February 14, 2008

Global economic outlook 2008

Slowdown but no recession

After four years of above-average growth the global economy is facing substantial challenges: financial distress caused by the fallout of the US subprime crisis, the correction in a number of residential property markets, the surge in global headline inflation driven by record oil and food prices plus – outside the US – the effects of the declining USD.

The US slowdown will subtract about half a percentage point from European growth and higher oil prices might take away another ¼ of a percentage point. These numbers are the result of model simulations, which obviously cannot pick up the financial ramifications of the current subprime crisis.

Some positive factors need to be taken into account. First, the emerging markets – contrary to previous shocks – are providing an element of stabilisation due to robust domestic demand and solid current account surpluses in many cases. While we are no buyer of the decoupling story, the rather modest widening of the EMBI spread and the stability of EM currencies do not point towards the old contagion story, either.

A second plus is that corporate spending in the industrialised world has been rather cautious in recent years. There is no need for the extent of balance sheet consolidation we suffered in 2001/02. In addition, profits and internal cash flows are still strong, so that somewhat tighter lending conditions should not have the same detrimental effect as in the last downturn.

We predict that the substantial USD depreciation of the last two years, decisive and timely Fed action and the USD 150 bn fiscal package will prevent a US recession. But even in 2009 US growth will remain below potential. Since we do not believe in decoupling, Euroland growth will slow to 1 ¾%, German GDP to 1 ½% in 2008.

With G7 central banks remaining in cutting mode, the risk of a substantial increase in bond yields is limited, especially because headline inflation rates will come down in the course of the year. Despite slower profit growth, equities are likely to do better than bonds.

GDP growth slows in 2008

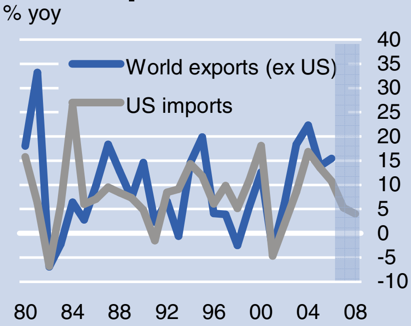
% yoy

	2006	2007	2008	2009
USA	2.9	2.2	1.5	1.7
EMU	2.8	2.7	1.6	1.6
Germany	2.9	2.5	1.5	1.5
Japan	2.4	2.1	1.3	1.5
China	11.1	11.4	10.4	10.0
India	9.4	9.0	8.2	8.6
LatAm	5.2	5.3	4.3	3.8
Asia	8.3	8.4	7.4	7.6
World	**3.7**	**3.5**	**2.6**	**2.7**

Source: DB Research

US imports set pace for world exports

% yoy



Sources: IMF, DB Research

www.dbresearch.com

Authors
Stefan Bergheim
+49 69 910-31727
stefan.bergheim@db.com

Bernhard Gräf
+49 69 910-31738
bernhard.graef@db.com

Maria-Laura Lanzeni
+49 69 910-31723
maria-laura.lanzeni@db.com

Stefan Schneider
+49 69 910-31790
stefan-b.schneider@db.com

Editor
Stefan Bergheim

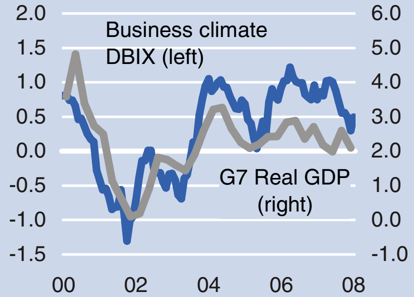
Technical Assistant
Pia Johnson

Deutsche Bank Research
Frankfurt am Main
Germany
Internet: www.dbresearch.com
E-mail: marketing.dbr@db.com
Fax: +49 69 910-31877

Managing Director
Norbert Walter

Dwindling confidence

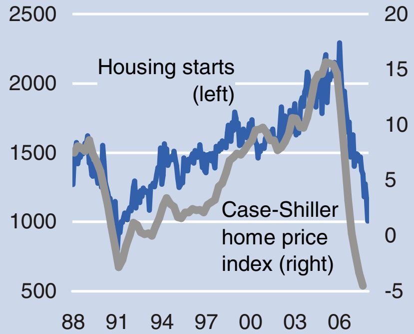
Standard deviation from historical mean (left), % yoy (right)



Source: DB Research 1

US housing in recession

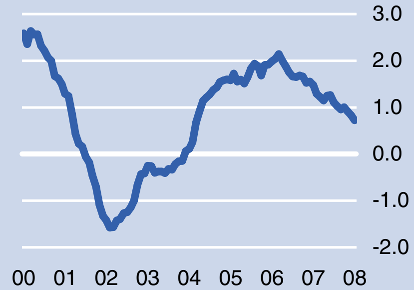
Units in '000 (left), % yoy (right)



Sources: S&P, Census 2

US employment growth slowed

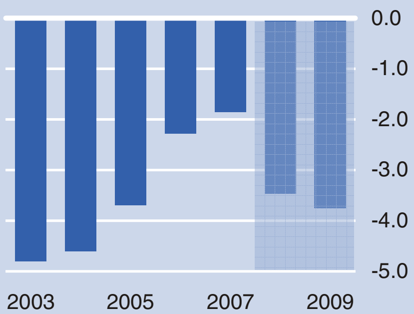
Non-farm payrolls, % yoy



Source: BLS 3

US growth package of 1% of GDP

General govt. budget balance, % GDP



Sources: OECD, DB Research 4

The R-word is doing the rounds

The global economy is in a difficult situation. Economic growth virtually came to a standstill in the US in Q4 2007 and already passed the top of the cycle in the euro area around the end of 2006. In Japan, too, the outlook is worsening.

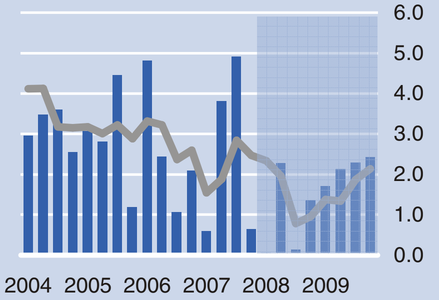
After real GDP rose by an annualised 4.9% (compared to the previous quarter) in the US in Q3, it increased by a measly 0.6% in Q4. The reason is the deep-seated recession in the American housing sector. The contraction of the market there, which had already been underway for over 2 years, recently became even more acute as a result of the deepening financial crisis. Housing starts in December 2007, at a little over 1 million units (annualised), were almost 40% down on their year-earlier level and around 56% lower than their peak in early 2006. Capital market valuations seem to indicate that the question is no longer whether there will be a US recession but rather how deep it will be and how long it will last. We, however, believe that a US recession will be avoided. Our argumentation is based on the expansionary monetary policy of the Fed and the government's fiscal stimulus package running to over USD 150 billion or slightly more than 1% of GDP. The Fed has cut its Fed funds target rate by 225 bp since mid-September 2007 (125 bp within one week in late January) to 3% most recently and is likely to reduce it by a further 50 bp in March.

USA: Tax cheques for everyone…

Seldom has there been such unanimity among American politicians regarding stimulus for the economy. As the presidential primary races shift into top gear no party wants to risk putting itself in a position where it can be blamed for the recession by opposing the package. The stimulus package contains not only tax breaks for companies but above all tax rebates for US households worth around USD 100 bn, which will be disbursed in the form of tax cheques – as was the case in 2001. In 2001 the US government sent out cheques worth USD 38 bn – equivalent to 0.4% of GDP – of which two-thirds were spent within two quarters. This year's temporary tax rebate is thus twice the volume of the 2001 package. Against this background our consumption forecast of 1.8% in 2008 is on the conservative side. Going by the experience in 2001, the stimuli could well turn out to have a greater impact. For example, a taxpayer can expect to receive a tax cheque of up to USD 600, while a couple with two children can look forward to receiving USD 1,800.

Such a package is well timed. The tax cheques that are this time also to be given to households with only small incomes and which do not pay tax could already be spent by the end of Q2, i.e. take effect at the very moment when a significant weakening of private demand and an increase in the savings ratio can be expected as a result of negative wealth effects and declining mortgage cash-outs as a result of shrinking housing prices. To date, private consumption has remained robust and relatively untouched by the fallout from the real estate and financial crises, and rose even in Q4 by 2% versus the preceding quarter. This does seem astonishing at first glance, but it can be explained by the still relatively stable labour market in Q4. However, at 17,000, non-farm payrolls fell in January for the first time since 2003.

US growth below potential
Real GDP



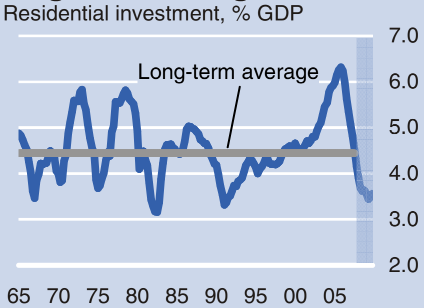
Sources: BEA, DB Research 5

… growth still well below potential in 2008 and 2009

The fiscal package is not the appropriate means of solving structural imbalances, such as the extremely low savings ratio. We therefore expect that the US economy will be able to avoid slipping into recession, but that growth will nevertheless remain a long way below potential, which we estimate at 2 ½ to 3%. After an average growth rate of 1 ½% for 2008 we forecast GDP growth of 1 ¾% at best in 2009 (see chart 5). Private consumption is likely to grow 1 ¾% in the current year mainly for fiscal reasons, declining, however, to below 1 ½% in the coming year, while the savings ratio climbs from 0.5% in 2007 to 2 ¾% in 2009. This is based on the assumption that employment increases by just about ½% each year in 2008 and 2009, compared with nearly 2% in 2006 and 1.3% in 2007, and that the unemployment rate rises towards 6% in 2009 compared with an annual average of 4.6% in 2007. A sharper slump in the labour market appears unlikely as US companies repeatedly cited the 2001 recession as a reason for consolidation and are currently far better equipped for a downturn than in the weak phases of the 1980s, 1990s and 2001.

Recession in housing: Nadir will soon be reached

Residential investment ratio will fall below its long-term average
Residential investment, % GDP



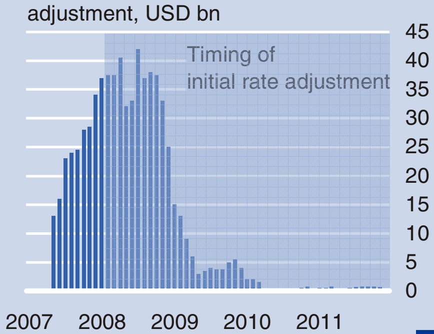
Sources: BEA, DB Reserach 6

The biggest imponderables in our US economic forecast lie in the housing sector and the impact of the subprime crisis on US consumption. Looking at past developments, we assume that the nadir for housing starts will soon be reached. At present, construction is being started on around 1 million dwellings per month. In the three months around the lows of 1982 and 1991 the average figures were between 875,000 and 900,000. A rapid recovery is, however, unlikely given that vacancy rates are far higher than the long-term trend. The correction could even take several years. Correspondingly, housing investment is likely to contract by nearly 14% in the current year, after falling 4.6% in 2006 and nearly 17% in 2007, and will remain slightly negative in 2009 as well. Relative to GDP, housing investments would thus drop to 3 ½% in 2009 and thereby fall considerably below the long-term trend, which however would correspond with earlier development patterns (see chart 6).

Wealth effect probably smaller than presumed

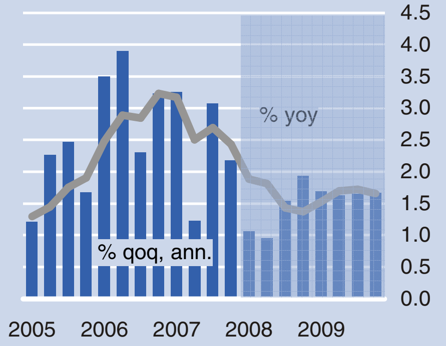
The recession in the housing sector weighs on private consumption via falling house prices and thus shrinking asset values. On top of this, losses are suffered from corrections in the equity market. How much these wealth effects actually dampen private consumption is open to question, however. According to our calculations, the wealth effect on US private consumption of 2 cents per dollar of asset loss is possibly only half as much as estimated by the IMF and other institutions. In addition, the Fed's rate cuts have made the refinancing of mortgages attractive once again, as shown by the jump in the refinancing index in January. This reduces the household's interest burden directly. In addition, the rate cuts have also appreciably reduced the increase in burdens from mortgages with a low initial interest rate that is adjusted after 1-2 years to match market developments. For this reason we do not expect a massive slump in private consumption. However, the effects of the mortgage crisis will continue to reverberate for a long time – albeit with a muted impact following the key rate cuts – and the default rates particularly in the subprime segment will continue to rise for a while. Most interest rate adjustments should be in place by H2 2009 (see chart 7).

Rate cuts reduce increase in interest burden
Subprime mortgage loans with rate adjustment, USD bn



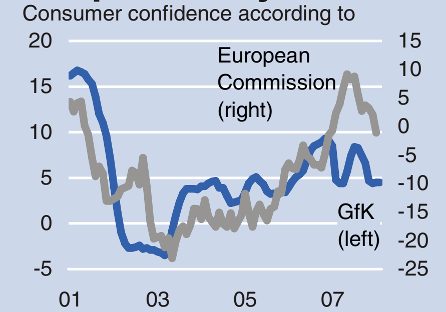
Source: SilverStreet Capital 7

EMU: Weaker growth
Real GDP



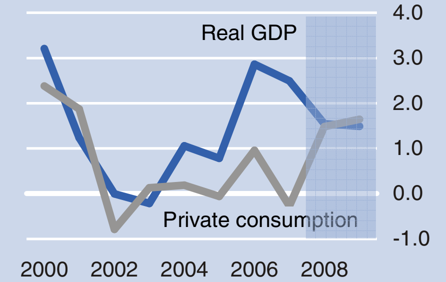
Sources: Eurostat, DB Research **8**

Germany: Confidence slumped recently
Consumer confidence according to



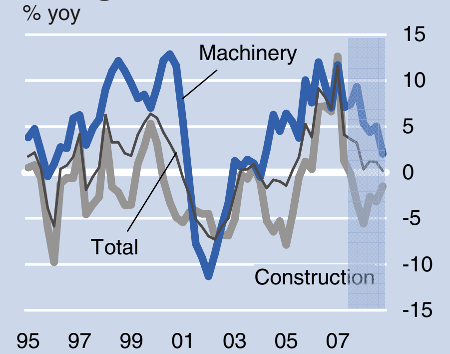
Sources: GfK, European Commission **9**

Germany: Consumption in line with GDP 2008/09
% yoy



Sources: Federal Statistical Office, DB Research **10**

Germany: Investment taking a break
% yoy



Sources: Deutsche Bundesbank, DB Research **11**

Europe cannot decouple from US downswing

Euro-area growth has remained robust of late with employment continuing to increase; in fact, the purchasing managers' index in manufacturing rose slightly in January. Nevertheless, the European economy is scarcely likely to be able to decouple completely from the US economy on a permanent basis. The reason is that ongoing globalisation and the increasing use of information and communication technologies have resulted in closer transatlantic links in external trade and financial markets than in the 1980s. The growth slump in the US could restrain growth in the euro area by roughly one-half of a percentage point, with the effect being reinforced by the strong euro and stubbornly high oil prices. Against this backdrop we expect euro-area growth to slow in the current year, from 2.7% to merely 1.6%, and continue at a similarly moderate pace in 2009 (see chart 8).

Germany: Consumption becoming a pillar of growth

After two years of unusually strong growth (real GDP up 2.9% in 2006 and 2.5% in 2007) the economic expansion in Germany is also set to ease. However, our forecast of 1.5% growth for both 2008 and 2009 puts it roughly in line with potential. That growth is more broadly based than in past years. As long as fiscal policy plays along and employment continues to increase, albeit at a somewhat slower pace (¾% in 2008 after 1.7% in 2007), private consumption should start to expand again at about the same rate as GDP for the first time in 6 years, as chart 10 illustrates. However, considering that consumer confidence has fallen sharply since its last high in autumn 2007, there are substantial risks attached to our assumption of a decrease in the savings ratio and thus in the degree to which consumption will grow in 2008.

Export and investment activity losing steam

On a contrasting note, the current drivers of growth, i.e. capital spending and net exports, are weakening noticeably. The strong euro and the sagging growth in the US are weighing on German net exports, whereas demand – at least from the euro area and the oil-exporting nations (Russia, in particular) – has remained relatively vigorous. All in all, real export growth is likely to ease in 2008, from over 8% to just over 5%. This and the pull-forward effects that emerged for tax reasons in 2007 will curb investment activity in 2008. We therefore expect investment in machinery and equipment to climb by only 5% in 2008, down from 8.4% in 2007. Moreover, the expansion in construction investment that started in late 2006 will fizzle out. Given the substantial decline in order intake, investment in construction will probably contract by 2 ¼% in 2008 after having expanded by 2% in 2007, meaning investment activity will be more or less flat in 2008 (+ 1 ¼%, down from 4.9% in 2007).

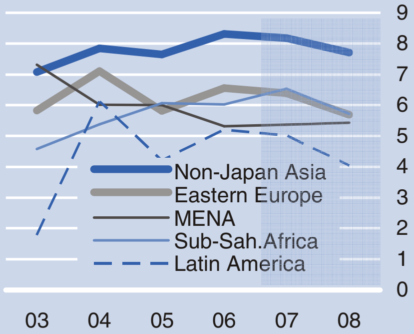
Emerging markets: Superior performance to continue

The emerging markets (EMs) will continue to outperform the rest of the world in terms of economic growth and likely with respect to financial markets as well. To be sure, due to the ongoing global market turmoil and sharp slowdown in the US economy, EM growth will be lower and financial market returns smaller than in 2007. In this sense, EMs have not "decoupled" from the rest of the world. But EM resilience to external shocks has significantly increased in recent years, due to much improved fundamental conditions (especially sovereign credit quality) and favourable medium-term growth prospects.

We expect emerging market economies to grow at 6% to 6.5% in 2008-2009, a drop of approximately ¾ pp from 2007. Asia (without Japan) will remain the most dynamic region, growing at roughly 7.5% in 2008, powered by China (10.5%) and India (8.5%). GDP growth in other regions will range from 4% (Latin America) to 5.5%-6% (Eastern Europe, Middle East and Africa) (see chart 12).

EM regions: Real GDP

% p.a.



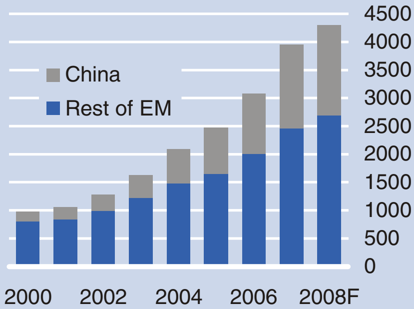
Source: DB Research 12

Inflation will not accelerate

After a sharp pick-up in 2007, inflation will remain high but probably not accelerate further this year. EM central banks remain very cautious and will be wary of starting to cut interest rates too soon, despite the aggressive easing in US monetary policy. In most countries, the pick-up in inflation has been due to sharp increases in food and fuel prices. This problem has been particularly acute in China. The PBOC is expected to remain hawkish but to resort to more moderate tightening with an eye on US recession risks. In India, the RBI did a good job in avoiding overheating last year, and is likely to start cutting rates in H2 2008. Elsewhere, inflation remains a significant problem in Argentina and Venezuela, due primarily to inconsistent domestic policies.

EM FX reserves to rise further

Official FX reserves, USD bn

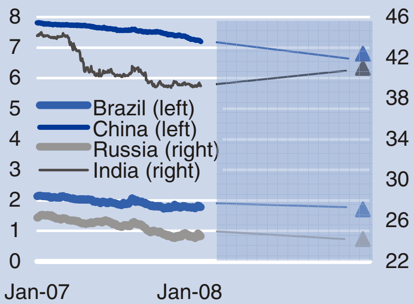


Source: DB Research 13

EMs as a whole will continue to accumulate external assets, but some countries remain vulnerable. Against the background of an aggregate EM current account surplus and high expected net capital inflows, emerging market countries will continue to accumulate official FX reserves (see chart 13) and probably other (unrecorded) external assets. The stock of EM external debt is expected to grow at a moderate pace, driven mostly by non-sovereign issuers. Therefore, in net terms, EMs will remain external creditors and thus well equipped to deal with external financing shocks. While this is true for the aggregate EM, some countries are quite vulnerable to deteriorating international liquidity conditions, in particular the Baltics, Romania, Bulgaria and Ukraine, as well as South Africa and Turkey. These countries exhibit large and in some cases growing current account deficits financed in part by volatile foreign portfolio inflows. In a context of high risk aversion by international investors, the probability of financial turbulence in these countries has materially increased.

BRIC currencies well supported

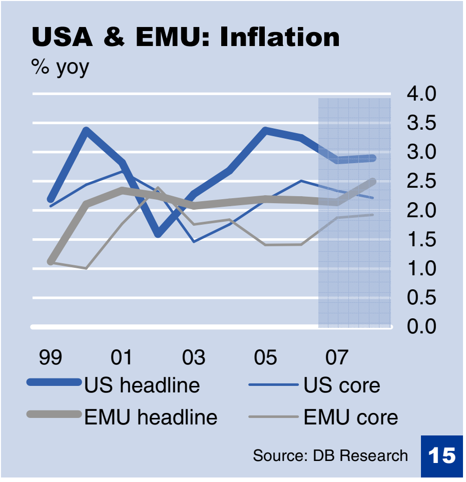
Currencies vs USD

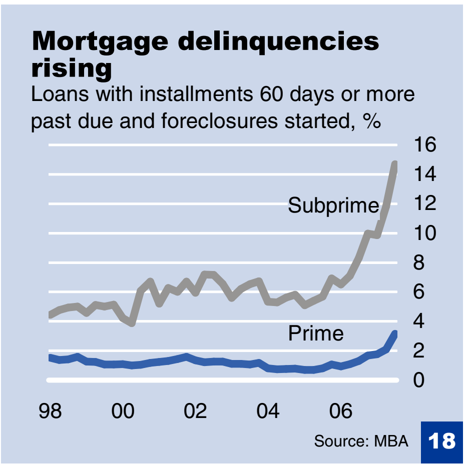


Forecast: Dec. '08

Sources: Global Insight, DB Research 14

Renminbi appreciation is set to accelerate. The Chinese RMB is likely to appreciate by 7%-10% vs the USD in 2008 (see chart 14). A weak USD and high domestic inflation will lead many EM central banks to accept somewhat stronger currencies. At the same time, the policy of keeping currencies "competitive" via FX intervention will remain unchanged, especially in Asia.





Inflation: Limited second-round effects

In the course of 2007 oil prices increased by close to 50% in USD terms. Prices for basic food stuff rose by close to 40% in the same period, due to poor harvests, increasing demand from emerging markets and the usage as an alternative source of energy. As a result, headline inflation reached 4.1% in the US, and 3.2% in the euro area in December. While in the US core inflation actually decelerated slightly during the course of 2007, to 2.4%, it inched up very gradually to 1.9% in EMU.

We assume that oil prices will decline towards USD 80/bbl by end-2008, having a slightly dampening effect on inflation. Still, the annual average will be up by close to 20% on the year. With regards to food prices, demand growth from emerging markets – due to rising incomes and the shift to a more protein-rich diet – will persist and, at least in the US and Europe, the sowings for 2008 do not indicate a rapid supply-side response. Inventory levels for several soft commodities are reaching critical lows so that food prices could rise by 4-5% in 2008.

However, the risk that higher energy and food prices will trigger substantial second-round effects is rather small. Unit labour costs in industry were -0.6% yoy in EMU, -2.1% in Japan and stagnant in the US in Q3 2007 (see chart 16). For cyclical reasons, unit labour costs might rise somewhat faster in the next few quarters, but there is little evidence that wage inflation will perpetuate itself, as the relocation threat continues to put a lid on wage increases in many industries. In addition, competition from the emerging markets continues to put pressure on prices of traded goods. In EMU the prices for non-energy industrial goods have been up a meagre 1.1% yoy in December. Short-term price expectations collected in consumer surveys rose last summer but have stabilised in recent months. But long-term inflation expectations derived from index-linked bonds have barely budged of late, even after the Fed's whopping 125 bp rate reductions within 2 weeks (see chart 17).

In the US and EMU headline inflation probably peaked around the turn of the year. With core inflation more or less stable at around 2%, headline inflation will recede to 2% by year-end in both regions. In EMU, however, monthly inflation rates will not fall below 2 ½% before autumn, making it hard for the ECB to cut rates despite increasing signs of economic weakness.

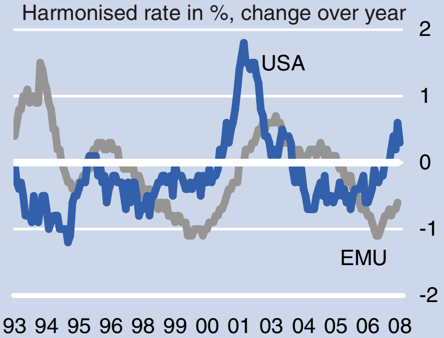
Japan remains stuck in a mild deflation even after five years of economic upswing. The CPI excluding energy and food has not seen an annual increase since 1998.

A very active Federal Reserve…

Up to now the Fed has lowered interest rates by 225 basis points since September. Almost nobody expected interest rates to fall from 5.25% to 3% within just five months. However, the Fed is making clear that unusual times require unusual action: severe financial market disruptions may lead to nonlinearities in the economy. The sharp rise in mortgage delinquencies gives plenty of reason to worry (see chart 18).

Unemployment rises first in the USA - then in EMU

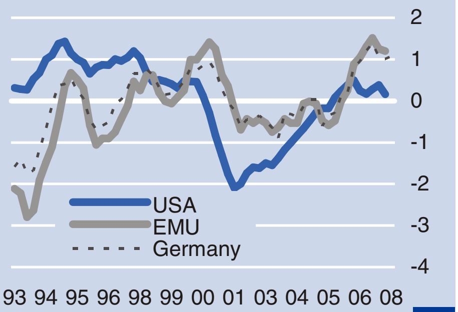
Harmonised rate in %, change over year



Sources: Eurostat, BLS **19**

Capacity usage well above average in EMU

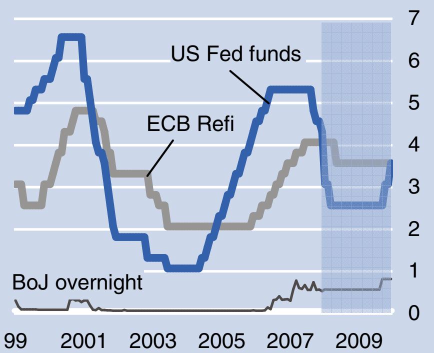
Manufacturing capacity usage, number of standard deviations from mean



Sources: Fed, EC, ifo **20**

Big rate cuts from the Fed

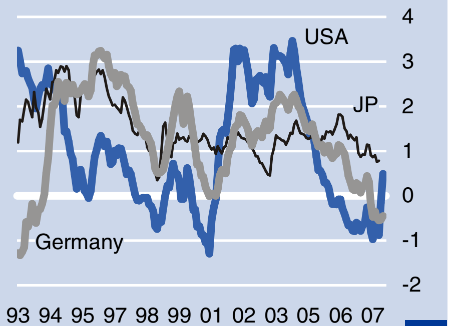
in %



Source: DBR forecasts from February 2008 **21**

Yield curves invert in USA and in Germany

10-year govt. yields minus 3-month rate



Sources: Global Insight, DBR **22**

The Fed has certainly convinced everybody that times are unusual and that it is set to reduce rates further. DBR currently expects another 50 basis points to 2.5% and 2-year government bond yields of 2.1% point to the market expecting even more. But the jury is still out on whether these moves were really necessary and appropriate in an economy operating near capacity with inflation rates above 4% and the risk of introducing more moral hazard in financial markets (the "Bernanke put" at work).

Still, the US unemployment rate of 4.9% in January (up 0.3 pp from a year ago, although down from December) and the massive amount of bad news from the financial sector indicate that pre-emptive action is appropriate. And this action may have to be even more pronounced this time because the financial turbocharger through the real estate sector is cut off this time. The Fed can undo its rate cuts if it turns out that bank lending will not be reduced as banks rebuild their balance sheets. But it will take several months before we will know.

… and a more passive ECB (and BoJ)

The European Central Bank is the polar opposite to the Federal Reserve. It has not reduced rates so far and many members of its Governing Council reject the idea that they will do so any time soon.

Granted, there are some good reasons for holding back: CPI inflation is stubbornly high, unemployment continues to fall (chart 19), the euro-area manufacturing sector operates well above capacity despite the strong euro (chart 20) and euro-area banks are much less affected by the subprime crisis than their US counterparts. The ECB seems to say: "Crisis? What crisis?"

However, we have seen much of this before for example in 1997/98 and in 2001/02 when rates in Europe followed those in the US with a lag. The usual transmission mechanisms are still functioning: equity markets are down around the world, confidence is declining globally and euro-area exports to the US and elsewhere will be hit hard. Therefore, with a lag the euro-area labour market will weaken, capacity usage will come down (see chart 20), inflation pressures will ease – and the ECB will eventually also reduce rates a little. How long this will all take is not clear, but in the second half of 2008 the ECB's main refinancing rate should have reached 3.5%.

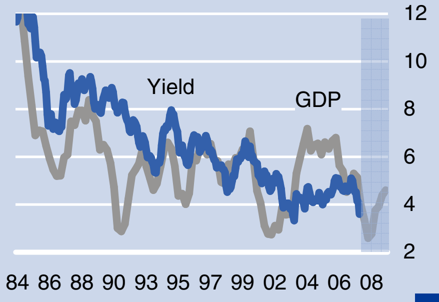
The Bank of Japan is yet another issue altogether. It has been unable to raise rates above 0.5% despite five years of solid real GDP growth and a weakening currency. The process of rate normalisation will not resume for the time being as inflation is unlikely to come back in Japan when the world economy is weakening and the yen strengthened to 106 per USD.

Warning signals from yield curves

Yield curves are giving an indication of how serious markets are taking the current problems. 10-year yields were below 3-month rates, both in the US and in Germany, inverted for the first time since early 2001 – and we know what ensued back then. The Fed is trying hard to engineer a positively sloping yield curve again and succeeded with the cut to 3% in late January. The euro-area yield curve is likely to stay inverted until the ECB cuts rates because we do not expect much of an upward move of long-term yields.

US GDP growth below 10-year bond yields

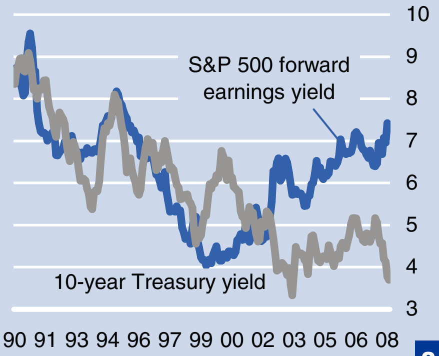
10-year govt yield in %, Nominal GDP growth in % yoy



Sources: BEA, Global Insight

23

Equity and bond yields diverged even further

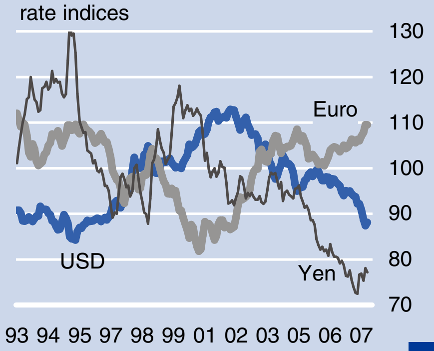


Sources: IBES, Global Insight

24

Weak dollar - weaker yen

Real broad trade-weighted exchange rate indices



Sources: Federal Reserve, ECB, BoJ

25

Bond yields may stay unusually low for a while longer

Government bond yields have plunged around the world. US 10-year yields fell from more than 5% in June to just 3 ½% in late January, reflecting the Fed moves. Yields may stay this low for some more months, but using macroeconomic valuation models, they should rise again in the medium term. As chart 23 shows, bond yields move with nominal GDP growth over time, with yields smoothing over cyclical fluctuations in GDP. Since we expect US growth to reach around 4 ½% in the medium term, yield forecasts are in a similar ballpark. This model helped us not wonder too much about why US yields did not rise much above 5% at the peak of the latest rate cycle, as we did not expect GDP growth to stay above 6% (the “Greenspan conundrum”).

German 10-year yields are more stable and the long-term level is set to be somewhat lower than in the USA because of lower trend growth. Therefore, they will probably not rise very much in 2008 from their current level of around 4%.

Equity markets look cheap even as profits fall

Global equity markets fell sharply in early 2008 as a number of negative factors combined: bad news about the business cycle, profit warnings and financial sector problems. Indeed, consensus expectations for corporate profits are likely to get revised downward further over the coming months – and not only for financials. The times of double-digit increases in profits are over, which is in line with economic theory and long-term observations: in the long run profits do not rise faster than nominal GDP and rates of return well in excess of nominal GDP growth can only be achieved at the price of high risk.

Even if profits turn out lower than the consensus expects today, the earnings yield on equities (inverse of the P/E ratio) is unusually high following this year’s market correction (chart 24). This is reflecting high hurdle rates by many companies and investors. Fixed investment is accordingly soft. And this earnings yield looks particularly high when compared to bond yields at the moment. Therefore, we see clear upside potential for equities when the current period of extreme uncertainty ends.

Currencies may have gone far enough

Since early 2001 the dominant movements of G3 currencies have been upward for the euro, down for the dollar and down even more for the yen. Based on real trade-weighted exchange rates, these moves have now taken currencies in territory that has often seen stabilisations (chart 25). Our expectations for the main exchange rates are to stay around current levels until year-end 2008.

Stefan Bergheim (+49 69 910-31727, stefan.bergheim@db.com)
Bernhard Gräf (+49 69 910-31738, bernhard.graef@db.com)
Maria-Laura Lanzeni (+49 69 910-31723, maria-laura.lanzeni@db.com)
Stefan Schneider (+49 69 910-31790, stefan-b.schneider@db.com)

Printed by: HST Offsetdruck Schadt & Tetzlaff GbR, Dieburg

ISSN Print: 1612-314X / ISSN Internet and e-mail: 1612-3158