

## CAMBRIDGE ASSOCIATES LLC

## ASIAN MARKET COMMENTARY

## ASIA EX JAPAN 2009: THE MOMENT OF TRUTH

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## Asia ex Japan 2009: The Moment of Truth

It all seems unfair; a crisis erupts on Wall Street and yet Asian stock markets—far from the epicenter—are punished even more severely than their American peers. Investors fled Asian equities in 2008 with as much manic gusto as they euphorically bought shares in 2007, abandoning their newfound belief that China's juggernaut economy made the region (if not all emerging markets) resistant to the troubles brewing in the U.S. economy. Indeed, 2008 was arguably worse for Asian equities than 1997 at the onset of the Asian financial crisis, which was a homegrown affair.

Although we are long-term bulls on Asia, we have always been skeptical of the decoupling argument, addressing it first in 2006, and again in late 2007 and early 2008. We concluded that in a globalized world, economic linkages are stronger, not weaker, and while Asia was better prepared to withstand a run-of-the-mill U.S. recession, it certainly would not be unscathed during a synchronized downturn in the United States, Europe, and Japan. Furthermore, given the feverish run-up in share prices over 2007, investors were bound to be burned by gross overvaluation. We advised investors to *tactically* underweight emerging markets and Asian equities, with an eye to becoming *structurally* overweight Asia as a long-term strategic objective.<sup>1</sup>

But with the global economy heading for what appears to be the worst recession in decades, are investors faced with something more sinister? Was the emerging markets and Asian demand story all an illusion, brought about by a credit-fueled consumption bubble in the United States? As Morgan Stanley economist Stephen Jen clearly states:

There are signs that the U.S. [current account] deficit may shrink sharply as its private savings rate rises in the coming years. This will reverse many of the trends we've witnessed in the past seven years, and could expose the [emerging markets] economies that rose more on the back of U.S. credit/housing/current account cycle than on efforts of their own. More than a cyclical shock, investors may want to have a fundamental, comprehensive, and critical reconsideration of their structural thesis on [emerging markets], if we indeed see structural changes in the U.S.

In many ways, 2009 will be the moment of truth for investors in Asia.<sup>2</sup> It will become increasingly clear over the course of the year whether the region, especially the Chinese economy, has the wherewithal to withstand a slumping U.S. economy without suffering a painful bust. We still feel the region's fundamentals are solid and better positioned for long-term growth than those of the developed world, but these assumptions will be strongly tested in the coming quarters. Although investors may need to temper their growth and return expectations going forward—as we do not see a return to the heady valuations of the past few years

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<sup>&</sup>lt;sup>1</sup> Please see our October 2006, November 2007, and April 2008 Market Commentaries *Decoupling?*, *Emerging Markets: What to Do, What to Do...*, and *The Eye of the Storm*.

<sup>&</sup>lt;sup>2</sup> For our outlook for the Japanese market, please see our December 2008 Market Commentary *Japan 2009: Darkest Before the Dawn?* 

anytime soon—now is the time to begin increasing strategic allocations to Asia, especially should markets come under renewed weakness in 2009 as we expect. While the macro outlook is certainly challenging and not without risk, valuations today provide a margin of safety for long-term investors.

## So Much for "Decoupling"

Tumbling share prices in Asia seem justified to us, given the macro outlook for the global economy. With unemployment rising across the developed world and demand falling, conditions are rapidly deteriorating. Global trade has effectively ground to a halt recently as letters of credit have dried up (reflected in the over 90% collapse in the Baltic Dry Index of shipping rates), manufacturing purchasing surveys have plummeted, and companies have slashed production to draw down inventories. Leading indicators across the globe, and especially in Asia, are in free fall (Table A). Consensus forecasts expect real GDP growth in the Eurozone, Japan, the United Kingdom, and the United States to be negative for 2009. Yet the same consensus forecasts expect Asia ex Japan to fare much better, with growth slowing from 7.4% in 2008 to 6.3% in 2009. Is this reasonable?

It seems quite optimistic to assume a coordinated recession in the developed world will only shave 1 percentage point of growth from Asia. Furthermore, most of these forecasts are based on an implied rebound in economic growth in the second half of 2009, something which may or may not occur with much vigor. While not having explicit GDP forecasts of our own, we feel the odds are slanted to the downside. As Goldman Sachs recently commented about their own econometric models (which are as good as any):

First, the magnitude of the credit crisis and its impact on the real economy is arguably greater than the model will pick up. Second, the downturn is global in nature and there are likely effects outside the U.S. that are more than the [model's] indirect channels allow for. Third, the extent of the credit and real economy shocks suggest that pass through effects to Asia could be greater than estimated. ... Indeed recent GDP and export data for many Asian economies are early evidence of how quickly the global downturn is passing through Asia.

We think investors should be prepared to see very weak economic statistics emanating from Asia over the coming quarters, resulting from what will likely be a sharp retrenchment by both consumers and businesses across the globe in 2009. However, we do not think a 1997–98 style *economic* collapse for Asia is in the cards. Most Asian economies have ample foreign exchange reserves to alleviate any potential balance of payment crisis and the flexibility to use fiscal as well as monetary policy to help offset the coming hit to external demand. Governments will not avoid the oncoming economic slowdown by taking these measures. However, we feel such measures will help prevent a systemic collapse, in contrast to previous emerging markets crises when policymakers' hands were tied by poor fundamentals and large deficits and external debts. (See Table B.)

Meanwhile, we have argued that the unwinding of the credit bubble will represent a major shift for the U.S. economy, likely resulting in lower structural growth going forward. However, we do not think this negates the "secular" Asian growth story of rising living standards and a growing middle class that will likely

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serve as a source of marginal growth for the global economy. Our fundamental view is somewhat simple; households in Australia, the United States, the United Kingdom, and parts of Europe (but not Germany) are largely tapped out. They have been living beyond their means and running up heavy debt burdens. At the same time that their main assets—homes and equities—have lost much of their value, households have little savings to spend. With incomes falling due to weak employment, savings will need to be rebuilt and consumption will be cut. It is unlikely that monetary policy alone will find much traction, as financial systems in these countries are hobbled by bad debts and new loans will not come cheap; there will be little demand for credit, regardless of the supply.

Across much of Asia, however, the story is different. Monetary policy has the potential to find traction as households are relatively unlevered and could (if they were so inclined) save less and spend more. Banks are not saddled with bad debts and so have room for credit growth. Opportunities for organic growth are higher as the region continues down the path of industrialization. In other words, while U.S. and other Anglo-Saxon economies may under go a painful multi-year deleveraging, Asia (including Japan) has the scope to spend down savings and increase financial leverage (Table C). While there will certainly be bankruptcies in Asia and rising unemployment, we judge these risks are largely cyclical, not the structural adjustments that prevailed in Japan throughout the 1990s and elsewhere in the region in the late 1990s when Asia went through its own painful deleveraging.

The most fundamental issue facing investors is determining whether we are on the verge of a global depression, or if instead growth will stabilize at some point in the coming year. We have argued since last year that the aggressive action of U.S. and other policymakers makes the odds of a severe depression (i.e., a prolonged contraction in growth) unlikely; our assumption is that the global economy is still a going concern. This view does not imply a return to business as usual. Investors will likely be wrong-footed by the tepidness of the potential growth "rebound" and the unintended consequences down the line of the current policy actions used to stave off deflation. However, markets may stage at least one strong rally before those birds come home to roost.

For Asia, we are assuming that external demand for Asian goods will slow sharply, but will not disappear. U.S. consumers will still consume—just less. At least some of the rebalancing of trade away from the U.S. economy and toward the rest of world (and within Asia itself) is likely to prove some sort of buffer in this cycle. Even excluding China, which serves as a workshop for the world, intra-Asian trade and trade outside the major developed economies still accounts for 48% of regional exports, compared to 15% and 13% for the United States and China, respectively (Table D). Nonetheless, growth in Asia will be slower than the pace seen over the past cycle, perhaps much slower as the global economy muddles along. Yet it is this hit to external demand that will help drive the shift toward more balanced domestic-demand-driven growth.

These changes have implications for investors in the form of possibly lower returns, as slower global growth may result in a lower valuation multiple being placed on Asian equities for a period of time. Already the region's current valuations are no longer priced for breakneck growth; if anything, markets are priced like the region's neck is broken.

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## Performance in 2008

The MSCI All Country (AC) Asia ex Japan Index finished the year with a -48% return, the worst year on record since data begin in 1988.<sup>3</sup> While not every Asian market finished the year with a record loss given the bounce since late November,<sup>4</sup> at one point in 2008 nearly every market had declined between 50% to 60% from its 2007 high, while Chinese equities had collapsed by over 70%, making this bear market both very deep and wide. (See Table E.)

Overall, Indian and Chinese/Hong Kong stocks were the hardest hit—not surprising given the frothiness of these markets in the 2007 run-up—and were the largest contributors to negative index returns. Given their relative size, Korea and Taiwan were also big detractors despite outperforming the index as a whole. In terms of sectors, cyclical shares such as energy, industrials, and materials were the worst performers—all down by over 50%. The traditionally defensive sectors of consumer staples, health care, and utilities outperformed noticeably, but still lost roughly one-third of their value. Financial shares, however, were still the largest detractor to returns given their 30% weight and that they performed only slightly worse than the index. (See Tables F and G.)

Adding to the losses for most investors was the weakness of Asian currencies over the second half of 2008, as the US\$ strengthened and capital flows to the region abruptly reversed. In US\$ terms, the AC Asia ex Japan Index returned -52% in 2008, implying currency movements detracted 4.5 percentage points for unhedged investors, the largest currency drag since 1997. However, Asian currencies have shown remarkable backbone compared to the 1997 Asian financial crisis, when collapsing currencies impacted returns by -14.0 percentage points. In fact, so far the weakness of Asian currencies seems much more a reflection of the kneejerk flight to safety rather than overarching nervousness about Asian economies; versus the euro, currency only impacted returns by -2.1 percentage points, while Asian currencies have broadly strengthened against the pound, with currency movements *adding* 13.8 percentage points of returns for sterling-based investors! Some of this resiliency reflects intervention by Asian central banks to defend their currencies and also the relative strength of the Hong Kong dollar<sup>5</sup> (which is pegged to the US\$), but we view currency collapses and capital flight of the magnitude seen in 1997–98 as unlikely. (See Table H.)

## Valuations and Near-Term Outlook

The sell-off, meanwhile, has left equities attractively priced. Table I shows our normalized valuation measures for the Asia ex Japan Index back to 1987. On most measures, Asian equities remain priced near 1

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<sup>&</sup>lt;sup>3</sup> We have chosen to take a pan-Asian view of the region, combining the "developed" markets of Hong Kong and Singapore with the rest of "emerging" Asia, while excluding Australia from our analysis, as discussed in the Australia section

<sup>&</sup>lt;sup>4</sup> Based on MSCI indices, both Hong Kong and Singapore suffered worse returns in 1974; Taiwan suffered worse in 1990 as its asset bubble burst alongside Japan's, while 1997 was worse for Malaysia and Thailand, which were at the epicenter of the Asian financial crisis. Korea posted a worse return in 2000.

With the MSCI China Index actually tracking H shares, which are denominated in Hong Kong dollars, the effective "currency weight" of the HK\$ in the MSCI AC Asia ex Japan Index is close to 40%.

standard deviation below average despite the recent market bounce, with valuations at their lowest levels since 2003. Amid the heavy selling of late October and November, we estimate our price-earnings (P/E) measures approached 10 to 11, while price-to-book (P/B) ratio fell to 1. (See Tables I and N.)

During the Asian crisis, normalized P/E ratios bottomed out between 8 and 9 in 1998; at the 2001 and 2003 lows the region traded at 9 to 10. And it was from these levels that the stage was set for massive outperformance over the past cycle. In terms of P/B, the region traded below book value in 1998 at 0.9. At the 2001 and 2003 lows P/B reached 1.2.

On the surface, it would seem valuations have reached trough-like levels. However, a major difference between today's valuations and the region's previous lows is that earnings per share (EPS) and return on equity (ROE) remain very elevated; in 1998 and 2003 you could buy Asian equities at depressed valuations on depressed earnings. Thus, a major risk in buying Asian equities today is that the hit to earnings is more severe than the market expects. In today's environment, the outlook for future earnings growth is extremely clouded. It remains to be seen how much of the growth of the past decade was ephemeral or based on lasting structural changes. (See Table J.)

So what is priced in? Since peaking in October 2007, Asian equities have fallen roughly 58% by the end of December 2008, while EPS have fallen only 4% over the same period because earnings continued to rise in early 2008.<sup>6</sup> Thus the market seems priced for a 54% decline in EPS. Such a fall would put earnings well below trend line and at roughly the same level as in 2003, thus erasing some of the debt-fueled gains of the past five years. Yet, the decline priced into EPS is only slightly worse than what occurred over the 2000 to 2002 earnings cycle, and the oncoming recession may very well be more severe. Thus earnings risk, or at least heightening fears about the hit to earnings, cannot be ruled out.

We think valuations offer a reasonable cushion to investors, but there are several risks facing the region that could result in a much more dire scenario than we envision, or force valuations to overshoot on the downside.

• China lands hard. This is the key risk for the region, and arguably the global economy. An economic collapse in China may seem extreme, however, it is by no means dismissible. China has historically been a boom/bust economy and the past cycle has seen a massive amount of excess capacity created in China, not just in the export sector, but across a range of domestic industries related to construction and housing (steel, cement, etc.). Already the collapse in trade has seen thousands of marginal businesses shut down and massive layoffs. Indeed, fixed investment and exports make up the largest part of the Chinese economy, each accounting for roughly 40% (if not higher on some measures), while consumption makes up only 36%. Thus, while there is plenty of scope for consumption to rise, consumption alone cannot offset a major hit from exports and collapsing domestic investment. The fact that Chinese policymakers have already announced an investment stimulus package equivalent to spending 14% of GDP over the next two years suggests

<sup>&</sup>lt;sup>6</sup> Based on MSCI Index data in US\$ terms. Real earnings have been deflated by U.S. CPI.

the extent to which growth has already slowed. Other initiatives are geared toward trying to reignite the housing market and increase social safety nets to entice more discretionary spending from Chinese savers. Hopes are running high that such stimulus will find traction and that China will be able to spend its way out of a global slowdown and remain a driver of regional growth. Such an outcome is possible given the deep pockets of the Chinese government and the fact that the government still exercises sizable control over the banking system, and thus in theory can direct lending and credit. Whether such measures will offset falling demand from the United States remains to be seen.

- Foreign selling. Even absent an economic collapse, Asian stock markets could still tumble amid heavy foreign selling. Although comprehensive figures are hard to obtain, Morgan Stanley estimates that emerging markets dedicated retail equity funds have seen \$49 billion worth of outflows in 2008, or roughly 40% of the cumulative inflows over 2003–07, estimated to be \$116.8 billion (Table K). Still, outflows in 2008 were less than the \$54 billion that poured into such funds in 2007. Given that Asia accounts for roughly 50% of emerging markets equity indices, with potentially even more exposure through broader international funds and other channels, there still remains significant selling pressure should foreign (mainly U.S. retail) investors fully capitulate on the emerging markets story. Given the pressures on U.S. households and the heavy losses already incurred by retail investors, it may not take much of a growth scare to spook investors into selling further holdings.
- Political risks. Both domestic and geopolitical tensions tend to flare during economic downturns, and this could make nervous investors even flightier. Aside from long-standing potential conflicts between North and South Korea and the Taiwan "issue" with China, we argue the biggest political risk is not military in nature, but a turning away from free market systems, and especially the rise of protectionism in the developed world. While a backlash is possible, Asia policymakers have always been pragmatic. They know that free trade and free market reforms have increased living standards enormously over the past few decades and cannot afford to slide back. Indeed, BCA Research points out that nearly all of the major reforms in recent Chinese history were announced during economic downturns. Chinese authorities have long said 8% GDP growth is needed to maintain adequate employment growth to ensure "social harmony" and growth may already be falling below this threshold. Should the global recession be deep and prolonged, rising unemployment in China, and indeed across Asia, could result in heightened political instability (which is already on display in Thailand for other reasons).

The above risks notwithstanding, the hope is that markets will rise in the face of weak growth and failing earnings next year, once investors feel that the global economy is stabilizing. The consensus view is that the effects of both the U.S. and Chinese stimulus plans will begin to impact growth sometime in the second half of 2009. However, since we expect the economic picture to darken before it gets brighter, the recent rally in Asian (and global) equities may soon whither. Analysis by Goldman Sachs shows that on average, Asian equities do not really lead the economy, but instead coincide with it. Equities bottom on

average zero to one quarter ahead of the trough in domestic GDP growth, compared to the rule of thumb in most developed markets that equities lead by six to 12 months (two to four quarters).

Meanwhile, we want to caution investors' return expectations. The potential for a very large rally exists, but it is also quite possible that markets could be highly volatile, and still post flat to lackluster returns. Returns were negative for the region in 1997 and again in 1998, despite a big rally at the end of that year. While 1999 was a blow-out year for Asia (and global equities in general), returns were again negative for the three years from 2000 to 2002, only to surge again in 2003 (Table E). As mentioned above, valuations have approached levels that in the past have signaled large rallies; however, we may have to go through more pain until the markets are truly primed for a strong rebound. We advise investors to build positions, doing so carefully—buying on weakness if possible. But at current valuations, having some exposure is necessary, as the timing of any sizable rally is—as always—anyone's guess.

The question of whether markets and valuations break to new lows in the interim will largely be a function of how badly economic conditions deteriorate relative to expectations. We judge that Asian markets have discounted a weak U.S. economy for the foreseeable future; what is not fully in the price is a collapsing Chinese economy. And in this regard, all eyes will be on China.

### Australia

We have largely separated Australia from our discussion of "Asia" as the underlying macro story is quite different, as are the market fundamentals. Given that it is the largest market in the region outside of Japan, developments in Australia can have an outsized impact on Asian benchmarks and index strategies if included as part of an Asia mandate. Indeed, Australia accounts for over 25% of the MSCI AC Asia Pacific ex Japan Index and a whopping 65% of the Pacific ex Japan "developed Asia" construct. Thus investors in such products need to be aware that they may not be buying the "Asia story" they think.

In our view the Australian economy is likely to suffer the same painful consumer and housing deleveraging cycle that is taking place in the other Anglo-Saxon economies of the United States and United Kingdom. While Australia's growth has been driven in part by supplying China's voracious appetite for raw materials, this mining boom begat a housing and consumption bubble (aided by an overvalued currency), which is now likely to unwind as the Australian economy slips into recession. As Morgan Stanley economist Gerard Minack sums up, "Australia's structural problems are straight-forward: the household sector is hugely indebted, house prices are significantly overvalued, the private sector is dis-saving to an unprecedented extent, the banking system is highly levered and heavily dependent on wholesale funding, and inflation pressures are unacceptable."

<sup>&</sup>lt;sup>7</sup> We have also excluded New Zealand from our analysis, as Kiwi equities account for less than 0.5% of the AC Asia Pacific ex Japan Index and only 1% of the Pacific ex Japan Index.

Thus, while closely tied to the China story, Australia may have already reaped the majority of this harvest, at least in the near term, as it has spent beyond its means over the past few years. According to Morgan Stanley, despite the export boom to China, in early 2008 Australia registered its largest current account deficit since 1952 at -6.4% of GDP, which rivaled the U.S. current account deficit at its peak. Demand for commodities may continue, but it cannot offset the hit from weak domestic demand; mining employs only 1.3% of the workforce, while consumer- and financial-related sectors have accounted for more employment growth over this cycle than the China demand–related sectors of mining, manufacturing, and construction.

Yet the Australian stock market has not yet fully discounted a hard landing; our normalized valuation measures point to the Aussie market trading at a P/E ratio of 15, or roughly fair value (Tables L and M). While such valuations are by no means excessive (P/E ratios were closer to 30 in late 2007), they are certainly not cheap, especially compared to the rest of Asia or even developed European equity markets.

The risk remains that Australian equities suffer an extreme reversion to the mean, as real EPS and ROE in Australia exploded to the upside in 2003 more so than other markets as the commodity "super cycle" and China's growth took off (Table J). With commodities and financials accounting for nearly 70% of the MSCI Australia Index, and metals and mining accounting for an estimated 50% of earnings, valuations may have much more room to undershoot, especially amid a China scare or a nasty domestic recession. At a minimum, Australian equities may underperform the rest of Asia when the cycle turns.

## Conclusion

The coming year will likely be a pivotal one for Asia, as 2009 will reveal whether the region's growth over the past decade reflected real structural changes in intra-Asian fundamentals rather than simply piggy-backing on the consumer-debt-fueled growth of the United States and elsewhere.

While we view the underlying economic fundamentals of the region as much improved and see the risk of a 1997–98 collapse in the region as unlikely, this does not preclude economic growth, and corporate profits, from slowing sharply. It could very well be that Asian economies are prepared to fight the previous war (a financial shock and currency crisis) instead of the new war (a demand shock). China remains the economy to watch.

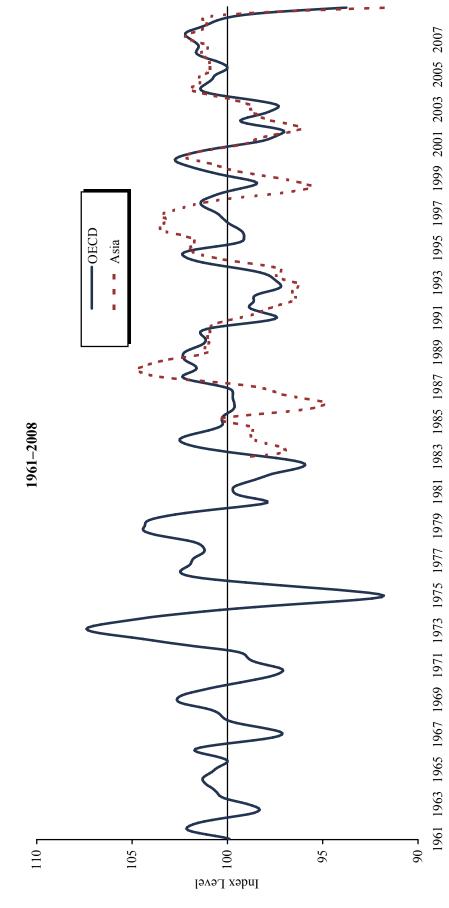
Yet we must stress that although underlying macroeconomic conditions are important, they are not paramount; the most important issue for investors in financial markets is not GDP growth, but rather the price paid for the assets. The current sell-off has purged the valuation excesses resulting from the decoupling-mania-driven run-up over 2007. Importantly, Asian equities are cheaper than those of the U.S. and even some European markets. (See Table N.)

Therefore, the current environment may represent a good long-term buying opportunity, especially if at some point next year markets turn down sharply. While there is certainly the potential for more losses in



2009, we would argue that investors should rebalance back to desired policy targets, if not slightly above for those investors with the necessary risk tolerance and patience. At this stage, Asia remains a high-beta, cyclical play. When it becomes clear that the global economy has found traction and shows signs of recovery, Asian equities will likely outperform, but whether that occurs in 2009 remains to be seen.

COMPOSITE INDEX OF LEADING ECONOMIC INDICATORS Table A



slow/contract. OECD composite covers 29 economies, including the Eurozone, Japan, the United Kingdom, the United States, and other members of the OECD. The Notes: Organisation for Economic Co-operation and Development (OECD) composite of leading indicators covers a wide range of economic indicators designed to signal turning points in the economic cycle. Rising indicator above 100 signals expansion, while a falling indicator below 100 signals economies are expected to Asia leading indicators index covers China, India, Indonesia, Japan, and Korea. Data for 2008 are as of November 30.

Sources: OECD and Thomson Datastream.

Table B

## SELECT MACRO INDICATORS

Average Govt Deficit/Surplus as % of GDP	2006-07	3.5	2.1	2.0	0.2	-0.1	-3.1	-1.1	-3.3	9.0-	9.0-
	1994–96	1.5	2.4	7.7	-4.1	6.0-	-5.2	1.3	1.3	6.0	2.3
Average Foreign Currency Reserves as % of GDP as % of External Debt	2007	201.5	114.0	636.7	279.4	438.3	183.7	40.8	188.5	53.5	147.3
	1994–96	269.6	31.7	791.7	356.5	67.1	23.6	13.0	74.1	21.4	39.1
	2007	73.7	27.0	101.0	70.5	44.2	23.6	12.7	54.1	21.0	34.6
	1994–96	38.3	6.2	82.4	33.4	10.3	5.4	6.5	29.2	10.1	20.8
Foreign Currency Reserves US\$ (billions)	2007	152.6	262.2	163.0	270.3	1,530.3	267.0	55.0	101.0	30.2	85.2
	<u>1996</u>	63.8	34.0	77.0	88.0	107.0	20.2	18.3	27.0	10.1	37.7
Average Current Account Balance as % of GDP	2006–07	12.8	9.0	23.0	7.9	6.6	-1.0	2.8	15.9	4.5	3.7
	1994–96	1	-2.3	16.1	2.8	0.7	-1.2	-2.5	-6.7	-4.6	-7.2
Country		Hong Kong	Korea	Singapore	Taiwan	China	India	Indonesia	Malaysia	Philippines	Thailand

Sources: Asian Development Bank; International Monetary Fund, World Economic Outlook Database; and Thomson Datastream.

Note: Percentages may not total due to rounding.

Table C

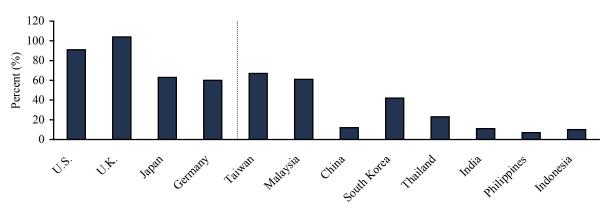
CREDIT AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT

## 2006

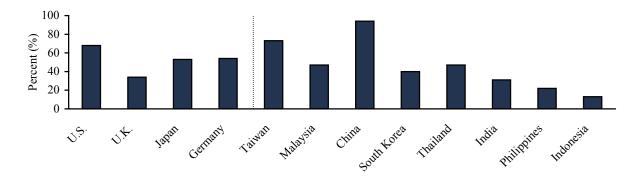
Total Debt as a % of GDP

## Developed Markets Asian Markets Asian Markets Asian Markets Asian Markets Asian Markets Asian Markets Inding is a chiral trained traine

## Household Debt as a % of GDP



## Nonfinancial Corporate Debt as a % of GDP



Sources: International Monetary Fund and Morgan Stanley Research.

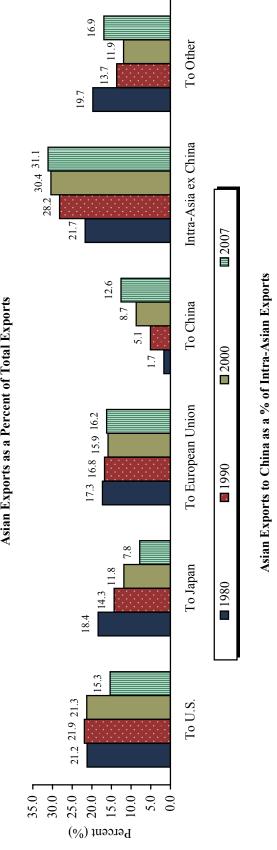
Notes: Total debt does not include government or financial sector debt. All data are as of 2006.

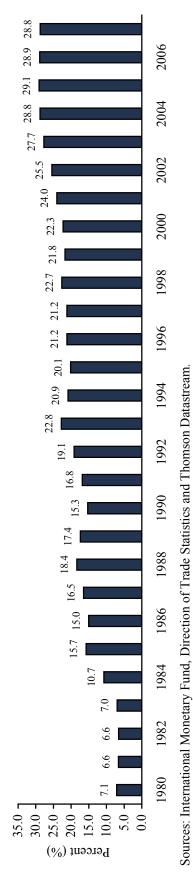
Table D

## ASIAN EXPORTS

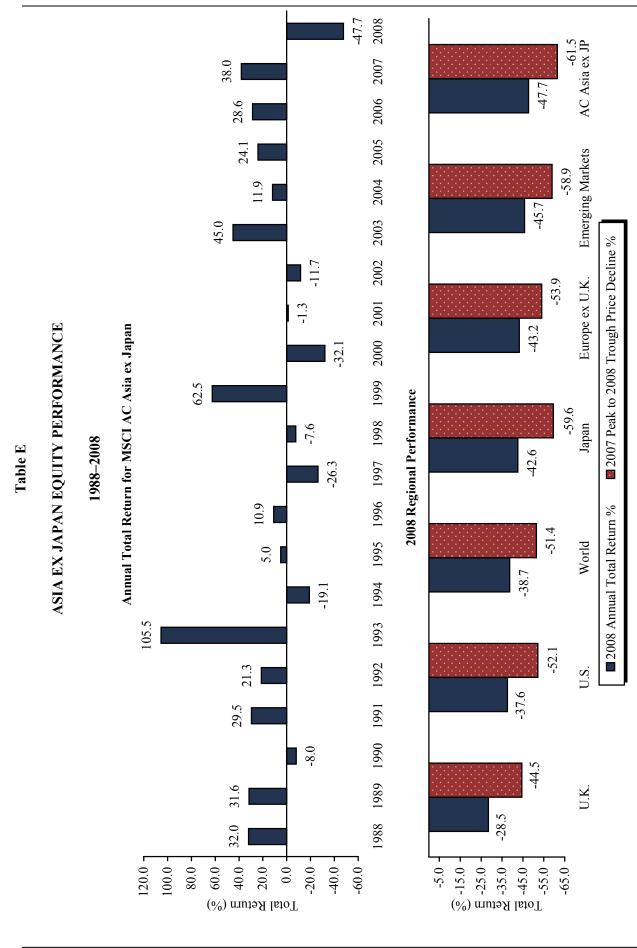
1980-2007







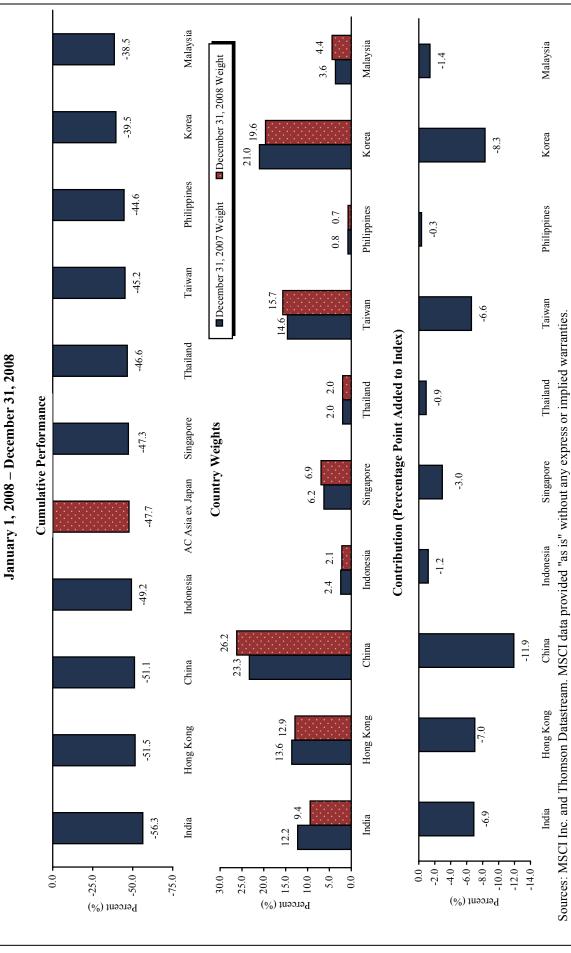
Notes: Percentages may not total due to rounding. Intra-Asian exports exclude Japan.



Notes: All returns are based on local currency performance. Regional performance graph sorted by 2008 annual total return.

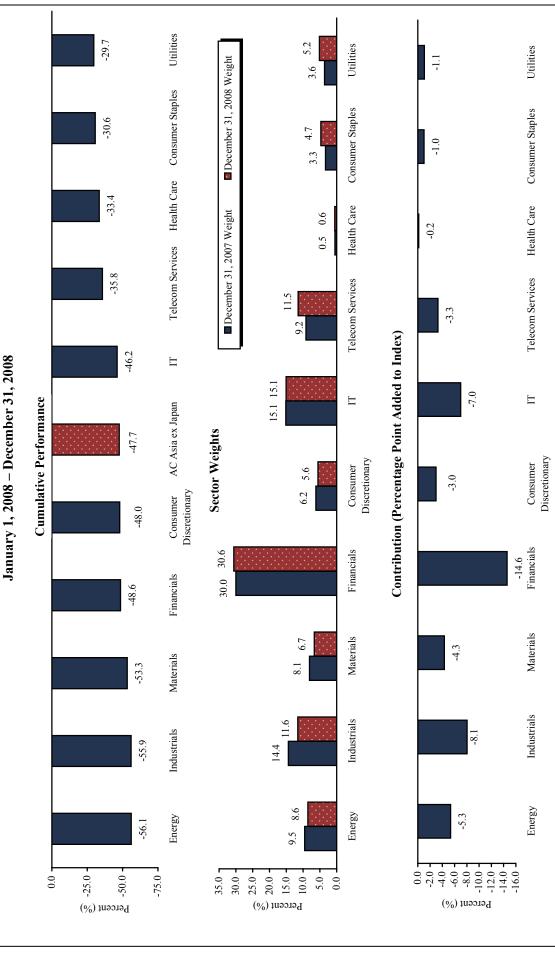
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.





Notes: Contribution represents the sector's percentage point addition to the AC Asia ex Japan Index return of -47.7%. Sector contributions are calculated by multiplying the Performance is measured by gross total returns in local currency. MSCI removed Pakistan from the index at the end of 2008, therefore it is not included in our analysis. sector's December 31, 2007, weight by its cumulative local currency return from January 1, 2008, to December 31, 2008. Percentages may not total due to rounding.

SECTOR PERFORMANCE ATTRIBUTION FOR MSCI ALL COUNTRY ASIA EX JAPAN INDEX Table G



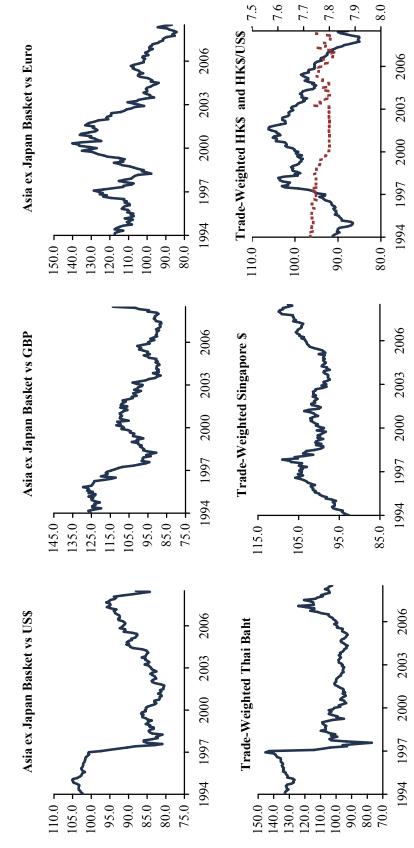
Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Contribution represents the sector's percentage point addition to the AC Asia ex Japan Index return of -47.7%. Sector contributions are calculated by multiplying the sector's December 31, 2007, weight by its cumulative local currency return from January 1, 2008, to December 31, 2008. Percentages may not total due to rounding. Performance is measured by gross total returns in local currency.

Table H

# ASIAN EXCHANGE RATE MOVEMENTS



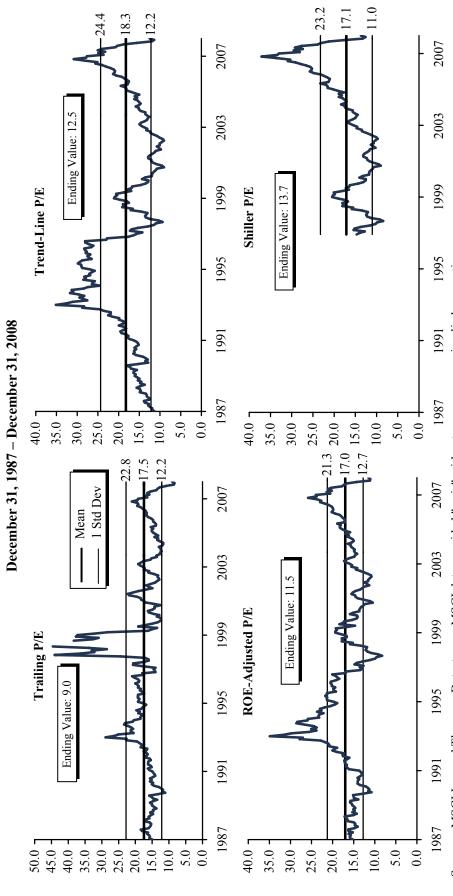


Sources: Federal Reserve, J.P. Morgan Securities, Inc., MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

country's market capitalization in the MSCI Index. Currency baskets are rebased to 100 on December 1987 (not graphed). The Hong Kong dollar is pegged to Notes: Graphs are based on monthly data. Asia ex Japan currency basket is the cumulative differential between returns for the MSCI AC Asia ex Japan Index in local currency terms and the corresponding returns in US\$, GBP, and euro terms. Thus, it represents the movement of Asian currencies weighted by each the US\$ and floats in a band between \$7.8 and \$7.7.

Table I

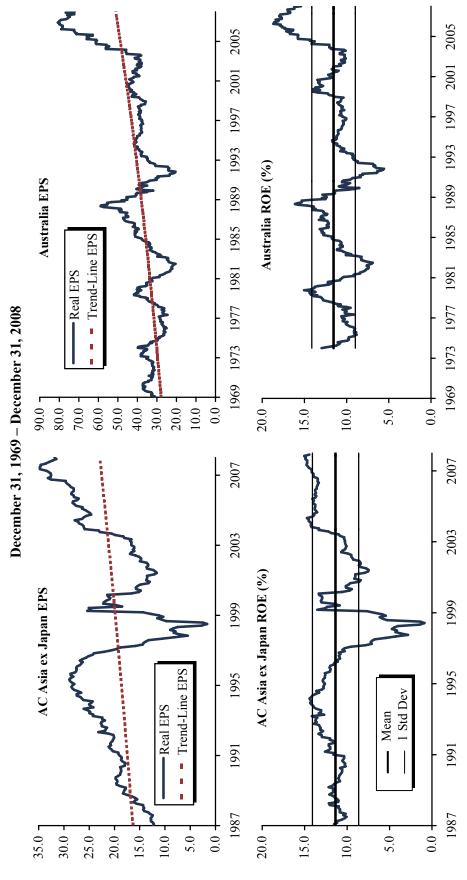
MSCI ALL COUNTRY ASIA EX JAPAN PRICE-EARNINGS VALUATIONS



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties

Notes: Outliers have been removed from the trailing price-earnings (P/E) graph. The return on equity (ROE)-adjusted P/E ratio is the current trailing P/E ratio multiplied by the ratio of the current level of ROE to its historical norm. Shiller P/E is calculated by dividing the current price level by the ten-year average of Indonesia, Malaysia, the Philippines, and Thailand are added; in 1994, India; and in 1995, China, Korea, and Taiwan. Starting in November 1995 the official real (inflation-adjusted) earnings per share. Trend-line P/E ratios compare current stock prices to the level of earnings predicted by long-term real earnings growth based on a simple linear regression. Valuation history for the All Country Asia ex Japan Index is re-created for the pre-November 1995 period by aking the market cap-weighted average of country level valuation data. From 1974 to 1991, the index includes only Hong Kong and Singapore. In 1992, MSCI value is used.

Table J REAL EARNINGS AND RETURN-ON-EQUITY



Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

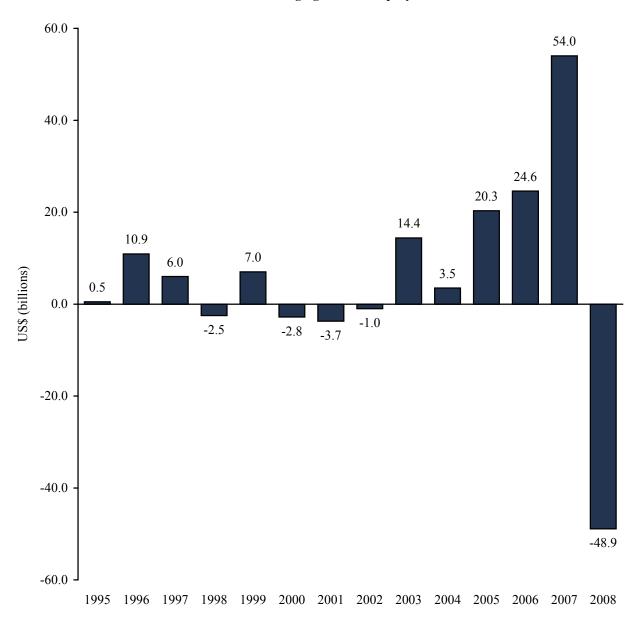
regression. Data for AC Asia ex Japan start on December 31, 1987. Valuation history for the AC Asia ex Japan Index is re-created for the pre-November 1995 Notes: Real earnings per share (EPS) for the MSCI All Country (AC) Asia ex Japan Index are based on EPS in US\$ terms deflated by the U.S. CPI. Real EPS period by taking the market cap-weighted average of country level valuation data. From 1974 to 1991, the index includes only Hong Kong and Singapore. In 1992, Indonesia, Malaysia, the Philippines, and Thailand are added; in 1994, India; and in 1995, China, Korea, and Taiwan. Starting in November 1995 the for the MSCI Australia Index are based on EPS in Australian dollar terms deflated by the Australian CPI. Trend-line earnings based upon simple linear official MSCI value is used.

Table K

NET INFLOWS INTO EMERGING MARKETS FUNDS

1995–2008

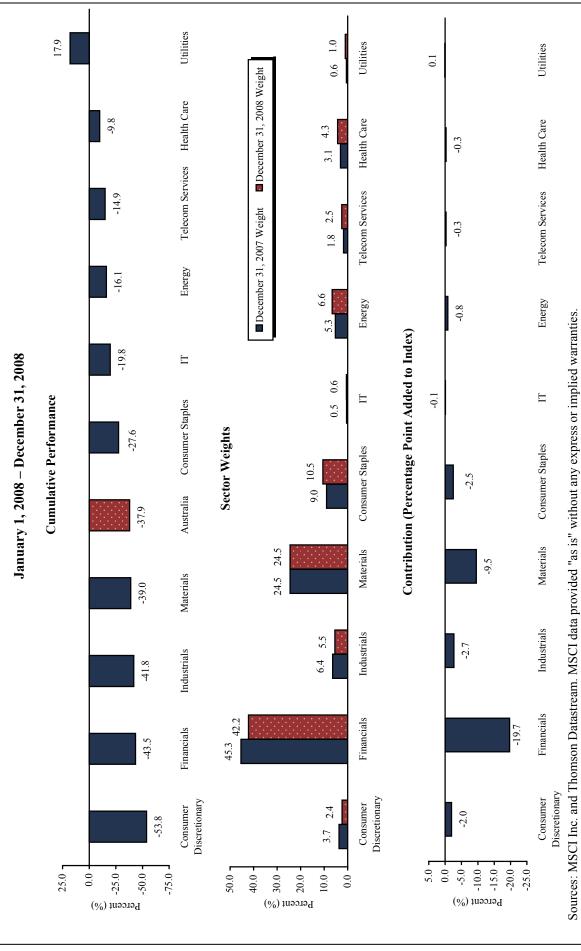
## All Dedicated Emerging Markets Equity Funds



Sources: EPFR Global and Morgan Stanley Research.

Notes: Includes both U.S. and non-U.S. domiciled funds. Data for 2008 are through December 31.

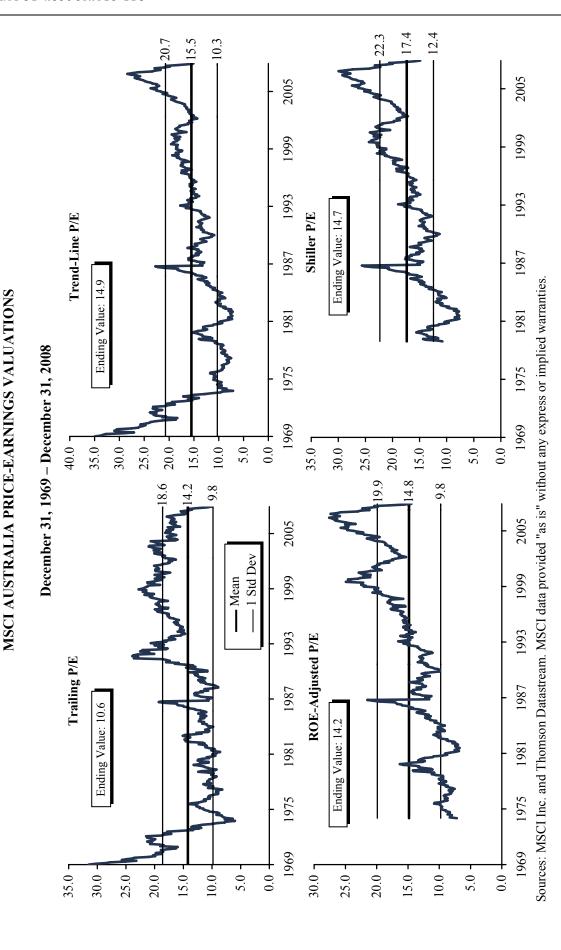
PERFORMANCE ATTRIBUTION FOR MSCI AUSTRALIA INDEX Table L



Notes: Contribution represents the sector's percentage point addition to the MSCI Australia Index return of -37.9%. Sector contributions are calculated by multiplying the

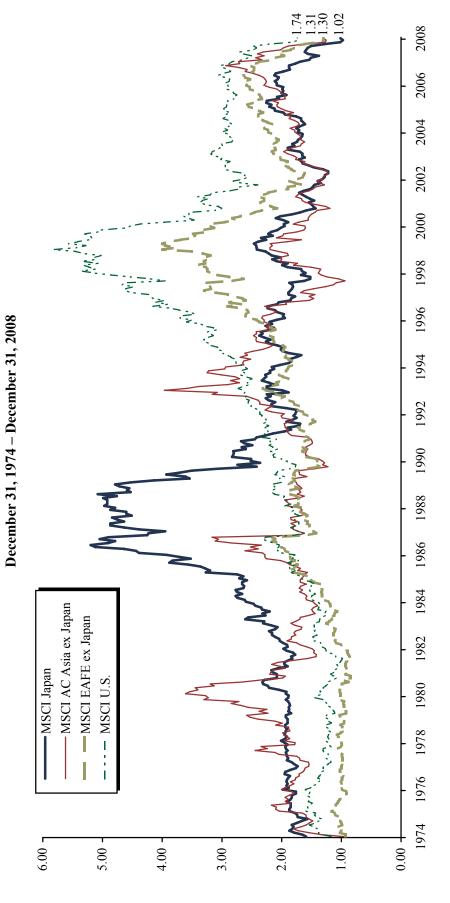
sector's December 31, 2007, weight by its cumulative local currency return from January 1, 2008, to December 31, 2008. Percentages may not total due to rounding. Performance is measured by net total returns in local currency.

Table M



Notes: The return on equity (ROE)-adjusted price-earnings (P/E) ratio is the current trailing P/E ratio multiplied by the ratio of the current level of ROE to its historical norm. Shiller P/E is calculated by dividing the current price level by the ten-year average of real (inflation-adjusted) earnings per share. Trend-line P/E ratios compare current stock prices to the level of earnings predicted by long-term real earnings growth based on a simple linear regression.





Sources: MSCI Inc. and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties

average of country level price-to-book (P/B) ratios. From 1974 to 1991, the index includes only Hong Kong and Singapore. Starting in 1992, Indonesia, Malaysia, the Philippines, and Thailand are added; in 1994, India; and in 1995, China, Korea, and Taiwan. Starting in November 1995 the official MSCI Index P/B value is Notes: Valuation history for the MSCI All Country Asia ex Japan Index is re-created for the pre-November 1995 period by taking the market cap-weighted