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## Sovereign Wealth Funds Highlight the Changing World—and the Need for More

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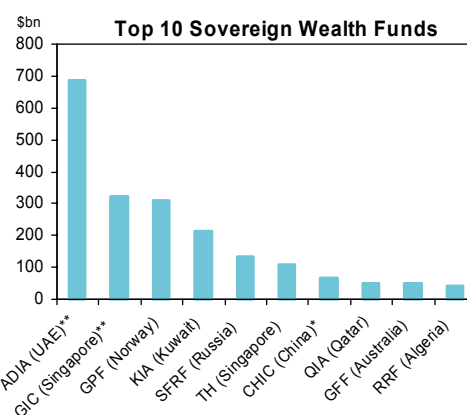
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This week, we discuss the topic of Sovereign Wealth Funds (SWFs), funds that invest on behalf of their nations. The growing focus on these entities is yet another sign of the changing nature of the world economy, and is linked to the emergence of the BRIC economies and their rapidly rising financial wealth. Although SWFs are not new, their profusion, scale and diversity of activity are attracting the attention of financial market participants and Western policymakers.

The sheer scale of some of these SWFs reflects the massive growth in foreign exchange reserves of many big developing economies. Moreover, one can broadly distinguish between two categories of SWF: those whose vast growth reflects their country's rich commodity endowment, and those that reflect large foreign exchange intervention activities.

It makes sense for these entities to invest more in equities rather than in the most liquid fixed income products, and for them to diversify out of the Dollar.

The emergence of large SWFs is yet another reason why the current organisational structure of the G7, G8, IMF and World Bank needs urgent overhaul. Just as with misaligned exchange rates, global current account imbalances, very high commodity prices, concerns about the environment and global warming, it is unlikely that we will get significant and optimal policies until and unless the institutional structure of world policymaking is changed.



Source: Truman (2007) and GS calculations.  
\*On 29 September 2007, the Chinese authorities established the China Investment Corporation (CIC) which will absorb the Central Huijin Investment Company and China Jianyin Investment Limited. The CIC will have initial capital of \$200 billion. Therefore, China's ranking will improve significantly in future.  
\*\* Use the midpoint of the range of estimates given in Truman (2007).

### World Top 10 FX Reserves

Country	Total FX Reserves* (US\$bn)	Current Account** (% of GDP)
China	1,434	9.4
Japan	911	3.9
Russia	407	9.7
Taiwan	263	6.8
Korea	257	0.7
India	222	-1.1
Eurosystem	201	0.0
Brazil	161	1.6
Singapore	147	27.5
Hong Kong	141	10.8

\*As of September 2007

\*\*As of December 2006

Source: IMF, National Sources



# Sovereign Wealth Funds Highlight the Changing World —and the Need for More

Recent months have seen a growing focus on so-called Sovereign Wealth Funds. The degree of focus on these entities is yet another sign of the changing nature of the world economy, and a development that is related to the emergence of the BRIC economies and their rapidly rising financial wealth. Government-controlled investment funds are hardly new, so to some extent the current commentary seems a bit misplaced. Nonetheless, the emergence of more of these funds, their scale and the diversity of their activity are attracting the attention of many financial market participants and Western policymakers. As Sovereign Wealth Funds (SWFs for the purpose of this article) become more sophisticated in their investment strategies, the attention mounts.

Here, we make the following key points:

- The sheer scale of some of these SWFs reflects the massive growth in foreign exchange reserves of many large developing economies, including some of the BRICs.
- We can broadly distinguish between two categories of SWF: those whose vast growth reflects their nation's rich commodity endowments and those that reflect large foreign exchange intervention activities. Some fall into both categories. For those with plentiful natural resources, the ongoing rise in commodity prices has been a major financial boon. In general, their strategy can be characterised by attempts to increase the long-term returns for their nation, as well as help avoid the consequences of the so-called "Dutch disease". Russia and many Middle Eastern oil producers fit into this category. The second group can be characterised differently, as nations that have simply accumulated large foreign exchange reserves linked to aggressive FX intervention policies.
- There is perhaps not too much difference between developed-country Finance Ministries and central banks on the one hand, and some SWFs on the other. For both groups, given the size of national reserves, developing more sophisticated investment policies makes sense. Indeed, for many years, we have been surprised that more developed countries have not done so—in particular, Japan and the member countries of EMU.
- It makes considerable sense for these entities to invest more in equities instead of the most liquid fixed income products, as well as diversify out of the Dollar (as much anecdotal evidence suggests is occurring). Whether they are a significant influence on financial prices is more debatable, especially in a market as large as foreign exchange.

- Western policymakers may not like the emergence of SWFs, especially when they are not "transparent". However, as in other areas, their complaints are often not on a consistently strong footing.
- Moreover, and lastly, if Western policymakers were to think on a broader scale, the emergence of large SWFs would represent yet another reason why the current organisational structure of the G7, G8, IMF and World Bank needs an urgent overhaul. Just as with misaligned exchange rates, global current account imbalances, high commodity prices, concerns about the environment and global warming, we are highly unlikely to see significant and optimal policies until and unless the institutional structure of world policymaking is changed.

## What Is a Sovereign Wealth Fund?

As the name implies, these funds invest on behalf of their nations. Some of them have existed for close to 50 years. The Kuwait Investment Authority (KIA) and the Abu Dhabi Investment Authority (ADIA) are two of the best-known, longest-existing of these funds. Interestingly, their style typifies some of the issues currently discussed about the group as a whole, even though these specific funds have existed for a long time. The 1980s saw occasional political concerns surrounding some of their stakes in Western companies. Recently we have seen considerable focus on newer (also large) SWFs ranging from the Norges Bank, which manages Norway's oil wealth, to those of China and Russia. As the table on the next page shows, the list of countries with some form of SWFs is large and diverse.

Not surprisingly, many of the largest SWFs represent countries with the largest foreign exchange reserves. But not all countries with large FX reserves have developed

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Source: IMF, National Sources

funds. Most strikingly, Japan's Finance Ministry still invests the vast majority of the country's huge foreign exchange reserves. Also, the central banks of most developed European countries manage their respective reserves. It is important to remember this when discussing two of the most topical issues surrounding SWFs: their size and their accountability.

The optimal size of an SWF is closely linked to the optimal level of a nation's foreign exchange reserves. We have long since believed that, in a world of floating foreign exchange rates, far too many developed and developing countries have FX reserves that are far too

big. Japan and the 13 European countries that share the single currency, the Euro, do not appear to need anything like their current level of FX reserves. In some ways, therefore, some of the issues often raised about SWFs and others from the emerging world are no different to the challenges facing developed countries. It often seems to us that developing countries have been more sophisticated in shifting to a "truer" investment philosophy for investing large parts of their foreign reserves than have the developed nations. If they are not going to sell the reserves or run them down, then why not invest them to achieve as high a return as possible? As the Swiss have shown, you don't need to be an SWF to

## Sovereign Wealth Funds

Country	Name	Date established	Current size <sup>a</sup> (US\$bn)
United Arab Emirates	Abu Dhabi Investment Authority and Corporation	1976	500 – 900 <sup>e</sup>
	Mubadala Development Company	2002	10 <sup>e</sup>
	Istithmar	2003	4 <sup>e</sup>
Norway	Government Pension Fund – Global	1990	308
Singapore	Government of Singapore Investment Corporation	1981	208 – 438 <sup>er</sup>
	Temasek Holdings <sup>b</sup>	1974	100 – 330 <sup>er</sup>
Kuwait	Kuwait Investment Authority	1960	213
Russia	Stabilisation Fund of the Russian Federation	2004	133 <sup>r</sup>
China	Central Huijin Investment Company <sup>b</sup>	2003	68 <sup>e</sup>
Qatar	Qatar Investment Authority	2005	50 <sup>e</sup>
Australia	Future Fund <sup>b</sup>	2006	49
Algeria	Revenue Regulation Fund	2000	43
United States	Alaska Permanent Fund <sup>b</sup>	1976	38
Brunei	Brunei Investment Agency	1983	30 <sup>e</sup>
Korea	Korea Investment Corporation	2005	20 <sup>r</sup>
Malaysia	Khazanah Nasional <sup>b</sup>	1993	18
Kazakhstan	National Oil Fund	2000	18
Canada	Alberta Heritage Savings Trust Fund <sup>b</sup>	1976	16
Venezuela	National Development Fund <sup>c</sup>	2005	15
	Macroeconomic Stabilisation Fund	1998	1
	Economic and Social Stabilisation Fund	2006	10
Chile	Economic and Social Stabilisation Fund	2006	10
New Zealand	Superannuation Fund <sup>b</sup>	2001	10
Iran	Oil Stabilisation Fund	2000	9 <sup>e</sup>
Botswana	Pula Fund	1997	6
Oman	State General Reserve Fund	1980	5 <sup>e</sup>
Mexico	Oil Income Stabilisation Fund	200	3
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	200	2
Trinidad and Tobago	Heritage and Stabilisation Fund	2007	1
Timor-Leste	Petroleum Fund	2005	1
Kiribati	Revenue Equalisation Reserve Fund	1956	<1 <sup>e</sup>
São Tomé and Príncipe	National Oil Account	2004	<1
Sudan	Oil Revenue Stabilisation Account	2002	<1
Total <sup>d</sup>			2,091

e = estimate, r = some or all assets are included in reserves

a. Data are from the end of 2006 or the most recent date available.

b. A portion of the holdings is in domestic assets.

c. A portion of these holdings is intended for domestic investment.

d. Total uses the midpoint of the range of estimates.

Source: Edw in M. Truman, The Management of China's International Reserves: China and a SWF Scoreboard, Peterson Institute for International Economics, October 19, 2007.

invest in equities and other forms of riskier and alternative assets. The Swiss National Bank has been doing this for a number of years with some success.

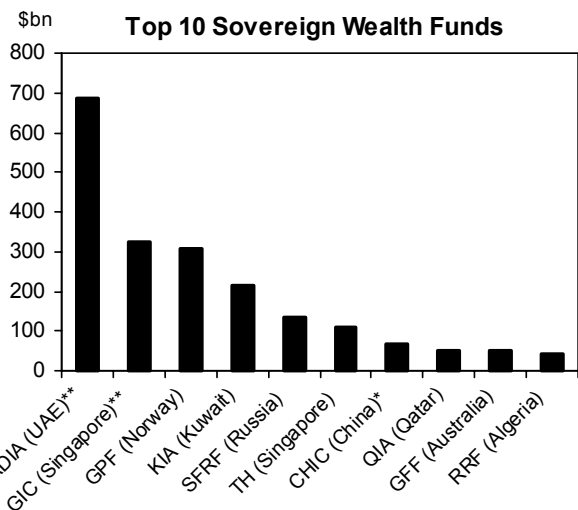
### Accountability and Transparency

A second issue that often arises relates to accountability, governance and, especially, transparency. Ted Truman of the Institute of International Economics has recently published a useful article on the topic<sup>1</sup>, discussing SWFs generally while focusing on China. Of course, we would all probably prefer to live in a world of very open transparency. SWFs are not the only opaque institutions—the investment policies of many developed countries also lack transparency. Some of them have on occasion suggested that too much transparency could be harmful, not least as it might limit their ability to make timely and large allocation decisions. Why have these complaints not been aired in the past? Many developing countries have been investing in US (and other) bonds for years. This didn't seem to “upset” Western policymakers.

As SWFs have grown in size, signs that they are searching for higher returns presents Western nations with new challenges. The often-stated concern is that Western governments do not want to see their own “trophy” assets fall into foreign hands, especially those that are currently privately owned. But is this really a balanced judgement? Although it means that the likely “national” cost of servicing the returns on such assets will be higher, it would appear somewhat far-fetched to assume that the ownership could result in usage that might even damage their interests. As this relates to the energy challenges of high prices and increased production, there is a credible case to be argued that Western governments should encourage foreign state-backed entities to buy some of their energy companies (as shown in the brief discussion in the box by Jeff Currie). Having government support might lead to stronger investment and allow developing countries access to the better technology needed to address some of the growing challenges in this area.

### The Rationale for State-Backed Investment Funds

Literature on the economic rationale for official investment vehicles appeared in the 1970s following the first oil price crisis and the sudden emergence of large oil revenues for many oil-producing countries<sup>2</sup>. A number of countries, known as the “low absorbers”, faced a rush of revenues that could not feasibly be spent on domestic consumption, and therefore had excess savings. Not only did it make sense to invest such surpluses overseas, but that the potential rate of return on overseas investment needed to be compared with the discounted value of future energy returns to determine the optimal rate of oil production today. Such theories showed how to avoid the “Dutch disease” and ensure that countries would not see



Source: Truman (2007) and GS calculations.

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their non-energy economies damaged by their commodity wealth. These theories were behind the development of the KIA, ADIA and, to some extent, (while it is not a Wealth Fund as such) the Saudi Arabian Monetary Authority (SAMA) and other institutions in the Middle East.

Other sovereign-backed wealth investment funds started up in their wake. These included in Singapore's Temasek and GIC, established as a fund for future generations, in which the prosperity created by the fund's returns would be for the benefit of future citizens.

By investing in overseas higher returning assets, not only did these nations earn higher returns, but they might encourage better performance in the economies of the West. Indeed, contrary to the mood of many today, SWFs were earlier often regarded as a positive for the global economy. Without them, the shortage of world savings would entail a prolonged global recession.

### Do Sovereign Wealth Funds Influence Asset Prices?

As can be seen in the earlier table, the size of SWFs is now significant and, in recent years, financial market participants have suggested that their activities influence asset prices. Analysts have argued for many years that the Euro, for example, has been supported by ongoing diversification out of the Dollar. Many have suggested that the bond yield “conundrum” is a direct result of SWFs buying US (and other G7 countries') bonds, and now there is growing talk that diversification from bonds to equities is inflating equity prices.

1. See Edwin M. Truman, *The Management of China's International Reserves: China and a SWF Scoreboard*, Peterson Institute for International Economics, October 19, 2007.

2. See Jim O'Neill, “An Empirical Investigation into the Opec Surplus and its Disposal, 1982”.

## The Energy Problem is Related to the Savings Problem

### Policy Forces Inefficient Investment, Supporting Oil Prices and Depressing Real Rates

The sharp rise in energy prices that started at the beginning of this decade has generated what is likely the largest wealth transfer on record. We have long argued that this rise in prices is the result of inadequate investment in energy productive capacity over the last two decades that is now creating severe supply constraints. We estimate that since 2001, due to the surge in oil prices, energy importing countries have transferred an additional US\$3.0trillion to energy producers than they otherwise would have had energy investment been adequate and prices stayed at US\$20/bbl.

Much of this capital now resides in the foreign exchange reserves and sovereign wealth funds of the energy producers, and has been labeled “surplus savings”, which has been identified as one of the key reasons for lower real interest rates. While this “surplus savings” has generated a modest rise in the global net savings rate and hence a modest rise in investment, the key driver of low real interest rates has been a dearth of good investment opportunities, which has, in turn, forced capital to flow towards lower-yielding, inefficient investments.

But how can there be a dearth of good investment opportunities, particularly in energy that has been and continues to be capacity constrained with extremely high yields? The answer lies in policy constraints, which have limited the access to higher-yielding investments and substantially increased the cost of those investments that are accessible, lowering their returns. These dynamics have forced the flow of capital from high-yielding natural resource-rich countries to freely accessible low-yielding investments in developed countries.

It is not a coincidence that the energy industry, which is the most capital constrained and hence highest yielding, is also the industry with the largest political constraints on the free flow of capital. Energy is not only the largest industry in the world, with an annual output in excess of US\$4.0trillion (making it the second-largest economy in the world), it is also the most politically sensitive industry, with consuming countries driven by security of supply concerns and producing countries driven by resource-protection issues.

In the pursuit of these political goals each country in the world has enacted policies to protect their self interests. The energy producers are reluctant to allow foreign

capital to invest in their country's resources. The energy consumers are equally protectionist. Consuming country governments are very quick to strike down any overture from one of the energy producers to buy or make a large-scale investment in one of their energy production, transportation, or even distribution companies. This creates very large constraints on the free flow of capital, labour and technology.

These political constraints are far-reaching. In the consuming countries, efficient investment in alternative energy is constrained due to bans on nuclear energy, which could be used to produce oil where energy is extremely scarce. Immigration constraints prevent the free flow of engineers on a global basis, particularly from China and India. Protectionist farm policy motivates agricultural import tariffs, which prevent the free flow of biofuels and ultimately the optimal level of investment in the extremely efficient Brazilian ethanol industry. Biofuel subsidies in the consuming countries discourage lower cost, equally environmentally friendly investments elsewhere in the world. In the producing countries, sharp increases in taxes and a high level of uncertainty over property rights discourage direct investment even when it is allowed.

Historically, this mismatch of political aims did not create investment problems as during previous commodity investment phases in the cold-war era, the world was “bilateral”, composed of two political entities. Investment flowed much more freely as political aims were more coordinated. Post globalisation, the world is much more multilateral, with many countries pursuing their own interests, which creates a healthy level of competition in many industries. However, in energy, which is global in nature and requires coordination, such competing interests lead to an inefficient level of investment. Put another way, while commodity markets are increasingly globalised in terms of consumption, they are increasingly fragmented in terms of investment.

The world cannot solve this energy investment problem if the current policy constraints remain in place. Global coordination is the key to the long-run energy solution, and it is important to remember that not one country in the world is completely energy independent, which makes coordination all that more important.

**Jeff Currie**

**With special thanks to Charlie Himmelberg and Jonathan Waghorn for their input.**

**Size of Key Financial Markets**

Billion US\$	Size of SWFs <sup>1</sup>	Size of Daily FX Turnover <sup>*2</sup>	Size of Government Bond Market <sup>**2</sup>	Size of Equity Market <sup>3</sup>
Global	2,091	3,210	24,809	29,285
US	—	—	6,411	13,690
Japan	—	—	6,851	2,899
Europe <sup>***</sup>	—	—	7,354	9,941

\*Daily average of total traditional (spot, forward, FX swaps) turnover in April 2007

\*\*Domestic Debt Securities, Amount Outstanding in March 2007

\*\*\*Europe includes UK

<sup>1</sup>Source: Truman (2007); <sup>2</sup>Source: BIS; <sup>3</sup>Source: MSCI

While the activities of SWFs in all financial markets does appear to be on the rise, it is far from clear that their activities influence prices. In the event of planned collusion and joint investment decision making, this would plainly be the case and, at the margin, it is feasible that in some markets any large financial decision can influence market prices. However, many of the underlying markets that SWFs engage in are rather large—usually they need to be in order to provide the liquidity and related properties that any large institutional investors desire.

According to Truman, the combined size of outstanding SWF assets is just over US\$2trillion (coincidentally, about the same as the estimated total assets of hedge funds).

It is hard to believe that SWF activity influences the price of major currencies. The latest BIS survey suggests that the daily turnover of the global foreign exchange market is about US\$3trillion. Thus the foreign exchange market turns over 50% more than the aggregate size of SWFs on a daily basis. Anecdotal evidence suggests that many SWFs have been active buyers of the Euro in recent years, but the same anecdotes suggest that some of them were also buyers when the Euro was introduced in 1999. It is worth pointing out, in this regard, that the Euro declined for the best part of its first two years in existence.

In fixed income markets, we ourselves have published research to suggest that the activities of central bank buying of US Treasuries may have depressed 10-yr US bond yields. In *Global Viewpoint 06/08*, we estimated the impact of Asian and Middle Eastern purchases of intermediate maturity government securities to be in the region of 40bp-50bp. This is the order of magnitude of the unexplained portion of 10-yr rates in the US and Germany in the average between 2004 and today, once cyclical developments are accounted for in a multi-country, multi-variate regression model such as our Sudoku framework. We are of the view that gradually the overvaluation of bonds will diminish as sovereign pools diversify away from fixed income instruments. However, as we pointed out earlier, this activity of central bank buying of US Treasuries does not often catch the attention of policymakers in some countries.

Equity markets are not as big as foreign exchange markets, so if all SWFs are making significant asset allocation shifts into equities, then they might positively

support prices to some degree. However, even here, it might be wrong to rush to such a conclusion. One highly visible example to the contrary is evident in China. Since the Chinese authorities announced that they were buying 9.9% of the (now public) private equity specialist firm Blackstone, its share price has fallen, not risen. Other cautionary tales exist. Suggestions by market commentators in 1999-2000 that the rising continental European pension funds would support global equity prices for years have also turned out to be rather incorrect.

The presence of SWFs might influence prices for some assets. However, so do those of other large participants and, as we mentioned earlier, some SWFs have been investing in this way for many years.

**An Additional Need for Reform**

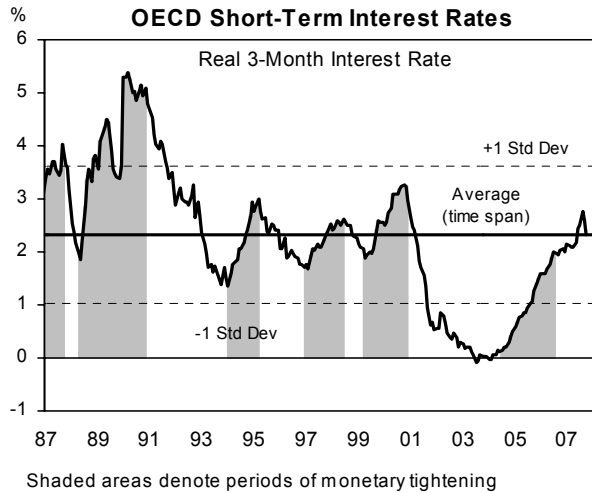
In recent weeks, more Western policymakers have talked about the need for much greater transparency on the role of SWFs. The new head of the IMF, Dominique Strauss-Kahn, has discussed the need for more information, as have other IMF staff. Fortunately, Strauss-Kahn's reference to the need for the IMF to press ahead with reform of its own purpose makes his comments more credible than those of others.

Sovereign Wealth Funds should now be added to the long, and rapidly growing, list of major economic policy issues supporting a view that the G7, G8, IMF and World Bank should no longer exist in their current format. It is now nearly six years since we published "The World Needs Better Economic BRICs". If Western policymakers want SWFs to operate in a more transparent environment; if they want to see a quicker reduction in global imbalances, a fairer value of many currencies, and some credible measures to halt the erosion of our environment; and if they want to reduce global warming—and so much more—then why not undertake some positive steps themselves in terms of the structure of the main multilateral institutions they still control. As long as China and the other BRICs cannot sit down with (some of) them at the same table, a place at that table will become increasingly less desirable.

**Jim O'Neill**

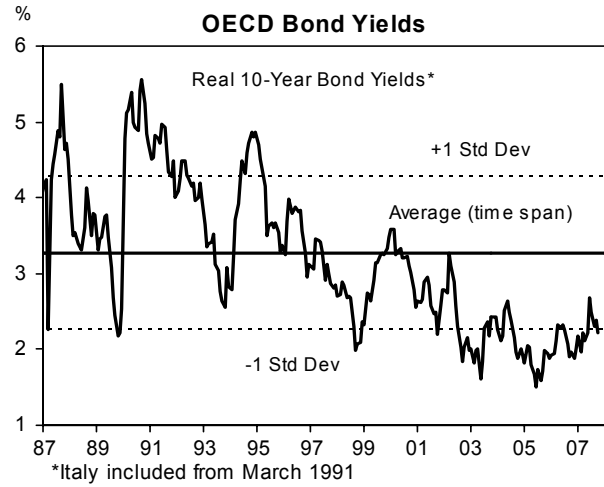
# Global Economic Indicators: Policies and Markets

Short-term interest rates are very close to their long-term average.

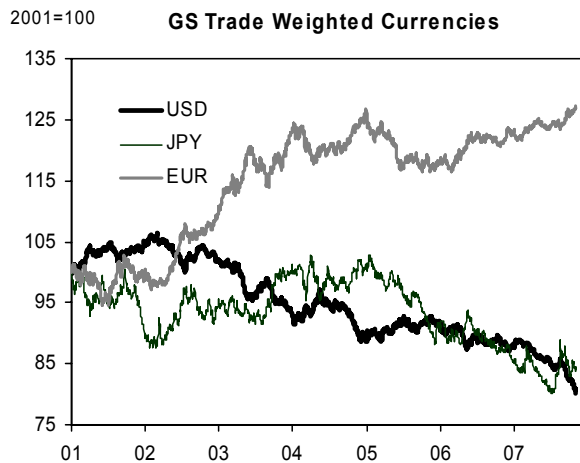


Shaded areas denote periods of monetary tightening

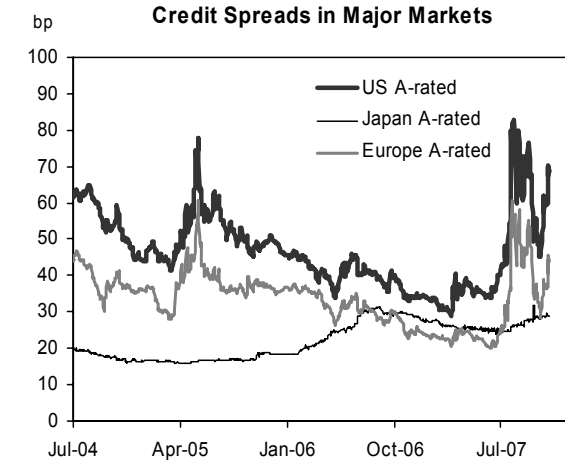
Real bond yields increased slightly in October and are now about 116bp below their historical average.



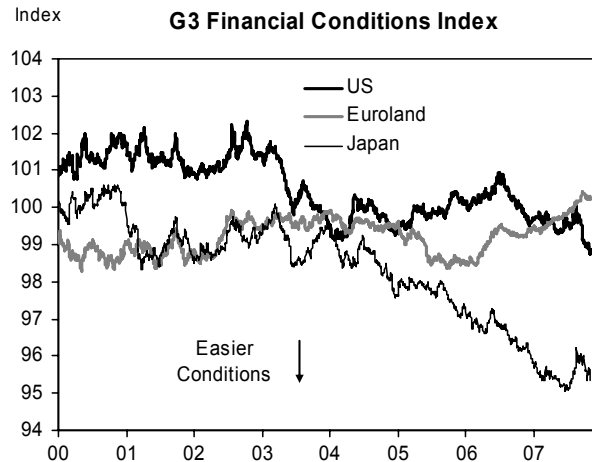
The Dollar remains weak, as concerns about US mortgage credit continue to dominate markets.



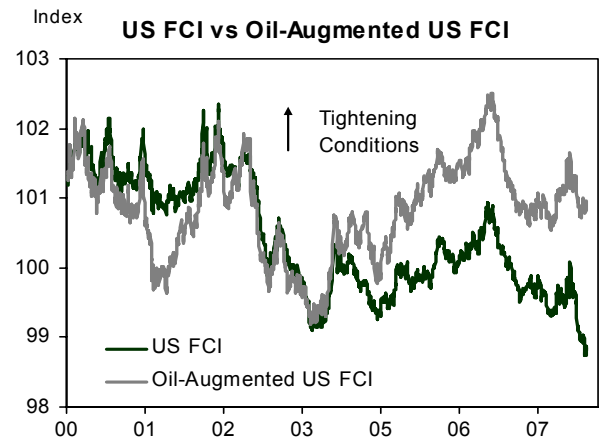
Credit market jitters continue, with US spreads having widened by over 20bp since the start of the summer.



US financial conditions have eased 120bp since the latest peak in mid-August.



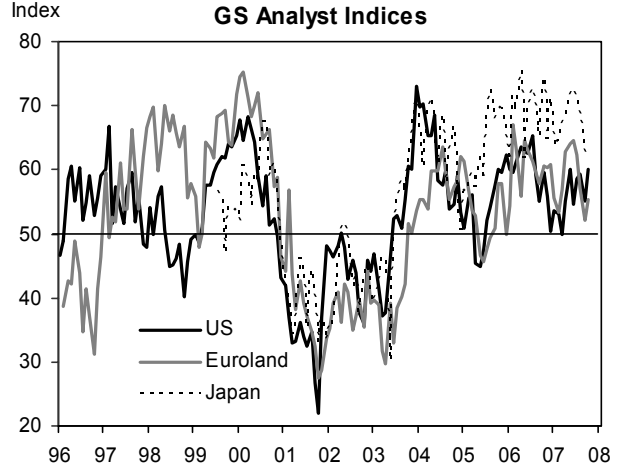
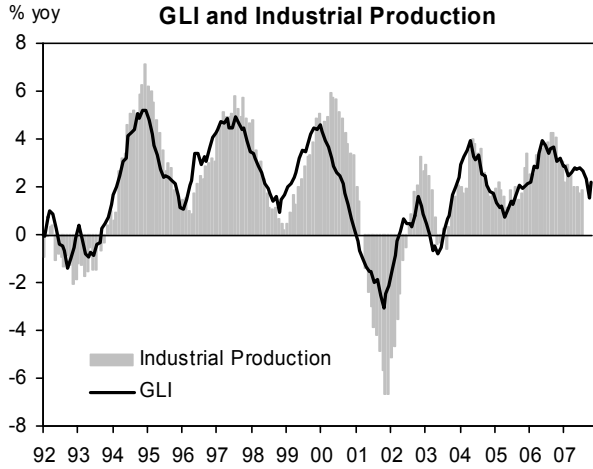
Our oil-augmented FCI has moved in line with the standard measure over the past week.



# Global Economic Indicators: Macroeconomic Developments

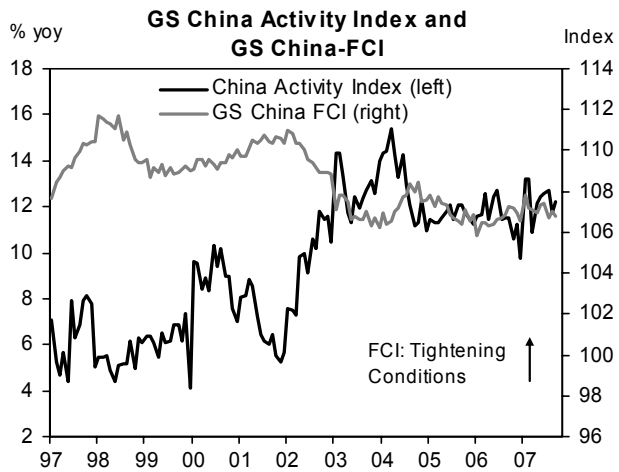
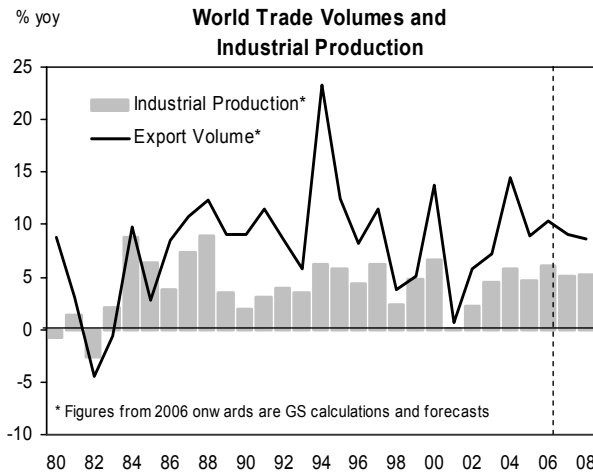
The October GLI rose to 2.2%yoy from the revised 1.5% in September. Monthly momentum improved a bit, coming in at -0.05%mom against September's -0.14%mom.

The US GSAI increased to 60.0 in October, registering a 4.8 point gain over September's reading of 55.2.



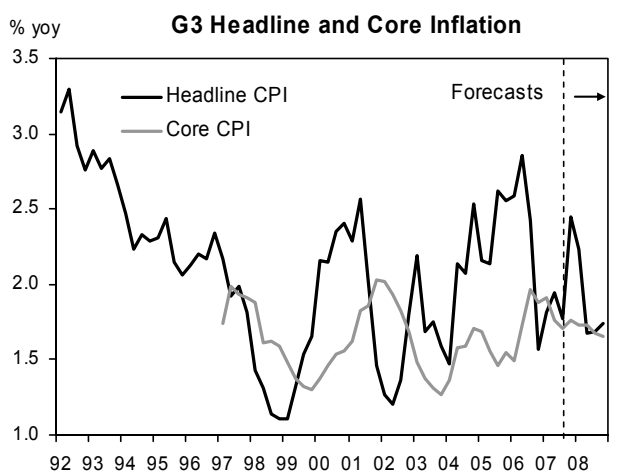
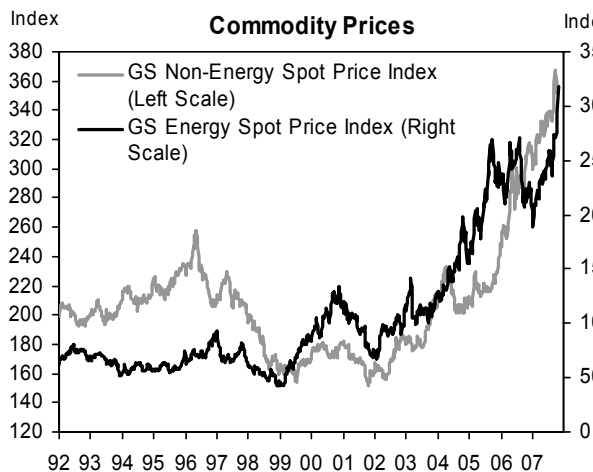
After this year's slowdown in industrial production, we expect a mild pick-up in 2008.

Our China GSCA grew 12.2%yoy in September, up from 12.0% in August.



Energy prices continue to rise, driven by uncertainty over winter temperatures and related energy demand.

We expect headline inflation to peak in 4Q2007 and to converge on core inflation gradually during 2008.



# Global Economic Indicators: Market Valuations

The world Equity Risk Premium (ERP) is now about 30bp below its historical average.

## Updated Estimates for the Equity Risk Premium\*

	Real GDP Growth	Real Earnings Growth	Dividend Yield	Expected Real Return	Real Bond Yield	Implied ERP	Expected Inflation	Expected Nominal Return
US	3.0	3.0	1.8	4.8	1.8	3.1	2.0	6.8
Japan	1.5	1.5	1.4	2.9	1.1	1.8	0.5	3.4
UK	2.8	2.8	3.1	5.9	1.7	4.1	2.0	7.9
Europe ex UK	2.3	2.3	2.4	4.6	1.7	2.9	2.0	6.6
World	2.5	2.5	2.1	4.6	1.7	2.9	1.8	6.3

\*Calculated as of 6 November 2007.

Source: Datastream; real GDP growth and expected inflation are GS Economics Research forecasts.

Major global equity markets have turned negative over the past week.

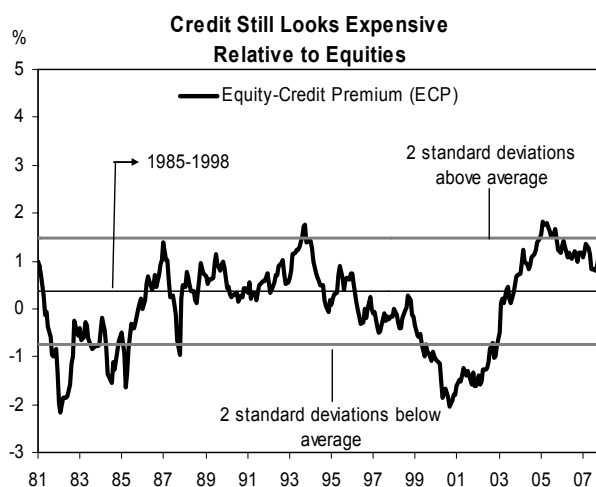
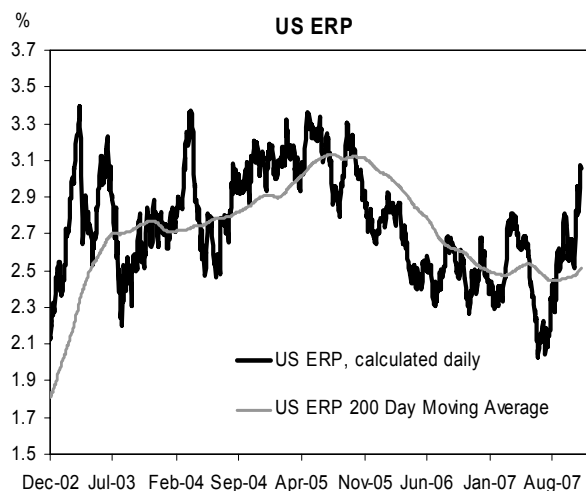
## Weekly Equity Market Performance

Price change for the week ending 06/11/07, % local currency terms				
	US	Europe	Japan	Hong Kong
<b>Market</b>	<b>-0.70</b>	<b>-0.34</b>	<b>-1.91</b>	<b>-5.99</b>
Basic industries	-0.18	-1.29	-5.63	0.49
Oil & gas	2.59	0.86	-2.31	-14.32
Industrial Engineering	3.14	0.90	-4.49	-0.01
Financials	-4.20	-2.59	-4.13	-3.37
Health Care	-0.52	0.69	1.56	0.00
Utilities	1.35	1.33	5.65	-1.76
Transport	0.80	0.37	-6.76	-4.62
Travel & Leisure	-4.78	-1.69	1.24	-4.29
Technology	1.62	0.60	-1.74	-4.35
Telecoms	-2.19	1.52	0.42	-10.37
Media	-0.40	-0.71	-0.56	-5.40

Source: Datastream.

The US ERP has risen slightly over the past week, as real bond yields have declined slightly.

Our ECP rose by 16bp in October.



# Main Economic Forecasts

	2005	2006	2007	2008
<b>Real GDP, % chg, yoy</b>				
USA	3.1	2.9	2.1	1.9
Japan	1.9	2.2	2.0	2.1
Euroland	1.6	2.9	2.6	2.0
Germany	1.0	3.1	2.6	1.9
France	1.7	2.2	1.7	1.7
Italy	0.2	1.9	1.6	1.3
Netherlands	1.5	3.0	2.3	1.8
Spain	3.6	3.9	3.8	2.6
Sweden	2.9	4.5	3.6	3.0
Switzerland	2.4	3.2	2.4	1.2
UK	1.8	2.8	3.1	1.8
EU27	1.9	3.2	2.9	2.2
Canada	3.1	2.8	2.6	2.7
Australia	2.8	2.7	4.3	3.0
G7	2.3	2.7	2.2	1.9
Advanced Economies	2.6	3.0	2.6	2.3
Asia	6.9	7.4	7.4	6.9
Central and Eastern Europe	4.5	6.2	5.9	5.1
Latin America	4.5	5.4	5.0	4.3
Emerging Markets	7.5	8.2	8.1	7.5
World	4.4	4.9	4.6	4.2

	2005	2006	2007	2008
<b>Consumer Prices, % chg, yoy</b>				
USA	3.4	3.2	2.8	2.4
Japan	-0.3	0.1	-0.1	0.5
Euroland	2.2	2.2	2.1	2.2
Germany	1.9	1.8	2.2	1.5
France	1.9	1.9	1.5	1.9
Italy	2.2	2.2	2.0	2.3
Netherlands	1.5	1.7	1.6	1.6
Spain	3.4	3.6	2.8	3.4
Sweden	0.5	1.4	2.0	2.1
Switzerland	1.2	1.1	0.6	1.1
UK	2.1	2.3	2.3	1.9
EU27	2.3	2.2	2.2	2.3
Canada	2.2	2.0	1.4	1.9
Australia	2.7	3.5	2.2	3.1
G7	2.3	2.3	2.0	1.9
Advanced Economies	2.3	2.3	2.1	2.1
Asia	2.4	2.7	3.3	3.2
Central and Eastern Europe	3.6	2.8	3.7	4.2
Latin America	6.3	5.2	5.0	5.4
Emerging Markets	5.2	5.0	5.5	5.2
World	3.3	3.3	3.3	3.2

	2005	2006	2007	2008
<b>Real GDP, % chg, yoy</b>				
China	10.4	11.1	11.6	10.3
India	9.0	9.4	8.7	8.0
Hong Kong	7.5	6.9	6.0	6.0
Indonesia	5.6	5.6	5.9	6.0
Malaysia	5.0	5.9	5.5	6.0
Philippines	5.1	5.5	6.2	6.7
Singapore	6.6	7.9	6.7	6.5
South Korea	4.2	5.0	4.8	5.3
Taiwan	4.1	4.7	4.5	5.0
Thailand	4.5	5.0	4.0	4.5
Brazil	3.0	3.7	4.5	4.2
Argentina	9.2	8.5	8.0	5.3
Mexico	2.8	4.8	3.0	3.3
Venezuela	10.3	10.3	7.1	4.9
Russia	6.4	6.7	7.5	8.0
Turkey	7.4	6.1	5.5	5.7
South Africa	5.1	5.0	4.8	4.5
Central and Eastern Europe	4.5	6.2	5.9	5.1
Asia ex Japan	8.5	9.1	9.4	8.6
Latin America	4.5	5.4	5.0	4.3
BRICs	9.0	9.6	9.9	9.0
Emerging Markets	7.5	8.2	8.1	7.5

	2005	2006	2007	2008
<b>Consumer Prices, % chg, yoy</b>				
China	1.8	1.5	4.8	4.5
India	4.4	5.5	4.8	4.4
Hong Kong	1.1	2.7	2.9	4.1
Indonesia	10.5	13.1	6.0	6.5
Malaysia	3.0	3.6	2.3	3.1
Philippines	7.7	6.3	2.8	3.3
Singapore	0.5	1.0	1.1	1.6
South Korea	2.7	2.2	2.4	2.2
Taiwan	2.3	0.6	1.0	1.8
Thailand	4.5	4.6	2.6	2.5
Brazil	7.1	4.2	3.6	4.3
Argentina	9.6	10.9	8.8	9.9
Mexico	4.0	3.6	4.0	4.1
Venezuela	15.2	16.1	16.7	19.8
Russia	12.5	9.7	8.8	8.3
Turkey	8.2	9.6	8.4	5.8
South Africa	3.9	4.6	6.3	6.5
Central and Eastern Europe	3.6	2.8	3.7	4.2
Asia ex Japan	2.9	2.8	4.2	4.1
Latin America	6.3	5.2	5.0	5.4
BRICs	3.9	3.6	5.1	4.8
Emerging Markets	5.2	5.0	5.5	5.2

For India we use WPI not CPI. Asia consists of China, Hong Kong, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand. Europe is EU plus Bulgaria, Croatia, Romania, Switzerland.

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## Goldman Sachs Economic Research Group

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# The World in a Nutshell

THE GLOBAL ECONOMY		
	OUTLOOK	KEY ISSUES
<b>UNITED STATES</b>	We have cut our growth and interest rate forecasts, and we now expect real GDP growth to drop into the 1%-1.5% (annualised) range from the fourth quarter through the first half of 2008. After that, we expect a modest improvement to a 2%-2.5% range. By sector, our growth cuts are focused on consumer and capital spending. On interest rates, we expect the Fed to cut rates by a further 50bp, which would bring the funds rate to 4% by early next year.	Despite the housing downturn of the past year, US households and businesses continue to outspend their current income by a large margin. An update of our model linking this private sector financial deficit to the asset markets and the macroeconomy points to a substantial retrenchment over the next two years. Over the next two years, we expect the private sector to move back into surplus. This is likely to involve a substantial labor market slowdown
<b>JAPAN</b>	We have pushed back our forecast for the next interest rate hike to July-September 2008 from January-March. We expect the BOJ to raise the overnight call rate to 1.25% by March 2009. Downside risks are increasing in the economy due to somewhat slower global growth and special factors dampening construction investment. We expect GDP growth to continue running at a pace below the economy's potential growth rate through the end of the year.	Although economic indicators have been notably weak since the summer, indicators of labor market supply/demand are generally showing steady improvement. The alleviation of mismatches in the labor market appears to be accelerating the cyclical decline in the unemployment rate. Nevertheless, wage growth remains stagnant, despite the growth in employment; we attribute this to demographic factors and a decline in the NAIRU.
<b>EUROPE</b>	We have revised down our GDP forecasts for Euroland to 2% in 2008, from 2.6% this year, with broadly stable inflation. Despite the ECB's hawkish talk, we now think they will remain on hold at 4%, but the risk is skewed towards one more hike. In the UK, we have further accelerated the decline in growth to 1.9% in 2008, from 3% this year, and we now think that the MPC will cut rates three times next year, beginning in Q1.	Our new inflation model has led us to raise our Eurozone inflation forecasts slightly, and we now expect headline inflation to peak at 2.7%yoy in January and then gradually fall below 2.0% in October 2008. We agree with the ECB's assessment of upside risk to inflation, which is one of the key reasons why we see upside risk to our ECB forecast of unchanged interest rates through the next 12 months.
<b>NON-JAPAN ASIA</b>	We have lowered our real GDP growth forecast for China to 11.6% for 2007 and 10.3% for 2008, down from 12.3% and 10.9% respectively, and we have raised our CPI inflation forecasts to 4.8% for 2007 and 4.5% 2008, up from 4.5% and 4%. These forecasts are based on a significant policy tightening path and a modest softening of global demand.	India needs US\$475bn in infrastructure spending over the next five years, with the government identifying it as a policy priority to sustain growth. Financing such a large requirement is a challenge, but also a compelling investment opportunity. The absence of a vibrant bond market is a critical constraint. Infrastructure financing could be a trigger for developing the bond market.
<b>LATIN AMERICA</b>	In Brazil, our central forecast is that COPOM will keep interest rates unchanged at 11.25% until end-2008, although we see a chance of two or three cuts in the second half of 2008. In Mexico, we now believe that the central bank will keep interest rates unchanged at 7.5% until end-2008.	A moderate global credit tightening and a slowdown in economic activity in the US and the world would be unlikely to have a significant impact on the region, thanks to the positive backdrop of commodity prices and macro fundamentals. We forecast that LatAm real GDP growth will soften to 4.7%, from 4.8% in 2007.
<b>CENTRAL &amp; EASTERN EUROPE, MIDDLE EAST AND AFRICA</b>	Poland's pro-market Civic Platform (PO) won a surprisingly large victory in last week's general election, which is a market-friendly outcome. We expect the structural reforms and the policy choices of the PO-led government to bolster Poland's growth potential and Polish asset prices. Accordingly, we see a stronger PLN going forward and revise our 12-month EURPLN forecast to 3.5, from the previous 3.6.	In light of the recent increase in the GS oil price forecast to \$85/bbl in 2008, we have raised our inflation forecasts for Central Europe and Romania by around 0.5ppt. Food prices also look likely to put upward pressure on rates. Nigeria's central bank has grown more serious in its efforts to hold inflation in single digits, a precursor to proper inflation targeting.

CENTRAL BANK POLICIES			
	CURRENT SITUATION	NEXT MEETINGS	EXPECTATION
<b>UNITED STATES: FOMC</b>	Fed funds rate cut by 25bp to 4.50% on October 31, 2007.	December 11 January 29/30	We expect the FOMC to cut the Fed funds rate by 50bp by early 2008.
<b>JAPAN: BoJ Monetary Policy Board</b>	The BoJ raised the overnight call rate by 25bp to 0.5% on February 21, 2007.	November 12/ December 19	We expect the BoJ to leave rates unchanged for the rest of 2007, with the next hike in July-September 2008.
<b>EUROLAND: ECB Governing Council</b>	The ECB raised rates by 25bp to 4.0% on June 6, 2007.	November 8/ December 6	We expect the ECB to keep rates on hold at 4%.
<b>UK: BoE Monetary Policy Committee</b>	The BoE raised rates by 25bp to 5.75% on July 5, 2007.	November 8/ December 6	We expect the MPC to cut rates three times in 2008, starting in the first quarter.