extent that they would if the shock were known to be permanent.

Table 3. Impact of shocks to borrowing and equity risk premia
per cent difference from base

		Borrowing Premium			Equity Premium		
		Year 1	Year 2	Year 5	Year 1	Year 2	Year 5
Euro Area GDP	Temporary	-0.7	-0.7	0.0	-0.4	-0.4	0.0
	Permanent	-0.2	-0.7	-1.0	-0.2	-0.4	-0.2
Germany GDP	Temporary	-0.8	-0.6	0.0	-0.4	-0.3	0.0
	Permanent	-0.3	-0.7	-0.8	-0.2	-0.3	-0.1
France GDP	Temporary	-0.6	-0.6	0.0	-0.6	-0.5	0.0
	Permanent	-0.1	-0.4	-0.5	-0.4	-0.7	-0.7
Italy GDP	Temporary	-0.5	-0.8	0.0	-0.2	-0.4	0.0
	Permanent	-0.3	-0.7	-0.8	-0.1	-0.3	-0.2
UK GDP	Temporary	-0.5	-0.5	0.1	-0.5	-0.4	0.1
	Permanent	-0.1	-0.5	-0.6	-0.4	-0.8	-0.7

Note: Simulation results from V409 of the NiGEM model. Temporary shocks reflect a 350 basis point rise for 3 quarters. Permanent shocks reflect a 200 basis point permanent rise.

Germany and Italy are far more sensitive to borrowing premia shocks than to equity premia shocks, reflecting smaller wealth effects and more limited use of equity finance for investment. France exhibits a similar response to temporary borrowing and equity premia shocks, but the impact of a permanent equity premium shock is somewhat larger, reflecting the impact of wealth effects on consumption and greater dependence on equity finance. The UK shows a similar response to both types of risk premia, with a slightly bigger impact in the short-term from permanent equity premia shocks. Within the Euro Area, the impact of the shock differs somewhat across countries, with the biggest long-run impact observed in Spain and the smallest long-run impact in Portugal. In general, different responses to risk premia shocks are related to the openness of the economy, with more open economies exhibiting a smaller long-run response; the level of the user cost of capital before the onset of the crisis, where the higher the initial user cost of capital the smaller the response;

the capital-output ratio, where a higher ratio is associated with a deeper crisis; and the elasticity of substitution, with a higher elasticity of substitution associated with a bigger response.

Table 4 reports the estimated impact on output of a combined scenario run with the NiGEM model. Equity and borrowing risk premia rise by 5.5 percentage points for three quarters, and then remain 2 percentage points above base permanently. This combines the temporary and permanent shocks reported in table 3 above.

In the first year, output falls by about 1½ per cent in the Euro Area and in the UK, with a somewhat smaller impact in Italy, reflecting a slower adjustment process. In the second year, output is about 2 per cent below base. Euro Area output is about 1¼ per cent below base after five years, and remains below base permanently.

Table 4: Combined temporary and permanent shock to risk premia

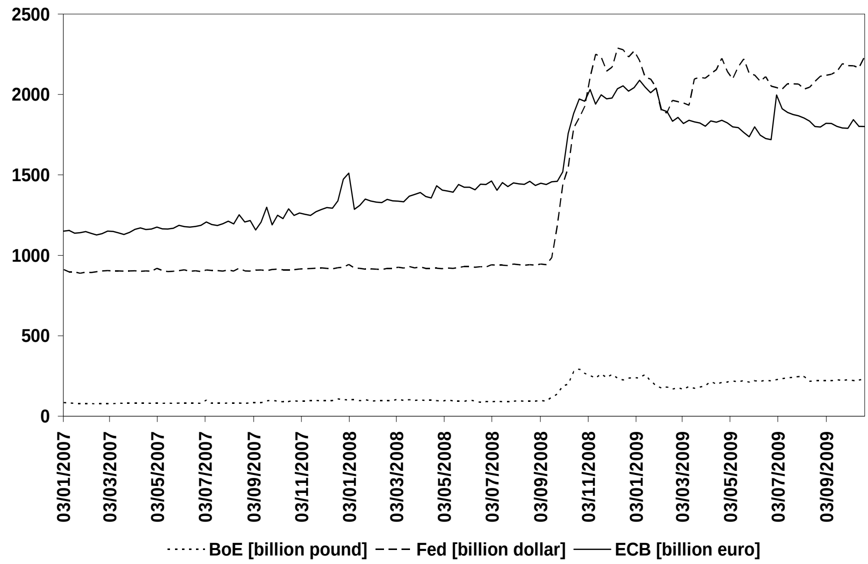
per cent difference from base

	Risk premia shock		
	Year 1	**Year 2**	**Year 5**
Euro Area GDP	-1.4	-2.0	-1.2
Germany GDP	-1.6	-1.7	-0.8
France GDP	-1.5	-1.9	-1.1
Italy GDP	-0.9	-1.8	-1.4
UK GDP	-1.6	-2.2	-1.2

Monetary Policy

In line with other major central banks, ECB's monetary policy has been strongly expansive in reaction to the financial turmoil and economic weakness following the Lehman bankruptcy last year. Starting with 8 October 2008 the ECB successively cut the main refinancing rate from 3.25% to an all-time low of 1% on 7 May 2009. Since then the rate has been kept constant. In addition, non-standard measures were taken by the ECB in early 2009 to sustain liquidity in the banking sector in the face of an effective standstill of the money market. These measures included the introduction of a fixed-rate tender procedure for the main refinancing operations, the acceptance of a wider range of assets as collateral for bank loans, the introduction of liquidity providing longer-term refinancing operations with a maturity of 12 months and the purchases of euro-denominated covered bonds issued in the euro area. The use of unconventional measures has been very extensive raising the assets in the European Central Bank Area as well as in the US Federal Reserve and in the Bank of England as shown in Figure 16.

Figure 16: Central Bank Assets



Financial market conditions have improved along with the general economic situation by mid-2009. Asset prices started to recover from March onwards and the high risk premia on inter-bank and bond markets started to reverse. In late 2009 observed spreads reached levels considered as normal. With the improvement in financial conditions signs of excess liquidity have emerged on markets, such as very low interest rates on international bond markets. As a result, a first announcement was made in November of exit strategies to remove non-standard measures in order to absorb excess liquidity.

Inflation is expected to turn positive again, but staying moderate in 2010. It will be dampened by the persistently high negative output gap and by rising/high unemployment. Against this background, the ECB is expected to keep the main refinancing rate at 1% until the first quarter of 2010, but to raise it slowly in the course of next year in line with the expected economic recovery. Based on GDP growth of 2% and CPI inflation of 1% in 2011, we see the ECB to raise the main refinancing rate to above 2% by the end of 2011.

In the course of 2009 the euro has appreciated by some 15% vis-à-vis the US dollar and stood close to 1.50 in November, marking the highest value this year. Standing still at just slightly below the record levels reached in mid-2008, the appreciation partly reverses the losses due to the flight into safe US assets after the crisis. At the same time the euro also appreciated against the British pound and a number of emerging economy currencies. In nominal effective terms, the euro stood close to the high levels of mid-2008. We assume bilateral exchange rates between major currencies to stabilize in 2010 at around 1.50 dollar per euro, 0.90 British pound per euro and 135 yen per euro.

GERMANY

The German economy experienced an extraordinarily sharp contraction in the fourth quarter of 2008 and the first quarter of 2009 as a result of a collapse in exports and corporate investment, but returned to growth in the second quarter of this year with GDP rising by 0.4 %. The turnaround was underpinned by private consumption growth, a sharp swing in net exports and a rebound of investment (largely due to a weather-related correction to construction investment). In the third quarter, output growth accelerated to 0.7 % on the back of a massive contribution from change in inventories. Fixed investment posted a robust increase despite still low levels of capacity-utilisation and tight credit conditions with both investment in machinery and equipment and construction investment contributing to this rise.

By contrast, private consumption – which had been surprisingly robust during the months of recession as a result of the boost to purchasing power from sharply declining food and energy prices and the government's car-scrapping subsidies – fell substantially (-0.9 %) as the supporting factors faded away. Exports continued to recover swiftly, but imports were up even more sharply leaving a negative contribution from net exports (-0.5%). Although unemployment has increased from its trough reached in autumn 2008, the deterioration of the labour market has been very modest given that output is still down almost 5 % year on year. The muted reaction of employers has been helped by the government's subsidy for shorter working hours. The number of workers on this scheme rose sharply and approached 1.5 million (more than 4 % of people in employment) in the summer as eligibility had been extended and rules made even more attractive.

Fiscal policy has been supporting demand significantly and will continue to do so in 2010. The government injected around €35 bn. (1.4 %) into the economy this year, with increased expenditures and cuts to taxes and social contributions each making up around one half of the volume. Next year the volume of the measures will be even larger, resulting in a further stimulus of 0.6 % GDP. The newly elected centre-right government has decided to increase children allowances and lower corporate taxes as well as the VAT on hotel services adding another €8 bn to the measures which were already in the pipeline from the stimulus packages introduced by the previous government. Next year, the major share (more than 2/3) of the measures will impact through the revenue side.

The outlook for fiscal policy 2011 is still very much unclear. While the government seems to be committed to lowering income tax in the first step of a major tax reform programme pushed for mainly by the liberal party, it remains to be seen whether chancellor Merkel's CDU and the states will accept a major loss of revenues given that there is no programme for expenditure reductions in sight that could reduce the impact on the deficit to an acceptable level. For the forecast, we have assumed an income tax cut by €11bn, which would be accompanied by subdued growth in public expenditures. As a result, the fiscal deficit which is expected to rise from zero in 2008 to 3 % in 2009 and 5 1/2 % in 2010 will come down only slightly in 2011.

All in all, German real GDP is projected to fall very substantially by 4.9 % this year, but a gradual recovery is expected to materialize in 2010, mainly driven by some recovery of investment and a return to a positive contribution of net exports. Germany is likely to benefit from the revival of world trade and to regain export market share as the demand for capital goods improves. However, after a period of relatively rapid recovery from extremely depressed levels, the rate of increase in exports should level off in the course of next year reflecting the overall modest momentum of growth in Germany's trading partners and the stronger euro. The pick-up in investment demand should be gradual in face of the large amounts of idle capacity. Household consumption is expected to even be a drag on GDP in 2010 mainly due to the lagged impact of the recession on employment and labour income. The unemployment rate will continue to rise through 2010, and the situation on the labour market is not yet expected to improve significantly in 2011. While the economic recovery is projected to accelerate slightly, output growth will remain moderate, at 1.8 %, and the level of GDP will still be significantly below its peak in 2008. Low pricing power of producers and increased slack in the labour market in combination with a strong euro will lead to low inflation of around 1 % over the projection period.

FRANCE

French GDP declined for four quarters in a row from the second quarter of 2008 by a cumulative 3.5%. However French GDP rose by 0.3% in both the second and third quarters of 2009. Hence, the French economy seems to have resisted the crisis better than its main EU trading partners, with GDP in the third quarter of 2009 being 2.9% below its level of early 2008, as compared to 5.6% in Germany and close to 6% in Italy and the UK.

Industrial production fell sharply although some sectors were supported by fiscal measures. This was especially true for the automobile industry which benefited from the car scrapping schemes introduced in France and neighbouring countries. Manufacturing output grew by 1.2% in the second quarter of 2009, and by 2.3% in the third quarter.

Since last Spring a number of indicators have been positive for the French economy. World trade has started to recover and credit conditions have improved. Consumer and companies' economic sentiment has also improved although they still remain at low levels. Finally, it appears that stockbuilding is about to resume.

According to the latest release of national accounts, net exports contributed to 0.4% to GDP growth in the third quarter of 2009, following +0.9% in the second quarter of 2009. Domestic demand excluding stockbuilding was virtually unchanged in the second and third quarter of 2009, with households' consumption growing modestly and government consumption rising by an average of 0.6% each quarter. Company investment fell by 0.8% each quarter. The investment fall has been much more limited in France than in other large EU economies since the beginning of the crisis.

The output fall has led to the unemployment rate rising by 2.4 percentage points and it reached 10% according to EUROSTAT figures in September.
Fiscal deficits have been rising under the combined effects of the recession and the fiscal stimulus package. We expect the general government deficit to rise from 3.4% of GDP in 2008 to 8.3% this year. The fiscal stimulus package implemented in 2009 amounts to 1.6% of GDP, embedding measures mainly on government investment and supporting companies' cashflow, while measures directly addressing the unemployment situation have so far been limited. Under current fiscal plans, fiscal policy will be contractionary in 2010 (by around 0.5% of GDP) and will be tightened further in 2011 (by around 1.2% of GDP).

The rebound of the French economy could be short-lived. We expect French GDP will only rise by 1.1% only in 2010, which cannot be seen as a real recovery. A number of factors will lead GDP growth to remain moderate. French households' consumption growth will be constrained by decelerating purchasing power resulting from both the stabilisation of inflation at close to 1.0% in 2010 instead of close to 0% in 2009 and from rising unemployment. Companies will reduce their indebtedness levels and will not increase their investment before their balance sheets and profits have improved. The unemployment rate will continue to rise. Under our GDP growth forecasts and projected fiscal tightening, fiscal deficits will be close to 8.5% of GDP in 2010 and come close to 7.5% of GDP in 2011.

ITALY

The decline in industrial production came to an end in the summer, even if the strong rebound in August (partly due to statistical reasons) was followed by an equally strong decline in September. Business and household opinion surveys are also improving, as Italy is benefiting from a recovery in exports and the need to rebuild stocks is providing an initial spur to production. According to first released data, the third quarter registered an increase on a quarterly basis of both industrial production and GDP (4 percent and 0.6 percent respectively). By contrast, figures on the labour force and on the number of hours of wage supplementation authorized (Cassa Integrazione Guadagni) show a deterioration in the labour market.

Reflecting above all the fall in raw material prices in the second half of 2008, consumer prices were unchanged from a year ago in July and rose by 0.3 per cent in October. They are likely to accelerate gradually from autumn onwards, as base effects, resulting from the movements in global commodity prices a year ago, are waning.

The most recent data confirm that the deterioration of the fiscal position in 2009 has been mainly due to the economic crisis. In fact, because of the already high public debt, the Italian Government choose to let the automatic stabilisers work and not to implement crisis-related discretionary measures. The exceptions being the "Against-crisis Law" with some measures for firms (the temporary possibility for SMS firms not to reimburse bank loans, tax benefits to new investment) and for the labour market (the recourse to the Wage Supplementation Fund has been widened). These measures will not have any effect on the fiscal balance, however, as they were financed by changes in the composition of the budget.

The Government's recent measures should support the recovery, but they are just dampening the contractionary effects of the budget law for 2009: we estimate the fiscal stimulus to be 0.3 percent of GDP in both 2009 and 2010 (0.7 percent the Government estimate).

As long as the world economic upturn gathers momentum over the next number of quarters, economic activity in Italy should continue growing in 2010. Nevertheless, a sustained recovery in domestic demand is still far off, as capacity utilisation rates are still near rock-bottom and unemployment is set to rise further.

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THERE IS AN APPENDIX TO THIS REPORT ON FISCAL POLICY BY CATHERINE MATHIEU AND HENRI STERDYNIAK OF OFCE WHICH IS AVAILABLE TO DOWNLOAD ON THE EUROFRAME WEBSITE WWW. EUROFRAME.ORG

FORECAST TABLES

Annex Table 1: Summary of Key Forecast Indicators for Euro Area[a]

	2005	2006	2007	2008	2009	2010	2011
Output growth rate	1.8	3.1	2.7	0.6	-3.9	1.0	2.0
Inflation rate (harmonised)	2.2	2.2	2.1	3.3	0.3	0.5	1.0
Unemployment rate	9.0	8.3	7.5	7.6	9.4	10.1	10.1
Govt. balance as % of GDP	-2.5	-1.3	-0.6	-2.0	-5.7	-7.2	-6.4
Govt. debt as % of GDP	70.1	68.3	66.0	69.3	79.1	84.4	88.0

a GDP data shown in the tables are adjusted for working-day variation.

Annex Table 2: Real GDP in Major Economies

	World	OECD	China	EU-27	Euro Area	USA	Japan	Germany	France	Italy	UK
	Annual percentage changes										
2005	4.4	2.7	10.1	2.0	1.8	3.1	1.9	0.9	1.9	0.8	2.2
2006	5.1	3.1	11.0	3.3	3.1	2.7	2.0	3.4	2.4	2.1	2.9
2007	5.2	2.7	13.0	2.9	2.7	2.1	2.3	2.6	2.3	1.5	2.6
2008	3.2	0.6	9.1	0.7	0.6	0.4	-0.7	1.0	0.3	-1.0	0.6
2009	-1.0	-3.5	8.3	-4.1	-3.9	-2.6	-5.2	-4.9	-2.4	-4.9	-4.6
2010	2.9	1.6	9.6	1.0	1.0	2.1	1.4	1.3	1.1	0.8	1.1
2011	3.8	2.5	10.0	2.2	2.0	2.8	1.4	1.8	1.7	1.6	1.7

Annex Table 3: Private Consumption Deflator in Major Economies

	OECD	EU-15	Euro Area	USA	Japan	Germany	France	Italy	UK
	Annual percentage changes								
2005	2.1	2.0	2.0	3.0	-0.8	1.4	1.8	2.2	2.4
2006	2.1	2.1	2.1	2.7	-0.2	1.0	2.1	2.7	2.7
2007	2.2	2.2	2.1	2.7	-0.4	1.8	2.1	2.2	2.9
2008	3.0	2.8	2.8	3.3	0.5	2.1	2.8	3.2	3.0
2009	0.4	0.1	-0.2	0.3	-1.9	0.0	-0.3	0.4	1.2
2010	1.3	0.9	0.7	2.2	-0.5	1.0	0.7	1.2	2.4
2011	1.6	1.1	1.1	1.8	1.1	1.2	0.8	1.3	1.3

Annex Table 4: World Trade Volume and Prices

	World trade volume	World export prices in $	Oil price ($ per barrel)[a]
	Annual percentage changes		
2005	8.0	3.7	51.8
2006	9.4	3.0	63.4
2007	7.1	7.1	70.5
2008	2.8	7.4	95.7
2009	-11.9	-7.3	61.4
2010	7.5	5.4	74.6
2011	8.4	1.7	81.1

[a] Based on the unweighted average of the Brent, WTI (West Texas Intermediate) and Dubai oil prices.

Annex Table 5: Interest Rates

	Short-term interest rates				Long-term interest rates			
	USA	Japan	Euro Area	UK	USA	Japan	Euro Area	UK
2006	5.0	0.2	2.8	4.6	4.8	1.7	3.8	4.5
2007	5.1	0.5	3.8	5.5	4.6	1.7	4.3	5.0
2008	2.1	0.5	3.9	4.7	3.6	1.5	4.2	4.5
2009	0.3	0.1	1.3	0.6	3.2	1.4	3.7	3.6
2010	0.5	0.2	1.2	0.8	3.7	1.5	3.8	3.8
2011	1.6	0.4	2.0	2.1	4.1	1.7	4.1	4.2
2008Q1	3.2	0.5	4.0	5.4	3.6	1.4	4.1	4.5
2008Q2	2.1	0.5	4.0	5.0	3.9	1.6	4.4	4.8
2008Q3	2.0	0.5	4.2	5.0	3.8	1.5	4.5	4.7
2008Q4	1.1	0.3	3.4	3.3	3.2	1.4	3.9	4.0
2009Q1	0.3	0.1	2.0	1.1	2.7	1.3	3.7	3.5
2009Q2	0.3	0.1	1.1	0.5	3.3	1.4	3.9	3.6
2009Q3	0.3	0.1	1.0	0.5	3.5	1.3	3.7	3.8
2009Q4	0.3	0.1	1.0	0.5	3.4	1.4	3.5	3.7
2010Q1	0.3	0.1	1.0	0.5	3.5	1.4	3.6	3.6
2010Q2	0.4	0.1	1.1	0.7	3.6	1.4	3.7	3.7
2010Q3	0.6	0.2	1.4	0.8	3.7	1.5	3.8	3.8
2010Q4	0.9	0.3	1.5	1.1	3.8	1.5	3.9	3.9
2011Q1	1.2	0.3	1.7	1.4	3.9	1.6	3.9	4.0
2011Q2	1.5	0.4	1.9	1.8	4.0	1.6	4.0	4.1
2011Q3	1.7	0.4	2.2	2.3	4.1	1.7	4.1	4.2
2011Q4	2.0	0.5	2.4	2.9	4.2	1.8	4.2	4.3

Annex Table 6: Nominal Exchange Rates

	USA	Japan	Euro Area	Germany	France	Italy	UK
			Annual percentage changes				
2006	-1.5	-6.7	0.1	0.0	0.1	0.0	0.7
2007	-4.4	-4.5	4.0	1.8	2.0	2.0	2.3
2008	-2.2	13.1	5.6	2.2	2.9	2.7	-11.8
2009	7.1	15.2	3.4	1.8	1.3	1.9	-10.8
2010	-4.2	1.0	3.2	1.2	1.5	1.5	0.7
2011	1.5	0.0	1.4	0.5	0.6	0.7	1.0

Annex Table 7: Bilateral Exchange Rates

	Bilateral rate against US Dollar		
	Yen	Euro	Sterling
2006	116.3	1.255	0.543
2007	117.8	1.368	0.500
2008	103.4	1.464	0.544
2009	93.7	1.391	0.640
2010	90.2	1.488	0.604
2011	91.4	1.477	0.605
2008Q1	105.2	1.499	0.505
2008Q2	104.6	1.563	0.507
2008Q3	107.6	1.502	0.529
2008Q4	96.1	1.321	0.635
2009Q1	93.6	1.302	0.697
2009Q2	97.3	1.361	0.644
2009Q3	93.6	1.431	0.610
2009Q4	90.1	1.486	0.609
2010Q1	89.9	1.495	0.604
2010Q2	89.9	1.490	0.604
2010Q3	90.4	1.486	0.604
2010Q4	90.7	1.481	0.604
2011Q1	91.0	1.477	0.605
2011Q2	91.3	1.475	0.605
2011Q3	91.5	1.479	0.605
2011Q4	91.6	1.479	0.606

Annex Table 8: Euro Area, Main Features of Forecast[a]

	2005	2006	2007	2008	2009	2010	2011
	Annual percentage changes						
Volumes							
Consumption	1.9	2.1	1.6	0.3	-1.0	0.8	1.4
Private investment	3.0	6.6	5.0	-0.8	-11.7	1.0	5.2
Government expenditure	1.5	1.9	2.2	1.9	2.0	1.3	1.1
Stockbuilding[b]	0.1	0.1	0.0	0.0	-0.8	0.3	0.5
Total domestic demand	2.1	3.0	2.3	0.5	-3.2	1.3	2.5
Export volumes	5.3	8.5	6.1	1.0	-13.9	7.2	8.1
Import volumes	6.0	8.4	5.2	1.0	-11.7	7.4	8.9
GDP	**1.8**	**3.1**	**2.7**	**0.6**	**-3.9**	**1.0**	**2.0**
Average earnings	2.4	2.8	2.7	3.3	1.4	2.7	2.3
Harmonised consumer prices	2.2	2.2	2.1	3.3	0.3	0.5	1.0
Private consumption deflator	2.0	2.1	2.1	2.8	-0.2	0.7	1.1
Real personal disposable income	1.4	1.8	1.7	1.3	0.4	0.8	1.0
				Levels			
Standardised unemployment %	9.0	8.3	7.5	7.6	9.4	10.1	10.1
Government financial balance[c]	-2.5	-1.3	-0.6	-2.0	-5.7	-7.2	-6.4
Government debt[c]	70.1	68.3	66.0	69.3	79.1	84.4	88.0
Current account[c]	0.1	-0.1	0.1	-1.6	-0.9	-0.4	-1.1

[a] See footnote a of Annex table 1.
[b] Change as percentage of GDP. [c] As a percentage of GDP.