

## The "Asian Miracle": How Close to Maturity?

*Viewed from a long-term perspective, the financial crisis in South-East Asia points to the hazard of "over-investment." Over the past decade, excessive optimism has pushed Asian capital formation beyond what is "appropriate" given the region's state of development. If this positive sentiment were to reverse, Asia could go into a period of painful consolidation.*

### The Asian export engine

The present Asian crisis has positive medium-term implications for exports and growth. Most of the region's currencies are now much cheaper in real effective terms, making its exports even more competitive than before. Moreover, as illustrated in Chart 1, Asian exports have been tightly correlated with its investment. Thus, once the region gets over its present overhang, and as long as its export machine keeps humming, overall growth rates should recover.

This trajectory is far from certain, however. With its exports accounting for 30% of GDP, Asia is already the world's most export-dependent region. Raising this ratio further is possible, but increasingly difficult. And even if the ratio continues to rise, that alone does not *guarantee* a parallel rise in investment. Indeed, as Chart 1 shows, the correlation between exports and investment is far from a universal phenomenon. In Latin America, the rising share of exports in GDP has been associated with a *falling* investment share in GDP, whereas in South-Asia, the relation was positive until the late 1980s, but has since broken down.

### Investment and urbanization

The special Asian circumstances are illustrated in Chart 2, which relates investment with the process of urbanization — a general proxy for the stage of economic development. The chart contains data for various groupings — the developing regions of South-Asia, Middle East & North Africa, Latin America & the Caribbean, and East Asia & Pacific; the overall categories of developing as opposed to developed economies; and Japan.

In general, the data point to a highly stylized relationship between urbanization and investment. They also suggest there could be significant *quantitative* variations between the different regions.

The process of urbanization is, more or less, a continuous progression. Over time, each region is therefore moving from left to right on the chart. The share of investment in GDP, on the other hand, progresses *non-linearly*, in an arc-like fashion. During the initial stages of urbanization, infrastructure, construction and mechanization cause investment to rise much faster than the economy. In this phase, the economy moves up the arc. At some point, however, with much of the needed infrastructure already in place and with the service sector rising relative to manufacturing, investment growth starts lagging that of the economy. This is where we begin moving down the arc.

Of course, important as it may be, the "urbanization" variable is not all-encompassing. With other considerations also playing a role in, the *position* of the arc on the chart — at least in principle — need not be fixed.

In practice, however, most regions appear to follow the same stylized pattern, illustrated by the lower arc. As expected, the developed economies are situated near the right-hand base of the arc, with a high rate of urbanization associated with a

low and falling rate of investment. The developing countries, on the other hand, are still climbing up the arc, with urbanization and investment both rising.

Among the individual developing regions, the least "advanced" is South-Asia. It's urbanization has merely passed the 25% mark, and as this rate continues to rise, investment is likely to become a major engine of growth.

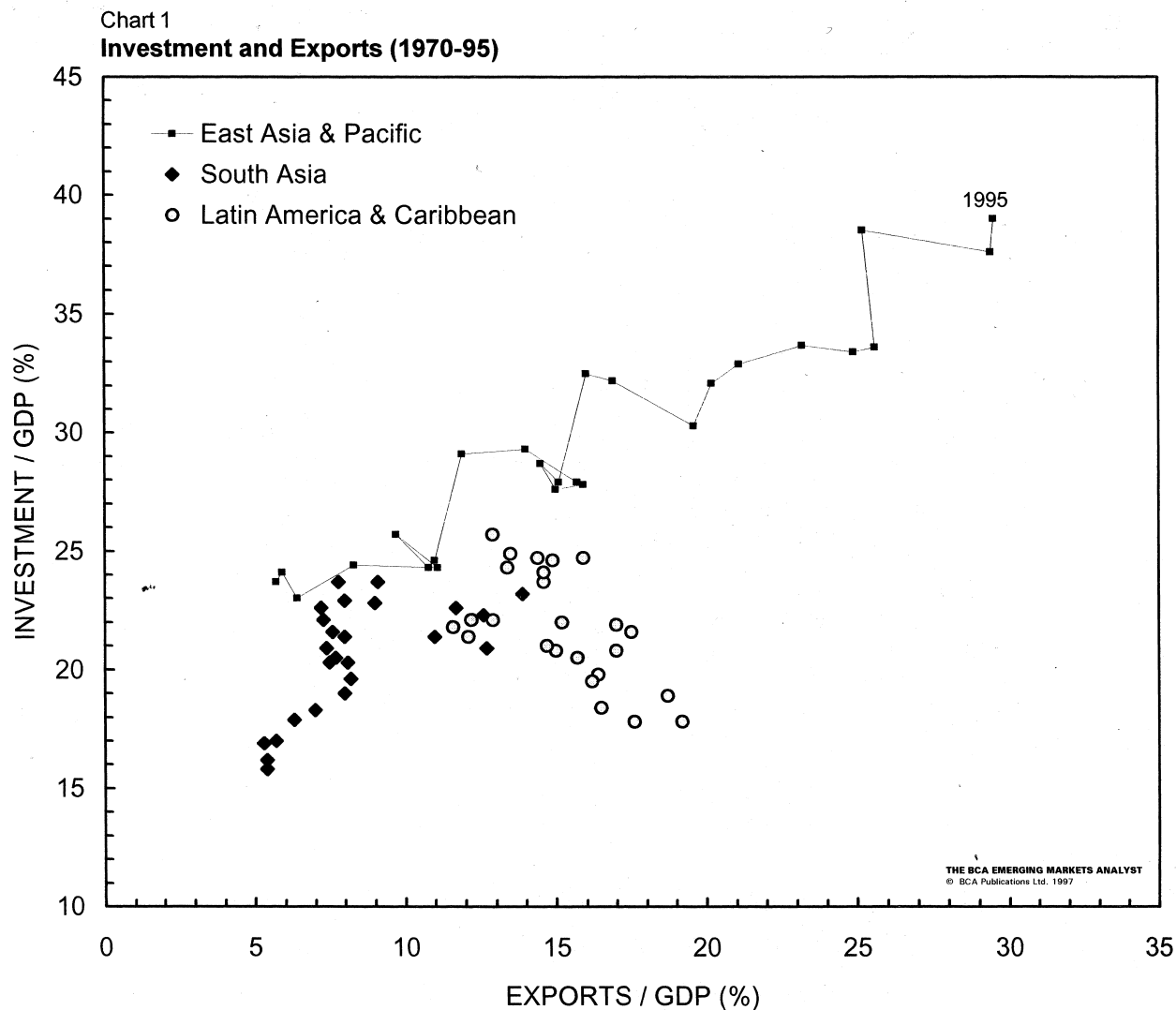
The Middle-East & North Africa region is at a historical cross-road, saddling the high point of the arc. Because of the region's dependency on oil, the relationship between urbanization and investment here has been far more unstable than elsewhere. Yet with over 55% of the population already living in urban areas, investment in this region is likely to remain under downward pressures regardless of the price of oil.

Of the three developing regions on this arc, Latin America and the Caribbean is the most "mature."

---

*Asian exports are  
set to grow, but not  
enough to offset its  
excess-capacity  
hangover*

---



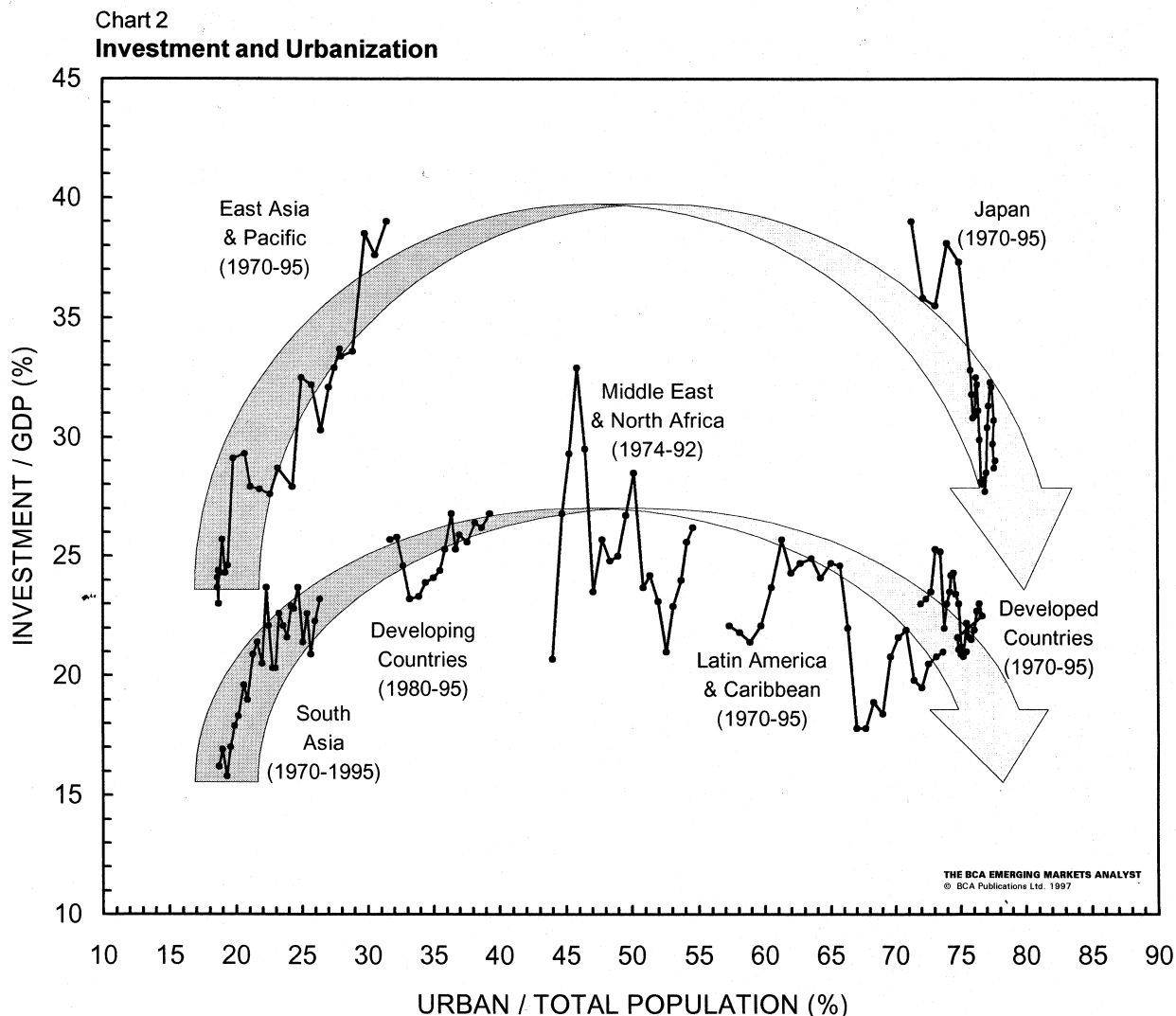
SOURCE: World Bank.

The level of urbanization here is roughly on par with the developed countries, and its investment-to-GDP ratio is in a clear downtrend. Current hopes for a Latin "tiger" could therefore be frustrated, even if the region's much hailed liberalization process continues.

Chart 2 also suggests that there could be large and prolonged deviations from the stylized pattern. This occurred, for example, in the Middle-East & North Africa, where the ups and downs in the price of oil have generated a pronounced boom-bust investment cycle. A similar divergence is evident in Latin America & the Caribbean, where investment has collapsed far below its "warranted" level in the wake of the 1980s debt crisis. In both cases, however, the arc-like pattern has remained dominant in the *long-term*.

Similar conclusions emerge from examining the US experience, plotted in Chart 3. This case is particularly interesting given the long data series, going back to the late 1860s. The evidence here suggests that the US arc peaked during the last decade of the 19<sup>th</sup> century. The process of urbanization continued uninterrupted, but with the closing of the western frontier and the end of the railroad boom, investment as a share of GDP reverted to a long-term downtrend. The period of the Great Depression and the Second World War brought a major deviation from the stylized pattern, but here too this proved an aberration rather than a beginning of new trajectory.

Against this general backdrop, Chart 2 makes Asia look like a class of its own. Both developing Asia (East Asia & Pacific) and Japan seem to obey the



SOURCE: World Bank.

general "arc rule," with urbanization associated with rising investment in the former, and falling investment in the latter. But relative to the other regions, the level of investment here is far higher.

Why has Asian investment been so high? Part of the reason has to do with circumstances special to the region. Developing Asia is unique in its mercantilist model of export-led growth which, as Chart 4 shows, explains much of its investment boom over the past couple of decades. The uniqueness of Japan owes much to the second world war. By devastating its cities, infrastructure and industry, the war effectively "de-urbanized" Japan. Most of the population already lived in cities, but these had to be rebuilt, hence the "anomaly" of high investment in a relatively mature economy.

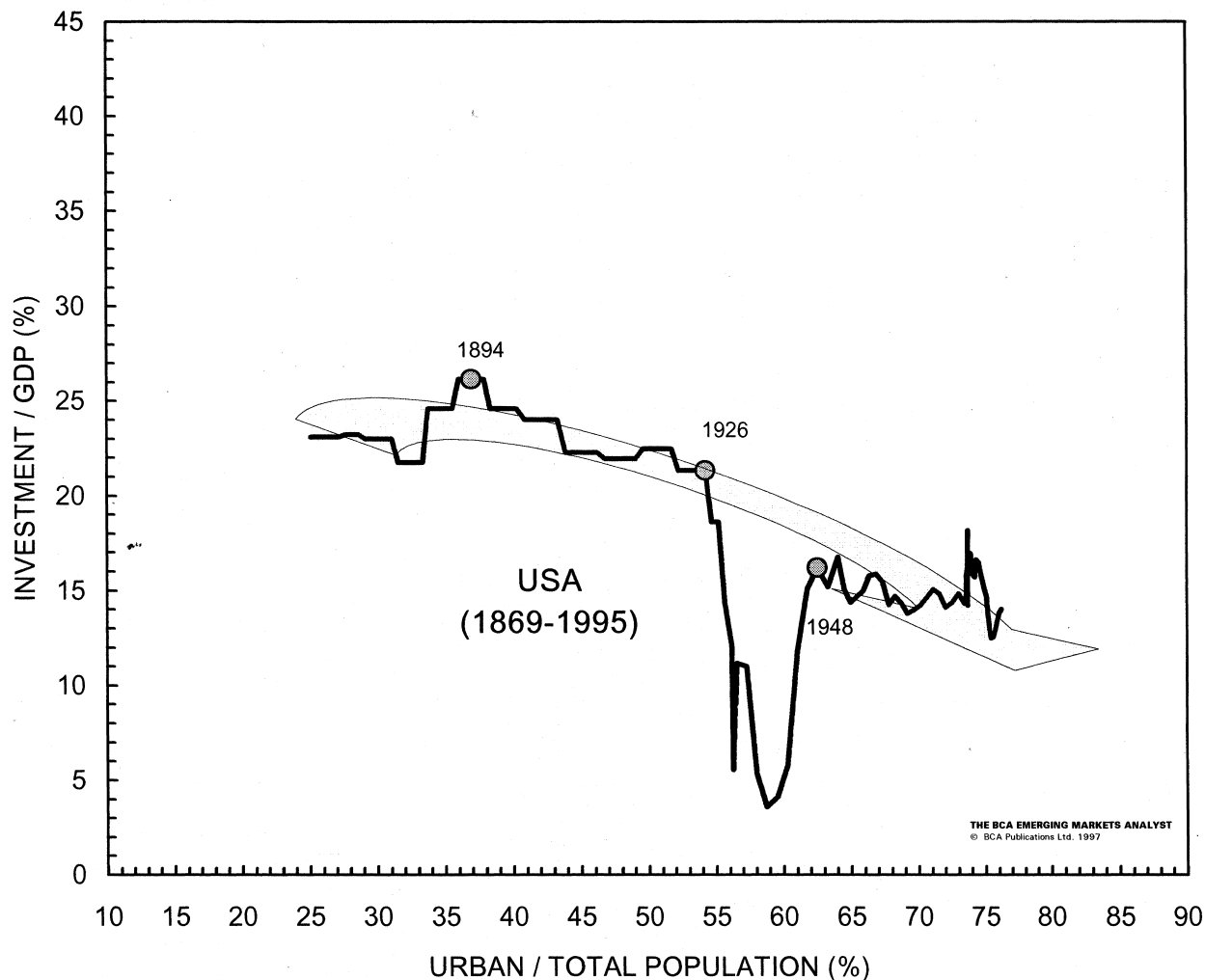
The question, of course, is how long can such special circumstances last? In the case of Japan, the big post-war boom is clearly over. And as Japan painfully illustrates, the overhang created by massive investment could be as big and prolonged as the economic boom it earlier helped fuel.

In contrast to Japan, Asia's export boom is not over. Yet, in itself, the continuation of this boom may not be enough to justify current investment levels.

**Has Asia "over-invested"?**

The extent of "over"-investment is of course hard to determine. The ultimate yardstick here is the rate of return, but then real capital formation is made with an eye to the future, which means that the true answer will be known only years "after the fact."

Chart 3  
Investment and Urbanization



SOURCE: US Department of Commerce.

In the meantime, investors could use alternative rough and ready indicators. One of these is the association between the share of investment in GDP and the rate of growth of GDP. Higher investment is driven by higher profit expectations. These expectations could materialize through a larger GDP, a larger profit share of GDP, or some combination of the two.

With this in mind, the outlook for East-Asia & Pacific is not particularly cheerful. Chart 4 combines data for Latin America & the Caribbean, South Asia and East Asia & Pacific, contrasting investment as a share of GDP with the rate of growth of GDP. In general, the data indicate a positive correlation between the two. They also suggest, however, that from the late 1970s onward, and particularly from the mid-1980s, Asian investment has "broken away": its share of GDP has risen dramatically, *without a*

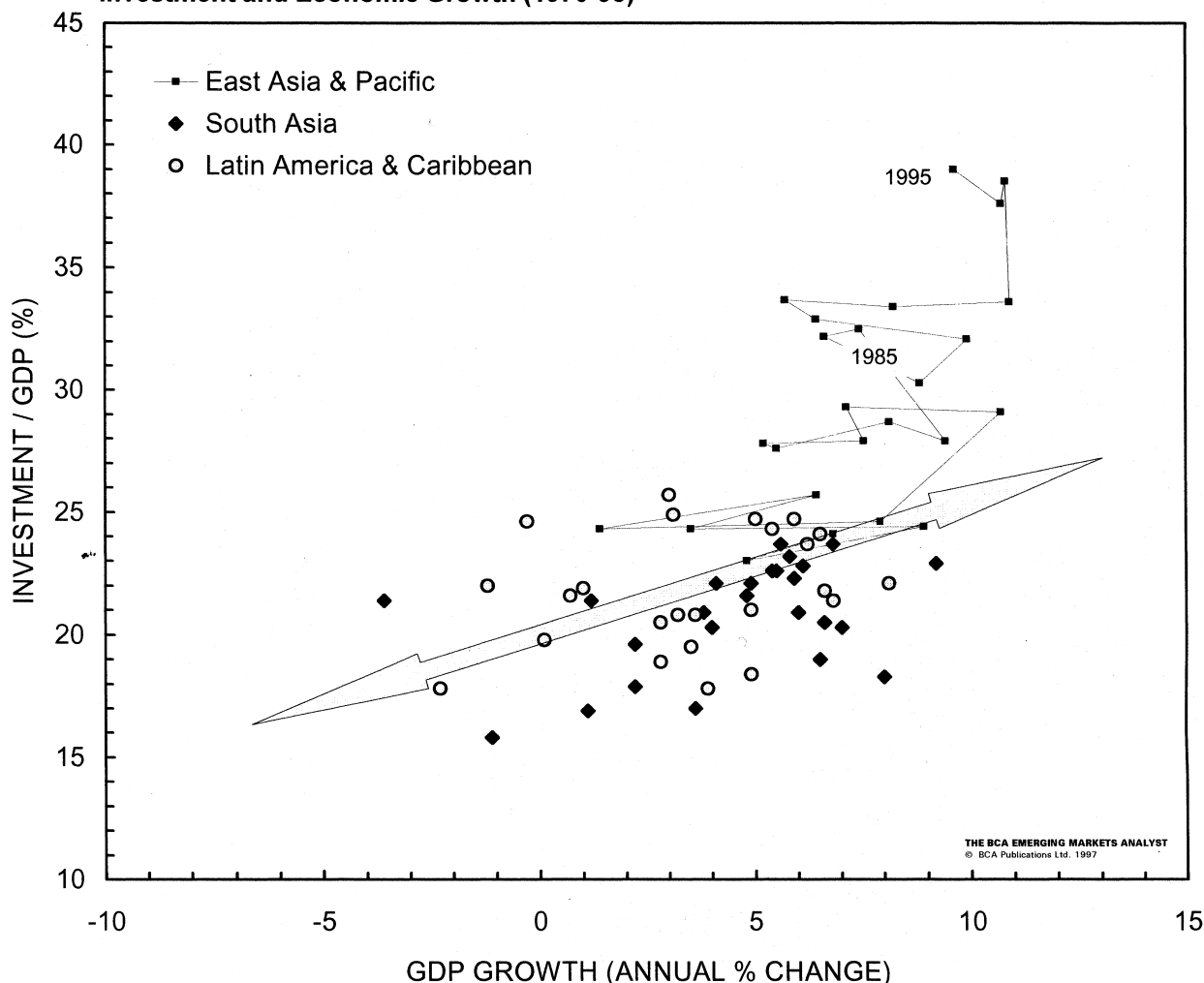
*parallel acceleration of economic growth.*

Of course, this is hardly surprising given that the region was already growing at roughly 7.5% when the process began. In addition, investment has been largely export-driven and, as we showed earlier, exports have risen much faster than GDP.

Yet, regardless of the underlying cause of investment, profits have to accelerate; otherwise, the rate of *realized* profit is bound to fall.<sup>1</sup> Under the present circumstances, such an acceleration in profits will be difficult to achieve. In the short-term, the high interest rate environment brought about by

<sup>1</sup> Our emphasis here is on aggregate profits in the economy. Although profits on export sales could be maintained or even rise, the economy's *average* profitability depends on the overall GDP.

Chart 4  
Investment and Economic Growth (1970-95)



SOURCE: World Bank.

the currency crisis suggests downward pressure on growth. Profits could of course grow via redistribution, though in the context of slower growth that is likely to be both politically difficult as well as insufficient.

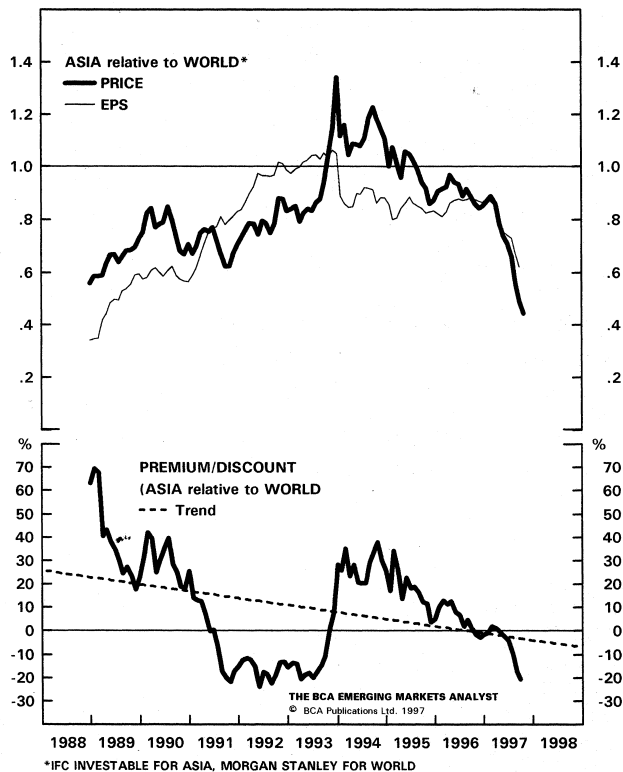
Thus, short of a massive surge in exports in the next year or so, there is a real risk that business sentiment will take a serious beating.

The prospect for such a shift in sentiment is already evident in the region's equity markets, as illustrated in Chart 5. The top panel of the chart plot Asia's performance relative to the Morgan Stanley global index — with respect to both share prices and earnings per share. The bottom panel indicates the extent to which Asian earnings have been traded at a "premium" or "discount" to world earnings, based on

the ratio of their respective P/E ratios.<sup>2</sup> Asia's earnings have underperformed the world benchmark since late 1993, but until recently were still trading at a *premium*. In other words, investors have been expecting *future* earnings growth in Asia to far exceed the world average. This buoyancy has finally been reversed, with premiums giving way to deep discounts.

<sup>2</sup> For more on this, see our *BCA Emerging Markets Strategist*, "Back to Basics: Earnings Growth and the Relative Performance of Emerging Markets," Special Report, June 26, 1997. For a copy, call our circulation department. Telephone (514) 499 9550; e-mail: circ@bcapub.com.

Chart 5  
Back to Earth



**Investment conclusions**

- Export-driven growth remains Asia's hallmark and exports should benefit from more competitive currencies in the medium term.
- In the longer-term, the Asian economies could suffer from the consequence of "over-investment." Unless economic growth *accelerates*, profits are likely to come under downward pressures. Since such acceleration is unlikely, Asia may be facing an extended period of lower investment and consolidation.

*Jonathan Nitzan*

Jonathan Nitzan  
Senior Editor