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The global economic outlook in the autumn of 2008

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.

- In the summer of 2008, even before suffering the consequences of the abrupt worsening of the financial crisis in mid-September, the world economy was faltering.

- By the summer of 2007, growth around the world had already started to slow down. This was due to the impact of the depressed American housing market on world financial markets starting in August 2007, and to the rise in commodity price – oil hit a record high of $147 a barrel in July 2008. In a single year, growth was down in nearly every industrialised country, and negative growth was even observed in the euro area and Japan in Q3 and Q4, and in the US and the UK in Q3. Although emerging countries proved to be relatively resilient, China's growth slowed in Q3.

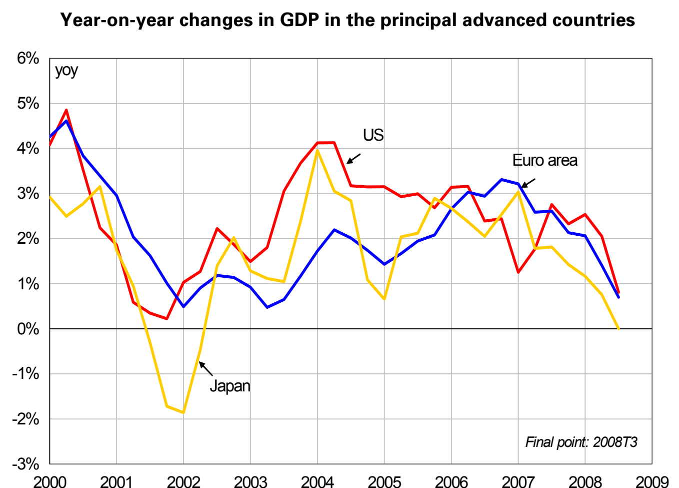
- Starting in mid-September 2008, the financial crisis worsened considerably, particularly after the failure of Lehman Brothers, causing credit to dry up and stock prices to fall. A widespread lack of confidence caused financial institutions to deleverage and to tighten lending to households and businesses. Thanks to large-scale intervention on the part of the authorities, specifically recapitalisation of companies in difficulty, the financial sector has stabilised but has remained extremely fragile as of early November 2008.

- The impact of the financial crisis on the real economy has taken several forms, including tighter credit, decreased confidence and negative wealth effects. The prospects for global growth in 2009 appear dim indeed.

- In the wake of the crisis in western economies, growth should also slow in emerging countries.

- In the context of wide-scale uncertainty concerning the future of the world economy, the drop in the price of oil and commodities since the summer and changes in economic policy should help to lessen the negative effect on growth.

Year-on-year changes in GDP in the principal advanced countries



Source: National Accounts.

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DIRECTION GÉNÉRALE DU TRÉSOR ET DE LA POLITIQUE ÉCONOMIQUE

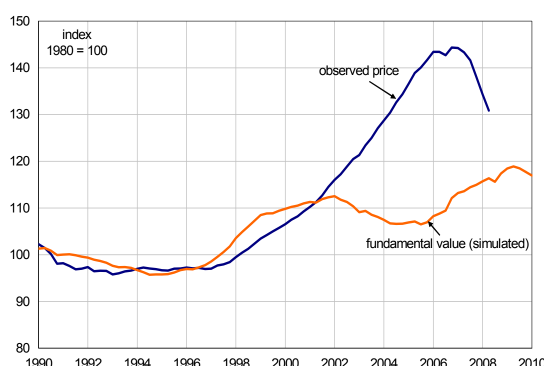
1. Starting in the summer of 2007, the impact of the depressed American housing market and the sudden rise in commodity prices caused the world economy to enter a slowdown period

1.1 In certain countries, excess liquidity encouraged excessive debt and the emergence of a housing bubble

In the course of the past decade, the abundance of liquidity in the world economy – particularly in connection with several emerging countries' increased foreign exchange reserves (China included) – led to a widespread loosening of lending conditions. In some countries, these funds were used to prop up growth by financing household spending and private investments.

In the US, the UK, Ireland and Spain in particular, growth was fuelled after 2000 by expanding housing markets. Demand for housing grew, stimulated by an abundance of credit, and fed a sharp rise in housing prices. In turn, this increase propped up consumer spending *via* a wealth effect[1]. Housing bubbles formed in these countries, and prices shot up to excessive levels. These bubbles burst in 2005 (Spain), and then in 2006 (US[2]) and 2007 (UK).

Chart 1: Real housing prices (OFHEO Index)



Source: OFHEO, DGTPE calculations.

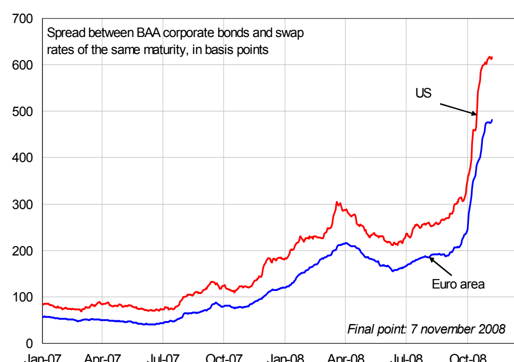
1.2 From the downturn in the US housing market to the credit crisis in the summer of 2007

Concurrently, banks increasingly began to invest in certain financial products that would turn out to be toxic; these included structured products and credit derivatives, in particular linked to US subprime loans. Those who purchased such products were unaware of just how risky they were.

The downturn in the US housing market led to explosive growth in the number of defaults on these subprime loans[3] and, *via* the financial products held by the banks, to a financial crisis starting in the summer of 2007:

- credit spreads (the difference between interest rates paid by government bonds and those paid by companies, banks in particular) increased sharply to hit record high levels (see Chart 2)

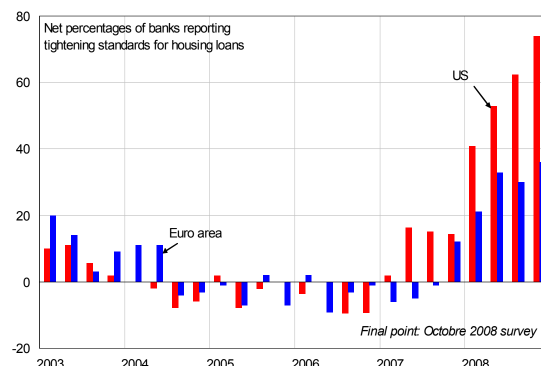
Chart 2: BAA corporate bond spreads



Sources: Datastream.

- in 2008, banks' weakened financial situation due to losses they sustained led to a slowdown in lending, including loans to households, in the hardest-hit countries (see Chart 3).

Chart 3: Surveys of housing loans to households



Source : FED (Senior Loan Officer Survey), ECB (Bank Lending Survey).

1.3 Commodity prices, oil in particular, rose sharply between summer 2007 and summer 2008

Between August 2007 and July 2008, the price of oil more than doubled, rising from $71 a barrel (Brent Crude) to $147 before falling back down starting in August 2008. Corrected for inflation (prices deflated by the US Consumer Price Index), average real oil prices also hit a record high in July ($133/barrel against the previous peak of $115/barrel, during the second oil crisis of 1979).

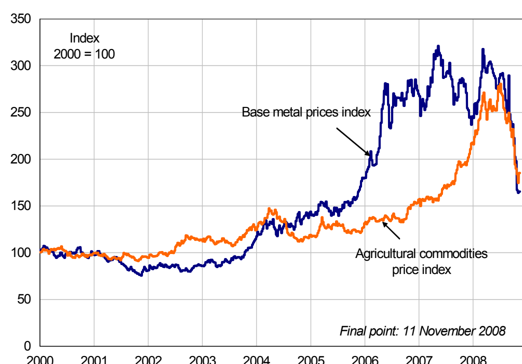
The scarcity of oil no doubt explains most of the price changes recorded in 2007–2008, even if speculation

(1) In the US, this effect was also strengthened by mortgage equity withdrawal.
(2) See Sorbe S (2008): "The bursting of the US house price bubble", *Trésor-Éco no. 40*.
(3) A default rate of 18.8% in Q1 2008, a record since these types of loans were made available.

exacerbated things. Demand for oil was very dynamic, particularly due to strong growth in emerging countries[4]. At the same time, the rise in prices did not rein in this demand, particularly because in certain emerging countries such as China, prices are highly subsidised[5]. As oil is a scarce and non-renewable resource, such a situation could only result in significant price hikes.

Rising commodity prices were seen across the board for similar reasons – a sharp increase in world demand for limited supplies. The price of metals rose sharply between summer 2007 and summer 2008, as did a number of agricultural commodities (see Chart 4), which were also driven upwards by rising energy prices and the growing use of these commodities to make biofuel.

Chart 4: Commodity prices



Source: The Economist.

Companies were faced with increased production prices, which were partly linked to the price of oil and other commodities (a "supply shock"). In the short term, companies can:

- increase their prices to recoup their production costs (which will affect demand)
- absorb high production costs in their margins. This erodes profitability and leads to fewer investments and a slowdown in hiring

In addition, the sharp rise in the prices of oil and commodities in recent years reduced households' purchasing power and affected their behaviour. Thus as oil prices rose, household consumption as a whole slowed ("demand shock").

These supply and demand shocks were only partially compensated by the recycling of excess revenues by oil-producing countries.

1.4 World growth slowed sharply in the first half of 2008, essentially due to the consequences of the downturn in housing markets (particularly in the US) and to the rise in commodity prices

Although companies at first appeared to have absorbed the shock in their margins, it was the effects of the demand shock that was primarily responsible for the slowdown in the world economy during the first half of 2008. The sharp rise in oil prices led to very high levels of inflation (5.6% in the US in July 2008, against 2.4% in July 2007; 4.1% in the euro area against 1.8%), which significantly dampened household purchasing power, and thus consumption.

In countries directly affected by a crisis in the housing sector (the US, the UK and Spain, among others), growth was also hampered by the negative contribution to growth of household housing investment (–0.7% of GDP in the US, –0.3% in the UK, and –0.3% in Spain). The drop in housing prices also contributed to keeping consumption down via the housing wealth effect, particularly in the US and UK[6].

At the end of the summer 2008, the global economic situation had significantly worsened over the previous year (see Charts 5 and 6). In a year's time, unemployment rates had increased sharply in the US (6.1% in August 2008 against 4.7% a year earlier) and in Japan (4.2% against 3.8%). Although this figure changed little in the euro area (7.5% against 7.4%), this is basically because it decreased in both Germany and France.

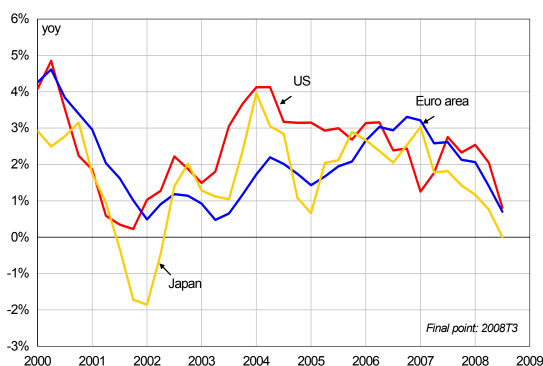
Countries directly affected by the housing crises appeared to fare the worst: US household spending dropped by 0.8% in Q3 2008, despite the additional income provided by the government's economic stimulus package that was voted in February 2008. In the UK, GDP dropped sharply in Q3 (–0.5% against 0.0% in Q2), and in Spain, the unemployment rate hit 11.3% in Q3 (against 8.0% a year earlier).

(4) Emerging countries' oil consumption has been rising astonishingly since 2003. In these parts of the world, growth is energy-intensive, and development has brought with it a rapid and unforeseen increase in the need for fuel. Higher standards of living means an increase in the number of vehicles per capita. This demand was more or less met by OPEC thanks to its spare production capacity, but the supply is nevertheless constricted and adjusted based on complex and shifting targets. In the end, insufficient increase in world supply led to countries tapping their reserves, which became problematic in 2008.

(5) In industrialised countries, on the other hand, rising oil prices led to a definite drop in demand.

(6) For Spain: the entire construction sector.

Chart 5: GDP growth

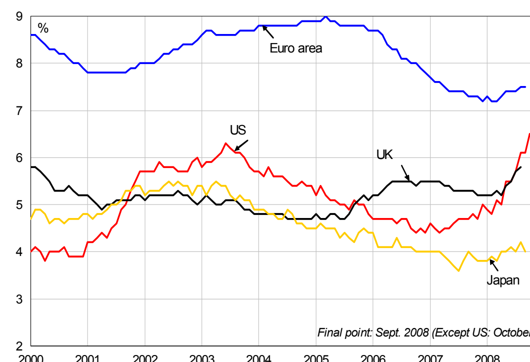


Source: National Accounts.

These countries' trading partners have also been affected, with a certain lag-time, by slowdowns in exports. Thus, German exports have dropped from quarterly growth of 2.8% in Q3 2007 to 0.0% for Q3 2008. Japanese exports also slowed (+1.6% in Q3 2008, against +5.1% in Q3 2007).

Up until September 2008, emerging countries as a whole displayed remarkable resilience, turning in good growth rates and thus contributing to propping up the world economy. Nevertheless, they also began to show signs of flagging – year-on-year growth in China, for example, slowed in Q3, dropping from 11.9% in Q2 to 9.0%.

Chart 6: Employment rates



Source: National statistical offices.

2. Since September 2008, the worsening financial crisis has contributed to sharply lower growth forecasts

2.1 The financial crisis that began in August 2007 has considerably worsened since September 2008

In an already dark economic environment, the financial crisis began to get much worse starting in mid-September 2008. Although most financial institutions appeared to have experienced liquidity problems by that point, suddenly the solvency of several major institutions appeared to be in doubt.

On 7 September, Freddie Mac and Fannie Mae, the two American mortgage finance giants were placed in government conservatorship – nationalised, basically – to keep them from failing. On 14 September, the American investment bank Lehman Brothers, handicapped by losses accumulated during previous quarters and unable to find a buyer, filed for bankruptcy protection. This time, the US government, which had previously intervened, particularly in rescuing Bear Stearns (which was purchased in March by JP Morgan with help from the Fed), considered that the failure of Lehman Brothers was acceptable from a systemic risk point of view.

The failure touched off a panic in the markets, including a sudden and spectacular risk aversion, a near-total strangulation of interbank lending and a drop in stock prices (see Charts 7 and 8). On 16 September, the world's largest insurance firm, American International Group (AIG – estimated assets under management: $1,050bn, or 7.3% of US GDP), which was also on the brink of failure, was rescued by the US government. These upheavals hastened problems at other major institutions:

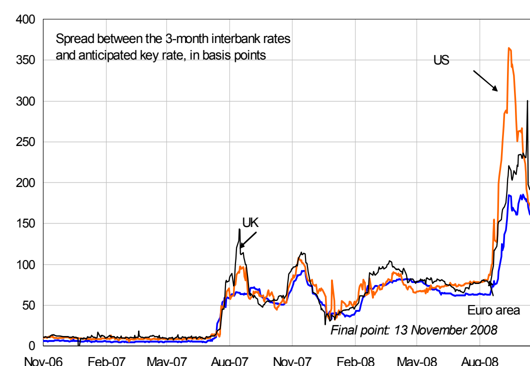
– On 20 and 21 September, Morgan Stanley (estimated assets under management: $780bn, or 5.5% of US GDP) and Goldman Sachs (estimated assets under management: $690bn, or 4.8% of US GDP) changed their status from investment banks to bank holding companies. This offered them greater legal protection, and gave them access to Federal Reserve liquidity.

– On 26 September, Washington Mutual, the number one US savings and loan association (estimated assets under management: $330bn, or 2.3% of US GDP) was taken over by JP Morgan.

– On 28 September, the British bank Bradford & Bingley (estimated assets under management: £21bn, or 1.5% of UK GDP) was nationalised before being partially taken over by the Spanish Group Banco Santander.

– That same day, the Dutch, Belgian and Luxembourg governments acquired stakes in Fortis (estimated assets under management: €450bn, or 50% of Benelux GDP) to keep the company from failing.

Chart 7: Interbank spreads



Source: Reuters.

Box 1: **Changes in the main exchange rates**

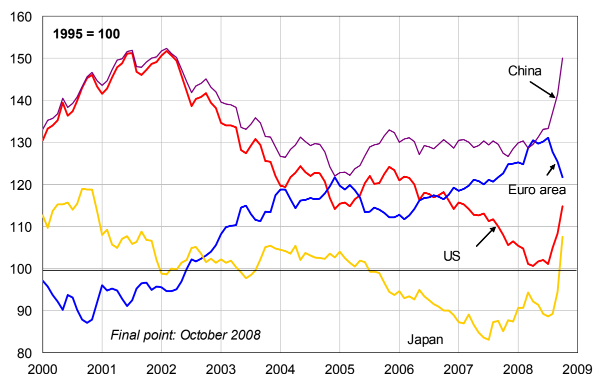
Since mid-September, the various exchange rates have experienced a period of high volatility, in connection with the worsening financial crisis.

In particular, the yen gained against every other currency. Its nominal effective exchange rate rose by 20% between August and October. This appears to have been caused by increasingly risk-averse investors, who largely abandoned carry trades (in which an investor borrows a currency with a relatively low interest rate, like the yen, and buys a different currency yielding a higher interest rate).[a]

At the same time, the euro fell sharply against the dollar, reversing a months-long trend. This may be explained by the worsening financial situation in the euro area, and to expectations that the ECB would drop its rates even more than had been expected before the summer.

Finally, the pound was very affected by the financial crisis and its impact on the British economy. Since August 2007, its exchange rate fell by nearly 15% (and by 19% against the dollar).

Chart 8: Nominal Effective Exchange Rate



Source : DGTPE calculations.

The Chinese yuan rose significantly starting in the summer, but this appears to be linked to changes in the dollar – its rate has remained basically stable with respect to the dollar for the past three months, halting a slight upward trend that had been in action since 2005.

a. See Grislain N., Jacquet-Saillard F. (2008): "The carry trade and recent yen movements", *Trésor-Éco no. 33*.

Between mid-September and late October, the markets were extremely disturbed by the high level of risk aversion. Stock market volatility reached new highs: the SP500 index registered a one-day gain of 11.6% on 13 October, and then lost 9% two days later.

Chart 9: Major stock market indices

Source: Reuters.

The public authorities reacted vigorously to the crisis in order to restore confidence and avoid a systemic collapse of financial institutions.

- A number of countries restated their commitment to backing bank deposits, and raised the ceiling on depositor guarantees. In the US, as part of the bailout package, the maximum guaranteed amount was raised from $100,000 to $250,000, and in the EU the ceiling was set at a minimum of €50,000[7].
- Confronted with solvency problems on the part of financial institutions, several countries opted for capital injections for banks in trouble. Between 12 and 14 October, the UK injected some £40bn into its principal banks. In the US, $250bn of the $700bn bailout package was used for capital injections.
- Monetary authorities continued their liquidity injection efforts, and the major central banks jointly lowered their key interest rates by 50 basis points on October 8.

Following these moves, the situation appeared to stabilise somewhat in late October and early November, with a partial return of investor confidence. Interbank spread rates, although still high, came down slightly, and the still-volatile stock markets appear to have stabilised as of mid-October. Nevertheless, the situation remains extremely fragile, and there is still significant risk that the financial system will fall once again.

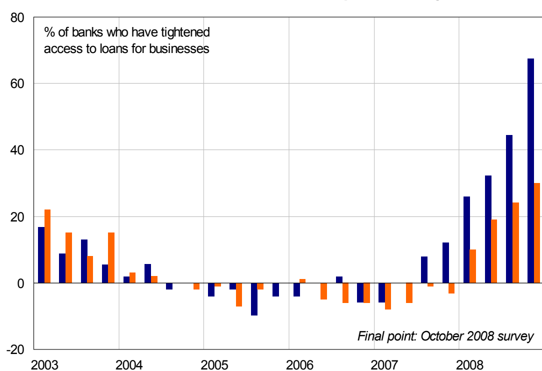
2.2 The channels by which the financial crisis affects the real economy are many - lending, the wealth effect, and consumer confidence

The financial crisis affects the real economy in a number of ways:

- **Tighter access to loans** in recent months, both to households and businesses, according to surveys of banks in Europe (the ECB's Bank Lending Survey) and the US (the Federal Reserve Bank's Senior Loan Officer Survey). Between August and October, 65% of European banks and about 80% of US banks reported having tightened conditions for loans to businesses. For companies, this has affected both investments and employment, while for households it has had an impact on consumption and housing investments.

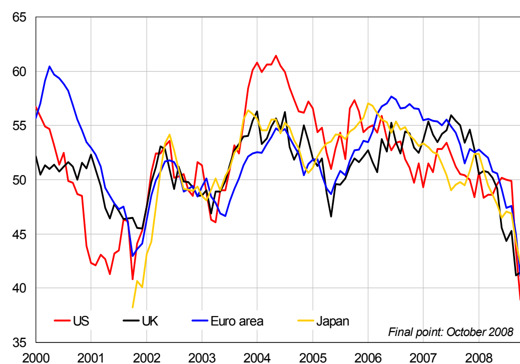
(7) Individual Member States have the right to offer higher guarantees, as France has done.

Chart 10: Surveys of lending to businesses



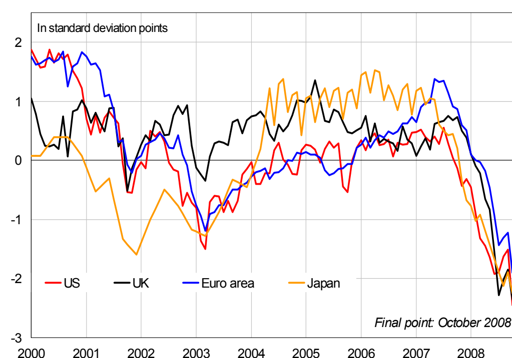
Source: FED (Senior Loan Officer Survey), ECB (Bank Lending Survey).

Chart 11: PMI index of manufacturers' confidence



Source: ISM, Reuters.

Chart 12: Household confidence



Source: Individual country data and DGTPE calculations.

- **The drop in stock market values will have an impact on both households and businesses:** everywhere in the world, households are facing up to significant drops in financial wealth. In the US, a 10% drop in the SP500 index resulted in a 4.3% drop in household's financial wealth, or a 3.4% decline in total wealth. It is estimated that this decrease will reduce household spending by 0.7% over the long term. At the same time, the drop in the market value of businesses could be perceived as a loss in profitability – foreseen by the market – of future investments, which would in turn lead to companies investing less.
- **Increased volatility**, particularly with respect to exchange rates (see Box 1), could also put a damper on activity. For example, in times of high volatility, companies tend to pay more for insuring themselves against exchange rate variations.
- Finally, the crisis has had a profound effect on the confidence of the various stakeholders (see Charts 11 and 12). This may contribute to an increase in household saving, particularly in countries where confidence is lowest (US and UK), or to greater reticence on the part of businesses to either invest or hire.

The direct effects of the worsening financial crisis will differ from one country to the next. For example, the wealth effect generally carries more weight in the US and UK.

2.3 Given the above, the outlook for growth is pessimistic

In developed countries, the most recent economic surveys suggest that the situation has worsened since September.

PMI figures dropped even further in October, both in the US and in the euro area, and are now under 50, which indicates a contraction of activity.

The worsening financial crisis and the continuation of the housing crisis in the US and UK mean that outlook for growth in 2009 is very pessimistic.

There is a great deal of uncertainty with respect to forecasts, because it is difficult to know both how the crisis will evolve and to accurately evaluate its effect on the real economy.

The financial crisis will affect growth in emerging countries in several ways. The downturn in global trade will hurt those countries whose growth has, in recent years, been fuelled by exports (China and Brazil), as well as those whose economic cycles are closely linked with those of the US (including Mexico and Singapore). In addition, the economic slowdown will bring with it a drop in commodity prices, which – although propping up growth – will affect the growth of producing countries. The marked downturn in developed countries will also reduce emigrant workers' remittances, particularly to Mexico and India. Finally, the increased cost of credit may affect financing for both businesses and households, and a possible housing slump may create additional problems for growth in some emerging countries (including China, India, Korea, Singapore, etc.).

The sharp increase in risk aversion since mid-September has devastated Asian stock markets *via* a drop in share prices and an increase in risk premiums for emerging markets. Growth predictions for businesses in these countries have been scaled back due to the expected slowdown in demand from the US. In addition, the head offices of companies with affiliates in these countries are transferring profits back home. Finally, the need for liquidity by investors in developed countries has led them to partially divest their portfolios of investments in emerging countries, which has resulted in a massive withdrawal of capital and depreciation of emerging currencies (Korea and Brazil). Ongoing worldwide financial turbulence would make it difficult for economies with significant deficits to finance their current account deficits, putting pressure on the local financial markets. This in turn would contribute to an increase in the cost of capital in countries such as South Africa, Turkey and India. In recent weeks, some countries have sought aid from the IMF, including Hungary, the Ukraine and Pakistan.

2.4 Changes in economic policy and falling commodity prices since the summer will dampen the negative effects of the financial crisis

2.4.1 Commodity and oil prices have dropped sharply since the summer

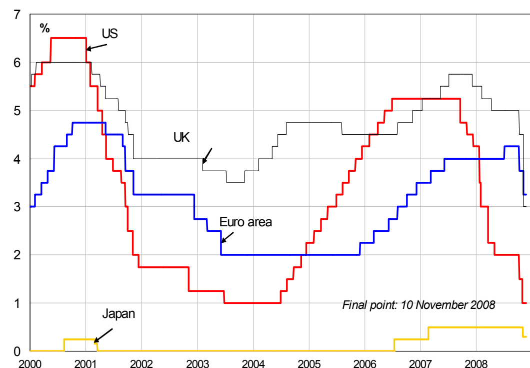
The price of a barrel of Brent Crude fell from $147 in July to less than $60 in November. This decline is basically due to an (observed and anticipated) fall in demand for commodities. The fall in prices was spectacular in both scope and speed, but governed by the same reasons as their rapid rise - inflexible short-term supply coupled with weak price elasticity of demand, particularly in many emerging countries where energy products are subsidised.

The drop in commodity prices has already caused inflation to decrease, from 5.6% in July to 3.7% in October for the US, and from 4.0% to 3.2% for the euro area, and this trend looks set to continue. Following the inflation peak in the summer of 2008, there were no second-round effects on wages, contrary to what occurred during the oil shocks of the 1970s. Thus, despite the sharp rise in inflation between the summer of 2007 and that of 2008, the vicious circle of a wage-price spiral appears to have been avoided. This is specifically because wages are less pegged to prices than in the 1970s[8].

Reduced inflation will restore some purchasing power to households and help improve businesses' margins, thus contributing to supporting growth in coming quarters.

2.4.2. This drop in inflation has also given central banks more room to manoeuvre, allowing them to deal with risks to growth

Chart 13: Key interest rates at the principal central banks



Source: FED, ECB, BoE, BoJ.

On 29 October, the Federal Reserve dropped its federal funds rate to 1%, or 425 basis points lower than that of summer 2007 (5.25%). The ECB, which had raised its key rate by 25 bp in July 2008 (bringing it to 4.25%), subsequently lowered it twice - by 50 bp on 8 October, during a synchronised drop by all of the world's principal central banks, and again by 50 bp on 6 November. The Bank of England also reacted vigorously, lowering its key lending rate by 150 bp on 6 November, bringing it down to 3% (against 5.75% in August 2007).

The market expects new rate decreases, in particular by the ECB (75 bp by early 2009). In the US and Japan, there is little room to manoeuvre, since the rates are already close to zero (1% in the US, and 0.3% in Japan), and the impact of monetary policy is partially a result of quantitative reductions.

Monetary policy has been less effective than expected, particularly because the channels by which it is transmitted appear to be somewhat inefficient. The credit channel for both households and businesses was largely disrupted by the financial crisis and the banks' desire to deleverage. In addition, the role of the exchange rate channel – *i.e.* gains in competitiveness associated with currency depreciation due mainly to rate decreases – is relatively limited due to the worldwide nature of the slowdown, hence the widespread tendency to practice a more accommodating monetary policy.

(8) Up until early autumn, there were fears in Germany of a wage/price spiral. An upward trend in wages (since 2006) was underscored by aggressive trade union bargaining. But these fears are now a thing of the past, as inflation recedes and wage negotiations take into account the economic slowdown. The 12 November metal-working agreement (affecting 3.5 million workers) is a good example. Although the trade unions originally called for increases of 8%, the final agreement stipulated a more moderate rise, between 3 and 4% for 2009. Given that industry-wide agreements lead to lower average increases (because not every company subscribes to a collective bargaining agreement) and that metal-workers' wages are traditionally higher than other industrial sectors, it seems likely that real wage increases will be low or even flat in 2009.

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There are stabilising mechanisms for dealing with economic downturns, including lowering the price of oil and commodities – which should improve households' purchasing power – and a more flexible monetary policy.

On 12 October, the euro area's Heads of State and Government have put in place a common framework for coordinating the actions of Member States, a move that was endorsed by the European Council on 15 and 16 October. It mainly includes measures for recapitalising financial institutions and medium-term guarantees for bank financing[9]. Since then, most Member States have implemented national recovery plans that fit with this framework. For the euro area, the Member States have committed more than €200bn to recapitalising the financial system and have guaranteed nearly €1,300bn for financing banks (for example, up to €40bn in recapitalisation funds and €320bn in guarantees for France, €80bn and €400bn for Germany, and €20bn and €200bn for the Netherlands). For the EU as a whole, the amounts committed come to €280bn and €1,800bn, respectively, including €65bn and €325bn for the UK.

In addition, the ECB has expanded its scope of action and continues to provide substantial liquidity to financial institutions to alleviate the failings of the interbank market. Specifically, it announced that it would proceed with new, unlimited injections of liquidity in euros at 3 and 6 months, that it would do the same for injections in dollars, and that it would expand the list of eligible collateral.

Monetary authorities and governments have shown their determination to act swiftly and to implement measures of an unprecedented scope, in order to stabilise the financial system at first, and then to provide macro-economic support. The willingness of major countries to ensure a coordinated set of actions, at EU, G7 and G20 levels, is also a very encouraging factor.

Aurélien FORTIN, Stéphane SORBE

(9) The principles set out in the concerted action plan are as follows: ensure adequate liquidity to financial institutions, facilitate financing, which is currently limited, for banks, provide financial institutions with capital resources to allow them to correctly finance the economy, provide efficient recapitalisation to banks in trouble, ensure sufficient flexibility in implementing accounting rules given the exceptional state of the market, strengthen cooperation procedures between European countries, and request that the Commission swiftly and flexibly implement decisions concerning aid to Member States.

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