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Challenges for financial institutions today

Notes for remarks by Malcolm D Knight, General Manager of the BIS,
at a European Financial Services Roundtable meeting, Zurich, 7 February 2006

Summary

- Many observers and analysts see major macroeconomic risks present in the global economy – large and widening external current account imbalances, large structural fiscal deficits in key countries, etc.

- Yet financial markets are not reflecting such risks in prices: a strong US dollar, very low long-term nominal and real interest rates, subdued volatility, etc.

- Hence there is a disconnect between the substantial medium-term macroeconomic risks and apparently benign risk perceptions implicit in the prices established in international financial markets.

- This disconnect is a key challenge for financial firms at the present time.

Global imbalances are large, and have widened further ...

Table 1: Current account balances[1]

	Level		Change
	2000	2005	2000–05
Industrial economies[2]	–352	–582	–230
United States	–416	–793	–377
Euro area	–90	–2	88
Japan	120	157	37
Emerging economies[3]	126	465	339
Selected net oil exporters[4]	97	267	170
Selected net oil importers[5]	48	166	118
China	21	129	108

[1] In billions of US dollars. [2] Australia, Canada, Denmark, the euro area, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States. [3] Economies cited in footnotes 4 and 5, plus Argentina, Brazil, Chile, Colombia, the Czech Republic, Hungary, Indonesia, Malaysia, Peru and the Philippines. [4] Iran, Kuwait, Libya, Mexico, Oman, Qatar, Russia, Saudi Arabia, Venezuela and Yemen. [5] China, Hong Kong SAR, India, Korea, Poland, Singapore, Taiwan (China), Thailand, Turkey and South Africa.

Sources: Consensus Economics; IMF; national data.

As Table 1 shows, current account imbalances have grown substantially over the past five years, to unprecedented levels.

The US external deficit has nearly doubled to around USD 800 billion over 2000-05. The consensus forecast projects it to grow further, to USD 830 billion (around 6¼% of US GDP) in 2006.

Moreover, what is even more intriguing is that the foreign counterparts of the external deficit of the United States, and indeed of the industrial countries as a group, have changed markedly over the past several years:

- Of course, with strong world demand and the associated rise in energy prices the external surpluses of major net oil exporters jumped, to more than USD 250 billion last year.

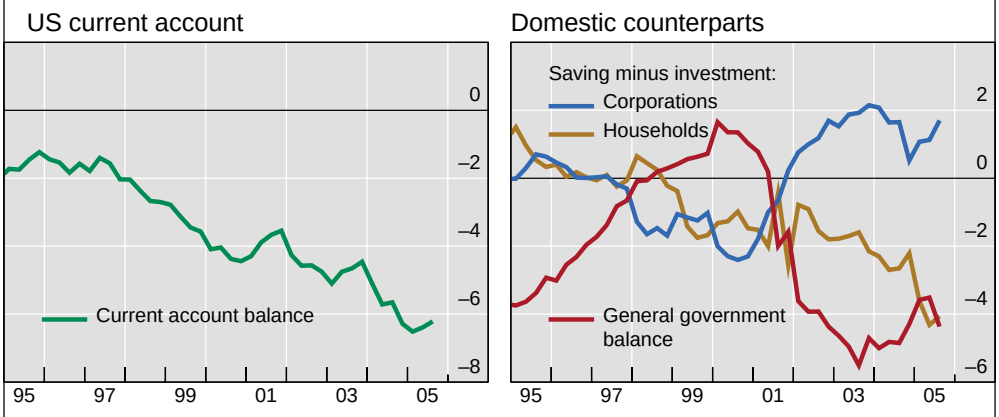
- More surprising is that even oil-*importing* emerging market economies have been recording rising surpluses, which is highly unusual in these circumstances.

- Indeed, Table 1 illustrates a striking feature of the global economy: the extent to which net savings from “capital-scarce” emerging market countries are flowing to the group of “capital-rich” industrial countries.

- It is hard to believe that such an unprecedented flow of net savings from “poor” to “rich” countries can represent a sustainable global equilibrium. At some point, this highly unusual pattern will have to change.

... but this pattern of external balances has so far been smoothly financed

Graph 1: Domestic counterparts of the US current account deficit[1]



[1] As a percentage of GDP.

Source: National data.

The left-hand panel of Graph 1 shows the trends in the US external current account deficit since 1995 while the right-hand panel gives the sectoral saving/investment flows that are its domestic counterparts. The graph suggests that the determinants of the rise in the US current account deficit have become less healthy, or less "sustainable", in recent years, for three reasons:

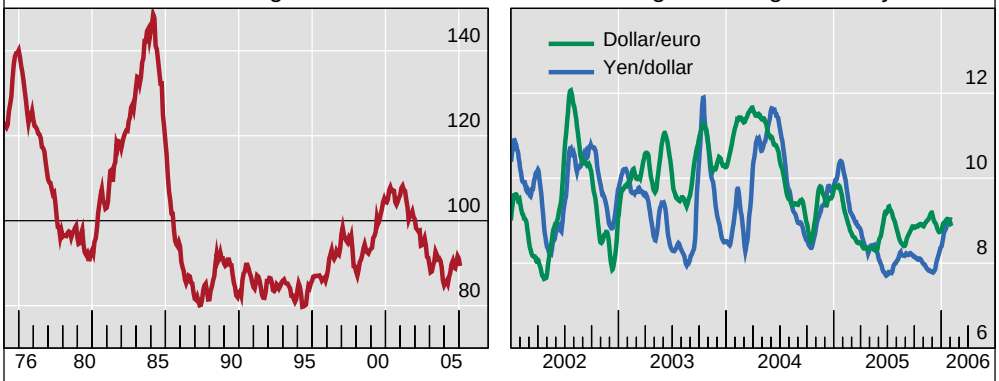
- 1) As you can see from the blue line in the right-hand panel of Graph 1, back in the late 1990s, larger US current account deficits mirrored increased corporate investment relative to corporate saving – this development was raising US productive and export capacity. But since 2001 US corporate saving has exceeded corporate investment.

- 2) As the red line shows, since 2000-01 US borrowing from abroad has been used on an increasing scale to finance larger US federal government deficits.

- 3) The brown line shows that US households have stopped saving while steadily increasing their residential investment (to 5% of US GDP in 2005, compared to 3½% on average in the 1990s). This combination does not raise US productive capacity in tradable goods and services. This is a quite different pattern from that of the late 1990s. Consequently, the mechanism that eventually adjusts this imbalance will also be very different.

Relative calm in forex markets ...

Graph 2: Foreign exchange markets



[1] In terms of relative unit labour costs; 1975–2005 = 100. [2] Call implied volatility; 20-day moving averages.

Sources: Bloomberg; BIS.

Yet, as Graph 2 suggests, financial markets have remained calm, especially forex markets.

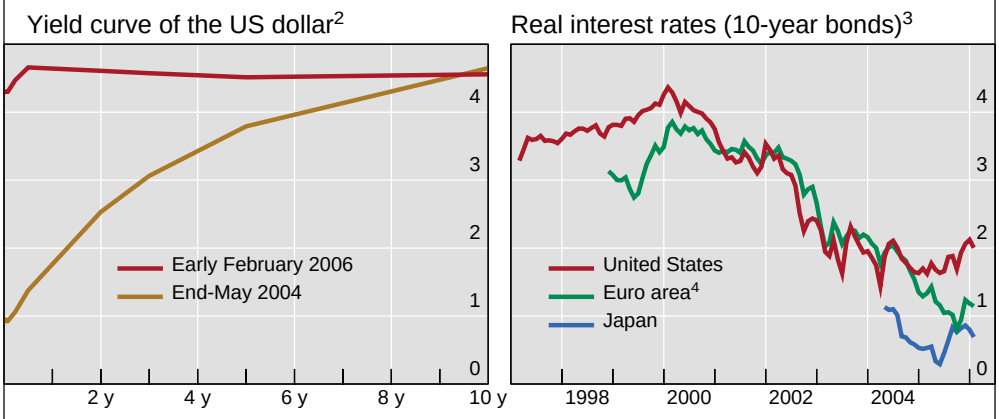
- Certainly, as the left-hand panel shows, the US currency has depreciated significantly in real effective terms since the early 2000s.

- But, as can be seen also at the end of the left-hand panel of the graph, the real effective exchange rate of the dollar appreciated during 2005 and is still close to its long-term average, despite the huge build-up of net foreign liabilities that the United States is incurring.

- The right-hand panel of Graph 2 shows that implied volatility levels in forex markets remain rather low, suggesting that financial markets attach a low probability to sharp movements in the exchange rate of the dollar in the future.

… but long-term interest rates remain very low …

Graph 3: Interest rates[1]



[1] In per cent. [2] Based on nominal Treasury bond yields. [3] Yields of inflation-linked government bonds. [4] French Treasury bonds.

Sources: Bloomberg; national data; BIS.

Furthermore, interest rates are generally low:

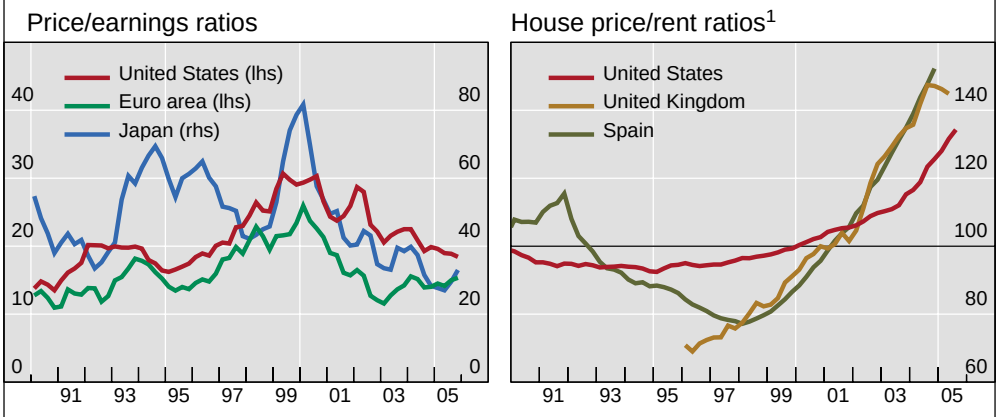
- The left-hand panel of Graph 3 reminds us that the US Federal Reserve has raised interest rates by 350 basis points since May 2004, to 4.5%. The ECB refinancing rate (not shown), which had been stable at 2% for two and a half years, was raised by 25 basis points in December 2005.

- However, the left-hand panel also shows that, even as policy interest rates are being normalised in the United States, long-term interest rates have not risen at all. This development is in sharp contrast to earlier periods of tightening monetary policy.

- A key puzzle is that real long-term interest rates are low almost everywhere (eg the United States, the euro area, Japan) and well below most estimates of potential growth. This is evident from the right-hand panel of the graph, which shows yields on inflation-indexed bonds.

… and might have led some assets to be overvalued

Graph 4: Indicators of asset valuation



[1]1990–2004 = 100; for the United Kingdom, 1996–2004 = 100.

Sources: Datastream; various real estate associations; national data.

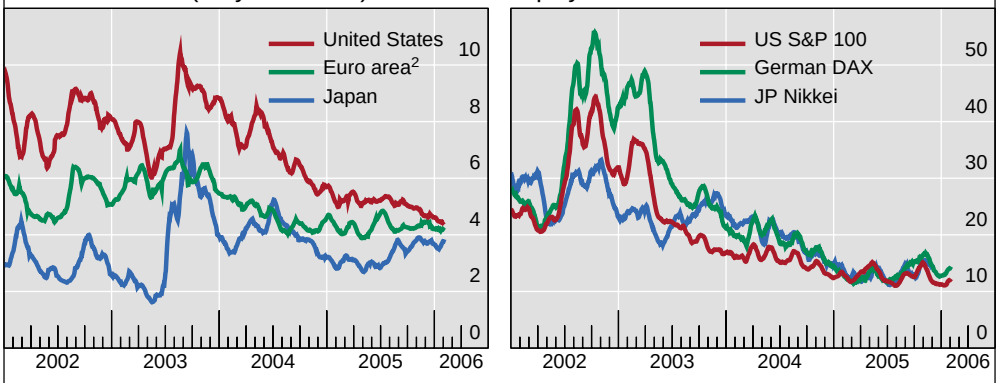
Have these low interest rates lifted certain asset prices too far? This depends on which asset prices you look at.

- Although equity prices have risen substantially, so have corporate earnings. One can see from the left-hand panel of Graph 4 that price/earnings ratios are still well below the levels seen during the IT sector boom. Equities in key markets are certainly not as overvalued in terms of price/earnings ratios as they were in the late 1990s.

- However, the right-hand panel does suggest that valuations in housing markets have risen to historically high levels relative to rents in some countries.

Low volatility in financial markets …

Graph 5: Volatility in financial markets[1]



[1] Call implied volatility; 20-day moving averages. [2] German bund.

Source: Bloomberg.

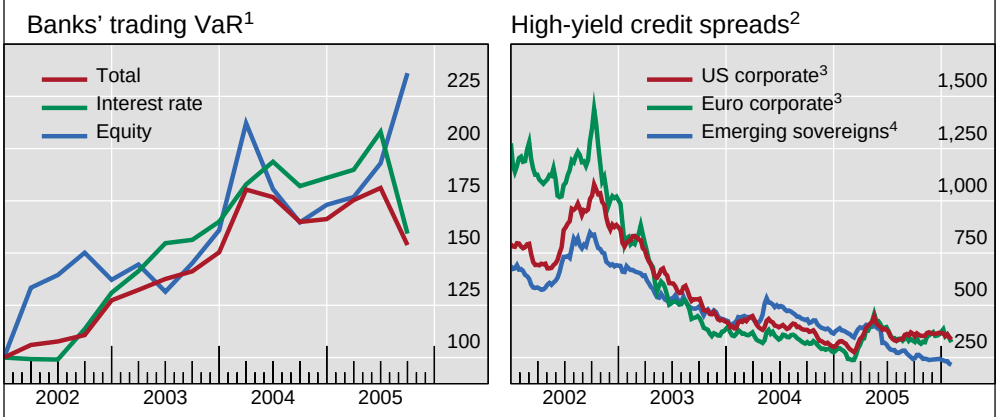
Paradoxically, these benign conditions in financial markets make life more challenging for those responsible for managing large, internationally active financial firms.

- As already noted, volatility in forex markets is low. This is also the case for bonds and equities, as can be seen in the two panels of Graph 5.

- But such measures of volatility do not price in “extreme events” or “tail risks” – low probability risks of substantial movements.

… but banks' trading VaRs are still high

Graph 6: Market and credit risk



[1] Market capitalisation-weighted average of value-at-risk data of Citigroup, Credit Suisse Group, Deutsche Bank, Goldman Sachs, JPMorgan Chase, Morgan Stanley, UBS and Société Générale; 2001 Q4 = 100. [2] In basis points. [3] Option-adjusted spreads over government bond yields; Merrill Lynch corporate bond indices. [4] EMBI Global Diversified; stripped spread over government bond yields; JPMorgan Chase emerging market bond indices.

Sources: Bloomberg; financial reports of individual institutions; JPMorgan Chase; Merrill Lynch.

What vulnerabilities might be lurking in the background? Let us look at the two traditional types of risk for banks and other financial institutions, ie market risk and credit risk:

- Market risk.

  The measures of volatility used to calculate value-at-risk (VaR) have fallen across markets. Nevertheless, as is evident from Graph 6 (left-hand panel), VaRs from banks' trading activities have been on an increasing trend. Hence, there has been a secular rise in the underlying market-risk positions taken by banks.

- Credit risk.

  As can be seen in the right-hand panel of the graph, both sovereign and corporate credit spreads have been on a declining trend since the fourth quarter of 2002, and are currently at low levels. How far is this compression of credit spreads warranted?

  It is also worth recalling that the nature of credit risk has been transformed by the arrival of new market participants and the development of new financial instruments.

Conclusion

- Several major macroeconomic risks are at high levels and rising: at some point, global imbalances will begin to adjust.

- If these higher risks were being reflected in signs of increased volatility in financial markets (that is, if they were being priced in), then one could perhaps be reasonably confident that the risks were being properly recognised, and therefore managed, by markets.

- In contrast, the very low levels of implied volatility that are being priced in at present by markets seem to suggest that mechanistic rules such as VaR-based exposure limits are probably not giving very meaningful signals for appropriate risk exposures.

- Moreover, the management of financial risks has become more complex.
  - **Credit risk transfer markets** are growing rapidly.
  - There is rising **counterparty risk** in lending to hedge funds.
  - There is growing concern about **liquidity risk**. Some markets are increasingly dominated by players that would not necessarily be able to maintain liquidity in adverse market conditions.
  - Finally, one should not forget elevated **operational, reputational and legal risks** in the Sarbanes-Oxley world.

- All this means that stress tests, scenario analysis, etc, are more important than ever in determining how to respond to potential abrupt adverse changes in the financial environment. This means that most senior-level managers in financial sector firms require more information to guide the risk management processes than is usually the case.

- Perhaps the biggest challenge is to work out how the different risks in the current period might interact. What I have tried to suggest is that the disconnect between macroeconomic risks and the unusually low levels of volatility that prevail in financial markets is currently one of the biggest challenges for the senior management of large private sector financial institutions.