Global Economic Perspectives

New forecasts

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- **Slower global growth**

In this note, we present an updated set of global forecasts for 2008 and - for the first time - our economic outlook for 2009. We expect global growth to slow to a 4.3% pace in 2008, about half a point slower than this year's projected rate of 4.8%. In 2009 we expect a marginal further softening of global growth to a 4.1% pace, roughly in line with the world economy's underlying trend.

- **Inflation risk to recede**

If our outlook proves correct and global growth decelerates toward trend, we believe that underlying inflation risk ought to recede, even against the backdrop of today's soaring energy prices and, for the US, weak dollar. Core inflation (i.e. excluding food and energy) in most major economies and regions is expected to remain well-behaved and inflation expectations ought to remain well anchored.

- **More aggressive easing**

We are now forecasting that the Fed will lower policy rates by a further 100bps to 3.5% by the middle of next year (75bps more than we had previously anticipated). The ECB is now expected to trim its key policy rate by 50bps by the end of next year (relative to a previous forecast for unchanged policy). And the Bank of England is expected to lower rates by 75bps by the end of next year (25bps more than we had previously assumed). Meanwhile, our mid-2008 forecast for the euro has been lifted to 1.50 (from 1.45).

- **Downside risk**

Our global growth forecasts are lower than the current consensus though not significantly so. Even so we believe that the risks to our forecasts still lie to the downside. The slump in the US housing market, high oil prices and further instability in financial markets are our chief concerns.

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ANALYST CERTIFICATION AND REQUIRED DISCLOSURES BEGIN ON PAGE 16.

2008-2009 forecasts

New forecasts

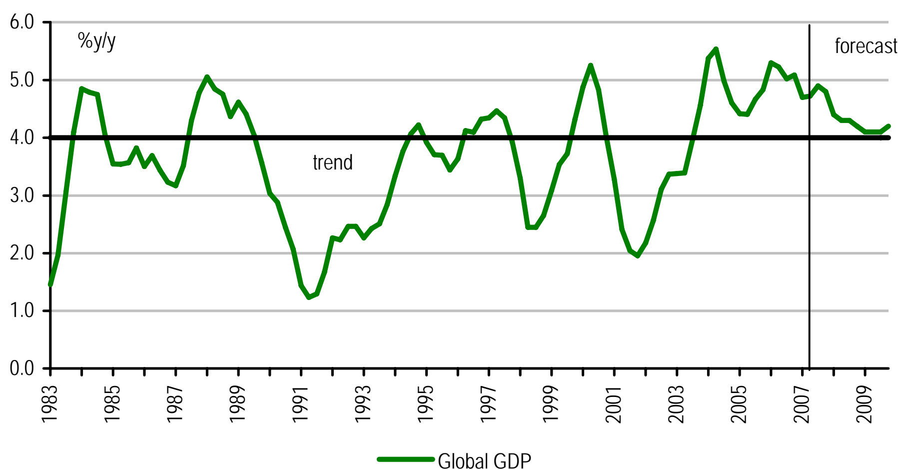
In this note, we present an updated set of global economic forecasts for 2008 and—for the first time—our outlook for 2009. The full set of forecasts for 2008 and 2009 can be found in the accompanying tables at the back of this document. In addition, our various regional and country teams will be detailing their forecasts in the coming days via their respective publications. In what follows, we highlight the significant features of the new outlook, as well as the key risks to the view.

Outlook for global growth

Slower global growth

We expect global growth to slow to a 4.3% pace in 2008, about half a point slower than this year's projected rate of 4.8%. In 2009 we expect a marginal further softening of global growth to a 4.1% pace, roughly in line with the world economy's underlying trend.[1] At a 4.2% average rate for the next two years, the global economy is projected to grow at its slowest pace since early 2003.

Global growth is expected to decelerate toward trend



Source: UBS

A synchronised slowdown led by weaker US consumption

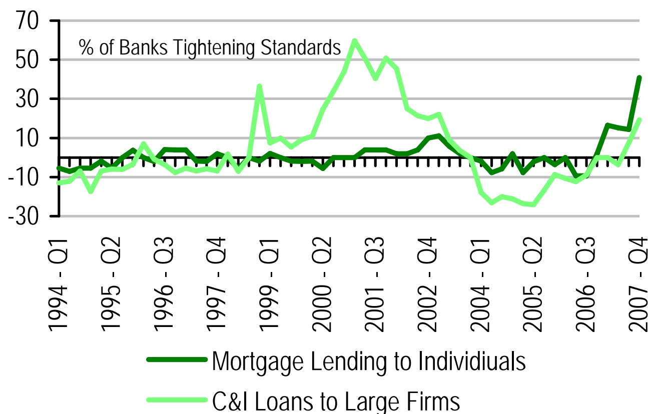
Within the breakdown of our global GDP arithmetic, every major economy and region is expected to slow in 2008. In other words, a synchronised global slowdown is expected to unfold with no further decoupling between the advanced and developing economies. One of the principal reasons is that US consumption growth is expected to weaken in 2008. Given the importance in recent years of US consumer spending as a source of import demand, and hence for world trade, this development should have a meaningful impact in reducing the external support for other major economies and regions, including in the developing complex.

[1] Our estimate of the world economy's underlying trend is about 4% and based on a 10-year average of the y/y pace of global GDP growth. We have chosen a relatively short time horizon over which to calculate our trend estimate in order to take into account the growing importance of emerging economies (and particularly China) in advancing the world economy's productive potential over the past few years.

More restrictive financial and monetary conditions

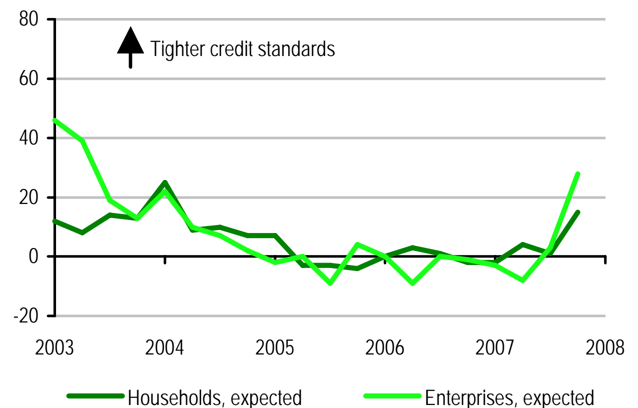
Another reason to expect a slowing of *global* growth is the advent of more restrictive financial and monetary conditions. This is, in part, a consequence of the recent financial market turmoil and the increase in the cost of capital it has rendered (e.g. via wider credit spreads). Importantly, it is also a lagged consequence of tightening campaigns that central banks in nearly every major economy have pursued over the past three years. Against this backdrop, recent evidence suggesting that lending standards in the banking sector have been tightened for both households and businesses in the US, via the Fed's Senior Loan Officer Survey, as well as in Europe, via the ECB's loan officer survey, is a noteworthy and further troublesome signpost for prospective global growth (see charts below).

Fed survey: Tighter credit standards



Source: FRB/Haver. The data for mortgage lending to individuals runs to 2007 Q1. The last three surveys from 2007 Q2 – Q4 only show this category for lending for prime, non-traditional and subprime mortgages. We have shown the proportion of banks tightening in the prime category from Q2 –Q4 above in conjunction with the data that runs to 2007Q1. It probably under-states the degree of tightening if the non-traditional and subprime category were included.

ECB survey: Tighter credit standards



Source: ECB/Haver

Downside risks

Our global forecasts for 2008 are, in general, lower than the current consensus (see chart below), though not significantly so.[2] Even so, we believe that the risks to our forecasts lie to the downside for several reasons.

US housing market risks

First, the slump in the US housing market threatens to persist for longer than we have assumed in our central forecasts, which would, in turn, have more severe ramifications for US consumption—and world trade—than we currently forecast.

Oil price risks

Second, the current level of oil prices is much higher than we have thus far factored into our headline inflation and GDP arithmetic. If higher energy prices are sustained, our forecasts for headline inflation will be subject to considerable upside risk in a number of economies, developed and developing as well as oil producing and consuming. Equally, to the extent that higher energy prices sap purchasing power in oil-importing economies, our growth forecasts in those regions will also be subject to more downside risk. This is likely to be negative for global GDP growth under the assumption—as seems sensible—that the

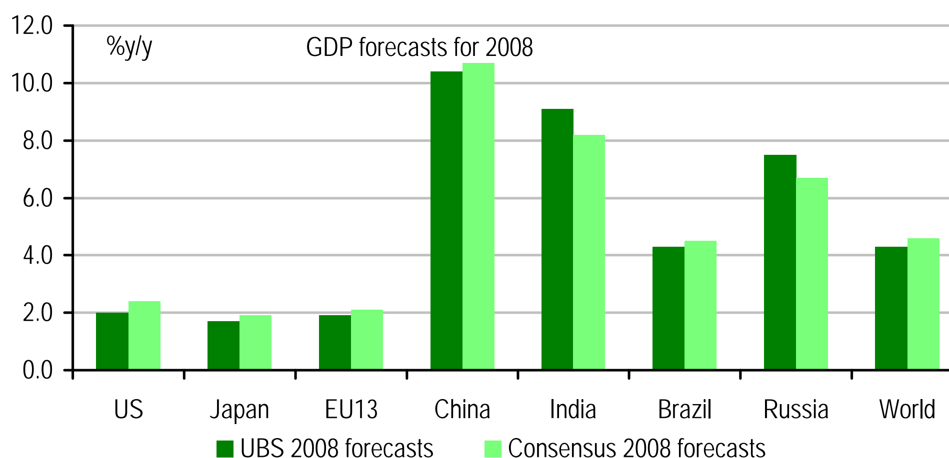
[2] There are no forecasts available yet for 2009 from other sources to calculate a consensus.

propensity to spend and invest in the oil producing countries is lower than in the oil-consuming ones.

Financial sector risks

Third, while it is true that the turmoil in credit markets has eased somewhat, the financial sector remains vulnerable to further instability. And this, in turn, threatens to prompt a further tightening of financial and monetary conditions, potentially applying a more forceful brake on the pace of consumption and investment. We discuss these risks in more detail toward the end of this note, including via simulation exercises on the NiGEM model.

Marginal disappointments relative to consensus are expected for global growth in 2008



Source: UBS

US outlook: Worsening housing slump

Slower US growth and more Fed easing

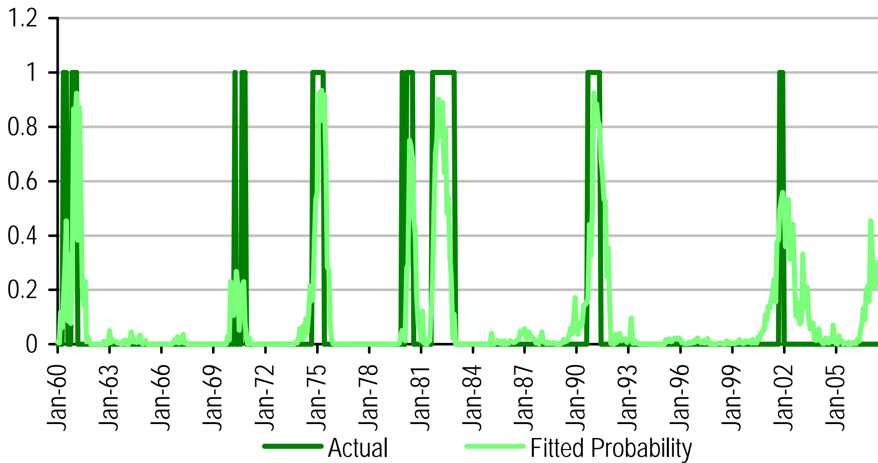
Our US team now expects the housing slump in the US to be deeper and longer-lasting than they previously thought (having been on the bearish end of the spectrum even before the troubles became more widely apparent). GDP growth in 2008 is now projected at just 2.0% (down from a previous forecast of 2.4%) with weaker consumer spending and another large decline in residential investment activity expected to exert a drag on the economy throughout 2008. Even so, we are not forecasting a US recession. A main reason is the prospect of further interest rate cuts from the Fed. We now forecast that the Fed will lower the Fed funds target rate by an additional 100 basis points to 3.5% by the middle of next year (25bps cuts are assumed at the next four FOMC meetings). This should offer some offset to US household and business cash-flows, and hence to consumption and business spending. Net exports will provide a further source of support. Export growth should remain solid, despite more apparent signs of slowing abroad, in part because of the lift owing to a weaker US dollar. Import compression will also support a narrowing of the US trade deficit and hence will ‘add’ to GDP growth.

Recession risk is high

It should be noted, however, that US recession risk is rising. Our US team is on record with a recession probability of 40% over the next twelve months. Our recession probability model, based on the past statistical relationship between US recessions (as defined by the National Bureau of Economic Research) and changes in non-farm payrolls, housing starts, home prices and durable goods

orders, conveys a similar message. It's recession probability estimate has now risen to 45%.

US recession probability indicator

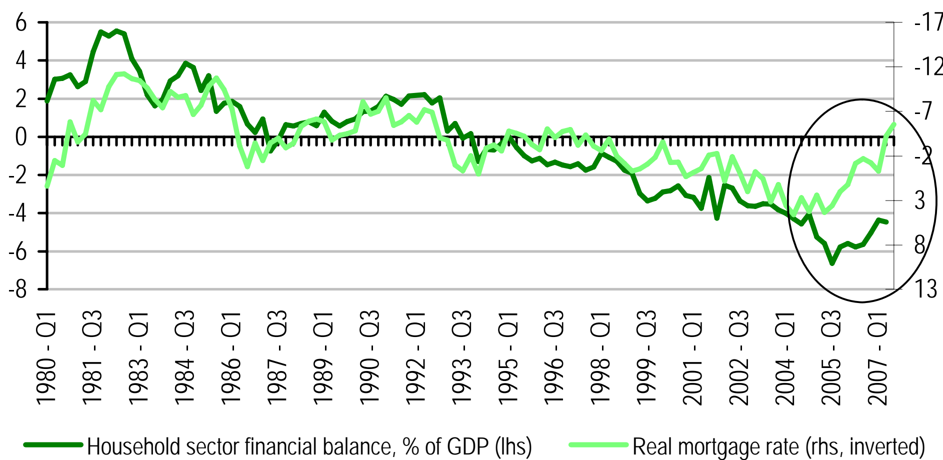


Source: UBS.

Slow recovery

Irrespective, however, of whether a formal US recession occurs, the more important question facing investors is what shape a US *recovery* will look like as we extend the vista into 2009. In the environment of falling home prices, still-tight credit conditions and slower credit demand (recall that household debt service is near record highs), Fed easing is unlikely to generate a quick and large turnaround in consumer durables spending. Balance sheet repair in the household and financial sectors is likely to exert a drag on aggregate demand for longer than in the typical cycle. Hence, we do not believe that a recovery will be particularly rapid or forceful. Indeed, for 2009 we forecast US GDP growth of just 2.5%, some way below trend of about 3.0%. As a result, underlying inflation pressures in the US will continue their recent moderating trend, as we highlight below.

Lower US house prices have created significant US household balance sheet headwinds



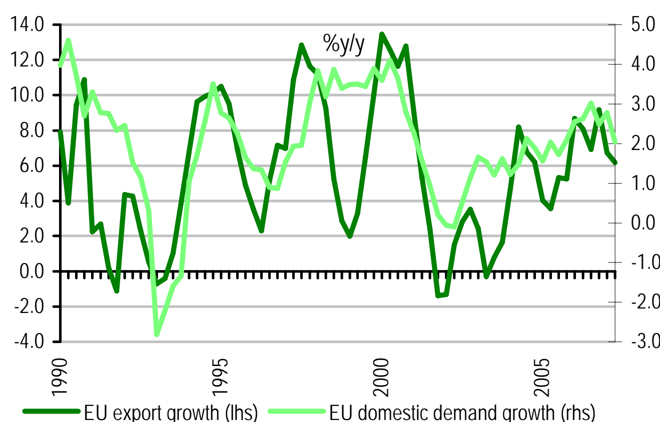
Source: Haver. Real mortgage rate defined as the gap between US 10 year Treasury yield and house price inflation

Europe: Already slowing

Weaker European growth

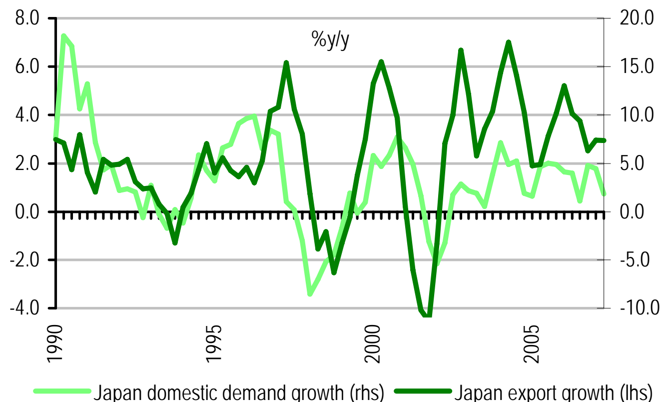
In the Eurozone, growth already appears to be slowing and we expect some further deceleration over the coming months and quarters. Specifically we forecast growth of 1.6% in 2008 (after 2.6% this year) and just 1.7% in 2009. To be sure, the absence of major imbalances in the Eurozone economy and relatively high levels of household savings leaves the region somewhat less exposed to the credit malaise that may afflict the US economy. Europe remains, however, more exposed on the external front, despite some considerable re-orientation of its global trade patterns. Links between Eurozone export performance and its domestic demand growth are evident (see chart below), which are likely to be reinforced somewhat by a strong euro. Net trade and investment are expected to act as a drag on growth next year, and will only partially be offset by somewhat stronger consumption growth on the back of declining rates of unemployment.

European domestic demand and export growth are closely linked:



Source: Haver

High correlation between Japan's domestic demand growth and export growth



Source: Haver

Japan: Resilient, if sluggish

Resilient Japan

Japan's economy is, to some extent, expected to weather the global slowdown we envisage, though not entirely. Our Japan economics team expects GDP growth to slow to a 1.7% y/y rate in 2008 (from 1.9% this year), stabilizing to around 1.8% in 2009. Like Europe, Japan is typically exposed to a slowdown in global demand (see chart above). We anticipate that support from the external sector will fade somewhat over the next few quarters. Consumer spending has been sluggish, given disappointing real wage gains despite falling unemployment and may be at risk to more recent signs of a weaker labour market and poor real wage formation. Domestic demand should garner some support from a modest recovery in investment spending and a contribution from government consumption. All told, however, Japan's inability to generate independent sources of domestic demand continues to expose it to the vagaries of the global cycle; in this case the coming slowdown.

China: Slowdown ahead

Slower Chinese growth ahead

In the year to Q2 2007, China overtook the US as the leading contributor to global GDP growth. Unfortunately, China's economy will not, in our view, escape the global trend toward slower growth in 2008. Our new forecasts also suggest that the Chinese slowdown will continue into 2009. Specifically, our China economist, Jon Anderson, projects GDP growth of 10.4% in 2008 (after 10.9% in 2007) followed by 9.8% in 2009.

Capex and net trade drag

China's growth in recent years has been propelled by strong investment spending, as well as by a sharply expanding trade surplus. Looking ahead, both of these drivers are expected to exert some drag on activity. The current account surplus, for example, is expected to narrow from 10.8% of GDP in 2007 to 9.0% in 2008 and 7.5% in 2009, in part owing to the slowdown in US import demand we now forecast.

Downside risk

That leaves consumption to pick up the domestic growth baton, which to some extent we believe is likely given tighter labour markets and higher wage growth, along with a policy commitment to re-balance the economy away from investment and exports toward consumer-spending growth. Yet here, too, the risk is probably skewed toward slower growth than we presently forecast, given the possibility that household sector demand is restrained by structural impediments, such as the absence of adequate social safety nets and public pension provision, factors that contribute to China's high household savings rate.

Other developing economies

No more decoupling

Economic growth in the rest of the developing economy complex has remained resilient—so far—to the US slowdown. Economic growth in Asia, Latin America and Eastern Europe is, however, expected to decelerate over the next two years as the external environment becomes less supportive. Major sources of export support for these economies in recent years have included the US, but also China and—to some extent—Western Europe (particularly for central and eastern Europe). With domestic demand growth in these areas likely to ebb, it will be difficult for other developing economies to find offsetting sources of demand which would enable them to decouple.

Above trend, albeit slower, domestic demand growth

Still, many of these economies are much better placed to withstand a downturn in global growth than on past occasions.[3] Savings, investment and public sector imbalances have been reduced or eliminated, external financing needs have been replaced by capital exports for many and reduced for others, and significant foreign exchange holdings exist to cushion any reversal of trade or capital flows. Furthermore, significant pent-up private sector demand still exists, particularly in Asia. Thus, while we are content to forecast slower growth in these regions

[3] Economic conditions still vary considerably across the spectrum of developing countries. In the main, macroeconomic imbalances have improved, as have monetary and fiscal policies. Yet in some cases, such as Turkey, South Africa or Hungary, savings and investment imbalances continue to result in large external deficits, funded in part by short-term capital inflows. In others, such as Hong Kong, asset price inflation may—if it continues—one day pose economic or financial risks. It would be wrong, therefore, to assume that all emerging economies will experience the same degree of resilience to slower global growth that is characteristic of the complex as a whole. We will therefore continue to closely monitor macroeconomic and financial conditions in the emerging economy space.

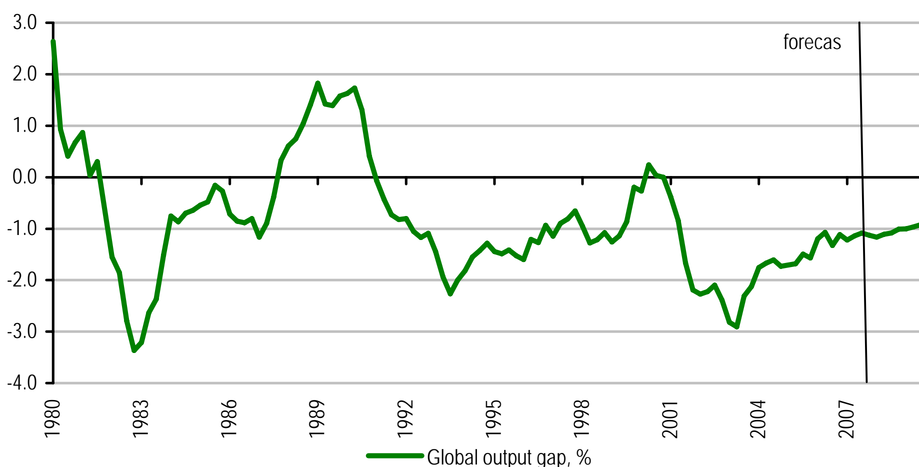
over the next two years, we are equally content to forecast above-trend domestic demand growth for many. And this—to some extent—should cushion them from the weaker demand conditions that we expect in the rest of the world economy.

Inflation and monetary policy

Receding underlying inflation risk

If our outlook proves correct and global growth decelerates toward trend, while US growth remains sub-trend, *underlying* inflation risk ought to recede, even against the backdrop of today's soaring energy prices and, for the US, weak dollar. The world economy—on our estimates—still operates with a modicum of spare capacity in many sectors (see chart below). Core inflation (i.e. excluding food and energy) in most major economies and regions should therefore remain well-behaved and inflation expectations ought to remain well anchored.

The world economy still has some spare capacity



Source: UBS

Relative price movements still important

Still, relative price movements—as reflected in the recent 'inflation' of energy and food prices versus, for example, 'deflation' of US house prices—are likely to have important impacts on economic outcomes over the next two years. In some cases, measured rates of inflation are likely to move higher, given the significant weights attached to food and energy prices in CPI baskets. In selected emerging economies, the reduction of energy subsidies is also likely to lift headline consumer price inflation.

Another 100bps of Fed easing, 75bps of BoE easing

Receding inflation risk will allow central banks to ease policy in those countries where growth is most at risk. As noted above, we now project a further 100 basis points of easing from the Fed by the middle of next year (and thereafter the Fed is expected to remain on hold). We also forecast 75 basis points of easing from the Bank of England next year, reflecting a softer outlook for the UK economy (25bps of additional easing relative to our previous forecast).

50bps of ECB easing

In the Eurozone we now believe that the ECB will ease monetary policy by 50bps next year, a change from our previous forecast which had assumed unchanged policy rates. Specifically we have pencilled in 25bps of easing in Q2 and another 25bps of easing in Q3.

Next hike from BoJ postponed to July

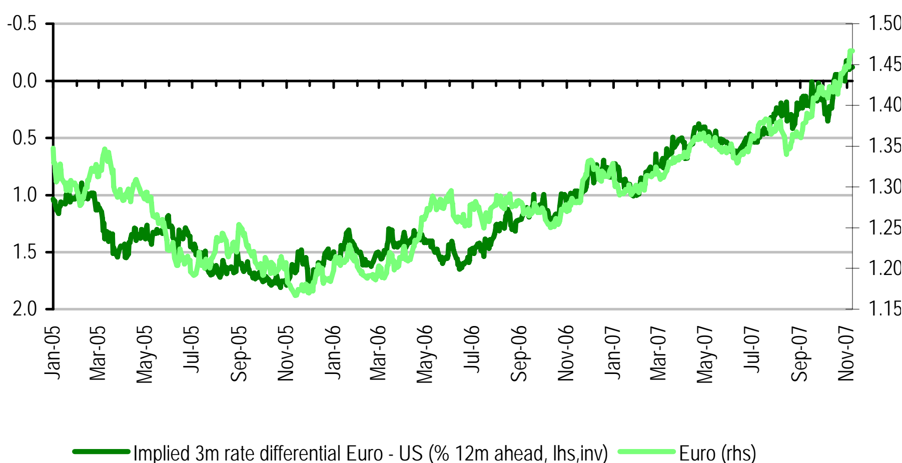
Finally in Japan, we now expect the Bank of Japan (BoJ) to resume its campaign of monetary policy normalisation, but only in July of next year (a change from our previous forecast for the next hike as soon as January). Our revised profile now has the BoJ lifting the overnight call rate by 25 basis points to 0.75% next July and again by another 25 basis points to 1% by mid-2009.

Currencies: Near-term dollar vulnerability

US dollar to remain vulnerable in the near-term...

In the near-term, the US dollar will remain vulnerable to a deterioration of (relative) fixed income returns in the US. Recall that in this decade net relative fixed income returns have been a dominant driver of exchange rates: High yielding currencies have typically appreciated. In light of ongoing credit concerns in the US and our forecast for more aggressive Fed easing, we have adjusted our mid-2008 forecast for EUR/USD from 1.45 to 1.50. The near-term risk remains further dollar weakness, particularly versus the euro and other freely-traded currencies, given concerns about the US growth slowdown and its impact on US-dollar denominated fixed income returns.

EUR versus 3 month forward interest differential

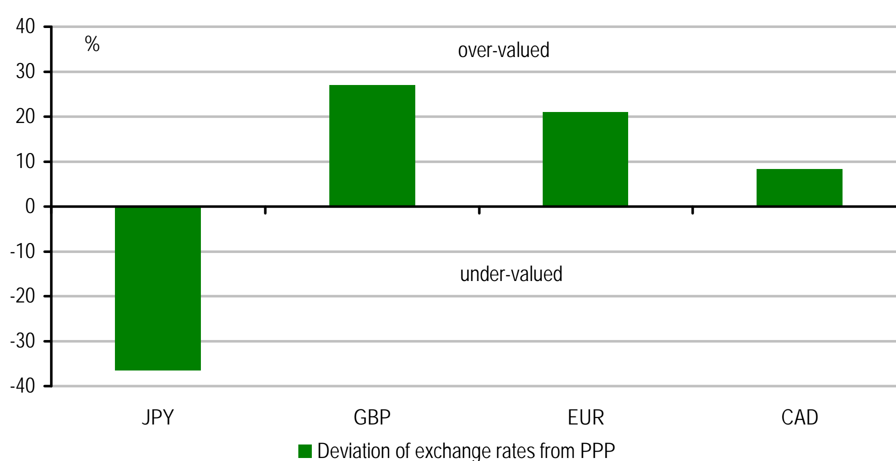


Source: Bloomberg

...to stabilise by mid-08

As we peer beyond the early half of next year, the dollar may stabilize and recover, particularly against the euro. By then weaker US growth is likely to be accompanied by softer activity elsewhere, including in Europe (partly a by-product of a weak dollar). Short-term interest differentials should also narrow between the US and Europe as the ECB moves into a position to ease monetary policy. The dollar ought to also be supported on valuation grounds. On our estimates, the US dollar is already under-valued relative to the euro, sterling and the Canadian dollar, for example. Valuation could prompt cross-border portfolio and long-term equity inflows to the US, including FDI and M&A.

Bilateral US dollar deviations from purchasing power parity, in %



Source: UBS

Risks to the view

Upside risks include...

Our growth forecasts are subject to upside- and downside risks. Positive growth shocks could include:

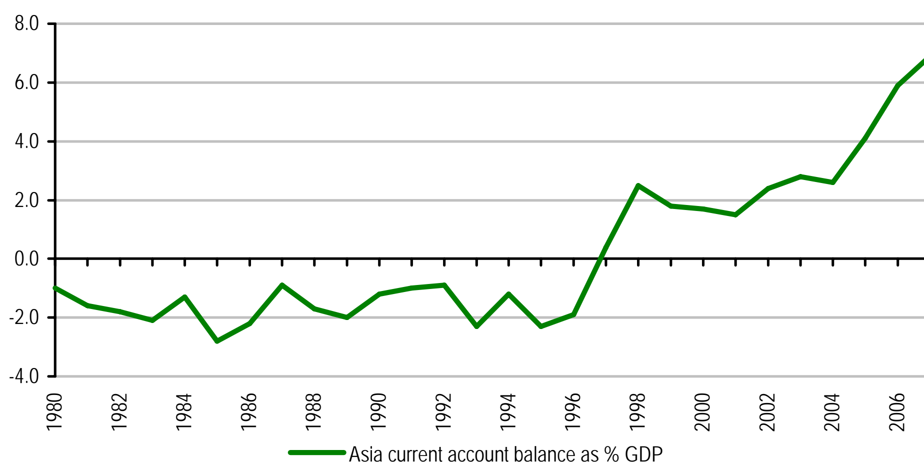
...a more rapid recovery of US housing market...

- A more rapid recovery of the US housing market and/or a resilient US consumer, given still decent US job formation and stronger real wage gains in the next 12-18 months. The latter could come about if energy and food prices fall from recent lofty levels, giving a lift to household purchasing power. This more upbeat growth scenario would, of course, remove some or all of the Fed easing we forecast and most likely would reverse the dollar's recent bout of weakness.

...and a more resilient emerging economy complex

- A more resilient performance from emerging economies, presumably reflecting a shift to stronger domestic demand (i.e., a decline in national savings). Asia's vast current account surplus (mostly China) provide ample scope for stronger domestic activity without jeopardising external balance and could, in theory, be re-channelled into the world economy via an increase in demand to offset the loss from the US. While the catalysts for this outcome are not clearly evident (those being either a change in tax or social welfare policy in developing Asia or a more rapid appreciation of their currencies, either of which could lift household spending), stronger domestic demand in Asia would boost global (long-term) interest rates by more than we now forecast.

Asia's current account surplus



Source: Haver/IMF

Downside risks include…

Downside risks to our outlook include:

…a more protracted US housing downturn…

- An even more protracted slump in the US housing market and US house prices than we forecast that, in turn, could precipitate a more significant slowdown in US consumer spending growth and a US recession.

…high oil prices…

- A further shock to already tight energy supplies that keeps oil prices higher for longer than we envisage;

…and further disruption in financial markets

- A further disruption in global financial markets that causes the cost of capital for companies to climb and balance sheet strains for households to increase (either via wider corporate credit spreads and/or via lower equity prices).

In order to provide some quantitative guidance on what a more nefarious scenario might imply for the world economy we ran a simple simulation on the NiGEM global econometric model. Specifically we simulated a scenario in which:

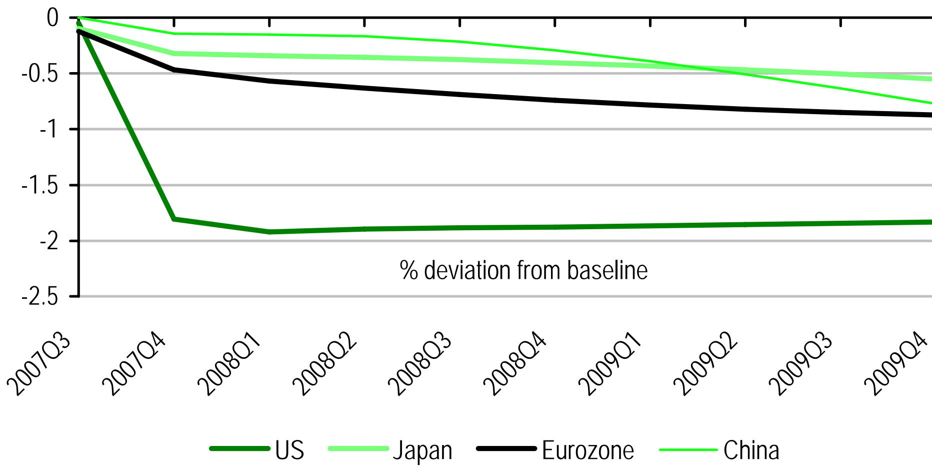
- US house prices decline by 15% (from their current level) over a period of two years
- Oil prices temporarily rise by $25/bbl over a period of two years (roughly the increase that has occurred over the past two months) and;
- The cost of capital for companies in developed economies is lifted by 100 basis points for a period of one year.

The simulation contrasts with our baseline assumptions which assume a 10% peak to trough decline in US house prices from mid-2006, a decline in oil prices to around $66 (WTI) by end-2008 and to $62 by end-2009 and a more benign financial backdrop with limited further disturbances to corporate sector financing costs.

The impact of the simulation on GDP and on policy rate outcomes in selected major economies is illustrated via the two charts below. The results indicate that the US economy would enter a protracted recession with GDP some two

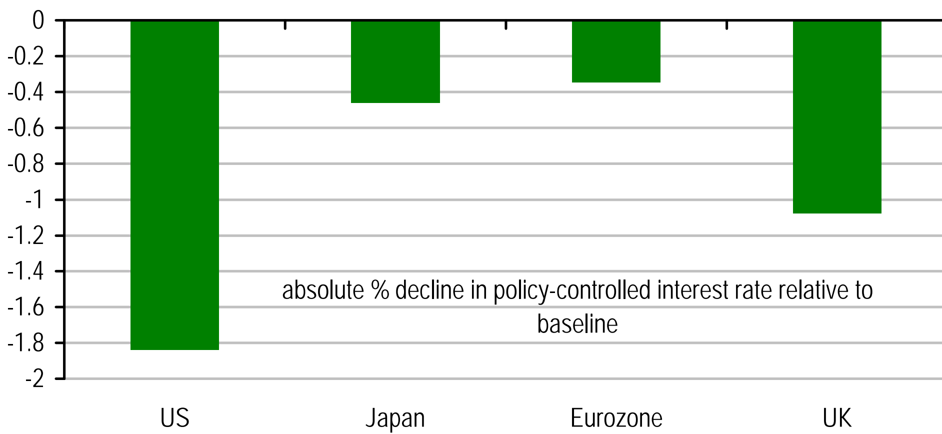
percentage points lower than its baseline level for at least two years even if—as the simulation suggests—the Fed eases monetary policy by 175 basis points. Japan, Europe and China are more insulated from these shocks (the simulated drop in house prices is, after all, a localised shock for the US) but they nonetheless suffer a significant drop in GDP of between 0.5 and 1 percentage points relative to their baseline. Overall we calculate that global GDP would be about 1.3% points lower than our baseline scenario should these risks materialize.

Impact on GDP of a 15% decline in US house prices, a $25 increase in oil prices and a 1% jump in investment risk premiums



Source: UBS

Impact on policy rates of a 15% decline in US house prices, a $25 increase in oil prices and a 1% jump in investment risk premiums after 2 years



Source: UBS.

Table 1: GDP growth

%y/y	Weight*	2006	2007F	2008F	2009F
US	0.22	2.9	2.1	2.0	2.5
Canada	0.02	2.8	2.6	2.9	2.9
Japan	0.07	2.2	1.9	1.7	1.8
Western Europe	0.21	2.9	2.6	1.9	1.9
of which:					
EU "13"	0.16	2.9	2.6	1.6	1.7
UK	0.03	2.8	3.0	1.8	2.0
Switzerland	0.01	3.2	2.7	1.6	1.8
Asia **	0.30	8.7	8.8	8.5	8.2
of which:					
China	0.15	10.7	10.9	10.4	9.8
India	0.06	9.4	8.6	9.1	8.8
Latin America	0.07	5.3	4.8	4.3	3.9
of which:					
Brazil	0.03	3.7	4.6	4.3	4.0
Eastern Europe	0.07	6.2	6.4	5.8	5.3
of which:					
Russia	0.03	7.0	7.5	7.5	7.0
Rest of world	0.04	7.3	6.8	6.4	5.6
Advanced economies	0.57	2.9	2.5	2.1	2.3
Developing economies	0.43	8.0	7.9	7.1	6.5
WORLD	1.00	5.1	4.8	4.3	4.1

Source: UBS calculations and estimates
* Based on purchasing-power-parity-adjusted GDP levels;
** includes Australia and New Zealand.

Table 2: Inflation

%y/y	Weight*	2006	2007F	2008F	2009F
US	0.22	3.2	2.8	2.5	1.7
Canada	0.02	2.0	2.3	2.3	1.9
Japan	0.07	0.3	0.0	0.5	0.9
Western Europe	0.21	2.2	1.9	2.1	2.1
of which:					
EU "13"	0.16	2.2	2.1	2.5	1.9
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Switzerland	0.01	1.1	0.7	1.3	1.2
Asia **	0.30	3.6	4.1	3.7	3.8
of which:					
China	0.15	1.5	4.6	3.4	3.5
India	0.06	6.8	4.8	5.0	5.5
Latin America	0.07	4.8	5.1	5.8	6.3
of which:					
Brazil	0.03	3.1	3.8	4.2	4.5
Eastern Europe	0.07	7.0	6.4	5.3	5.9
of which:					
Russia	0.03	9.0	7.5	6.0	8.0

Source: UBS calculations and estimates
* Based on purchasing-power-parity-adjusted GDP levels;
** includes Australia and New Zealand.

Table 3: Interest rate forecasts

%	09-Nov-07	Jun-08	Dec-08	Dec-09
US				
3 month rate	4.9	3.9	3.7	3.7
10 year yield	4.3	4.1	4.3	4.6
Canada				
3 month rate	4.0	4.5	4.5	4.5
10 year yield	4.3	4.6	4.6	4.6
Japan				
3 month rate	0.9	0.9	1.1	1.5
10 year yield	1.5	1.8	1.9	2.1
Germany				
3 month rate	4.6	4.5	4.3	3.6
10 year yield	4.1	4.2	4.1	4.3
Sweden				
3 month rate	4.5	4.5	4.3	4.3
10 year yield	4.2	3.9	3.8	4.3
UK				
3 month rate	6.2	5.4	5.2	5.2
10 year yield	4.8	4.8	4.8	4.9
Switzerland				
3 month rate	2.6	2.5	2.5	2.5
10 year yield	3.0	2.8	3.0	3.0
Australia				
3 month rate	7.0	7.2	7.1	7.1
10 year yield	6.0	6.4	6.4	6.4
New Zealand				
3 month rate	8.7	7.9	7.3	7.6
10 year yield	6.4	6.3	6.0	6.3

Source: UBS calculations and estimates

Table 4: Foreign exchange forecasts

	09-Nov-07	Jun-08	Dec-08	Dec-09
EUR/USD	1.47	1.50	1.35	1.30
USD/JPY	111.16	115.00	110.00	105.00
EUR/JPY	163.33	172.50	148.50	136.50
GBP/USD	2.11	2.08	1.90	1.91
EUR/GBP	0.70	0.72	0.71	0.68
USD/CHF	1.12	1.10	1.21	1.23
EUR/CHF	1.65	1.65	1.63	1.60
USD/CAD	0.93	0.90	1.05	1.10
AUD/USD	0.92	0.85	0.80	0.85
NZD/USD	0.77	0.70	0.66	0.68
EUR/SEK	9.28	9.10	9.20	9.20
EUR/DKK	7.45	7.46	7.46	7.46
EUR/NOK	7.81	7.70	7.80	7.80

Source: UBS calculations and estimates

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