



OVERVIEW

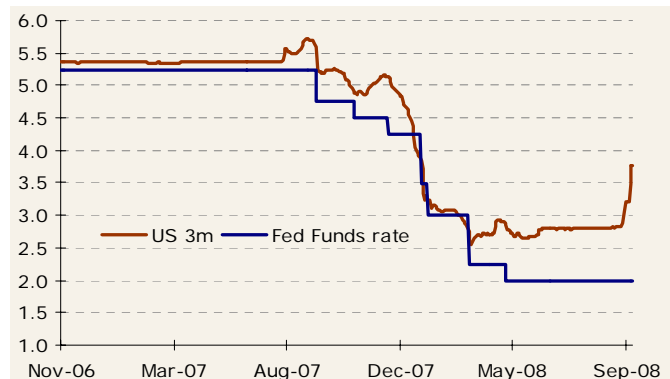
- The crash in financial shares in the past few weeks has intensified the credit crisis in a dramatic way. Initially there was a series of individual failures (Bear Stearns, IndyMac Bank, etc) with the market seeming to focus on the next most exposed bank in a game of international financial dominoes.
- But following the US Treasury's intervention to take over Fannie Mae and Freddie Mac the runs on individual institutions such as Lehman's and AIG turned into a generalised run on the system. US money market funds were inundated with redemptions and several had to suspend dealing or close, the US dollar plunged, and commodity prices surged.
- The only response to such a broad-based capital flight is a comprehensive, systemic solution that removes the bad assets of the banks (which are the source of the anxiety), and – if necessary – injects more capital into the banking system.
- US Treasury Secretary Paulson's TARP (Troubled Asset Recovery Program) is the Bush Administration's attempt to get ahead of the tidal wave of failures sweeping the US financial system.
- Both the outcome of the proposal and the likely costs are very uncertain at this stage. Passage of the legislation through Congress is not likely to be as swift as intended by the Administration, and the costs could vary from minimal to very large.
- Meantime, the de-leveraging of the financial and household sectors in major, developed economies will continue, exerting a contractionary impact on economic activity and inflation.
- The commodity price bubble is over, and is following the path taken by housing, credit, and equities.
- Recessions are either already under way or about to begin in many developed economies, which will in turn reduce global demand.
- So far the economic weakness has been quite mild, but the credit crunch is now causing abrupt slowdowns or even declines in the availability of credit. This is likely to intensify the downturn this winter and next year.
- Market expectations of rate hikes by the Fed should be discounted completely. In the current economic situation it is inconceivable that the Fed could raise rates. The next move is more likely to be a rate cut designed to avoid deflation.
- Spillover effects on the broader, global economy are mounting -- from housing, from the credit crunch, from wealth effects, and from the reverse multiplier effects of deleveraging.

US FINANCIAL MARKET CRASH & THE US TREASURY'S RESPONSE

Ever since the US housing market peaked out in July 2006 (according to the Case Shiller Composite 20-City House Price Index) there has been an escalating deterioration in the quality of the balance sheets of US financial institutions that were heavily exposed to the real estate market, to mortgages, or to structured products and derivatives based on those mortgages. Initially the adverse effects of the credit crisis were mitigated mainly by Fed rate cuts and by the creation of numerous new methods by which banks and other institutions could obtain temporary liquidity from the

central bank. More recently the Fed has stepped up its lending by granting wider access to its funding, expanding the range of permissible collateral for Fed loans, and enlarging some international swap facilities to provide US dollars to foreign central banks.

Spreads over central bank rates widen sharply (%)



Source: Bloomberg LP, Nov 06 to Sept 08

In addition, the US Treasury has acted on a case-by-case basis to address the problems of Fannie Mae and Freddie Mac, and lend to AIG. However, it refused to come to the aid of Lehman brothers. In spite of these actions by the authorities, interbank lending rates have remained well above central bank policy rates throughout the year, indicating sustained stress on bank balance sheets. In the past two weeks the deterioration in credit quality at several banks and investment banks climaxed in a massive sell-off that threatened a complete meltdown of the US financial system. Towards the end of last week there was a generalised flight to quality as investors fled money market funds (withdrawing \$298 billion last week according to iMoneynet.com) and institutions backed away from interbank lending. Even a temporary guarantee for the assets of U.S. money market mutual funds was not enough to overcome the panic. As investors lost confidence in financial institutions, financial companies saw their access to liquidity and capital markets increasingly impaired and their stock prices drop sharply.

A decade or more of lax lending practices, excessive leverage and risk-taking, unsound business models, inadequate attention to counterparty risks, and regulatory failure have culminated in the collapse of major financial institutions. Unquestionably all these problems and more will need to be addressed over the next few years as part of any recovery plan, but for the immediate future the focus must be on stabilising the system and avoiding a 1930s-style repetitive multiple contraction of the banking system (when withdrawals of deposits triggered widespread banking failures that intensified the economic downturn).

There are broadly two approaches to bank rescue that the US authorities could adopt. One approach is to insulate and ringfence the bad assets, perhaps in a government-run vehicle, and dispose of them in an orderly fashion over a period of time. This is the approach used by the RTC (see below) in the 1990s and it is the approach adopted by Treasury Secretary Paulson in the current crisis. An alternative approach is to require the banks to raise more capital, with the government standing by as a backstop if the bank is unable to do that. In this case the authorities would contribute to one of the bank's classes of



capital, imposing stringent conditions (such as stopping dividend payments to ordinary shareholders, or restricting executive compensation at the bank) to protect the interests of taxpayers.

In response to the crisis Treasury Secretary Paulson is now proposing a comprehensive bail-out plan to acquire up to US\$700 billion of the illiquid assets of US commercial banks over the next two years. Removing \$700 billion of bad assets from the books of the banks and replacing them with fresh cash or government securities is intended to unblock the credit markets and enable banks to resume providing credit. (At this stage there is no proposal to provide capital to the banks.) Purchasing impaired assets will create liquidity and promote price discovery in the markets for these assets, while reducing investor uncertainty about the current value and prospects of financial institutions. More generally, removing these assets from institutions' balance sheets will help to restore confidence in the financial markets and enable banks and other institutions to raise capital and to expand credit to support economic growth. This is the Bush Administration's attempt to get ahead of the tidal wave of failures sweeping the US financial system.

The outline plan follows the template of the Resolution Trust Corporation (RTC), the entity that was set up in the wake of the Savings & Loan crisis of the late 1980s. There are parallels, too, with the Swedish Securum, set up in 1992 to restore stability in that country after the real estate and banking crash of the early 1990s. The US Treasury's Troubled Asset Recovery Program (TARP) needs Congressional approval, and may as a result change its format as the negotiations with Congress proceed. Both the outcome of the proposal and the likely costs are therefore very uncertain at this stage. Passage of the legislation through Congress is not likely to be as swift as intended by the Administration, and the costs could vary from minimal to very large.

Aside from the issue of Congressional cooperation, the major issue is whether the scope of the plan is large enough: Is Paulson's bazooka big enough? Numerous estimates of the losses from the sub-prime and broader US housing and structured credit crisis point to losses in excess of US\$1 trillion. If markets do not quickly gain confidence in the viability of the plan, then further bankruptcies among financial institutions are possible, along with the associated disruptions that counterparty failures always imply. This would extend the credit crunch, deepen the downturn, increase the losses, and delay economic recovery. Against this backdrop market expectations of rate hikes by the Fed should be discounted completely. In the current economic situation it is inconceivable that the Fed could raise rates. On the contrary, the next rate change is more likely to be a rate cut designed to avoid deflation.

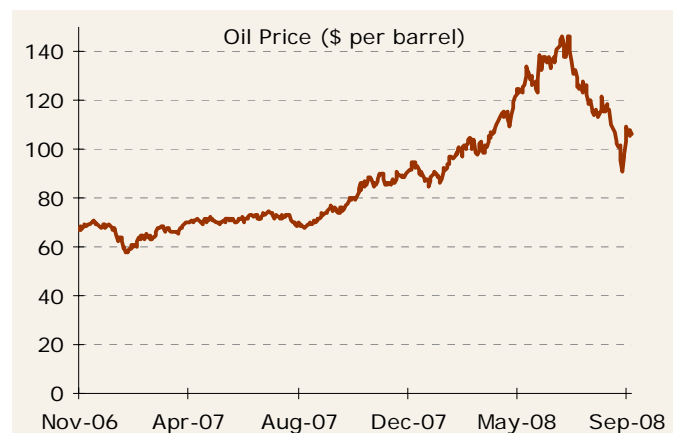
As a postscript to this analysis, it is worth summarizing a recent IMF paper that examined 42 systemic banking crises from 37 countries, for the period 1970-2007. In the words of a Dresdner-Kleinwort study, "Typically, the affected economies concerned went into recession, sometimes deep recession, and saw their current account positions improve. In some of the cases considered, the currency fell ahead of the crisis (exacerbating the problem of banks with foreign currency liabilities), on some other occasions the exchange rate fell after the crisis hit, as part of the corrective

medicine. Sometimes, the crisis turned out to be contagious, rapidly spreading to economies with no apparent vulnerabilities. In 32 of the 42 crises that the IMF examined banks were recapitalised by the government. In 12 crises, the recapitalisation by government took the form of cash; in 14 cases, government bonds; 11 times, subordinated debt; in 6 crises, preferred shares; in 7 cases, governments purchased bad loans; in 2 crises governments extended credit lines to banks; on 3 occasions they assumed bank liabilities and in 4 cases they purchased ordinary shares of banks. Occasionally they used a combination of the above. However, the recapitalisation of the banking sector would normally involve the writing off of losses against shareholders' equity and the injection of either Tier 1 or Tier 2 capital, or both."

COMMODITY BUBBLE HAS BURST

The commodity price bubble is over, and, even despite the weakening US dollar and the September options expiry spike, seems unlikely to exert much further inflationary influence on CPI measures in this cycle. Basically commodities are following the path taken by housing, commercial real estate, and equities. Each in turn was inflated by the credit bubble, but once they had reached unsustainable levels and/or credit had tightened appreciably, they lost value as investors' inflated expectations were downgraded.

Oil price falls away from peak



Source: Bloomberg LP, Brent Crude price, Nov 06 to Sept 08

The surge in commodity prices made central banks and investors acutely nervous of a repeat of the 1970s style of inflation. However, such an extrapolation of recent events is likely to prove wide of the mark. First, monetary conditions in the 1970s were far more accommodative than they were even in the lead-up to the current episode of CPI inflation. Second, the recent commodity price increases were simply the final stage of the transmission of monetary policy through a series of asset markets starting with the credit and capital markets, then equities, and real estate to commodities. There will be some further impact on CPI measures, but these are residual effects, not the early stages of a new episode of inflation. Provided the monetary policies of the major central banks remain firm, there should be no additional inflation beyond what they have already permitted by reason of their earlier laxity.

Although some central banks have been lowering interest rates – notably the Federal Reserve – the fact is that in most countries monetary policy, as judged by the growth of money and credit in the banking system and in the “shadow banking



system," has been tightening abruptly. Thus in the US bank credit has slowed to a negligible pace since April, and in the UK the growth of M4 lending to the non-financial sector (adjusted for securitisations) has slowed from 14.5% in late 2006 to 5.6% in July 2008. Consequently the next phase of growth in the global economy is likely to be very weak in both nominal and real terms.

A SYNCHRONISED RECESSION IN THE DEVELOPED ECONOMIES

Reduced access to credit, the negative wealth effect from declining housing and equity prices, and in some cases the loss of income from employment will all constrain consumer spending in the months ahead. All these effects will be exacerbated wherever there is an explicit banking crisis. In addition, many financial firms and households need to de-leverage their balance sheets to avoid further losses, and to limit the burden of debt service. In combination these pressures are likely to outweigh the ability of central banks to ease monetary and credit conditions. As a result, recessions are either already under way or about to begin in the developed world, which will in turn impact demand in some of the emerging economies.

It is worth emphasising that a return to "Goldilocks" conditions of solid GDP growth with low inflation is not possible from the present conjuncture. Study of the experience in numerous economies over different time periods shows that once inflation has become elevated it takes several quarters for the growth rate to slow and for sufficient excess capacity to be created for price pressures to moderate. Only then can the central bank switch tactics and actively promote an economic expansion again. In those developed economies where household and financial sector balance sheets are still stressed, the recovery will take even longer. In emerging economies where the underlying growth rate is faster the economic downturn may not last as long, but the same logic applies. It would therefore be very surprising if either China or India were able quickly to revert to rapid growth and low inflation without a temporary period of slowdown after their recent brushes with inflation.

Consensus Economic Forecasts as at 8 September 2008				
	2008 Forecast		2009 Forecast	
	Real GDP	CPI	Real GDP	CPI
US	1.8% (1.5%)	4.5% (4.0%)	1.4% (1.7%)	2.9% (2.5%)
EU-12	1.3% (1.7%)	3.5% (3.3%)	0.9% (1.4%)	2.4% (2.3%)
UK	1.2% (1.7%)	3.8% (3.1%)	0.6% (1.3%)	2.9% (2.4%)
Japan	0.9% (1.3%)	1.6%(1.1%)	0.9% (1.5%)	1.2% (0.8%)

data in brackets were consensus forecasts from June 2008 survey

Spillover effects on the broader, global economy are mounting -- from housing, from the credit crunch, from wealth effects, and from the reverse multiplier effects of bank deleveraging. These will be particularly severe in the developed world. As shown in the table, most economists still expect positive growth for the leading economies in both 2008 and 2009, but this is inconsistent with the evidence from previous banking crises quoted above. Elsewhere, economic prospects for some of the emerging economies do look substantially better than prospects in the developed world. Although they will experience export slowdowns due to the recession in the developed economies, domestic economic activity is much less likely to stall. This is especially true for those economies that are

commodity importers and where the inflation problem has been largely one of food or fuel prices rather than a generalised surge in goods and service prices. This would apply primarily to China and some of the other economies on the East Asia Pacific rim. Apart from high underlying growth rates and high savings rates, these economies have not become as leveraged during the recent economic boom as their developed economy counterparts. Therefore they will need less down-time to repair balance sheets and restore economic stability. Consequently the Asian economies seem well placed to be the "first out of the gate" when the global economy eventually recovers.

UNITED STATES – RECESSION, DELAYED RECOVERY

While the National Bureau of Economic Research (NBER) has not yet pronounced on whether the US economy has entered a recession or not, in GDP terms it has only avoided a downturn by virtue of strongly positive net exports. Since June the prospects for non-US economies has worsened, undermining the ability of the economy to continue to skirt recession. In my view it is increasingly likely that no matter what the depth of the recession, there will at best be only a weak recovery while balance sheets are repaired in the financial and household sectors.

Real GDP growth in 2008 Q2 was revised upwards to 3.3%, with as much as 3.1 percentage points of that coming from net exports. The growth of final domestic purchases (consumption plus investment plus government expenditures) was only 0.2% in real terms. Following the boost from tax rebates in the summer, the US economy is headed into a period of renewed weakness. Unemployment has risen steeply in recent months, employment has declined at an average rate of 76,000 jobs per month this year, and consumer confidence has been severely dented. Consumer net worth has declined by a total of \$2.7 trillion since it peaked in 2007 Q3, and prospective further declines in house prices mean that US consumer spending will remain under pressure. Although the rate of house price declines has moderated, futures markets suggest they will not trough until sometime in 2010. Lower gasoline prices will help householders somewhat, but this is trivial compared with the continuing erosion of net worth. Moreover, over \$300 billion of ARM mortgage-holders are facing rate hikes over the next year. My forecast is for real GDP to decline in the second half of 2008 and to grow at only 1.0% in 2009, made up of a positive contribution from net exports but declining domestic spending. Headline CPI inflation however, should slow from 5.4% in August to below 2% by late 2009.

EUROZONE & UK – RECESSIONS UNFOLDING

In the UK and some parts of the eurozone such as Spain and Ireland the same symptoms of over-indebtedness in the household and financial sectors, the loss of net worth, and rising unemployment have caused GDP growth rates to stall or decline. Even if the same symptoms had not been built up in Europe, the economies of the developed world could not be immune from developments in the United States. Recessionary conditions are therefore unfolding across most of the developed world.

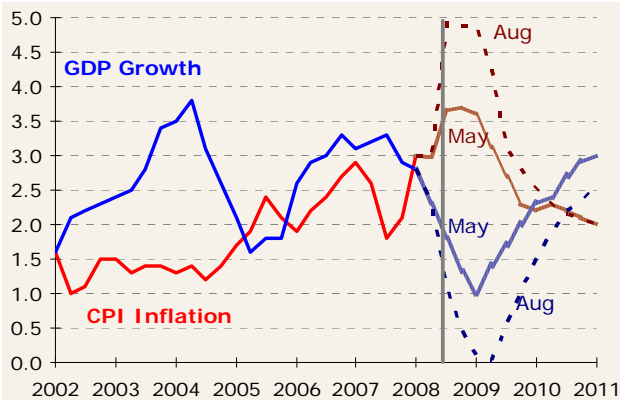
After raising rates to 4.25% in July the ECB has now found itself overseeing an economy that is heading rapidly into a downturn. Two special problems for the eurozone are the strength of the currency in the period to July and the rapid growth of lending to the corporate sector within Europe. The strong euro means that as the economy weakens, exports will be unlikely to offset softer domestic spending. The strong



growth of credit means that it will be hard for the ECB to justify rate cuts, particularly with the CPI at 3.8% -- more than twice the ECB's target of "less than but close to 2%". Real GDP for the eurozone as a whole declined by 0.2% (quarter-on-quarter) in Q2 and slowed from a year-on-year growth rate of 2.1% in Q1 to 1.4%. New car registrations across Europe fell by 15.7% in August, and the composite PMI (manufacturing and services) fell from 48.2 to 47.0 in September. Sentiment indicators across the continent have been moving downwards, notably the German IFO index and the French INSEE. The OECD leading economic indicators are also heading downwards for all the main eurozone economies, implying a winter of economic contraction.

Bank of England Dilemma: Slowing growth and rising inflation (%)

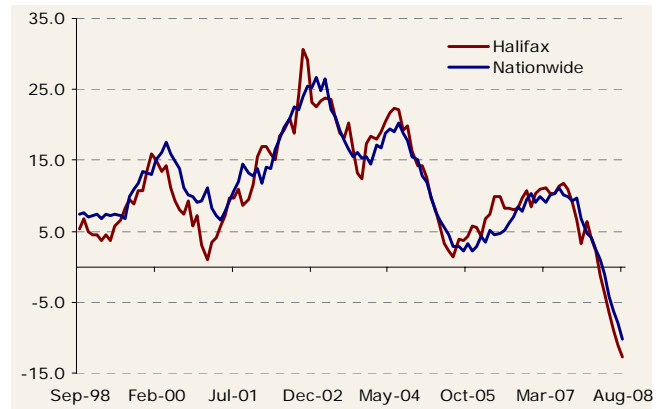
MPC's May and August 2008 Inflation Report Forecasts



Source: Bank of England MPC Inflation Report August 2008

In the UK the credit crunch has been reflected in the sharp slowdown of bank lending to the non-financial private sector to 5.6% (quarterly annualised) from double-digit rates in the recent past. Jobless claims surged by 32,500 in August. The discomfort of consumers was increased by the jump in the headline CPI to 4.7% in August, and the continuing fall in house prices. The Nationwide and Halifax house price indices declined by 1.9% and 1.8% respectively for the month of August, and by over 10% year-on-year. In 2008 Q2 real GDP stalled, showing 0% change from Q1. In Q3 and Q4 it is entirely possible that the economy will see actual declines. Forward-looking indicators such as the CBI's Distributive Trades Survey suggest further significant weakening in the months ahead. Yet due to the existing budget deficit and the Treasury's rules on the size of its debt, the government has very little scope for increased fiscal spending, and the Bank of England could well keep base rates on hold at 5.0% for several more months. In short, unless they break their own rules, the British authorities appear to have their hands tied in the face of the on-coming recession.

Annual change in UK house prices (%)



Source: Datastream, Sept 98 to Aug 08

JAPAN – EXPORTS AND DOMESTIC SPENDING WEAKENING

Japan's economic growth record since the start of 2007 has been miserable. Real GDP declined in 2007 Q2 and Q4, and then again in 2008 Q2, this time by a substantial 0.8%. Prospects for any near-term improvement are bleak. The pace of increase in exports which have provided three-quarters of growth in recent years has slowed. Export growth to the US fell by 16.2% over the three months June-August compared with the same period in 2007. Exports to Europe are also falling. Growth in exports will remain only modest due to the slowdown in overseas economies. Domestic private spending has been adversely affected by decreasing corporate profits and growth in business fixed investment will remain sluggish while corporate profits continue decreasing. Personal consumption has also been relatively weak, due to sluggish growth in household income and higher food and energy prices. Consumer sentiment has become more cautious. The recovery in housing investment has stalled since January as shown by the fall in applications for housing starts (houses, condos and apartments). Industrial production has been relatively weak and inventories have risen. Growth in household income has been sluggish as the year-on-year rate of increase in nominal wages per worker has declined.

Japan's headline price indices have been driven up by commodity price rises, but the underlying trend remains deflationary. For example, the three-month rate of increase in the domestic corporate goods price index (CGPI) increased to 6.7% (yoy) in August, while the year-on-year rate of increase in the CPI (excluding fresh food) was 2.4%. As in other economies where food and energy prices have had a big impact, Japan should see inflation run down quickly next year.

One way that Japan's economy differs from most others is in the relatively mild impact of the credit crunch. The lending attitudes of Japanese banks has continued to be generally accommodative, but overall lending growth remains limited by the very slow growth of the money supply (2% for M2). Funding costs for businesses (in yen terms) have remained more or less unchanged while the financial condition of firms as a whole has continued to be strong, but that of small firms has deteriorated somewhat. I expect BOJ to remain on hold with a 0.5% policy rate target for the remainder of 2008 even though real growth will be weak and deflation could return in 2009.



NON-JAPAN ASIA – GROWTH STILL BUOYANT

In most of Non-Japan Asia growth remains vigorous, but there are signs of an export slowdown in some economies as overseas orders fall and previous monetary tightening starts to have an effect. In China we now expect just 10.1% real GDP growth in 2008 (down from 11.9% in 2007), and inflation averaging 6.8% for the year. However, with the August inflation rate falling abruptly to 4.9% the Chinese authorities have shifted policy, cutting interest rates and lowering reserve requirements, signalling that Asia as a whole is likely to be moving in that direction. In India real GDP growth will be close to 8% in the fiscal year to March 2009 (down from 9.0% in FY2008), but inflation is an uncomfortably high 12% at present and likely to average over 11% for the year as a whole. Across the rest of Asia growth has held up much better than expected in the face of slowing US and developed economy demand, but almost every economy is experiencing inflation at rates that are too high for comfort. However, now that commodity prices have peaked Asian inflation should decline rapidly over the next year, showing up in the monthly CPI figures in the next few months, and in the year-on-year figures next summer. The main difference between Asia and the rest of the world is that Asia does not suffer from the extended, over-indebted balance sheets seen in the US or the UK, and consequently Asia should be well positioned to recover quickly when the global situation improves.

CONCLUSION

Since the June issue of this Quarterly Economic Outlook the economic situation has worsened markedly due to the US-centred banking crisis. Whereas in that publication I predicted that the global economy was not going to experience a drastic downturn in terms of magnitude, but the slowdown would be prolonged, that must now be modified. The economic downturn is likely to be more serious in the developed economies, with recessions and/or a prolonged period of sub-par growth in several of the leading economies (notably the US, UK, Australia, and the eurozone). The silver lining in these dark clouds is that the commodity-induced surge of inflation experienced during 2008 should not be very severe or prolonged, and headline inflation should fall quite rapidly next year as global demand weakens. In the US renewed rate cuts remain more likely than the reverse. In the eurozone rate cuts should be expected between now and the end of March by the ECB despite the hawkish rhetoric of ECB council members. Equally in the UK the Bank of England is likely to switch to rate cuts over the same time horizon.

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26 September 2008

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