



# Quarterly review

October 2007

Thomas Della Casa  
+ 41 (0)55 417 77 42

Mark Rechsteiner  
+41 (0)55 417 77 43

Ayako Lehmann  
+41 (0)55 417 61 70

## Q3 2007 – special topic: The Asian crisis – 10 years on

- The credit crisis, the quant meltdown and the unwinding of carry trades were the big stories in the third quarter
- Hedge funds returns were highly dispersed throughout the quarter
- The Asian crisis in 1997/1998 changed the economic and political landscape
- Today, Asia has decoupled to some extent from the US and Europe and growth is expected to remain strong
- Long/short equity is still the dominant approach in Asia but other strategies are growing rapidly

# Performance review Q3 2007

Volatility returned...

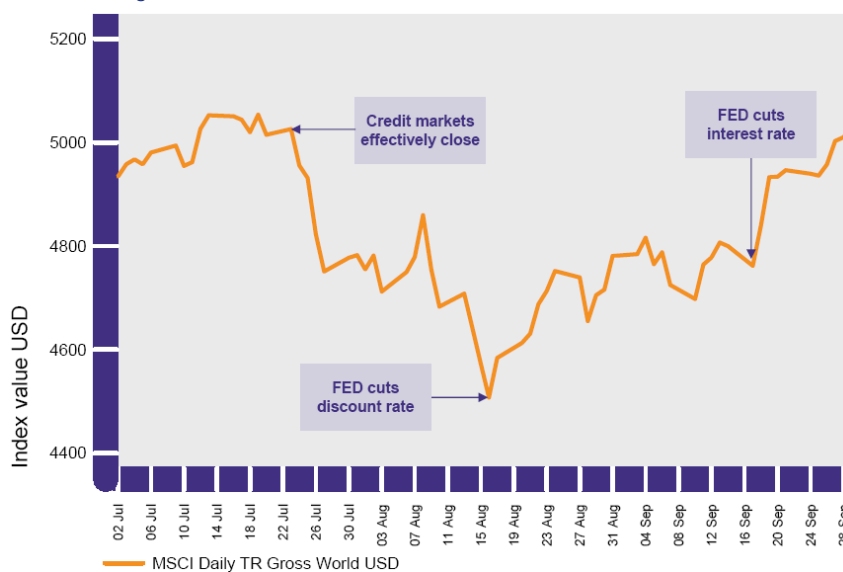
...liquidity dried up...

...and all asset classes corrected

Volatility returned with a vengeance in the third quarter. The VIX (a measure of the short-term implied volatility of the S&P 500 index) briefly reached a level of over 30% in mid August, a level unseen since 2003. Fixed income and currency volatility also spiked. Risky asset classes such as equities, commodities and high yield endured a roller coaster ride with heavy losses in late July and the first two weeks of August followed by a strong recovery in the later part of August and September. During July, problems in subprime lending spilled over into the wider credit market and triggered a global re-pricing of credit risk. As a result, the liquidity of structured credit instruments such as Collateralised Debt Obligations and asset-backed securities dried up completely. With credit markets essentially closed, banks were no longer willing to lend to each other and overnight lending rates soared. Central banks around the world had to inject liquidity to ensure market stability.

Equity markets came under pressure as it became clear that the real economy was also affected and that the problem would not be contained within the financial markets. The sell-off accelerated on 16 August when the JPY rose sharply against nearly all currencies. High yielding currencies lost several percentage points in just a few minutes. The ensuing flight to quality sent the yields on T-Bills tumbling. On 17 August the Fed stepped in and lowered the discount rate. This resulted in a 180 degree reversal sparing most markets from further losses. During the following weeks markets staged a remarkable recovery. After the Fed cut interest rates by 50 bps on 18 September, equity markets accelerated their gains and finished at or near record highs. However, the Fed and other central banks made it clear that they are only willing to help if the real economy is in danger, but not to bail out speculators.

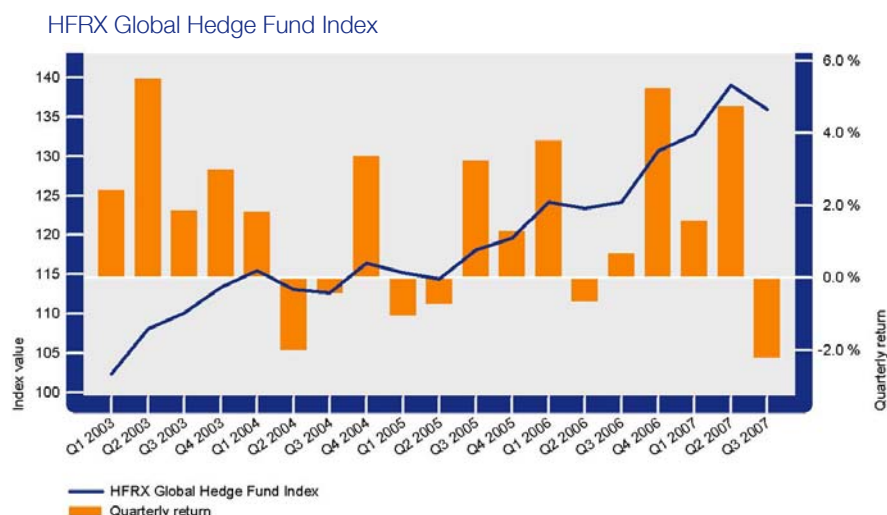
Unfolding of events in the summer of 2007



Source: Bloomberg. Period: July – September 2007.

## Hedge fund returns were highly dispersed

Credit markets were already deteriorating in June and hedge funds then had to cope with the subsequent market turbulence. Some quantitative trading strategies suffered substantial losses in this environment and were forced to scale back their market exposure, thereby missing out on the recovery after the Fed 'rescued' the markets. Other strategies were less affected and the dispersion of returns during Q3 was very high. Although most funds did not have direct exposure to subprime – some even benefited from short positions - the lack of liquidity and huge sell off in mid August led to widespread losses. August was the worst month in years for many funds and September the best, with some funds completely making up the losses. Others, however, could not fully recoup from severe drawdowns in July and August. On a YTD and 12-month rolling return basis most hedge funds are still on track to meet or even beat their performance targets. Measured by the HFRX Global Hedge Fund Index hedge funds lost 2.22% (YTD 4.02%) during Q3 07.



Source: Bloomberg. Period: January 2003 to September 2007.

## Equity hedge did very well in emerging Asia

The challenge for equity hedge managers in Q3 was to reduce exposure during the sell-off while not missing out on the strong rebound after the Fed intervention. The MSCI World Index lost 0.60% (YTD 6.39%, in LC) during the quarter. Growth stocks significantly outperformed value stocks and large caps did better than small caps. Managers with exposure to emerging Asian equities clearly benefited from strong price appreciation. China and Hong Kong delivered stunning returns of 40% (A-shares) and 22% (Hang Seng) respectively over the quarter. Japan focused managers, however, struggled as the Nikkei lost over 7%. European equity focused funds delivered mixed results. Some were able to benefit from shorts in financial stocks or troubled mortgage companies, such as Northern Rock, while others lost money on their core long positions. US based funds did well as many US large caps and tech stocks benefited from the declining USD.

## Oil and soft commodities rallied

Despite growing concerns over US economic growth, several commodities reached record or multi-year highs. September was the best month for commodities in many years. Over the quarter the S&P GSCI TR Index rose 11.47% (YTD 18.84%) largely due to higher oil prices which broke through the USD 80 per barrel level for the first time. In

the US, crude oil inventories moved into a year-over-year deficit despite the start of seasonal refinery maintenance. Oil inventories are also tight outside the US with a strong likelihood that balances will tighten further in Q4 07. Base metals, which are particularly vulnerable to any global slowdown in housing, autos or general consumer spending, were mixed with some weakness in August but recovered afterwards. Soft commodities took off in September, especially wheat which rose a stunning 61% in Q3 (YTD 87%). Global wheat inventories are already at record lows and poor weather conditions in several major wheat producing regions put further pressure on reserves. Precious metals also posted strong positive returns as they benefited from the weakening USD. Gold equities outperformed bullion by a wide margin as many investors viewed them as undervalued. While hedge funds with a focus on agriculture and precious metals performed strongly, other funds in relative value oriented strategies underperformed or lost money.

Global macro funds began well, benefiting from the continuation of Q2 trends, such as long equity, long emerging markets, short fixed income and short USD. However, this changed quickly during the last week of July when nearly all trends reversed and positions had to be cut. Even though managers had reduced risk, many were surprised by the severity of the equity market sell off and several established global traders decided to remain underexposed until a clearer picture develops.

## The Kiwi lost 22% in three weeks

In currency markets, the USD was under pressure against nearly all major currencies. GBP reached a 26 year peak against the greenback and the EUR leapt over the 1.40 mark, an all time high. As it became clear that the problems in the US were spilling over to other markets, carry trades had to be closed to the detriment of a number of currencies. The next chart shows the JPY – NZD exchange rate over the last 12 months. Japan has the lowest short-term interest rate in the developed world (0.5%) while New Zealand has the highest (8.5%) so this currency pair provides a sharp illustration of the rapid unwind of the Yen carry trade. The Kiwi lost 22% in the three weeks up to 16 August. A day later the Fed stepped in and lowered the discount rate. In an unusual move, it encouraged banks to borrow directly from the Fed and made such loans more attractive. The Kiwi and other high yielding currencies subsequently recovered somewhat as the sell off seemed overdone and risk appetite quickly returned.



Source: Bloomberg. Period: October 2006 to September 2007.

## Hong Kong took off

Emerging markets were the first to recover after the sell-off, perhaps indicating that investors are willing to buy on the dips as long as the fundamentals remain in place. Hong Kong fired on all cylinders as China removed barriers to its citizens accessing the Hong Kong market. The Hang Seng Index rose over 22% during Q3. Emerging market fixed income and currencies also boosted performance. EM currencies such as the Brazilian Real (5.29%, YTD 14.41% against the USD) or the Turkish Lira (7.92%, YTD 14.78%) performed strongly.

## Managed futures recovered strongly in September

Like most styles, managed futures had a rollercoaster ride in Q3. Much like global macro, managed futures had to cope with trend reversals in nearly all asset classes in July and August but the style rebounded strongly during the recovery in September. Most managers entered the correction with long equity, long FX carry and short bond positions and consequently suffered. These effects were amplified because most trends based strategies entered July with significant market exposure. However, managed futures delivered strong returns during September. Currencies contributed the most to performance, particularly long EUR and long CAD (which reached parity with the USD) positions. Commodities, especially gold, oil and grains also contributed strongly.

## Relative value suffered from liquidity distortions

Relative value managers produced mixed results with a large dispersion in the performance of underlying managers. Volatility traders naturally benefited when realised volatility in many markets spiked to levels not seen since 2003. Fixed income arbitrageurs benefited as FI volatility rose and the yield curve steepened. Foreign exchange generated additional opportunities on top of all the central bank activity. Credit arbitrage, derivative and convertible bond arbitrage proved to be challenging during the turbulent market conditions as sharp, unpredictable moves created losses in most credit portfolios. Even managers with a short credit bias struggled as relations such as forward curves and basis relationships were pushed out of sync by hedging on the short end of the credit protection curve. As liquidity dried up and widening credit spreads spilled over into the convertibles markets, managers had to give back profits due to the general cheapening. On a positive note, multi strategy managers largely recovered their August losses in September.

## Quant models “misbehaved”

Quantitative equity strategies (also referred to as equity market neutral or quant funds) dominated the headlines during August when many well-known funds suffered steep losses in just a few days. Unsurprisingly, this coincided with the culmination of the equity market sell off and the JPY spike on 16 August. While there are many explanations for the ‘quant meltdown’, it seems that an unfortunate combination of events led to very unusual market behaviour which their statistical models could not handle. Some called it model misbehaviour. In particular, low beta value stocks (which they tend to be long) were sold to cover credit losses while higher beta stocks (shorts), which normally sell off more than the market, rallied. Tech stocks, for example, were seen as a safe haven by some investors. Market neutral managers employing statistical factor models exited positions in unison which further exacerbated the situation. In the ensuing mass liquidation of positions, highly leveraged funds recorded large losses. The strong rebound following the Fed action meant that managers who kept exposures or redeployed capital quickly recovered strongly.

## Event driven navigated the turbulence well

Event driven strategies came under pressure when investors feared that corporate activity could slow significantly in the aftermath of the credit crisis. The merger spreads on pending deals such as ABN AMRO (to be acquired by a European bank consortium) or Alcan (to be bought by Rio Tinto) widened dramatically on concerns that they would not go through as planned. The hedges on baskets and indices were insufficient to offset the concentrated losses. The picture brightened significantly during September when it became evident that most announced transactions would still happen. Merger spread narrowed again, though not quite to the pre-crisis level. So called 'hung bridges' were also a concern. Investment banks had to keep their temporary LBO bridge loans on their balance sheets as bond markets were effectively closed and public offerings could not be made on acceptable terms. There was some relief when First Data's partial syndication of a USD 13 billion term loan was successfully absorbed by the market. M&A activity came to a halt for weeks as market conditions did not allow further LBO deals and only a few strategic deals were announced. Towards the end of September, deal activity pitched up again. Special situations managers generally performed well under the circumstances.

Interestingly, Sovereign Wealth Funds (SWF) are playing a growing role in global equity markets as they target equity stakes in companies. As their assets increase rapidly - mainly driven by high oil prices - SWF are looking to diversify their assets from government bonds into more risky asset classes such as equities. One such notable deal occurred in September when the SWF of Qatar bought a 9.98% stake in OMX, the Nordic stock exchange operator, raising the prospect of a bidding war.

Distressed securities managers were positioned rather cautiously at the beginning of Q3 as many had anticipated a correction for some time. Nonetheless, they suffered from mark-to-market losses as nearly all credit positions had to be marked down. High yield spreads widened by over 100 bps during the quarter to finish at 423 over UST with July being one of the worst months for high yield in years.

## Special topic: ten years after the Asian crisis

The Asian crisis emerged in Thailand...

The Asian crisis became apparent on 2 July 1997, when Thailand ran out of foreign exchange reserves and could no longer maintain its currency peg against the USD. As a consequence, Thailand was forced to float the baht, which promptly plunged. Companies that had large USD loans in their books suddenly faced insurmountably high debt repayments in domestic-currency terms as their positions were unhedged. The currency depreciation was worsened by the panicked withdrawal of foreign capital. International investors quickly pulled their money out of countries with similar economic problems, including Indonesia, Malaysia and the Philippines where the local currencies dropped by 40-60%. When the contagion spread to South Korea, the Korean Won fell like a stone in November 1997. The IMF stepped in with a rescue package, but there were strings attached. By insisting on austerity measures, the US and the IMF ended up taking away the economic sovereignty of the affected Asian countries.

...and rapidly spread to other Asian states

Prior to the crisis, most South-East Asian currencies were pegged to the USD so banks saw no need to hedge their currency risk. In fact, that situation encouraged banks and local companies to borrow heavily in USD and JPY at lower interest rates than at home, resulting in massive amounts of capital flooding into Asia. As the USD rose between 1995 and 1997, so did the South-East Asian currencies, resulting in a widening of the current account deficits. In 1996, Thailand's deficit reached 8% of GDP: capital took flight and the country's foreign reserves started to dwindle. In 1998, Indonesia, Malaysia, South Korea and Thailand saw their real GDP per capita shrink by an average of 11%, Indonesia lost 13.7%, South Korea 5.5% and Hong Kong 5.1% and many millions lost their job due to over-borrowing and over-investment that had artificially boosted growth. Hence, the sudden slump came from financial excesses and not from poor productivity growth. But the pegged currencies and massive borrowing were not the only problems Asia had.

Exuberant credit boom fuelled stock and real estate markets before the crisis

The liberalisation of the Asian financial sector in the 1990s led to a credit boom. Investors started to use loans to invest in equity and real estate markets, thus fuelling the growth of these markets. As these markets grew, they tempted banks to grant even more credit. As a result, credit volumes increased on average by 8-10% faster than GDP growth. By the end of 1997, the percentage of real estate credits in Thailand, Indonesia, and Malaysia had increased to 25-40% of GDP. This made banks vulnerable to the stock/real estate market drawdowns which followed. The main problem for the banks was that they financed their domestic long-term debts with foreign short-term loans. Furthermore, the bursting of the property bubble in 1997 led to average house prices falling by 20-50% in most countries between 1997 and 2003. In Hong Kong, nominal prices slumped by as much as two thirds.

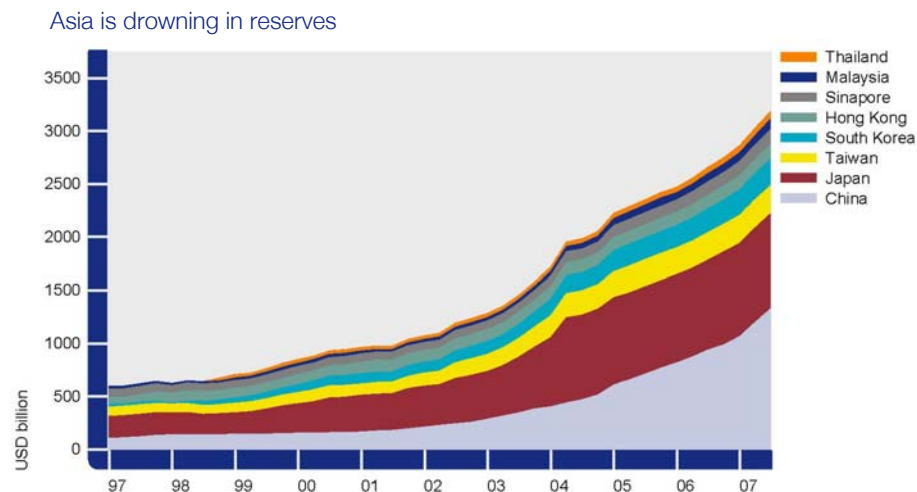
## Asia today

Asia has accumulated huge amounts of FX reserves...

...that massively exceed contingency needs

Things today are almost exactly the opposite of the situation ten years ago. Today, most Asian countries have accumulated huge amounts of foreign exchange reserves, much more than is needed to defend the currency. Most emerging Asian economies also have current account surpluses and largely balanced budgets. The majority of the Asian economies have prospered since about 2001, when China was admitted to the World Trade Organisation. Strong growth with modest inflation, rapidly increasing productivity and booming investments in infrastructure and industrial capacity have lifted per capita income to significantly higher levels than before the crisis. Today, Asia features four of the world's twelve largest economies: Japan, China, India and Korea.

Over the last ten years foreign exchange reserves held by the largest eight Asian central banks (China, Japan, Taiwan, South Korea, Hong Kong, Singapore, Malaysia and Thailand) have risen more than five fold from USD 624 billion in 1997 to USD 3.2 trillion by mid 2007. The largest increases were in China (12 fold) and South Korea (nine fold). There is broad consensus that these massive reserves exceed central banks' contingency needs by far. This reserve accumulation has occurred largely due to Asia's rapidly increasing export revenues and domestic currency management.



Source: Bloomberg. Period: January 1997 to June 2007 (latest data available).

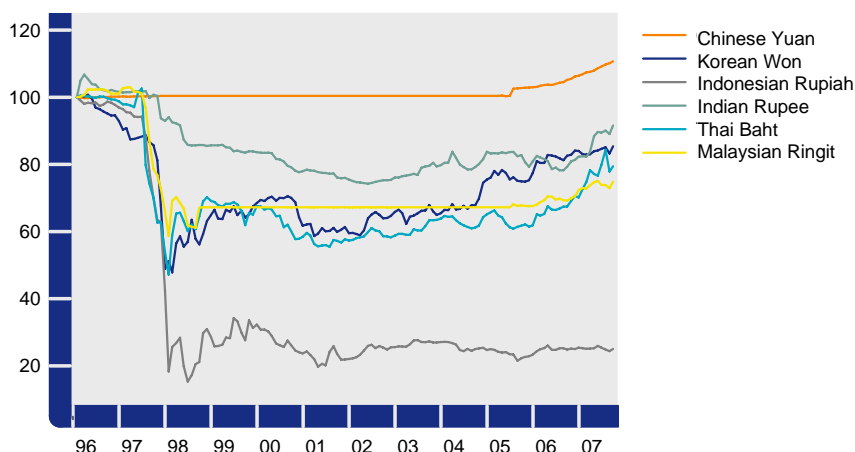
Most Asian central banks have tried to keep their currencies from appreciating too much by constantly buying foreign currencies, mostly the USD, thereby keeping the exchange rates in a 'managed float' or 'soft peg' mode. Nevertheless, the US and several countries in Europe blame countries such as China for not allowing the Asian currencies to appreciate more quickly in order to reduce the massive trade surplus. They claim that China is artificially keeping its Yuan at a low level to support their export growth. This is, however, easier said than done. If China reduced its massive USD reserves, it would not only damage the US economy, but also hurt its own most important export market. The other problem is inflation. As inflation has increased over the last few years, countries such as Singapore, Taiwan, and Korea have begun to

change their strategy by slowing their accumulation of USD in order to allow their currencies to slowly appreciate.

## Asian currencies are considered undervalued

While Asian currencies have recovered significantly since the crisis, many economists still deem them undervalued. As most Asian currencies are set to appreciate in the long run, investors can expect increased returns from asset price and currency appreciation. The chart below shows that the South-East Asian currencies were more or less pegged to the USD until 1997. During the crisis, they underwent a severe devaluation and since then, most of the currencies have recovered, but they have not yet reached pre-crisis levels. The only exception is the Chinese Yuan, which was pegged to the USD until July 2005 (at the rate of one dollar for 8.27 yuan). Since then, the Yuan has been soft-pegged to a basket of major foreign currencies and allowed to slowly appreciate.

Still undervalued



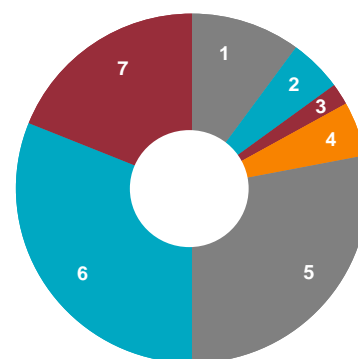
Source: Bloomberg. Period: January 1996 to September 2007. Currencies are inverted against the USD and indexed to 100 on January 1996.

## This year, China alone will contribute more to global GDP growth than the US

A decade after the crisis, Asian economies are booming. The region has grown by an annual average of 8% over the past three years, powered by China and India. Together, China and India account for over 55% of total GDP in emerging Asia. In purchasing power parity (PPP) terms the region has accounted for over half of the world's growth since 2001. This year, China alone will contribute more to global GDP growth than the US for the first time (in USD terms). In the first half of 2007 China grew at 11.5%, accounting for the biggest growth ever since 1994. India registered growth of 9.3% for the same time period, its fastest in 18 years.

### Share of global GDP at current USD prices

1	Japan	10 %
2	China	5 %
3	India	2 %
4	Other Asia	5 %
5	US	28 %
6	EU	31 %
7	Rest of World	19 %

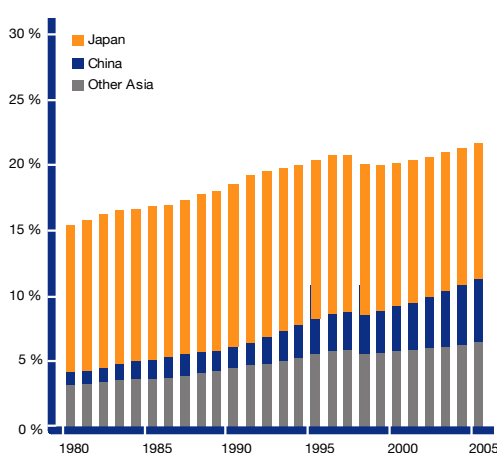


Source: IMF, UBS estimates. Latest data available.

## Asia's share of global output is growing steadily

Asia accounts for 22% of global GDP at current nominal prices and exchange rates, somewhat less than the US (28%) and the EU (31%), but this is already a very respectable portion of the global economy. The next chart highlights the fact that Asia is not just big, but also growing faster than the rest of the world. For the past 25 years, Asia has outpaced global growth every year, with the sole exception of 1998, at the depth of the Asian crisis. As a result, Asia's share of world output has been expanding steadily, from 15% in 1980 to 22% in 2006. The Asian region has contributed nearly one third of world GDP growth over the last three years, more than either the US or EU.

### Asia's share of world GDP



Source: IMF, CEIC, UBS estimates. Period: 1980 to 2005. Latest data available.

In its *Asia and Pacific Regional Economic Outlook 2007* the IMF states that the already strong growth rates of most emerging Asian economies have recently accelerated but concludes that they are not on the verge of overheating as core inflation and credit expansion remain subdued. It also sees little evidence of housing bubbles in most

countries. The patterns of Asian business cycles have changed quite significantly in the post crisis period. Although they still exhibit higher volatility than fully industrialised economies, Asia's business cycles have become much more stable. Better economic policies in the crisis countries may have also contributed to macroeconomic stabilisation, while underpinning strong growth.

Could a sharp US slowdown be offset by Asian consumers?

It is commonly accepted that US consumers have kept the world economy spinning. Asians are frugal, Europeans gloomy, so if Americans do not keep spending the world economy must be in trouble. Is it? Could a sharp slowdown in the US be offset by the growing power of Asian consumers? Previous US downturns have always dragged the rest of the world down. Is it different this time around? That view will need to be tested over the next couple of years as the US have to adjust themselves after the end of their housing bonanza. For the first time, the world economy's fate will depend largely upon whether Asia and other emerging economies can decouple from the slowing American locomotive.

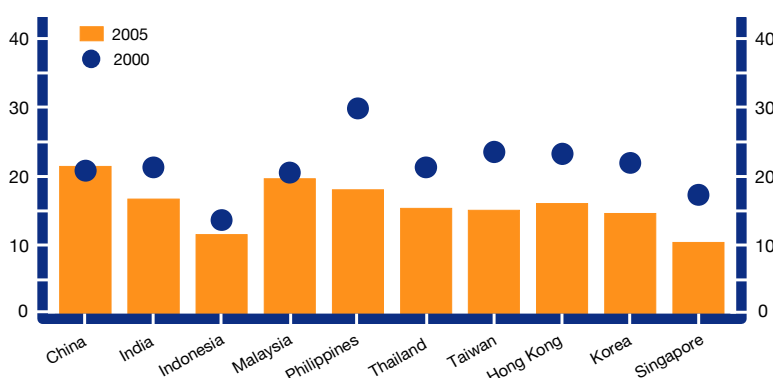
Probably not yet...

Despite the fairly large size of the Asian economy one has to keep in mind that domestic consumer spending is still at a comparatively low level in emerging Asia. US consumer spending, for example, is roughly four times the size of China's and India's combined. Hence, to compensate for a 1% drop in consumer spending in the US consumers in China and India will each have to increase spending by 4%.

...but exports to the US are losing importance

But just how dependent is Asia on the American consumer? Consider China. Its dependence on US consumers has decreased considerably in recent years as the country has diversified its export market. The US now accounts for slightly more than 20% of China's exports, down from a peak of about 33% in 1999. Markets outside the US, such as the EU and Japan, now take more than 45% of Chinese exports.

Exports to the US (percent of total exports)



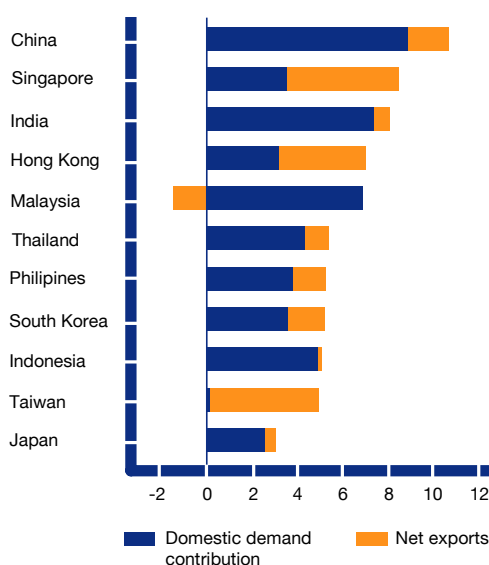
Source: Haver Analytics, IMF, International Financial Statistics and IMF staff calculations. Period: 2000 and 2005. Latest data available.

Weaker exports will hurt some industries...

Jonathan Anderson, a China economist at UBS in Hong Kong, believes that a 10 percentage point decline in US imports would shave just 0.2% off of China's annual growth rate. For other emerging Asian economies the haircut would be larger, but still less than 1%. Weaker exports will hurt some industries, but overall, the region will continue to grow at a reasonable pace. During America's 2001 recession, China's export growth fell by 25%, imports also slowed sharply but GDP growth remained strong.

...but not the whole economy...

GDP growth rates for selected Asian countries split into domestic and export portion



Source: UBS, Man Investments. Period: Average percentage change of past four quarters Q3 2006 to Q2 2007. Latest data available.

...as the bulk of the Asian growth has been domestically driven

Contrary to popular opinion, the bulk of Asia's growth has been domestically driven. Only Taiwan, Hong Kong and Singapore have been heavily dependent on external growth. Today, consumers in Asia excluding Japan are buying as many personal computers each year as Americans. Chinese consumers bought seven million cars last year, up from only two million five years ago. China's retail sales surged by over 16% in the year to July 2007 and even without the boost from net exports China's GDP growth would still be an impressive 9% this year. How does this square with the common perception that Chinese households' saving is extraordinarily high? The main reason why the national savings rate looks so high (close to 50%) is that Chinese companies have been saving a large portion of their booming profits – different from Asian consumers, who have been spending, rather than saving their money. Based on today's trends, the Chinese consumer markets, measured in PPP; will overtake the US by 2020.

And they call us frugal

America drops, Asia shops



Source: Economist 19 October 2007.

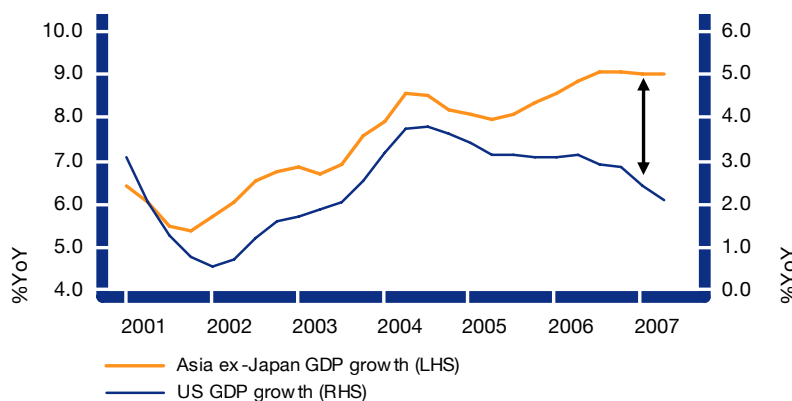
A complete decoupling seems unlikely...

The notion of the frugal Asian consumer is equally flawed across many other Asian countries. The IMF estimates that in Asia (including Japan) real growth in consumer spending has averaged a healthy 6.3% in 2005 and 2006. This suggests that Asian consumers can help sustain fairly robust GDP growth even if America's economy takes a dive. A complete decoupling, however, seems unlikely. Although Asia's direct exposure to the US and Europe is on a decline, final demand from these countries plays an important role under the surface of rising intra-Asian trade. Much of this trade is dominated by intra-industry and intra-company shipments of intermediate goods that are eventually consumed outside the region. The Asian Development Bank estimates that approximately 60% of exports from Asia are ultimately consumed in G3 countries.

...but some has already occurred

Nevertheless, some decoupling has already occurred. While US growth has been slowing gradually since 2004, Asia accelerated over the same period. As a result 2004, 2005 and 2006 were the strongest three years for the global economy in more than three decades.

US and Asian growth have already decoupled to some degree



Source: CEIC, Merrill Lynch calculations. Period: Q3 2006 to Q2 2007 (moving average of past four quarters). Latest data available.

A US downturn could even help Asia

This global boom was not driven by the US, as its growth over the period was only average. While Europe and Japan recovered somewhat, emerging economies made up for the difference. A US downturn could even help the Asian economies as trade balances could be normalised to a certain degree. Asian demand, meanwhile, is giving a boost to other emerging market economies, such as Latin America. Buoyant Asian demand should help keep Europe afloat, too, as European exporters are increasingly dependent on Asia, and less so on America.

Financial markets remain more tightly linked than real economies

More recently, Asian markets held up quite well during the July/August turbulence. Some investors now view the region as a source of stability rather than contagion. Sound policies and strong fundamentals have left these countries better placed than ever to ride out credit crisis. As Asian consumers do not make wide use of credit, a tightening in credit standards will not materially impact the economy. Nonetheless, even if economies can decouple, global financial markets tend to be more tightly linked than real economies. Thus, one should not expect Asian stock markets to decouple completely from Wall Street, as correlation between markets can increase and diverge from economics.

Some homework remains...

Domestic consumption in Asia is still weak compared to the size of its economy. This is partly due the high corporate savings rate, which puts domestic consumption to a low level. Eventually, Asian economies need to become less export and investment driven and more consumer oriented. In China, for example, consumer spending is only 36% of GDP, the lowest proportion in any large economy. In comparison, American households consume 70% of GDP. Not only would this make future growth more sustainable, but it would also reduce China's huge trade surplus. But before a consumer driven economy similar to the one in the Western countries can emerge, Asian governments must introduce pension schemes, improve public education and come up with an affordable healthcare insurance scheme.

...such as pensions and healthcare...

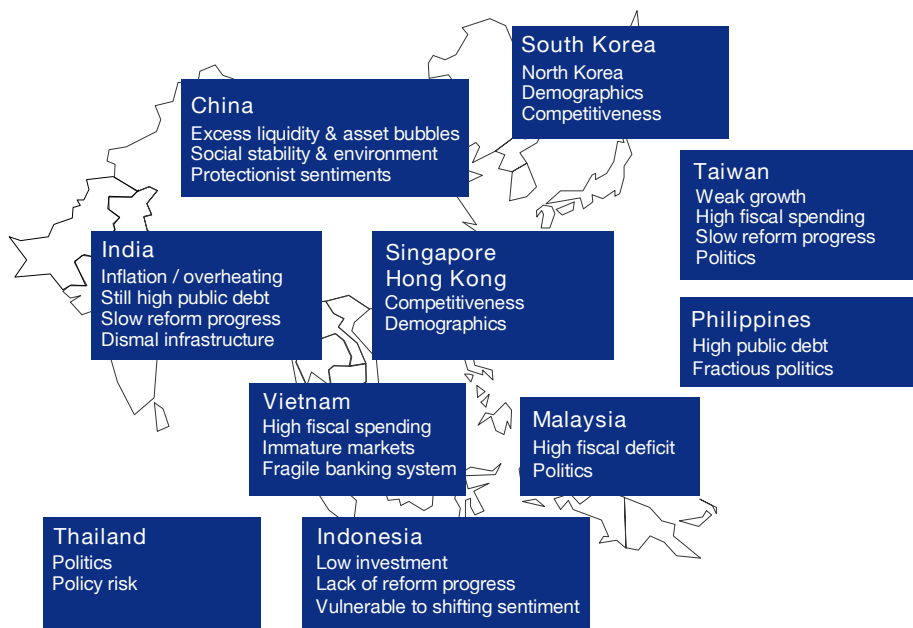
...growing inequality...

Furthermore, besides ethical and social implications, worsening inequality is a concern for policymakers. For example, China now displays a more skewed income distribution than the US. Despite the boom in Asian cities, rural Asia remains home to some of the poorest people in the world. As a result, the Gini coefficient, which measures the statistical dispersion of inequality of income distribution or inequality of wealth distribution, is very high in several Asian countries. If this inequality is unattended, growing disparities could strain societal cohesion or even lead to widespread unrest. Many countries will need to put in place welfare systems that cushion, but do not obstruct, structural change. And policy space must be found to deal with the environmental impact of rapid growth.

...and environmental policies

The schematic illustration overleaf gives an overview of the challenges that remain in Asia.

Challenges remain



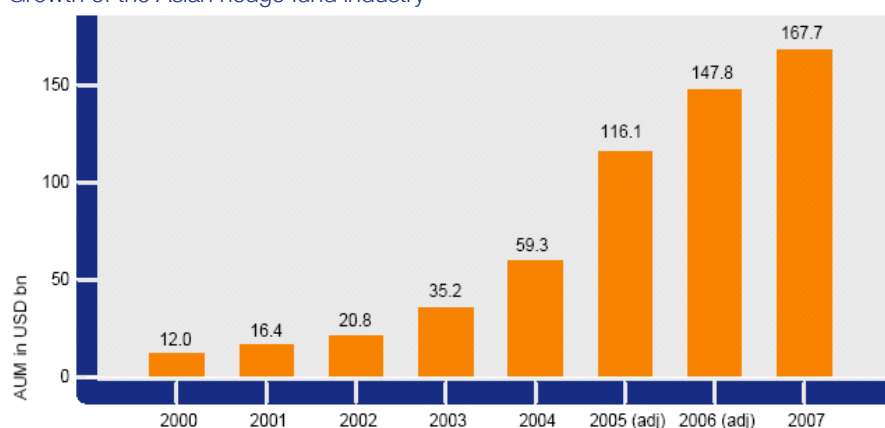
Source: Deutsche Bank Research.

## Hedge fund investing in Asia

Asian hedge funds manage  
10% of total hedge fund  
assets

After the Asian crisis, there were wide spread claims that speculators were responsible for the collapse in Asian currencies. Today, the dust has settled, investors have regained their confidence in the region and the Asian hedge fund industry is booming. There are now more than 1,100 single hedge funds (out of which 65 new funds came to the market during H1 2007) and 147 funds of hedge funds, compared to only 160 single hedge funds in 2001 (Eurekahedge). Assets under management by hedge funds jumped from USD 12 billion in 2000 to USD 167.7 billion at the end of H1 2007, a rise of 13% over the first six months of the year, or about USD 20 billion (Eurekahedge/AsiaHedge). This translates to over 10% of global hedge fund assets. It is expected that the Asian hedge fund industry could be worth USD 250 billion by the end of the decade (AsiaHedge).

Growth of the Asian hedge fund industry



Source: AsiaHedge. Period: January 2000 to September 2007.

Japan shrank, but emerging  
Asia has grown

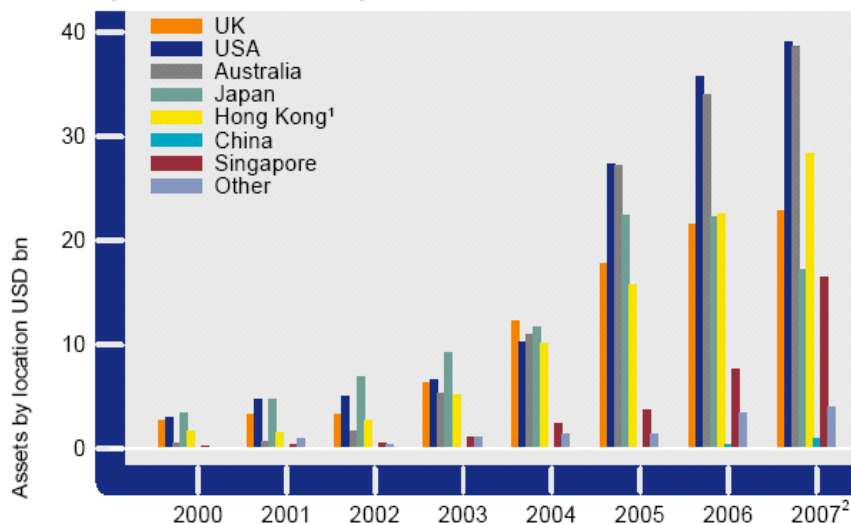
These figures do not, however, reveal major changes under the surface of the Asian hedge fund industry. Due to poor market conditions in Japan, hedge funds focusing on Japan long/short strategies have shrunk by about 20% from USD 48 billion to USD 38.6 billion. This was offset by ex-Japan managers, especially China, which grew very strongly. Eurekahedge estimates that there are currently more than 90 hedge funds investing in the Greater China area, with roughly USD 12 billion in total assets, up from 14 funds and USD 184 million in 2001. Thus, there has been a rotation out of Japan and into other Asia-based investment strategies. Unlike in previous years, capital has not been removed from the region completely but has stayed there and relocated, pointing to the increased stability of the Asia Pacific hedge fund industry.

As many hedge fund managers started investing in Asia investment after earning their spurs in Europe and the US, the number of managers located outside Asia is still fairly high. As at Q1 2007, 63% of Asian hedge funds assets were managed from the UK or

US, and only 24% was managed locally in Asia. But this figure is expected to change rapidly in the coming years. According to the InvestHedge Billion Dollar Club ranking in October 2007 some 27% already had an office in Asia and several established hedge fund companies from the UK and the US are planning to set up a local office next year.

The number of managers located outside Asia is still fairly high

Asian hedge fund assets by manager location



Source: AsiaHedge. Other includes Arbitrage, Vietnamese equity, specialist, global fixed income, managed futures, Taiwanese equity, Thai equity, Indonesian equity, emerging market, commodities, FX, Korean equity and event driven strategies. Distressed funds were added since December 2005. <sup>1</sup>Figures for Hong Kong between 2000 and 2003 represent assets in Hong Kong and China combined. <sup>2</sup>As at 30 June 2007.

Two city-states are leading the growth of the Asian hedge fund industry. While Hong Kong has a longer history as a centre for hedge fund management and services, Singapore is gradually catching up. This is mainly due to easier registration and greater tax clarity. While setting up a hedge fund in Hong Kong takes a couple of months, the same procedure can be completed in Singapore within a few weeks. These two city-states have advantages and disadvantages as can be seen in the table overleaf.

	Advantages	Disadvantages
Hong Kong	<ul style="list-style-type: none"> <li>■ Well established financial hub</li> <li>■ Longer history as a centre for hedge fund management and services</li> <li>■ More presence from prime brokers</li> <li>■ More local hedge funds</li> <li>■ Hong Kong is midway between Tokyo and Singapore, ideal for investments in Greater China and Northern Asia</li> <li>■ Diversified hedge fund industry</li> <li>■ English-speaking base in China</li> </ul>	<ul style="list-style-type: none"> <li>■ Slow, bureaucratic approval procedure for new companies</li> <li>■ Uncertainty over tax status of fund management companies</li> <li>■ Government was initially anti-hedge funds after the Asian crisis</li> <li>■ China centric hedge fund industry</li> </ul>
Singapore	<ul style="list-style-type: none"> <li>■ Smaller, but faster growing</li> <li>■ Easier registration procedure</li> <li>■ Greater tax clarity</li> <li>■ Low costs for setting up a fund management company</li> <li>■ Ideal for investments in South East Asian markets</li> <li>■ Diversified and fairly international hedge fund centre across the Asia-Pacific region</li> <li>■ Large and dynamic centre for private banking</li> </ul>	<ul style="list-style-type: none"> <li>■ More technocratic approach to policy-making</li> <li>■ Short history, going back to 2000</li> <li>■ Many hedge funds are still young with a short track record</li> <li>■ Smallest hedge fund hub in Asia</li> </ul>

## Scalability has improved

The smaller scale of, and lower volumes traded in, the underlying Asian capital markets, have been a limit on the assets managed by hedge funds in and across the region (particularly in terms of stock lending and derivative trades). This situation has improved in recent years, but even today about 48% of Asian hedge funds have less than USD 50 million under management. That still compares favourably with more than 60% three years ago, and this proportion is stabilising. Only 9% of Asian funds have more than USD 500 million in assets, with fewer than half accepting new capital. A typical equity long/short manager in Japan for example has a capacity of perhaps USD 500 million, a manager focusing on Asia excluding Japan can manage up to USD 250 million (AsiaHedge). Furthermore, hedge funds that focus on a particular region or country seem to have reached their capacity, as finding alpha is becoming increasingly difficult. As a result, they either start a new strategy or widen their focus to make it more global in order to be able to absorb additional capital. However, the situation seems to vary from one manager to another and also from one country to another. While some managers claim that they can only invest up to USD 500 million in a particular country, others can absorb more than double that amount.

Despite being a relatively young market, the capacity picture in Asia has begun to resemble that of the rest of the world: Popular managers soft-close within 12 months, a good track record ensures a close within 24-36 months, and many managers who have been around for two to three years with a decent track record are already closed. Hence, new investors looking for Asian hedge fund exposure are left with younger managers that have only 6-18 months track record and capacities of between USD 25 million and USD 75 million. In consequence, selecting the right Asian hedge funds requires a long due diligence process. Funds of hedge funds that have started to operate in the Asian market many years ago now have a significant advantage, as they have secured capacity with quality managers with a longer track record and they have the infrastructure and experience to identify promising managers across a wide region.

Hedge funds provide  
better downside protection

Many industry experts attribute the surge in Asian hedge funds assets to the fact that global investors were generally underweight in Asia and hedge funds provided a way to participate in the Asia-Pacific growth story without the large downside risk of long-only investments. On the other hand, there are also investors who still shy away from Asian hedge funds as they combine two characteristics they are not familiar with: First, they do not have a good understanding of hedge funds and second, they are sceptical about the sustainability of Asian growth. But as has been shown above, the Asian economies are booming – not based on speculation, but based on real fundamentals. And unlike long-only strategies, hedge funds are able to provide much better downside protection.

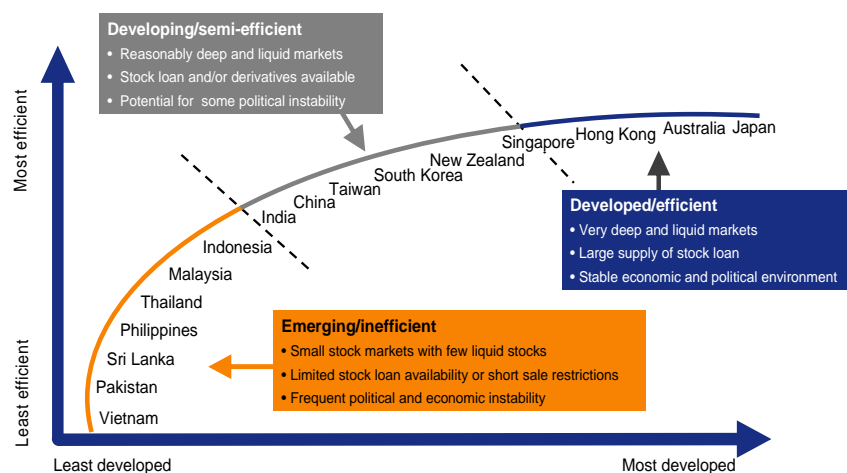
Markets are heterogeneous  
and require local knowledge

Asian economies and markets are heterogeneous and many industries are highly fragmented. Company research coverage from investment banks is fairly low and concentrated on large caps. This results in tremendous market inefficiencies that offer alpha generation opportunities. Out of more than 19,000 listed companies in Asia, the vast majority are unknown. Accounting standards are also slightly different. Putting valuations on firms in Asia requires a great deal more insight than a simple analysis of the balance sheet and ownership structures can hide a lot of ills. There are also corporate localisms, for instance charitable giving is generally a euphemism for corporate bribes. Interpreting these numbers requires a lot of direct knowledge.

The maturity of markets  
varies

As the next schematic illustration shows, Asia can be broadly categorised into three different market environments. While countries such as Australia and Japan belong to the most developed and efficient economies with liquid and stable markets, states such as Thailand, Indonesia and the Philippines are still fairly inefficient, with small stock markets, few liquid stocks and frequent political and economic instability. In between those two categories lie countries such as South Korea, China, and India, which have reasonably deep and liquid markets and political situations that are fairly stable.

### Spectrum of market development in Asia



Source: RMF Investment Management, based on CapGemini/Merrill Lynch Asia-Pacific Advisor Survey, June 2006. Schematic illustration.

Asian financial markets are developing rapidly

Beside inefficient information flow, Asian institutions have been slower than their counterparts in other markets to adopt low-cost trade execution alternatives. According to Greenwich Associates, Asian institutions execute nearly 85% of their total trading volume via single stock trades with a broker sales trader. But as a greater number of stocks are traded in local currencies and more debt is available in these currencies, the market environment for hedge fund managers has improved, lifting capacity restraints over the last 10 years. Today, Asia accounts for nearly 30% of the global stock market capitalisation. Additionally, more than one-third of the global volume in exchange-traded derivatives is generated in Asia (Futures Industry Association). While Korea has the highest volume index options market in the world, Japan has the largest government bond market. Hong Kong has the largest covered warrants market worldwide and India has the world's most active single stock futures market (Bank for International Settlements, World Federation of Exchanges, Futures Industry Association).

High retail participation leads to volatile markets

Due to a still underdeveloped institutional asset management, retail participation in Asian markets is high. Asian investors generally have a strong risk appetite, often day trading in stock options, which leads to a "greed and fear" mentality. This can drive valuations to extremes, as we currently witness in China. The higher equity volatility (compared to more developed economies) leads to stronger deviations from fair value. Hedge funds can benefit from this situation by identifying mispriced securities and setting up mean reverting trades or index dispersion trades. It is important to note that Asian markets have different characteristics when it comes to trading patterns, liquidity, availability and cost of stock borrowing (see below). This creates arbitrage and diversification opportunities for managers with the right knowledge and expertise. As the next chart shows, retail participation in Asia is high.

### High retail investor participation

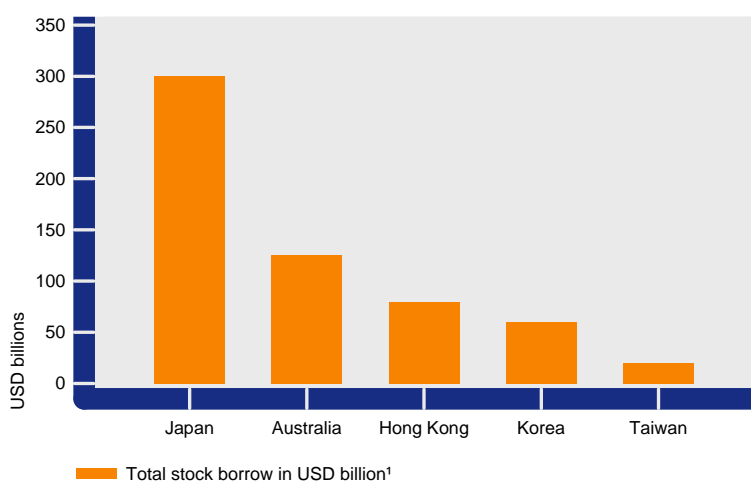


Source: Eurekahedge, World Federation of Exchanges. As at 31 December 2005. Latest data available.

## Stock borrowing has increased

The investment opportunities for hedge funds have grown over the past decade as shorting has become much easier. The chart below shows that while countries such as Hong Kong, Korea and Taiwan are small compared to Japan, they are already borrowing a remarkable amount of stock.

### Stock borrowing in Asian countries



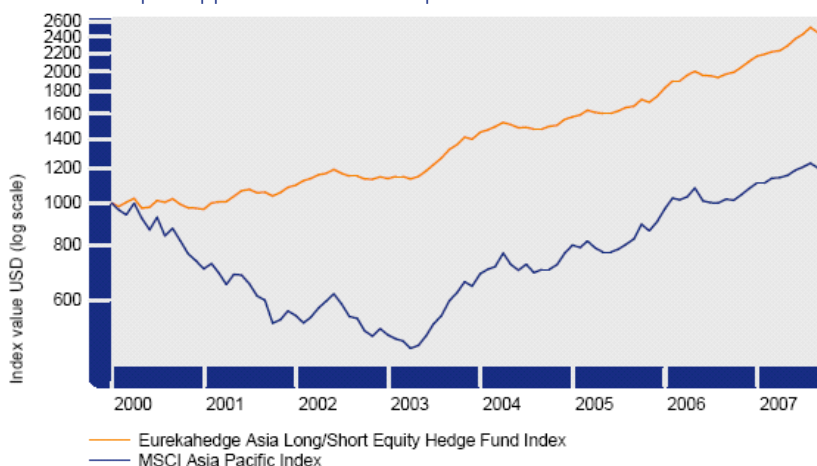
Source: Morgan Stanley estimate. As at 30 April 2007.

Although shorting single stocks has become possible in many Asian countries, there are still a number of countries such as Malaysia, Indonesia, Thailand and the Philippines, where shorting is difficult or even impossible. Also, stock borrowing fees are often

staggeringly high. In reality many managers hedge their long positions through index shorts, thereby reducing systematic equity risk significantly.

Despite the strong growth in Asian economies, equity indices (including Japan) have not performed that well over the long term. In contrast, equity long/short strategies have done much better as shown on the next chart.

Persistent alpha opportunities for stock pickers



Source: Bloomberg. Period: January 2000 to 30 September 2007.

Asian long/short hedge funds outperformed long-only indices

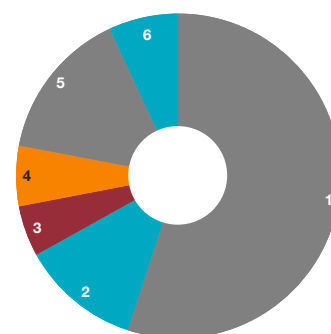
Some Asian markets are no longer cheap

The P/E ratios of many Asian markets have caught up with developed markets in recent months. China, India, and Indonesia for example now have higher P/E ratios than the most developed markets and can no longer be considered cheap. Consequently, the past strong headwind (from rising markets) is expected to slow or even reverse and stock picking will play a greater role going forward. This should allow hedge fund managers to better differentiate themselves from long only managers. They are better suited to navigate through a potentially choppy market.

Equity long/short continues to account for the lion's share of Asian hedge fund strategies making up 55% of the total hedge fund universe in Asia.

Distribution of hedge fund strategies in Asia

1 Long/short equity	55 %
2 Relative value	12 %
3 Event driven	5 %
4 Global macro	6 %
5 Multi-strategy	15 %
6 Other	7 %

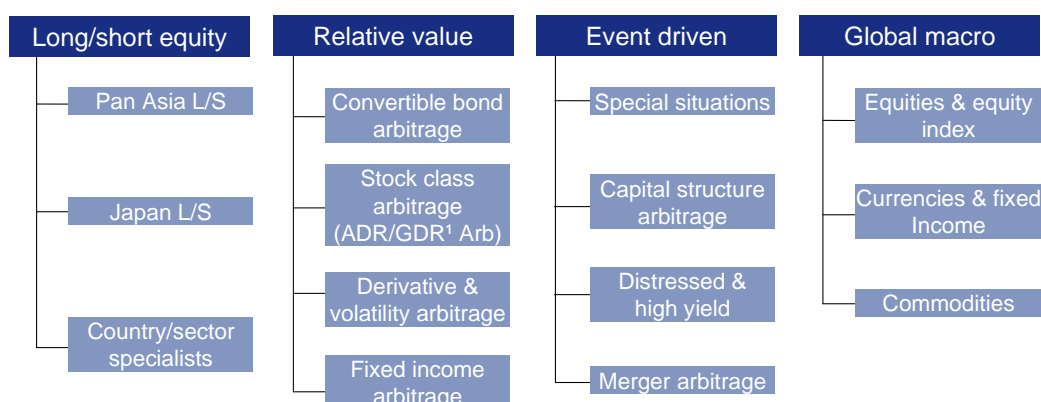


Source: Eureka Hedge, GFIA. Relative value includes fixed income, arbitrage and convertible arbitrage. Event driven includes distressed.

## Asia is more than long/short equity

Despite the concentration in equity long/short, this number has been gradually coming down in the last few years from roughly 80% according to RMF estimates. While relative value, event driven and global macro strategies have begun to develop, the biggest increase can be found among multi-strategy managers, as they are able to invest flexibly wherever the liquidity is and can allocate to the most promising strategies. The chart below gives an overview of strategies that can be found in Asia today.

Hedge fund strategies in Asia



Source: RMF Investment Management. ADR – American Depositary Receipt, GDR – Global Depositary Receipt.

## Volatility dispersion is a popular relative value trade

A popular relative value trade is volatility dispersion. Volatility dispersion trading aims to take advantage of relative value differences in implied volatilities between an index and a basket of component stocks. Normally, the implied as well as historical volatility is different from the index volatility due to the correlation between the stocks that make up the index. If the manager is long the volatility of each constituent and short the index volatility this can be viewed as a long correlation trade which is most profitable when markets sell off. Another approach is to trade index volatility between different markets.

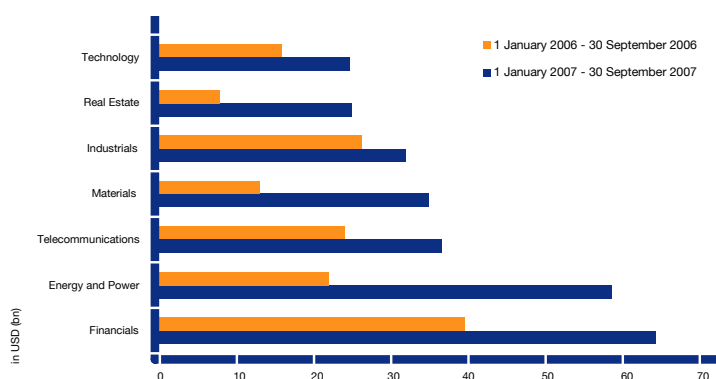
## New laws to weaken M&A influence in Japan...

A special situation approach could include searching for companies with changes in their dividend policy. In Japan, for example, there is increased pressure from shareholder activists to increase dividends or buy back shares. Recent developments such as Steel Partners, a US-based activist, trying to take control of Bull-Dog Sauce Co. in August, failed however. M&A deals are not welcome in Japan. Japan's financial regulator, the Securities and Exchange Surveillance Commission (SESC), believes that domestic companies have increased cross-shareholdings so as to protect themselves from takeovers. As a result, the SESC is going to implement the Financial Instruments and Exchange Law (FIEL), nick-named J-SOX (Japanese version of the Sarbanes-Oxley Act), in the next few months. It is expected that the new law will become effective starting on 1 April 2008 or later. This new law will require hedge funds with more than ten Japanese investors or whose total investment amounts to more than a third of the fund to file or register with the regulator. These funds will then be subject to scrutiny. As a result of such developments, the number of corporate actions has been disappointing in Japan.

## ...but transaction volume in Asia ex-Japan surged

Announced M&A volume in emerging Asia, however, surged 80%, reaching USD 315 billion in deal volume, and the number of announced deals increased by 15.3% to 5,950 transactions for the first three quarters of 2007, thereby creating a healthy environment for hedge funds.

### Asia ex-Japan involvement in announced M&A deals by target industry



Source: Thomson.

## Asia remains the place to be invested

In summary, Asia remains well positioned for future growth. While exports are still significant, domestic markets are developing steadily and offer the prospect of internally driven growth. Asia has grown faster than the rest of the world and it seems likely that it will continue to do so. The region has already decoupled from the US to some degree, but a complete decoupling seems unlikely. Financial markets, unlike economies, will remain more tightly linked. While the future looks bright, however, Asian markets are likely to remain volatile as they are less liquid and less transparent than their more developed counterparts in the US and Europe. As a result, investors would be well served to invest in Asian hedge funds that have the skill to extract gains from the significant growth opportunities and the tools to manage the inherent risks of this evolving and dynamic market. It is important to note that while equity long/short managers still dominate, other strategies are gaining a foothold. Asia remains the place to be invested and Asian hedge funds offer a smart way to access these markets.

### Important information

In preparing this publication, we have relied upon and assumed, without independent verification, the accuracy and completeness of all information available from public sources or which was provided to us or otherwise reviewed by us. We do not assume any liability in the case of incorrectly reported or incomplete information. This material is proprietary information of Man Investments and its affiliates and may not be reproduced or otherwise disseminated in whole or in part without prior written consent from Man Investments. Please be aware that investment products involve investment risks, including the possible loss of the principal amount invested. Furthermore, we recommend you to consult your bank, investment and/or tax adviser. Man Investments and/or any of its affiliates may have an investment in the described investment products.