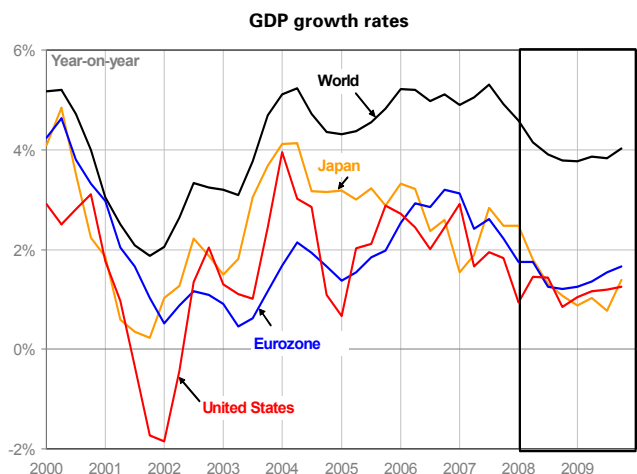


Global economic outlook, spring 2008

- Despite adverse economic conditions in the US, with the real estate market downturn and a deteriorating job situation, combined with a shock to commodities and oil prices and the financial turbulence that emerged during the summer, the global economy remained buoyant in 2007 thanks to continuing fairly vigorous growth in Europe and emerging Asia. Growth in the eurozone was sustained mainly by robust investment and dynamic external trade. In Japan, the upturn observed at the end of 2006 and early 2007 went into reverse in mid-2007, notably with a decline in activity in the second quarter due to weaker investment; activity picked up solidly at year-end, however, thanks to a rebound in public and private investment. Meanwhile, emerging Asia maintained its exceptional growth rate of 2006, driven by China's boom.
- In 2008, global activity is forecast to slow, partly as a result of the US economic downturn, and also due to the combination of a price shock (with the surge in the price of oil, agricultural commodities and food prices), and persistent financial market tensions that are expected to squeeze business investment. The inflation shock is expected to dampen consumption in the first half of 2008, particularly in countries also suffering negative wealth effects due to the property market.
- In the course of 2009, activity is expected gradually to return to its potential growth rate in Europe and the United States, as the financial markets situation is normalised, inflation abates and the effects of the US property crisis are attenuated. In the emerging countries, China notably, activity is expected to gather pace again progressively in 2008 in line with expected trends in global trade.

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.



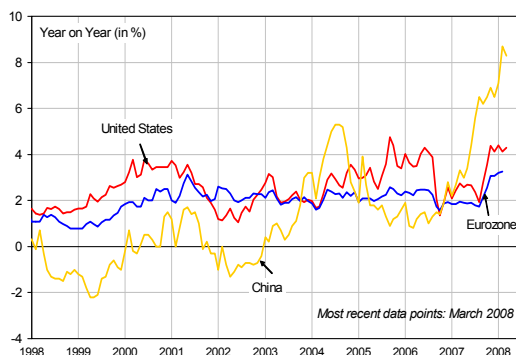
Source: National Accounts, DGTPE.

1. Since summer 2007, the international economic environment has suffered the combined effects of a price shock and a financial markets shock

1.1 Sharply rising inflation is squeezing household purchasing power

The price of oil rose steeply in 2007 and continued to rise in early-2008, with the price of Brent topping €100 per barrel for the first time on 29 February. At the same time food prices have continued to rise sharply as well¹. This trend has led to a distinct spurt in inflation in the industrialised countries (3.6% in the eurozone in March and 4.0% in the United States) as well as in the emerging countries (a record 8.6% in China in February 2008). This unforeseen increase in inflation has been squeezing employees' purchasing power since the end of 2007.

Chart 1: inflation trends



Source: FED, ECB.

Box 1: how to account for the rising price of oil?

Oil prices have been subject to wide swings since November 2007. After losing \$13 per barrel between 13 and 23 January 2008, the price regained \$20 between 7 February and 14 March. A barrel of Brent was trading at \$108 (€67) on 14 March before losing ground in the following days, then rising to nearly \$115 (€72) in mid-April. These levels are comparable to their historical records, expressed in \$2007: \$115 for Brent in November 1979 (see appendix).

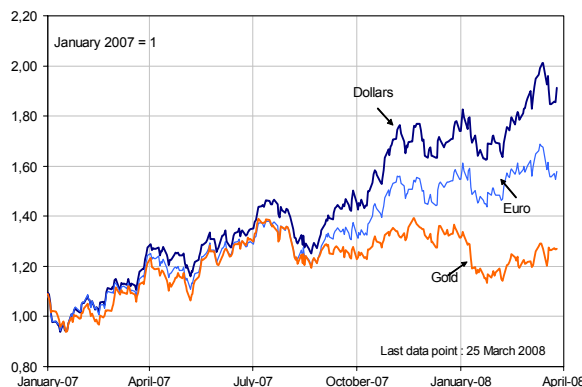
In a context of constrained supply, these fluctuations stem partly from uncertainty over the impact of the economic slowdown in the industrialised countries on global oil demand.

Ultimately, it seems that the tensions affecting the oil market mainly result from a combination of strong demand fuelled primarily by the emerging countries and China, a steep decline in the number of non-OPEC fields, tightly controlled OPEC supply, and the limitations themselves on this supply; in other words, from structural factors, mainly.

To this structural effect on the physical market is added a speculative effect on the financial market, which could explain the across-the-board nature of rising commodity prices observed recently (some investors are said to be switching into these assets in order to hedge against inflation and the falling dollar, in a climate of distrust of other financial assets; see Chart 2 showing oil prices relative to gold). The prospect of persistent structural tensions is clearly encouraging this investor reaction.

It is not possible to separate "fundamental" prices (*i.e.* market clearing prices) from the purely speculative element, notably due to lack of data on global inventories.

Chart 2: the relationship between the price of oil and the price of gold



Interpretation: "gold" represents the change in the relationship between the price of a barrel of oil and the price of an ounce of gold, rebased at 1 in January 2007.

Source: Datastream.

The only available data concerning speculative activity itself are exclusively American (US-Commodity Futures Trading Commission, CFTC) and partial, and the BIS conducts only a three-yearly survey of all paper over-the-counter contracts for all commodities (not disaggregated).

For forecasting purposes, oil prices have been frozen by convention at the average level for the past 30 days at 17 March (\$100). Given the expected slowdown in global growth in 2008-2009, growth in oil demand is expected to abate (+1.4 Mbd in 2008 and +1.5 Mbd in 2009). The projected price stability in this scenario of demand trends nevertheless implies faster supply growth, supply having risen by only 0.2 Mbd in 2007.

(1) On food prices, see Lecocq, Richard, Thornary (2008): "Do rising food prices pose a risk of persistent inflationary pressure?", *Trésor Economics no. 32, DGTPE*.

1.2 Exchange-rate trends have affected the competitiveness of the eurozone and Japan

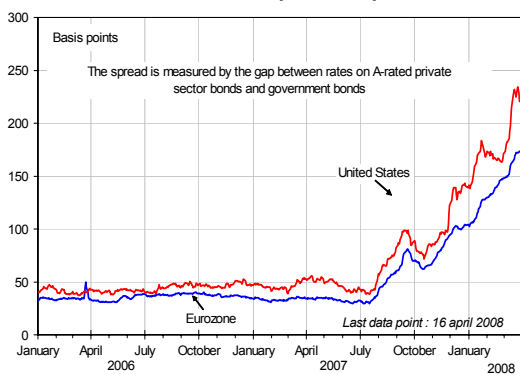
A second shock has affected the global economy since last summer, albeit less symmetrically. This relates to investor concerns over US growth since summer 2007 and the deep interest rate cuts decided by the US Federal Reserve. These have led to a steep fall in the dollar against the euro notably, while the emerging Asian currencies have also continued to lose ground against the European currency. The yen has appreciated sharply against all currencies due to the unwinding of carry trade positions in the face of rising exchange-rate risk². Finally sterling has depreciated against the euro.

As a result, the movements in the foreign exchange markets in the second half of 2007 and early 2008 have damaged the eurozone's and Japan's price competitiveness, thus hurting export growth. Conversely, they have tended rather to support growth in the United States and the United Kingdom.

1.3 The financial crisis originated in the United States has darkened the credit supply outlook

During the summer, fears over undervalued default risk on subprime US property loans combined with uncertainty over securities using these loans as underlying assets led to a widespread rise in risk premiums on both American and European financial markets. In April 2008, the situation had not yet returned to normal, particularly for rates charged to corporate borrowers (Chart 1). This situation seems to be affecting both Europe and the United States, whereas Asia (Japan included) appears to have been spared so far.

Chart 3: spreads on private sector bonds



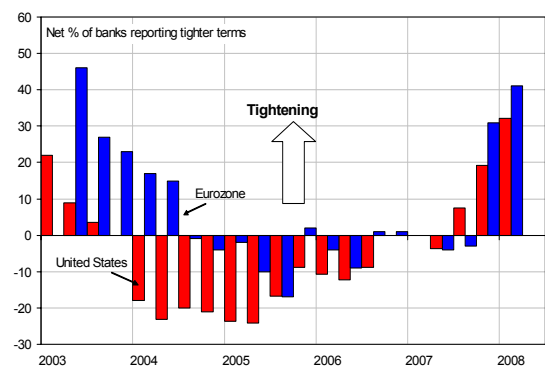
Source: Datastream, Lehman Brothers.

Part of the current volatility can be accounted for by the difficulty of estimating the potential losses and the extent of the risks still weighing on investors. Since the summer, heavy losses have been incurred as a result of investors seeking to sell assets that have come to be seen as overvalued (in particular assets linked to subprime-type loans) and seeking refuge in safer assets. The widespread flight

to security has sharply depressed prices of the incriminated assets and led to larger than initially expected losses: out of a total of around \$1,300 billion in subprime loans outstanding, losses of the order of \$130 billion were being mentioned at the beginning of the crisis (in summer 2007); by the beginning of April 2008, the spreading crisis had already given rise to reported losses of \$250 billion.

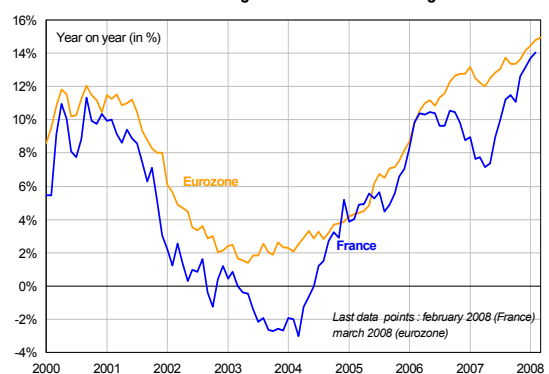
Deteriorating assets forced banks to raise fresh capital and restrict their lending. According to some surveys published by the European Central bank, the Federal Reserve and the Bank of England, this reduction in the supply of credit is already perceptible and threatens economic growth prospects. This phenomenon does not appear to be affecting Japan. Until now, lending conditions are mainly thought to have tightened for business borrowers (this is the case in the eurozone, the United Kingdom and the United States). Property lending too has become tighter in the United Kingdom and the United States.

Chart 4: surveys of terms of business lending



Source: FED, ECB.

Chart 5: lending to business outstanding in the eurozone



Source: ECB.

1.4 The US authorities have responded vigorously to the risks threatening growth

The American authorities have responded to the increased risk of recession in the United States for 2008 by acting on both sides of the policy mix:

(2) Grislain, Lacquet-Saillard (2008): "The carry trade and recent yen movements", *Trésor Economics*, no. 33, DGTPE.

- **on the fiscal policy side**, in February Congress approved President Bush's \$168 billion stimulus plan representing 1.2% of GDP. The measures concerned both households (for a total of \$116 billion in the form of tax credits) and corporations (for an estimated total amount of \$51 billion in the form of tax rebates on depreciation charges). It is expected to have an

impact of around 0.4 percentage points on GDP in 2008 (see Box).

- **on the monetary policy side**, the Fed has cut the Fed funds rate seven times since September, lowering its key rate from 5.25% on 18 September 2007 to 2% on 30 April.

2. The global economy has held up well so far, but early indicators for 2008 appear to point to a slowdown now at work

2.1 The second half of 2007 saw buoyant growth in the eurozone and Asia, but also in the United States

The shocks mentioned earlier (inflation and lending terms notably) do not appear to have had any significant impact on the real economy at the end of 2007: investment remained dynamic all over the world, while falling household purchasing power was generally offset by lower savings rates. In the United States, growth remained vigorous despite the worsening property crisis, especially in

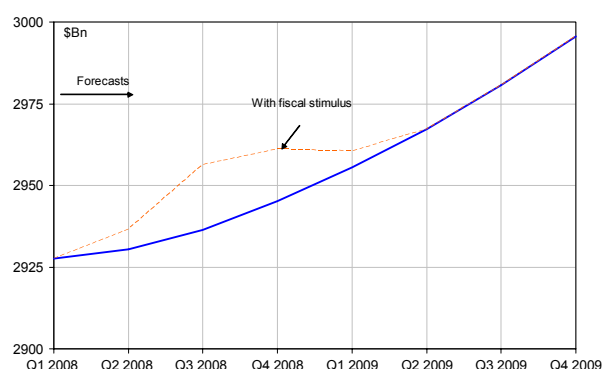
the third quarter. While this was partly due to a degree of consumer resilience and buoyant business investment (particularly its "construction" component, the "equipment and software" component having shown signs of running out of steam), this figure was in fact being sustained by continuing strong growth elsewhere in the world, thanks to which the external account again contributed positively (0.3 percentage points of GDP per quarter on average).

Box 2: estimating the impact of the US fiscal stimulus

The main channel through which the fiscal stimulus affects activity is *via* its impact on consumption. To quantify these, we have notably examined the impact of a similar measure in 2001. What emerges from this is that the propensity of households to consume the cheques received is far greater than what is predicted in classical macroeconomic models: nearly two-thirds of the amount of the cheques was thus consumed over 2 quarters in 2001^a. The situation is admittedly different today, notably because American households are more heavily indebted. It should be noted however that the increase in their debt stems solely from rising mortgage debt: consumer debt has remained stable as a percentage of income since 2001. Moreover, the stimulus is targeted more at the low-income households –that is towards those households whose propensity to consume is greatest– than in 2001. Consequently, it is this order of magnitude that has been used to quantify the impact of the stimulus on consumption, and which leads to the conclusion that the stimulus ought to boost consumption by around 0.7% in volume terms in 2008. Similarly, to quantify the impact of the fiscal stimulus on business investment, the experience of the period 2001-2004 (when similar measures were introduced) is examined: from this it emerges that the impact of this component on annual growth can be expected to be on the order of 0.7%.

Altogether, given the relative weight of these components in GDP, the total impact on growth can be expected to be on the order of $0.7\% \times 70\% + 0.7\% \times 10\% = 0.6\%$. Part of this demand, however, will lead to a 1.8% increase in imports, or 0.2% of GDP, assuming a short-term elasticity of imports to GDP of 3. Overall, the net impact on GDP growth should work out to an annual average of 0.4 percentage points for 2008^b, most of the effect occurring in the third quarter.

Chart 6: impact of the fiscal stimulus on GDP



Source: DGTPE calculations

Table 1: estimated impact of the fiscal stimulus

Demand components	Impact 2008
Gross Disposable Income (by value)	
- \$Bn	116
- on annual growth rate	1.10%
Consumption (volume)	
- \$Bn	62
- on annual growth rate	0.70%
Investment in producer goods(volume)	
- \$Bn	8
- on annual growth rate	0.70%
Imports(volume)	
- \$Bn	25
- on annual growth rate	1.30%
GDP (volume)	
- \$Bn	45
- on annual growth rate	0.40%

a. Cf. Johnson, Parker and Souleles (2004): "Household Expenditure and the Income Tax Rebates of 2001", *NBER Working Paper No. 10784*.

b. Insofar as the income infusion takes place in 2008 and there will be no repeat in 2009, we ought to see a corresponding dip in the growth rate in 2009.

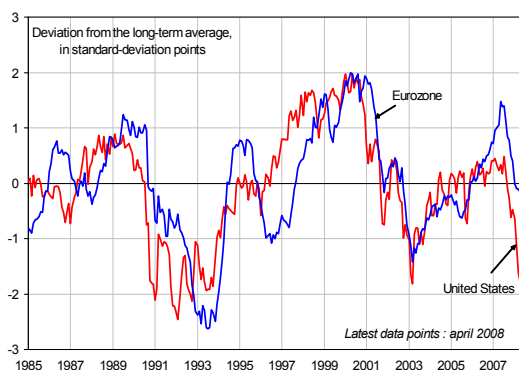
In the rest of the world growth has remained buoyant too. Investment has been the main driver in the eurozone, as consumption slowed progressively in Spain and remained very dismal in Germany (it fell sharply in the 4th quarter). In Japan, activity picked up following the decline in GDP in Q2 2007 (-0.5%), fuelled by very dynamic business investment and consumption, which continued to support growth despite stagnating real wages.

2.2 Early 2008: the slowdown is perceptible in the United States, but not visible in Europe

In early 2008, all the indicators seem to be showing a slowdown in global activity, notably under the impact of tighter credit and rising inflation, as described above:

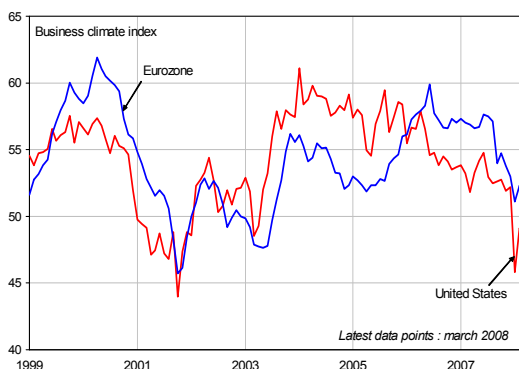
- consumer confidence has declined in all of the industrialised countries (in the United States, in the United Kingdom, where it has fallen a 15-year low, in Japan, and to a lesser extent in the eurozone).
- the business climate has deteriorated, particularly in the United States, where its current low level (according to the PMI) could be signalling that the economy is entering recession; a slowdown has also been observed in the eurozone, but the level reached tends rather to suggest the end of a period of particularly robust growth (reverting to levels close to the long-term average).

Chart 7: consumer confidence index



Source: European Commission and Conference Board.

Chart 8: business climate index

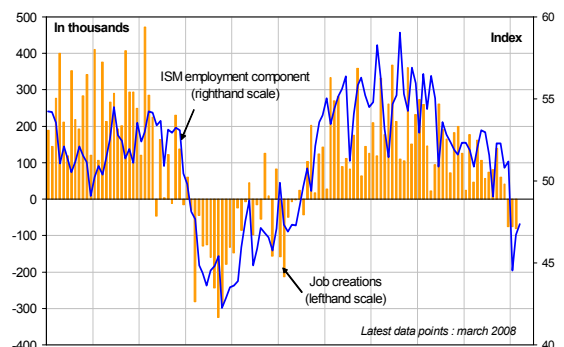


Source: PMI – Reuters.

However the situation is very different on either side of the Atlantic:

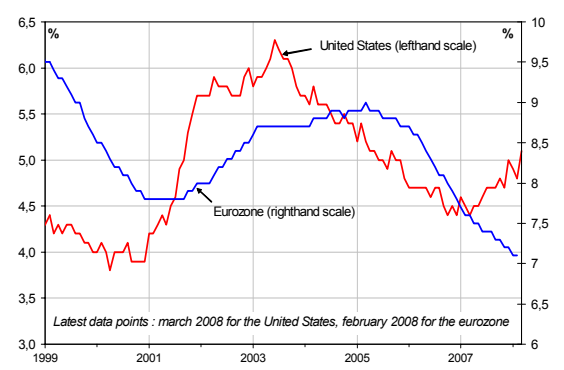
- the slowdown appears to be very pronounced in the United States; more jobs were destroyed than created for the fourth consecutive month in March, and the jobless rate rose to 5.1%. Most indicators are close to those that could signal a recession.
- in Europe, there are some elements of resilience; in particular, unemployment remains stable overall at historically low levels (except in Spain); industrial output bounced back strongly at the beginning of the year, after dipping at the end of 2007.

Chart 9: United States – Labour market



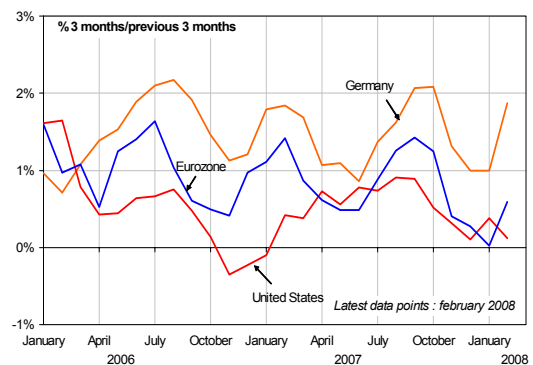
Source: BLS, ISM/NAPM.

Chart 10: unemployment in Europe and the United States



Source: Eurostat, BLS.

Chart 11: industrial output



Source: Eurostat.

The countries traditionally most exposed to the financial channel (the United States, the United Kingdom, Spain, etc.) are set to be affected by the financial turbulence and the weakness of their property markets throughout the whole of the first half of 2008 and will pick up progressively thereafter; the other countries, and especially the eurozone, are expected to slowdown chiefly *via* the trade and currency channel.

The forecast slowdown in activity in early 2008 is expected to be temporary, *a priori*, stemming from factors assumed to abate progressively³. However, the slowdown is forecast to be more pronounced in those countries more exposed to the financial wealth effects, as well as in countries where a property market correction is expected. Based on these criteria, France could expect to come through relatively unscathed.

2.3 Tighter credit and lower growth prospects weaken business investment

The credit crunch will probably be concentrated on the United States, where it would amplify the slowdown in investment in producer goods and business software already observed at the end of 2007, and should also help to explode the bubble in non-residential construction investment by businesses, leading this GDP component (which accounts for a relatively small 2.5% of GDP) to undergo a significant correction over the forecast's time horizon.

In the rest of the world, the impact of tighter credit is expected to be more localised (in the United Kingdom notably, but not in Japan or Germany) and investment

would be squeezed primarily by downward revisions of demand forecasts, chiefly in early-2008. In the eurozone, Italy is forecast to be worst-hit, being most sensitive to stockmarket fluctuations (and hence to the correction to the IBEX index observed at the start of the year).

2.4 A pronounced property market consolidation is forecast in the United States, with residential investment continuing to decline until the end of 2008 (and prices until end-2009)

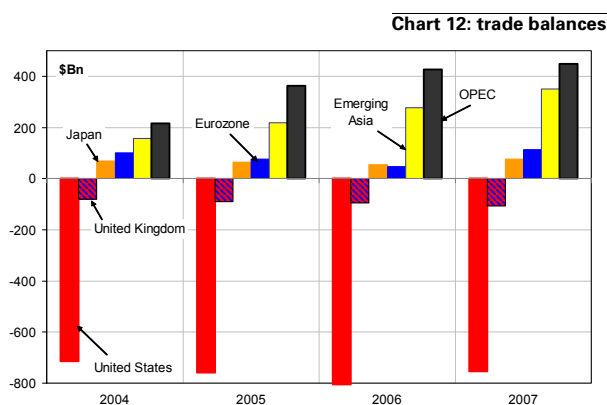
The property market consolidation under way since mid-2006 in the United States is expected to continue through 2008, although the scale of the decline will diminish from quarter to quarter, as banks' balance sheets return to normal. Residential investment is then forecast to pick up in Q1 2009. Property prices⁴, which began declining in late-2007, are expected to go on falling until end-2009, to a level 10% below their level at the peak of the bubble. This price decline is forecast to penalise American households throughout the time horizon of the forecast.

The correction is expected to be a sharp one in Spain and the United Kingdom also. However, despite tighter credit conditions, factors specific to each country mean the impact on property activity should remain moderate. In the United Kingdom, supply is still weak relative to demand, and the adjustment should consequently take place *via* prices. There is no supply deficit in Spain, and correction in the residential market could be quite substantial. However, public investment in construction should take over from residential investment and so help to limit the decline in activity.

Box 3: global imbalances were not reduced in 2007

Global growth was strong in 2007, and above all it was better balanced between the main economic regions, in particular on both sides of the Atlantic: between Q4 2006 and Q4 2007, the eurozone grew faster (+2.6%) than the United States (+2.2%). This ought to help reduce somewhat the global imbalances (notably *via* the reduction in America's current-account balance that this is supposed to enable). Yet in actual fact, while the American trade balance did indeed improve in 2007, global imbalances widened due to the following factors:

- the Asian surpluses grew yet again, especially since these countries' real effective exchange rate did not appreciate overall (the emerging Asian countries' effective exchange rate was globally unchanged, while the yen depreciated).
- the rising price of oil in 2007 (with Brent rising to \$73 on average, coming after \$65 in 2006) further widened the producer countries' surpluses.



Source: IMF and DGTPE.

- in Germany, the fall in consumption prompted by the VAT increase boosted the trade surplus sharply (\$240 billion in 2007, coming after \$155 billion in 2006).

(3) The scenario presented here assumes that the price of oil (Brent) is frozen at \$100 per barrel as from 17 March 2008, together with a progressive abatement of market imbalances observed (with spreads returning to their long-term level between now and the end of 2008).

(4) Measured by the OFHEO index.

2.5 Reduced financial and property wealth in the United States, Spain and the United Kingdom will squeeze consumption in 2008

Household consumption is expected to suffer unequally, depending on the country, from the negative wealth effects: substantially in the United States, Spain and the United Kingdom, to a lesser extent in Italy, Germany and Japan. On the other hand, rising inflation is forecast to impact consumption more evenly.

Overall, consumption is forecast to slow worldwide in the first half of 2008, with near-zero quarterly growth in the United States (where all of these different effects combine), and very sluggish growth in United Kingdom and Spain. Over the forecast's time horizon, growth is expected to pick up again progressively, more slowly in those countries expected to continue to feel the impact of property market consolidation (in Spain, United Kingdom and the United States).

German households are especially sensitive to high inflation, but they are benefiting from the additional income arising from the cut in unemployment insurance contributions introduced on 1 January 2008, and from higher wages. Consequently, their consumption is expected to resume growing from the beginning of 2008 (after slumping in Q4 2007, admittedly). Also worth noting, the American stimulus is expected to boost consumption sharply in Q3 and Q4 2008.

2.6 The emerging countries are forecast to provide substantial support to global growth, even if their economies are expected to slow too, as world trade slows.

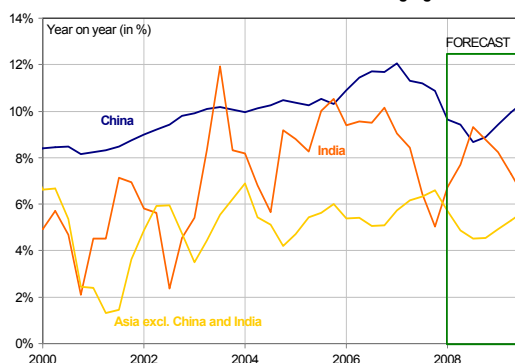
At the beginning of 2008, Chinese domestic demand was forecast to suffer from the high level of inflation recorded and new measures taken to curb surplus liquidity (with the raising of interest rates on overdrafts and lending and of the banks' compulsory reserves ratio, as well as from the sharp slowdown in exports caused by bad weather during the winter and the slowdown in world trade. Thereafter, the "global trade" effect is expected to fade progressively, while the "domestic demand" effect gathers momentum. Overall, growth is expected to continue at a slower pace (compared to recent years) throughout the forecast's time horizon; this slackening will be moderate however, as investment is forecast to remain fairly dynamic, driven primarily by public-sector investment.

A more pronounced slowdown is expected in India on the other hand, with sharply higher interest rates weighing on

consumption and investment, while the rupee's appreciation will harm competitiveness.

Against this background, activity in emerging Asia as a whole is expected to slacken slightly, in parallel to the slowdowns observed in China and the United States. This slowdown will be limited, however, and the region will continue to provide strong support to global growth.

Chart 13: emerging countries' GDP



Source: IMF and DGTPE.

2.7 The uncertainties surrounding this scenario are on the downside where financial conditions are concerned (with an amplification of the financial crisis and its effects), and on the upside where eurozone domestic demand is concerned (with fiscal stimuli, notably in Spain, and faster consumption growth in Germany)

The main downside uncertainty in this scenario concerns how the financial crisis is expected to develop. Consumption and investment could be worse hit if the conventional assumptions –of a rapid normalisation of the markets (with spreads reverting to their average level by the end of 2008) and of stockmarkets reverting to their long-term growth rate from second-half 2008 onwards– proved overoptimistic.

On the other hand, the situation could turn out better than expected if eurozone domestic demand proved more robust: consumption could pick up more strongly in Germany, notably due to a fall in the savings ratio, after rising steadily in recent years, and thanks to stronger wage growth. Some countries could benefit from their healthy fiscal position to stimulate their economies, as is being mooted in Spain notably.

Aurélien FORTIN

Table 2: main outcomes of the international scenario

Annual change (in %)	2006	2007	2008 (e)	2009(e)
GDP growth (Seasonally adjusted-Adjusted for days worked)				
United States	2.9	2.2	1,5	1.5
Japan	2.4	2.0	1.1	1.2
United Kingdom	2.9	3.1	2.0	2.2
Eurozone	2.9	2.6	1.8	1.9
Germany	3.1	2.6	1.6	1.7
Italy	1.9	1.5	0.8	1.1
Spain	3.9	3.8	2.7	2.3
Netherlands	3.0	3.5	2.8	2.0
Belgium	2.9	2.7	1.5	1.8
Central and Eastern Europe	5.8	5.4	4.9	4.6
Russia	7.4	8.1	7.0	6.4
Latin America	5.2	5.1	4.1	4.4
Emerging Asia	8.8	9.0	7.7	7.8
.... of which China	10.8	11.4	9.6	9.7
World	5.1	5.1	4.0	3.9
Global demand for French goods and services	8.8	5.2	3.9	5.3
Global trade	9.2	5.9	4.5	5.8
Oil price (Brent. in \$)*	65	73	99	100
Euro-dollar exchange rate*	1.26	1.37	1.53	1.54

* Oil price and exchange rate forecasts are based on the assumption that they are frozen at \$101 for oil and a euro/dollar exchange rate of 1.54 from 17 March.

(p): DGTPE forecasts.

Publisher:

Ministère de l'Économie,
de l'Industrie et de l'Emploi
Direction Générale du Trésor
et de la Politique économique
139, rue de Bercy
75575 Paris CEDEX 12

Publication manager:

Philippe Bouyoux

Editor in chief:

Philippe Gudin de Vallerin
+33 (0)1 44 87 18 51
tresor-eco@dgtpe.fr

Layout:

Maryse Dos Santos
ISSN 1777-8050

Recent Issues in English

April 2008

- No. 35. Real exchange rate appreciation in the emerging countries
Olivier Jonglez
- No. 34. «Large contracts» signed by French firms in the emerging countries
Nicole Madariaga, Raymond de Pastor
- No. 33. The carry trade and recent yen movements
Nicolas Grislain, Françoise Jacquet-Saillard

March 2008

- No. 32. Do rising food prices pose a risk of persistent inflationary pressure?
Pierre-Emmanuel Lecocq, Benjamin Richard, Baptiste Thornary
- No. 31. How does the National Minimum Wage compare with the SMIC?
Jean Boissinot

February 2008

- No. 30. The long-term economic consequences of climate change
Joffrey Celestin-Urbain
- No. 29. Implementation of the Markets in Financial Instruments Directive: what is at stake?
Frédéric Cherbonnier, Séverine Vandeloite

January 2008

- No. 28. The conditions for a positive contribution of sovereign wealth funds to the world economy
Ivan Odonnat
- No. 27. Competition within sectors in France
Romain Bouis