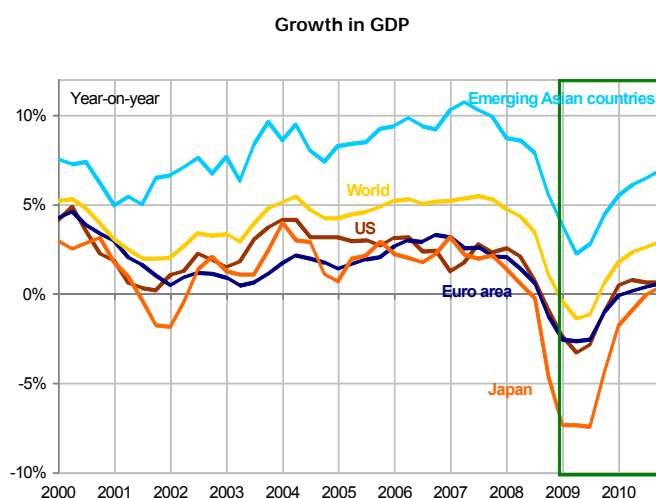


## Global economic outlook, Spring 2009

- In the fall of 2008, the financial crisis expanded, leading to a sharp contraction of activity by year's end. In countries where growth was largely debt-based, and whose populations are very sensitive to the wealth effect (US, UK and Spain), a steep fall in financial asset prices and tougher financing conditions resulted in a sharp drop in domestic demand. For export-oriented countries (such as Germany and Japan), it was chiefly the drop in exports that caused the rest of the economy to stumble.
- Faced with this situation, governments and central banks set about restoring confidence in the financial markets, recapitalising the banking systems and propping up the real economy. The central banks slashed interest rates, and implemented a series of "unconventional" policies (liquidity injections, and direct purchase of both public and private securities). Stimulus plans announced by the various governments included spending measures designed to strongly support growth. At the same time, household purchasing power was given a lift by lower inflation resulting from the drop in the prices of oil and commodities.
- For countries that need to reduce their debt levels and excessive investments, the process of consolidation will no doubt take time. In Spain and the UK, activity will likely continue to contract throughout 2009, whereas the US should manage to get back to positive growth thanks to the size and scope of its recovery plan.
- Given the rather sluggish outlook for 2009 (-0.6% world growth) and 2010 (2.4% world growth), inflation should decrease sharply. In the US, core inflation excluding rents should basically be zero at the end of 2010, whereas the appreciation of the yen will likely push Japan back into deflation starting in the first six months of 2009.
- This painful and particularly uncertain scenario is subject to more unknown factors than normal.

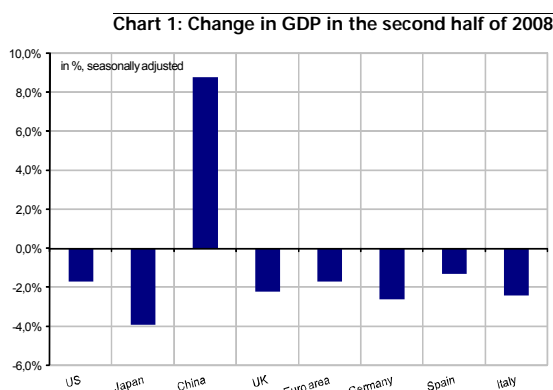
This study was prepared under the authority of the Treasury and Economic Policy General Directorate and does not necessarily reflect the position of the Ministry for the Economy, Industry and Employment.

Sources: national accounts, INSEE, OECD, DGTPE calculations



## 1. By crippling financing for the economy and reducing the value of stock market assets, the expanding financial crisis brought about a sharp and global contraction of activity at the end of 2008

The financial crisis that began in the summer of 2007 picked up speed in the summer of 2008, particularly after the collapse of Lehman Brothers in September of the same year. During the second half of 2008, stock market assets dropped 30% in value, while the cost of refinancing banks in the interbank market rose by an average of 150 basis points (bps). In reaction, manufacturers adopted a wait-and-see attitude and reduced their inventories, which triggered a significant contraction of activity across most of the globe.



Source: national accounts (estimated for China)

The beginning of the subprime crisis had already introduced considerable constriction in the interbank market. By September 2008, however, the expanding crisis brought about a new rise in the cost of bank refinancing, despite the intervention of the central banks (see below). This resulted in a tighter credit supply in certain countries, and precipitated the slowdown in demand for credit around the world. In countries where growth was largely debt-based (US, UK and Spain), the effects of this slowdown were pronounced, and consumer demand – especially for real estate – fell sharply. The changes in the mortgage market offer a good illustration of this phenomenon: although a housing price bubble had been observed in recent years, investment volumes had remained fairly stable due to significant restrictions on supply. The weakening of the British banking system resulted in an extremely sharp drop in the volume of loans issued, which by January 2009 had fallen 70% from their 2007 high point. Businesses were also affected by this tighter supply of credit as well as by its rising cost.

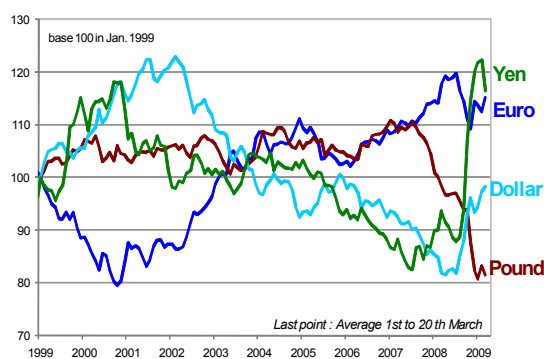
Trade channels passed the contraction in domestic demand in certain countries on to the rest of the world, thus affecting countries that had, in theory, been relatively untouched in a direct manner by the financial crisis. For example, Japan – where the crisis had only limited direct affect (the balance sheets of the various institutions had already been cleaned up over the last decade) – experienced a 3.3% contraction in its activity in Q4, and external demand contributed –2.1% to GDP. Other Asian countries were similarly affected: GDP fell by 5.6% in Korea, 5.5% in Singapore and 4.1% in Taiwan. Contraction in world trade was particularly strong in this part of the world, no doubt because of the importance of assembly trade in these countries<sup>1</sup>.

The effects of world trade were in turn affected by developments on the exchange rate market. In particular, the appreciation of the yen (+35.8% in nominal effective terms between June and December 2008) exacerbated the Japanese recession. In the UK, the depreciation of the pound (–15% for the same period) helped to prop up activity.

We may distinguish two groups of countries:

- Those directly affected by the financial crisis, because it brought about a correction in the balance sheets of excessively indebted private-sector stakeholders (Spain, UK, US and Central and Eastern European Countries, whose stakeholders often have hard currency debt)
- Those experiencing limited or no direct effects of the financial crisis, but whose growth models are export-oriented, and which are thus suffering from the effect of the crisis on trade (Germany, China, Japan)

Chart 2: Nominal effective exchange rates



Source: DGTPE

(1) Assembly trade: countries that import raw materials and spare parts, assemble the finished product and then re-export it.

## Box 1: How has the financial crisis affected the currencies of the leading countries?

Although the financial crisis has mainly affected the financing of economies, it also shifted the demand for currencies of certain key zones.

The country most affected by this is Japan. The development in recent years of carry trading (borrowing money at low rates in Japan to invest in zones yielding higher returns) had in fact brought about a sharp depreciation of the currency. Increased market volatility (which increases foreign-exchange risk) and lower interest rates at the main central banks have made such operations riskier and less remunerative. The decrease of this activity (unwinding of positions) caused a sharp appreciation in the yen, mainly vis-à-vis the dollar and Asian currencies that are more or less tied to the yen. This caused a sudden drop in export competitiveness and represents a major impediment to growth of Japanese activity.

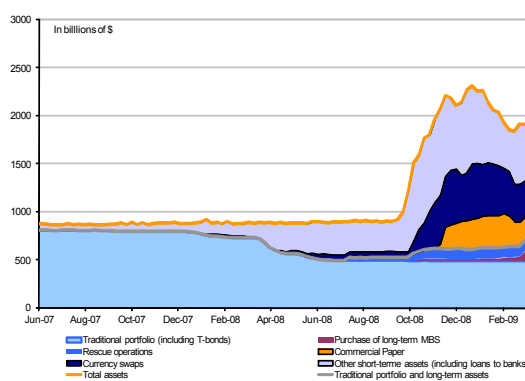
The other major country whose currency has recently been affected is the UK, where the pound has depreciated significantly (-26.1% in effective terms between July 2007 and March 2009, with the euro's contribution at -13.7%). This depreciation represents a change of attitude by the markets vis-à-vis the pound in the wake of specific challenges faced by the British housing market<sup>9</sup> and dimming prospects for growth. Although it had moved in lockstep with the euro since 2003, the pound suddenly finds itself at a nominal exchange rate not seen since the years 1993-96 - a time, in the wake of the exchange rate crisis of 1992, when the pound was seen to be weak with respect to other European currencies (the German mark especially).

a. The depreciation of the pound in particular, concomitant with the problems of Northern Rock.

## 2. Given the looming recession, fiscal responses were combined with actions by the central banks, which cut interest rates and implemented a series of unconventional policies (liquidity injections via longer-maturity bonds and asset purchases)

As the crisis came on, those responsible for monetary policy began by slashing interest rates, bringing them to historic lows both in the Euro area (1.5%) and in the US (close to zero). Nevertheless, the financial crisis partially blocked the usual channels by which monetary policy is transmitted. In addition, efforts by banks and financial institutions to reduce their debt levels likely led to tighter credit and higher risk premiums, which reduced the transmission of key interest rate changes to lending rates offered to borrowers. Given these factors, which hamper conventional monetary policy (via the near-disappearance of room to manoeuvre and poor effectiveness), the main central banks took a series of less conventional actions (Box 2). In particular, starting in October 2008 the Federal Reserve Bank stepped in to provide a boost for the commercial paper market, and then proceeded to acquire mortgage-backed securities (MBS) and GSE-issued bonds in order to prop up the housing market. More recently, it purchased government securities, specifically to keep interest rates low over the long term and reduce the risk of deflation. At the start of 2009, the Bank of England launched a "quantitative easing" scheme to buy government and corporate debt, both short-term (a commercial paper purchase in February 2009) and long-term (corporate bonds and gilts in March 2009).

Chart 3: The Federal Reserve's assets



Source: Federal Reserve Bank, Datastream

Concurrently, governments took the following measures:

- Bank recapitalisation
- Increased deposit insurance
- Debt guarantee
- Liquidity injection
- Purchase of toxic assets (especially in the US with the Troubled Assets Relief Programme (TARP))
- Providing credit: in an attempt to inject capital directly into the economy, some governments have attempted to use public and semi-public institutions to offer credit directly to the private sector. These include the ICO in Spain, which offers housing loans, and KfW, a German government-owned development bank.

Above all, such measures are intended to ward off bank runs and improve solvency ratios in order to support credit offers. Their effectiveness can be seen in the absence of bank runs, although their impact on GDP is difficult to assess.

## Box 2: Unconventional policies right from the start of the crisis

Since the start of the crisis, the main central banks have introduced a series of unconventional monetary policy schemes, collectively referred to as "quantitative easing" and/or "credit easing". We may distinguish three phases for such policies:

1. Up through October 2008: changes in the composition of the central banks' assets, with a constant size of the balance sheet.

These unusual measures took the form of the provision of liquidity to commercial banks in order to ease conditions in the inter-bank market. These injections of liquidity were sterilised either through the sale of securities held by the central bank (the case of the Federal Reserve), or by the substitution of longer-term (three to six months) maturities for shorter ones (the case of the ECB), thus guaranteeing stability in the size of the balance sheet.

2. October 2008 to February 2009: stepped-up liquidity injections and larger balance sheets

As the financial crisis worsened and the interbank market froze up, the central banks increased the size of their liquidity injections. These increased assets were financed through money creation (an increase in banks' reserves held by the central bank); as these operations were no longer sterilised, they brought about an increase in the size of the balance sheet.

3. Starting in February-March 2009: direct purchase of securities by the central bank

Several central banks (including the Fed, the BoE and the BoJ) have instituted schemes for purchasing short-term obligations (commercial paper), long-term private bonds (corporate bonds by the BoE, and GSE-backed MBSs for the Fed) and long-term public bonds (treasury bonds by both the BoE and the Fed). The goal of these purchases is to improve private-sector financing conditions, by both increasing the liquidity of company securities (which may henceforth be sold to the central bank) and by reducing the yield of public securities and thereby encouraging investors to reorient their portfolios to include somewhat riskier securities. Finally, inasmuch as these purchases are financed by money creation, they are also designed to encourage banks to make more loans by using their excess reserves with the central bank and, more generally, to increase the money supply to ease deflationist pressure.

4. In its strict sense, the quantitative easing policy carried out by the Bank of Japan between 2001 and 2006 was designed to raise banks' reserves and thus act on the central bank's liabilities. To do so, the BoJ set a target for the level of bank reserves, which it then attempted to reach by purchasing government securities from banks.

The Fed's policy, which the US President has dubbed "credit easing", seeks to influence central bank assets. The Fed's goal is to act on several segments of the capital market (commercial paper, MBSs and T-bonds) through asset purchases, thus increasing the central bank's assets, such purchases being financed through money creation (the central bank credits the accounts of banks selling the bonds). The minutes from the 4 March 2009 meeting of the Bank of England's Monetary Policy Committee suggest that the bank implement both quantitative easing - inasmuch as it is seeking to increase the money supply by increasing banks' central bank reserves (without setting specific quantitative goals) - and credit easing, as it targets certain securities markets, such as corporate bonds.

In addition to support for the financial sphere, in the second half of 2008, a number of governments adopted fiscal stimulus plans (which, particularly in the US, complemented existing efforts). Basically, these plans are

expected to support activity as of the second half of 2009 (except in Spain, where they are already underway), with particularly sizeable efforts in the US and Germany<sup>2</sup>.

### 3. Effective economic policies mean that the US and the euro area should return to positive growth in 2010

In certain countries (the US, Spain and the UK in particular), growth in the 2000s was largely debt-based and therefore unsustainable. A correction was required. This is the case with the housing markets in all three countries, but also with household behaviour in the US and UK, where saving rates had fallen close to zero.

US real estate prices, although they have come down nearly to base level<sup>3</sup>, should continue to fall through the end of 2010. This is due to a decline in the base level itself (expected drop in household purchasing power), as well as to an over-adjustment connected to high inventory levels and an increasing number of foreclosures. Transaction volumes should also continue to fall through the end of 2009. The wealth effect is expected to cause this to

affect household consumption, which had already taken a beating from the steep decline in stock prices. Consumption should also be affected by the sharp rise in the unemployment rate, which could reach 10% by the end of 2010, which in turn would give a strong boost to the savings rate, which is forecast to reach 6% at the close of the period under review.

In the UK, although prices had already fallen sharply at the end of 2007, they were still notably over-valued at the end of 2008. The decline should continue until the end of 2010, which, as in the US, should affect household consumption, thus bringing savings rates in 2010 up to the level they had reached in the first half of the 1990s (7%). The correction to transaction volumes is expected to be

(2) The large-scale recovery efforts underway in Spain should support growth in 2009 in a very significant manner. Currently, these efforts are expected to end in 2010, which will result in a sizeable backlash. In the UK, the proposed scenario envisages that in early 2010 the government will, as it has announced, raise the VAT rate from 15% (where it has been since 1 December 2008) back up to 17.5%.

(3) According to the DGTPE, prices were only 5% above base level in late 2008 (see "The bursting of the US house price bubble", Trésor-Economics no. 40, July 2008), and housing starts are at a historic low.

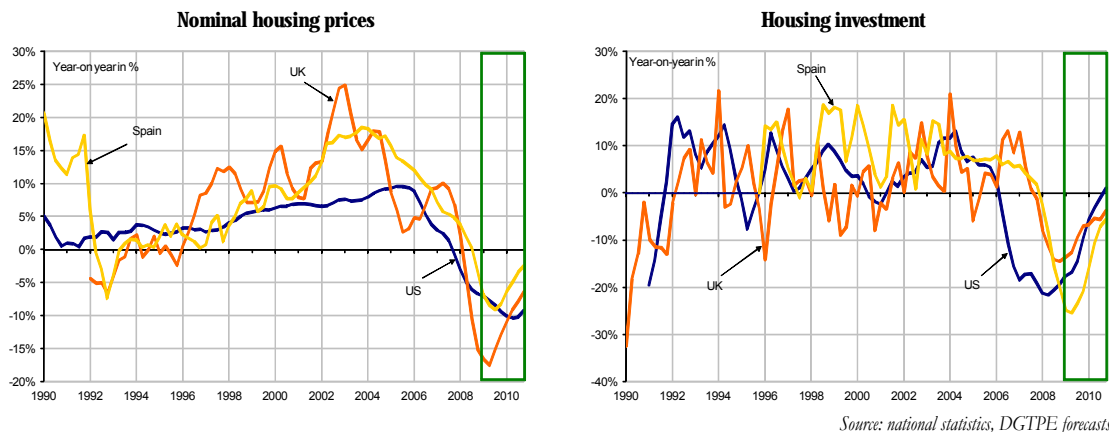
less severe than in the US, because the UK did not experience a housing bubble – the drop in housing investments is first and foremost a result of the consequences of the financial crisis and the fall in household purchasing power brought about by rising unemployment.

Finally, Spain experienced a sharp adjustment to transaction volumes: nearly 600,000 construction jobs have been lost since the end of summer 2007. Investment dropped by nearly 20%, and housing starts fell from some 800,000 per year in late 2006 to 300,000 two years later. In spite of this, housing investment still has an outsized share of GDP (6.5% in Q4 2008 against 4.5% in 1995, prior to the start of the property bubble), and the correction should

continue through the end of 2010. Real estate prices should also decline, but less dramatically than in the US or UK.

This adjustment should stymie any real return to growth (stimulus spending excluded) for all three economies before 2011. In Spain and the UK, recovery plans are not expected to be able to reverse contraction in activity until early 2010 (despite the support provided to the British economy by the depreciation in the pound). As for the US, the scope of the stimulus package should limit the length of the recession (with positive growth returning in the second half of 2009, but only because of the package, and at a cost of a sharp rise in the public deficit<sup>4</sup>).

Chart 4: Adjustment of the real estate markets in Spain, the UK and the US



### 3.1 A feedback effect is expected to limit growth around the world through to the end of 2010

The stagnating situation in Spain and the UK, and the lack of genuine growth in the US brings with it a drop in imports. This in turn should rein in recovery in world trade in the principal trading partners, particularly Japan and Germany. Nevertheless, the scope and timing of the recovery plan announced by the German government (stimulus for consumption in 2009, a boost in public investment in 2010) should allow activity to reach its potential for most of 2010.

In the rest of the world, a lack of vitality in world trade should also hold up a return to growth. Growth was poor in early 2009 in the emerging Asian countries, and the recovery is thus expected to be slow in coming, despite stimulus packages implemented by the authorities, particularly in China. In Japan, the contraction in GDP observed in Q4 2008 is likely to continue throughout 2009, and activity should drop by 6.6% during the year. As in Q4 2008, this drop is linked to falling investments and exports, and it is amplified by reductions in inventory and the reaction of Japanese consumers, whose purchasing power would fall off sharply in consequence. Recovery would then be a progressive affair, in step with the return

to normal of the outside world in 2010, and with the completion of labour market adjustments. In all, between early 2008 and early 2010, activity in Japan will likely have shrunk by nearly 10%.

### 3.2 In every country, economic cycles will likely be amplified by an acute phenomenon of inventory destocking / restocking

A sharp contraction in manufacturing was observed in every country in the world in late 2008, and as of early 2009 it had not abated. This contraction was a response by businesses to the slowdown in demand for their products. In such a highly unstable environment, studies revealed that the drop in production was the result of a desire to reduce inventories. This was done to limit the risks associated with overly-large inventories and perhaps also to create some room to manoeuvre with respect to cash flow. Although the drop in demand was such that it was not always followed by an equivalent reduction in production, destocking activities should increase in early 2009, extending the slowdown. Following this, as activity falls off less sharply – or even picks up – businesses are expected to progressively slow inventory reductions, which should contribute to GDP growth.

(4) Public deficit should reach 10.8% in 2009, and 10.0% in 2010.

Table 1: Comparative changes in target inventories

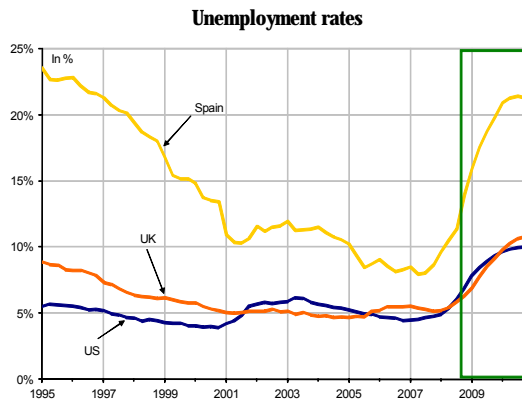
Country	Total destocking (in GDP points) during the current crisis	Destocking during the country's last recession (date)
United-States	0.6%	0.6% (crisis of 1983)
Japan	0.5%	0.5% (crisis of 1998)
United Kingdom	0.9%	1.3% (crisis of 1990)
Germany	1.6%	1.6% (crisis of 2002)
Spain	0.8%	0.6% (crisis of 1993)
Italy	1.1%	0.8% (crisis of 1993)

Source : DGTPE

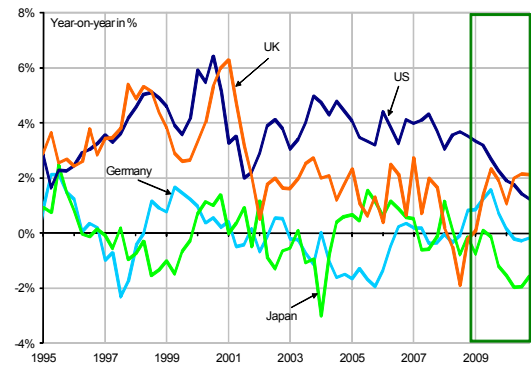
### 3.3 Rapid adjustments by the labour markets

Given the marked contraction in expected activity, businesses are expected to adjust their wage bills by sharply cutting jobs, while salaries should increase only marginally. Unemployment rates should thus rise dramatically,

particularly in Spain (from 11.3% in 2008 to 21% in 2010), in the UK from 5.7% to 10%, and in the US from 5.8% to 10%. This rise should be somewhat less steep in Italy (6.7% to 9%) and Germany (7.3% to 10%). The exception to this is Japan, where adjustments are normally accomplished through wage adjustments, leaving the unemployment rate relatively unaffected. However, the introduction of flexibility into the Japanese labour market in the early 1990s - and in particular the growth in temporary labour (whose share of total employment rose from 0.8% in 2000 to 2.0% in 2007) - should call this model partly into question. Thus, wages should continue to fall significantly, and employment should also suffer, which the traditional cyclicality of the working population should only partially redress. Unemployment rates should increase significantly, and household purchasing power is expected to diminish.



Graphique 5 : Changes in labour markets

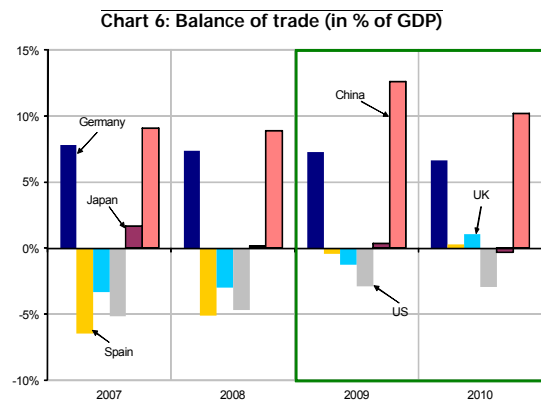


Sources: national accounts; DGTPE forecasts

### Box 3: The crisis should allow for a partial reduction of world trade imbalances

Among the countries most affected by the crisis are those that displayed excessive levels of debt in recent years (including the US, the UK and Spain), accompanied by strong current account deficits. The partial correction of this excess indebtedness (savings rates should increase sharply in the US and UK, but it will require some time before debt levels of private-sector stakeholders come down noticeably) should allow for some reduction of trade deficits. Thus, in Spain and the UK, deficits should be neutralised. In the US, the scope of the stimulus package will likely limit such a correction, and the deficit, which is falling rapidly, is expected to continue to be over 3% of GDP in 2010.

In other developed countries that accumulated trade surpluses, the change should be less noticeable. Only Japan should see its trade deficit eliminated (which is already the case at the time of writing), in connection with the significant hike in its currency that has occurred. Some countries may thus retain high trade surpluses, which suggests that their recovery efforts could have been more pronounced.



Sources: national accounts, DGTPE

### 3.4 Theoretically, the risk of deflation is limited in the euro area

The contraction in activity should result in record output gaps, which may reach -6% in both the Euro area and the US in 2010. In such a context, the main risk is that of deflation, as attested to in the marked slowdown in prices included in the baseline scenario (core inflation excluding rents close to 0% in the US in 2010, inflation at 0.7% in the Euro area for the same period, 1.4% in the UK and only 0.4% if we set aside the mechanical effect of the planned increase in VAT). On the other hand, deflation should return in Japan (-1% in 2010). In countries like the UK or the US, there is a risk of a deflationist spiral

brought on by the rise in debt levels, along the lines of what happened in Japan in the 1990s. In the euro area, given the relative stability of wages – which limits unit wage cost reductions in businesses, thus reducing their margin for lowering prices - the risk of a deflationist spiral is thus lower there than elsewhere in the world. Nevertheless, if the euro appreciates to any marked degree, the risk would be all the greater. For this reason, there is a risk factor in the implementation of unconventional monetary policies that are more aggressive than in other economies, such as we see in the US with the recent decision by the Federal Reserve to massively increase its purchase of T-bills.

Table 2: Summary of forecasts

Annual averages in %	Registered			Forecast	
	2007	2008	2009	2009	2010
US GDP	2.0	1.1	-1.1	-1.9	0.6
Japan GDP	2.4	-0.7	-3.0	-6.6	-0.6
Euro area GDP	2.7	0.8	-1.3	-2.1	0.4
Germany GDP	2.6	1.0	-2.0	-3.0	0.8
Spain GDP	3.7	1.2	-0.9	-2.1	-1.0
Italy GDP	1.3	-0.9	-1.8	-2.3	0.0
UK GDP	3.0	0.7	-1.5	-3.1	-0.7
China GDP	13.0	9.1	-1.9	5.5	7.5
World trade	5.8	2.4	-2.9	-8.1	2.3
World demand for French goods and services	5.0	2.3	-2.9	-8.6	0.6
Euro area inflation	2.1	3.3		0.4	0.7
US inflation	2.9	3.8		-1.3	0.7

Sources: national accounts, DGTPE

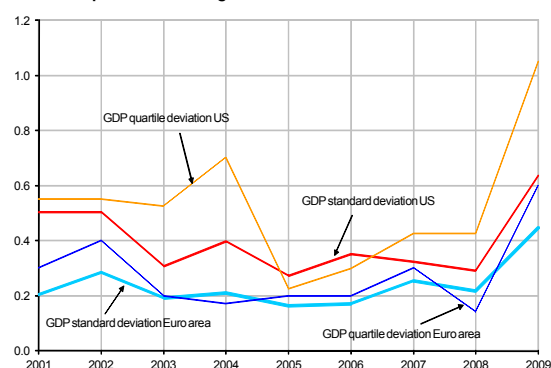
Note: These forecasts were finalised at the end of February. They do not take into account the latest manufacturing and foreign trade statistics from January, which show a continuation of the downward spiral in Q1.

#### Box 4: Many unknown factors cloud the global scenario

The uncertainties surrounding this growth scenario are much larger than normal.

This explains the record-breaking dispersion in the forecasts from the technical group of France's National Economic Council with respect to GDP growth in the US and the Euro area. The standard and quartile deviations for these forecasts are two to three times higher than in previous years.

Chart 7: Dispersion of GDP growth rates in the US and in the Euro area



Sources: forecasts from the technical group of France's National Economic Council (Commission Économique de la Nation), DGTPE calculations

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