

The BCA

Emerging Markets Strategist

Special
Report

Back to Basics: Earnings Growth and the Relative Performance of Emerging Markets

June 26, 1997

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BCA Publications Ltd.
1002 Sherbrooke Street West
Suite 1600, Montreal
Quebec, Canada
H3A 3L6

Tel: (514) 499 9550
Fax: (514) 843 1763
email: editor@bcapub.com

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The progressive integration of world financial markets implies that emerging equity markets are becoming less of an 'exotic' species. Until recently, their performance has been disproportionately affected by perceptions of risk. But as these markets mature, attention will increasingly turn to their relative earnings vis-à-vis global benchmarks.

This special report assesses the medium- and long-term prospects for the emerging-markets asset class, as well as for its underlying regions. A future report will examine the outlook for individual markets.

Earnings growth and risk premia

Over the long term, the performance of emerging equity markets is subject to two powerful forces. The first of these forces is superior earnings growth. Emerging economies tend to grow faster than the developed industrial countries; they also undergo a process of internal restructuring, which gradually incorporates the agricultural and informal sectors into the formal economy, thus contributing further to the growth of capitalized earnings.

The second important force is the change in investors' attitudes. The trend toward global capital markets is putting developing countries under pressure to liberalize their economies. It also means that investors are increasingly treating their equities as a "substitute" for developed countries equities.

The "stage of emergence" of a developing country is reflected in the risk premium investors assign to its equity market. At the early stages, with uncertainty about future developments being high, this premium tends to be large. But as the market gradually "emerges," it is being "re-rated" and the premium inevitably declines. The process need not be linear, of course. In some cases, typically when a market is first opened to foreign investors, excessive optimism pushes equity prices into an unsustainable premium, which is inevitably followed by painful consolidation. Alternatively, emerging markets could go into long periods of "submergence," which imply not only inferior earnings growth, but also rising pessimism and larger discounts.

Over the longer-term, however, the twin impact of a generally steeper earnings trend and a narrowing risk premium tends to dominate. The consequence is well illustrated in Chart 1. The top panel expresses emerging markets prices and earnings

per share relative to the world average. In both cases, a rise means that emerging markets outperform, whereas a decline means they underperform.¹

Since the late 1980s, the overall trend in both relative indices has been up: emerging markets earnings tended to rise faster than world earnings and so did their equity prices. (The progression has been anything but smooth, of course, but more on this later.)

A comparison of the two indices provides useful indication for the risk premium investors attach to emerging markets earnings. Unless noted otherwise, the emerging markets indices used in our charts are based on the IFC Investable universe (i.e., on equities open to foreign investors). They therefore represent an asset class which, in principle, is as accessible to foreign investors as the developed markets. Under these circumstances, the

ratio between the relative price index and the relative earnings index is a reasonably good measure of relative valuation (this ratio is equivalent to the ratio between the corresponding P/E multiples). Moreover, being open to foreign investors, investable emerging markets

indices are subject to the same global liquidity conditions affecting the developed markets.²

Because emerging markets are more risky, investors have generally been willing to "buy" their earnings only at a discount. The magnitude of this discount, expressed in percentage terms, is charted in the bottom panel. For instance, in October 1991, the relative price index was 1.08, against a relative earnings index of 1.55. With the ratio of the two indices being 0.7, the implication is that investors were willing to pay for one dollar of emerging markets earnings only 70% of what they were paying for a dollar of world earnings – a discount of 30%.

*As markets "emerge,"
earnings become
increasingly important
for stock performance.*

¹ Although emerging markets are technically part of the world index, because of their relatively small weight, their impact on its performance is limited. For practical purposes, therefore, the world index could be used as a proxy for the developed markets.

² There is of course a certain asymmetry here: global liquidity conditions affect emerging markets, whereas local liquidity conditions in emerging markets have negligible global effects. However, the former is far larger than the latter, and as emerging markets are becoming progressively open to foreigners, this asymmetry becomes decreasingly important for relative stock performance.

Chart 1
The Relative Performance of Emerging Markets

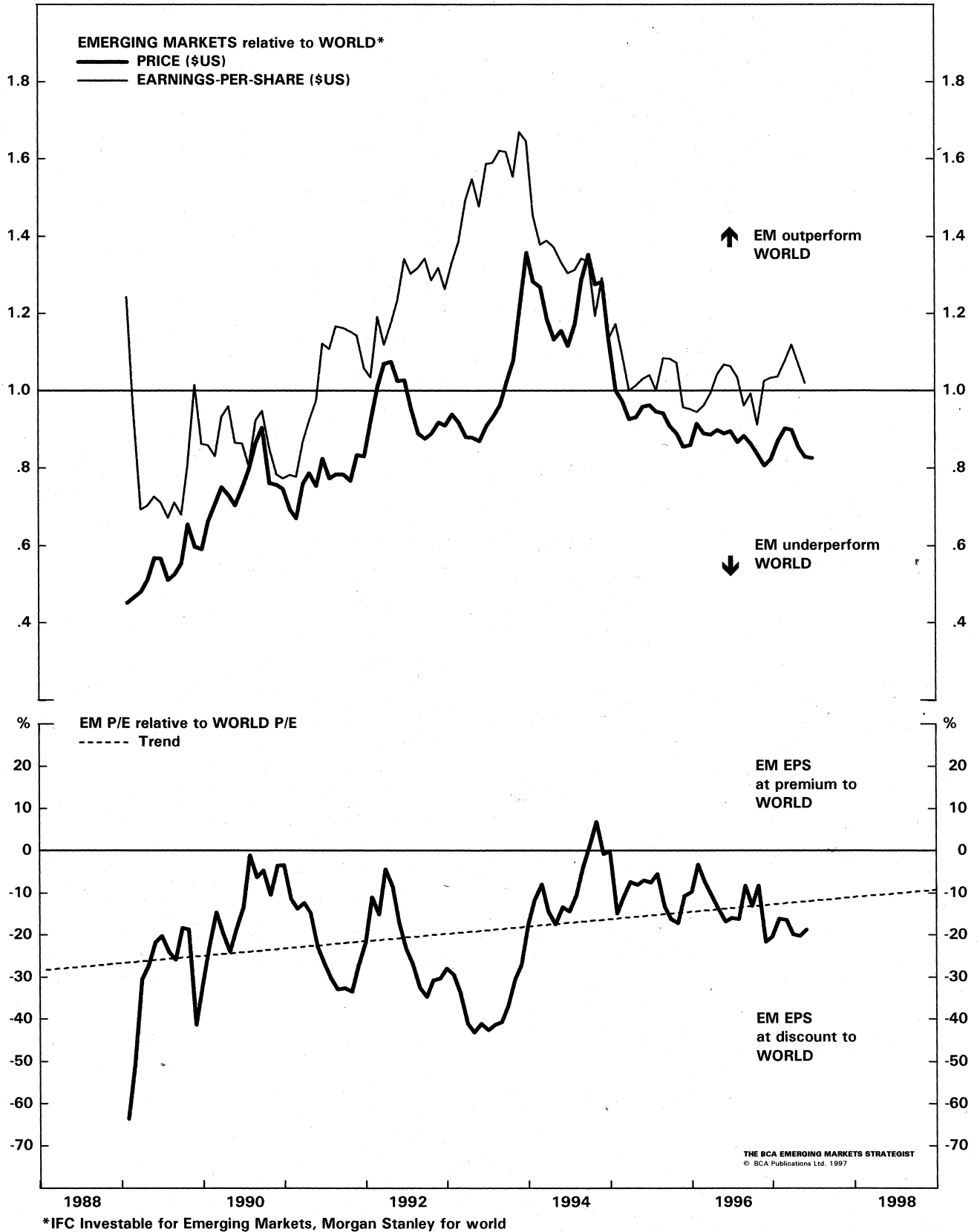
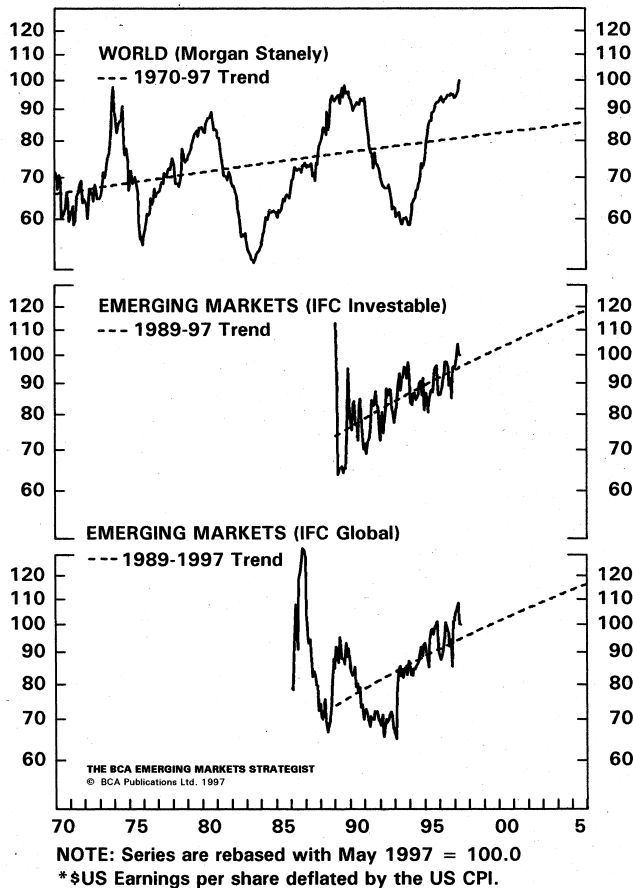


Chart 2
Real Earnings Per Share *



Over time, however, the magnitude of this discount has tended to narrow, as suggested by the positively-sloped trend line in the bottom panel. In other words, investors have been progressively "re-rating" emerging markets towards the world standard.

Are investors becoming too complacent?

Over the past three years, the re-rating process has caused the discount to narrow to an average of 10%, down from about 30% during the previous five years.

At first sight, this might suggest that investors are becoming far too complacent about earnings risks in emerging markets. After all, the political and economic conditions in developing countries such as Brazil, Thailand, Poland, India, or South Africa are far more uncertain than say those in France, Germany or the US. The difference is of course hard to quantify, but should it not warrant more than a 10% discount?

Part of the answer could be that, in looking *forward*, investors see not only a larger risk, but also the prospect for larger earnings growth. Indeed,

because earnings growth is generally faster in the emerging markets than in the world as a whole, there is no inherent reason why measures of trailing earnings must be valued at a discount.³

In practice, however, investors' foresight has been far from perfect. In fact, more often than not investors have been *backward-looking*, with major swings in relative price performance tending to lag, not lead those of relative earnings.

In 1992, for instance, emerging markets started to outperform the world a full year *after* the rise in relative earnings. During 1992 and much of 1993 they underperformed despite the continued climb of relative earnings. The big spike in relative performance came in late 1993, just as relative earnings were about to collapse. And in 1994, after its early-year collapse, the relative price index staged a temporary comeback, despite the ongoing downtrend in relative earnings.

The lesson therefore is twofold:

- First, for the emerging markets asset class, relative earnings generally lead relative prices and not vice versa. The implication is that investors should pay attention to present earning trends, and not assume that these trends have already been discounted.
- Second, as long as the earning discount is sizable, investors could gain from its compression. But as the discount trend narrows, opportunities for king-size "compressions" become more limited, suggesting that even more attention needs to be paid to relative earnings trends.

In other words, the answer as to whether or not the discount on emerging markets earnings is presently "too" narrow, is itself dependent on the future course of these earnings.

A bird's-eye view

Surprising as it may sound, fluctuations in the relative earnings index in Chart 1 have been affected by world earnings much more than by the earnings of emerging markets.

As illustrated in Chart 2, world earnings have followed a very stylized cyclical pattern. The earnings of the IFC Investable universe, on the

³ The standard procedure, followed by both the International Finance Corporation and Morgan Stanley, is to report earnings-per-share based on a one-year moving average of aggregate earnings divided by the outstanding number of shares.

other hand, have zigzagged rather tightly around a fairly linear uptrend. (Note the much more volatile earning performance of the IFC Global index, which includes also those stocks not open to foreign investors.) It was therefore the fall and rise of *world earnings* – rather than variations in emerging markets earnings – which caused the relative emerging markets index in Chart 1 to rise until 1994 and drop thereafter.

What are the forces underlying these distinct earnings patterns? How likely are these forces to remain in place for the next decade or so? What are the consequences for the relative earnings performance of emerging markets?

World earnings

The main difficulty in predicting world earnings is how to account for the so-called “high-tech revolution,” and the accompanying process of corporate restructuring. By rapidly enhancing productivity growth, this dual process is making companies, particularly in the developed economies of the US, Europe and Japan, far more efficient. The conventional wisdom is that, because wages in these economies are under the disciplinary pressure of globalization, the main beneficiaries are the owners of capital, who see their profit growth soar.

Assuming that this process is set to continue, the question then is whether *past* earning patterns are at all useful in predicting *future* earnings trends. One way of answering this question is by building a model for earnings growth, and then estimating it twice: once based on data available until the onset of the “high-tech/restructuring revolution,” say 1985, and a second time based on the entire, up-to-date data set.

If the estimates coming from the two separate runs are significantly different, so that the first model underestimates profit growth during the *post-1985* period, we would then conclude that higher efficiency gains are indeed coming to play a greater role. But if the model stays robust, i.e. if its estimates remain stable over time, the implication is that higher efficiency is offset by other factors – for example, greater competition – leaving the historical earnings pattern intact.

Chart 3 presents the result of such an experiment. In it, world real earnings growth is predicted by a

simple model based on lagged data for the G7 leading economic indicators and interest rates.⁴ The model is estimated twice – first based on data from 1971 to 1985, and then based on the complete 1971-1997 data set. The fitted values from both models are plotted, together with the actual course of real earnings growth.

The results are rather striking:

- First, in both cases the fit (R^2) is very tight, explaining 75% and 73% of the variation in real earnings growth, respectively.
- Second, the model appears to be remarkably *robust*, generating nearly identical estimates from the two runs. Indeed, a comparison of the two panels shows that, by using the 1971-85 data only, we can still explain *subsequent* (“out of sample”) profit growth no less accurately

than by using a model based on the full 1971-1997 data set.

The latter fact serves to suggest that the “high-tech revolution” and corporate restructuring have so far failed to fuel world earnings growth. Today’s earnings, much like those of the 1970s and 1980s, are well explained by variations in the level of economic activity and by the cost of capital.⁵

*World earnings growth
owes more to favorable
cyclical conditions
than to the “high-tech
revolution” and
corporate restructuring.*

Projections

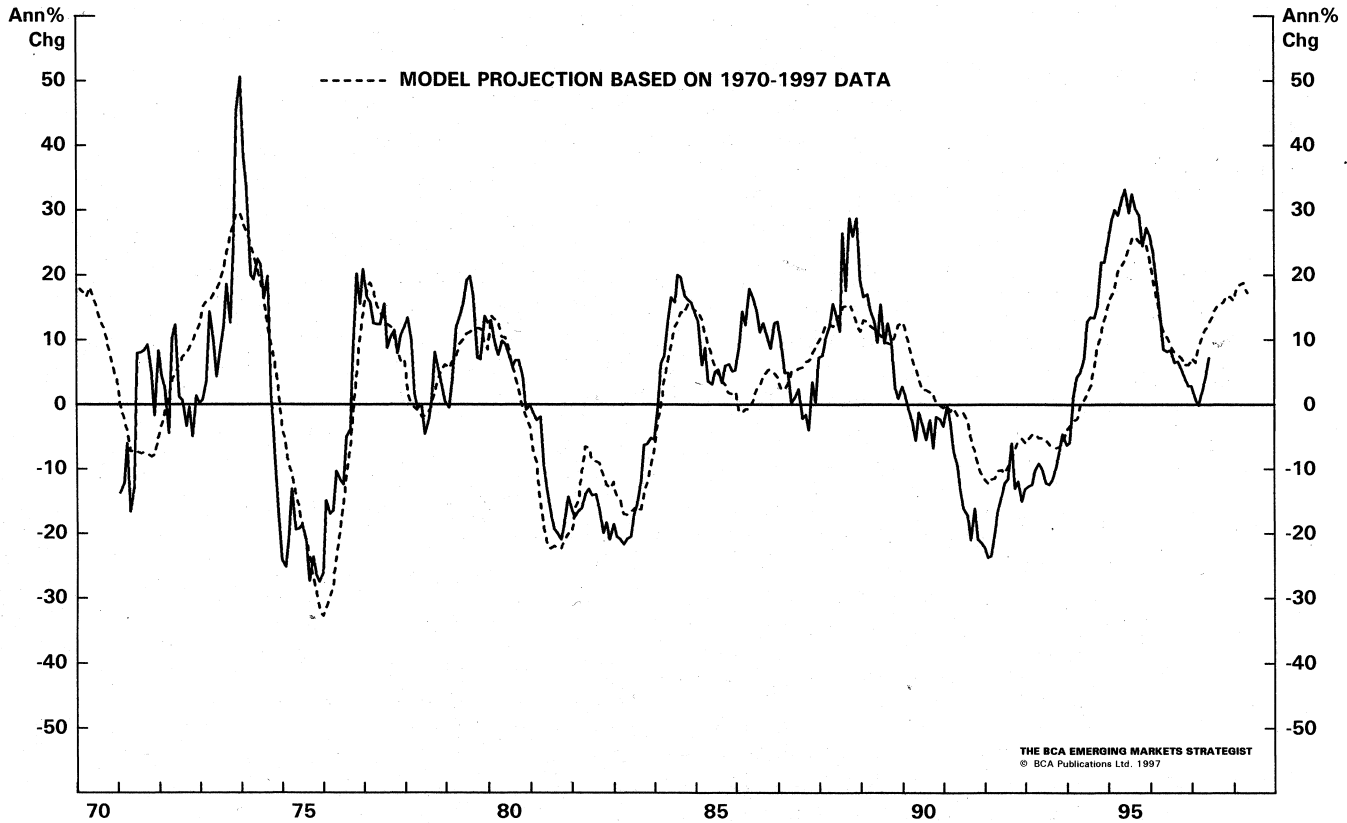
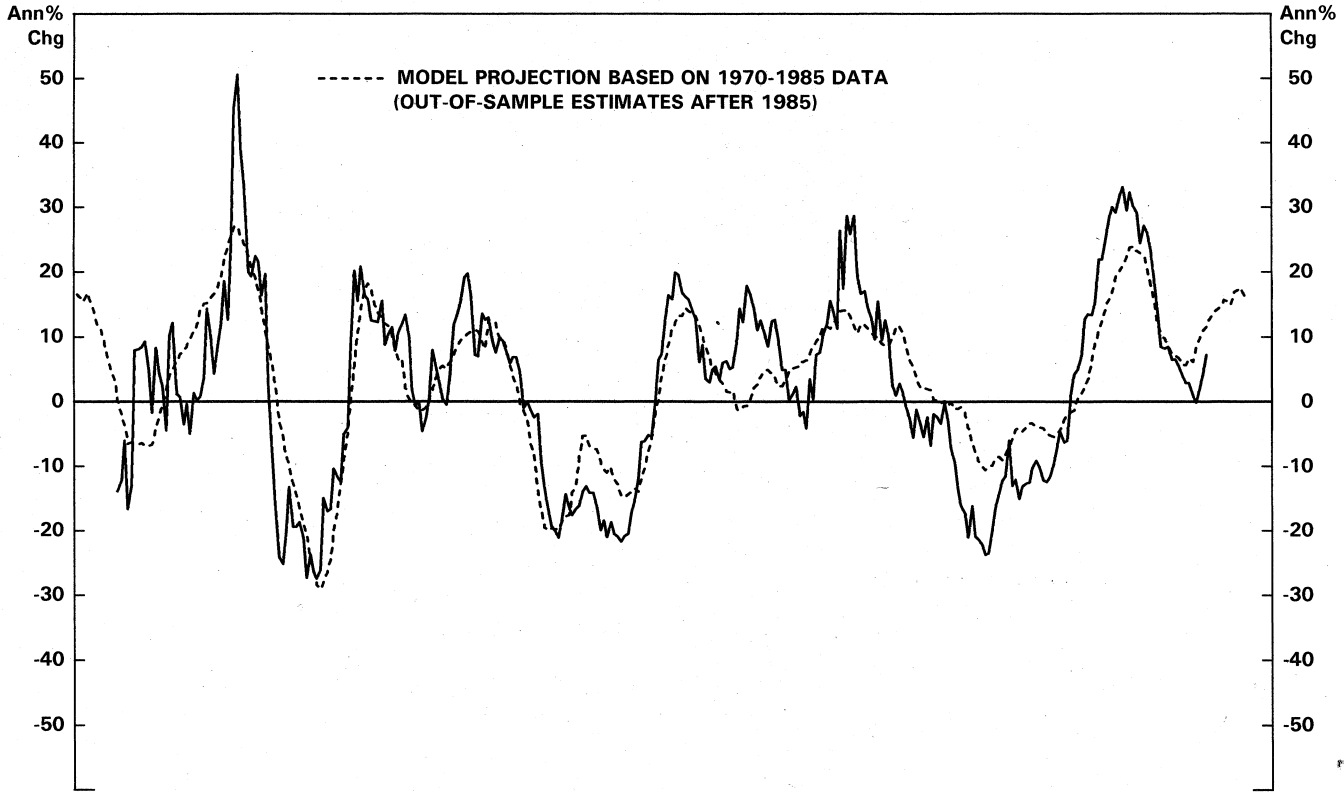
Being based on lagged data for economic activity and interest rates, the model enables us to make reasonably confident projections for the medium term. Based on these projections (and provided that the model’s tight fit continues into the near future), world earnings over the next year could well gain another 10%-30% over current levels.

Building a comparable earnings model for the emerging markets asset class is far more difficult: the emerging markets time series are much shorter; there are large divergencies between the business cycles across the developing world; and the country

⁴ The measurement of earnings growth in real rather than nominal terms is designed to bypass the potential bias introduced by the inflation of the 1970s and early 1980s. The use of lagged explanatory variables is aimed at matching the conventional reporting of trailing earnings.

⁵ Of course, efficiency gains and restructuring could affect profit growth *indirectly* – for example, by keeping inflation and hence interest rates low. This influence, however, is much more difficult to assess.

Chart 3
World Real Earnings Per Share *



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*Earnings per share expressed in \$US terms and deflated by the US CPI.

weights of the IFC investable index do not correspond to the underlying GDP weights.

However, an eyeball assessment of the medium term outlook suggests only a moderate upside. The reason is that over the past year, emerging markets earnings have already risen sharply relative to their trend. Given the present divergence between the business cycles of Latin America and Asia as discussed below, the potential for further gains in the next year or so seems limited.

The medium-term outlook, therefore is for emerging markets earnings to move either sideways or down relative to the world's average. This means that in order to outperform, emerging markets will have to see their earnings "discount" narrow. As indicated in Chart 1, this discount has widened somewhat over the past six months, so the potential for some narrowing is there. However, this potential is small to begin with, and if the world earnings boom remains intact, the discount could be reduced by falling relative earnings as well as by rising relative prices.

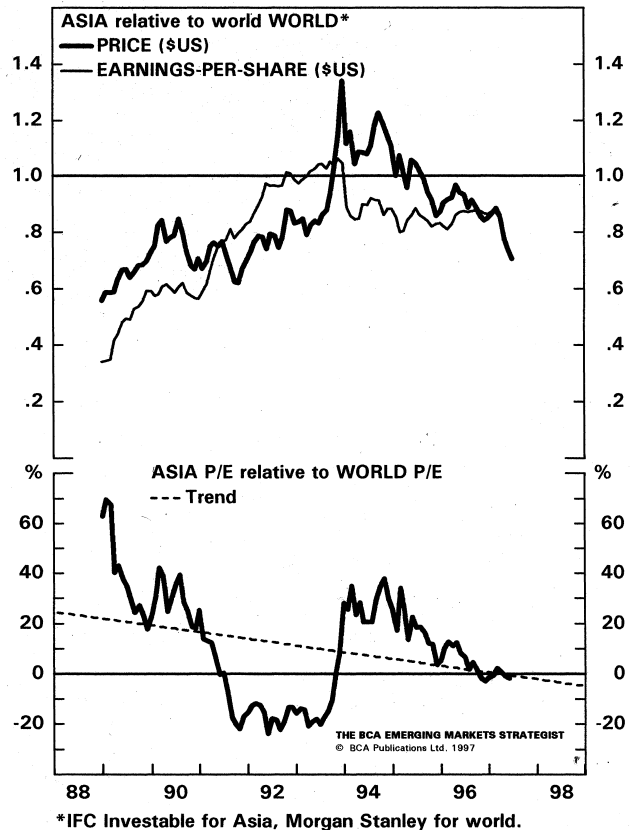
Although more difficult to project, the longer term outlook for emerging markets seems much better. World earnings per share, as depicted in Chart 2, display a remarkable cyclical regularity, anchored in the business cycle of economic activity and the movement of interest rates. If this pattern continues – and given our findings in Chart 3, there is little *a priori* reason to believe otherwise – the period until 2005 could see them peak, fall below trend, and then embark on another cyclical recovery. Assuming that by the end of this cycle, world earnings will be back at trend, their value on the chart will be 85, down from 100 presently.

If we were to adopt the same "trend-logic" for the emerging markets, earnings per share should continue to zigzag around their current trajectory, reaching a value of 118 by 2005, up from 100 presently (the assumption that the *level* of earnings follows a more or less linear trend implies declining earnings *growth*, but such caution is warranted).

The implication is that, by 2005, the ratio between earnings per share in the emerging markets and the world as a whole will stand at about 1.39. The current price ratio between the two assets classes is 0.8. Together, these numbers suggest that investors can now "buy" 2005 emerging markets earnings at a 42% discount to comparable world earnings.

If these earning projections are proven correct, and if the price discount is eliminated by 2005, *emerging markets will have outperformed the world benchmark by a compounded 74%, or 7.1% per annum, in real \$US terms.*

Chart 4
Asia



A regional perspective: Asia

The outlook for emerging markets as whole is of course colored by significant regional variations. Asia, for one, offers a good illustration of the consequences of excessive optimism. During the period between the late 1980s and early 1990s, Asian companies saw their earnings soar. This came in the context of falling world earnings, and as illustrated in Chart 4, the result was a threefold rise in Asia's relative earning index. However, investors' optimism ran far ahead of the curve, and by 1988, earnings were already "traded" at a whopping 70% premium to the world average.

This, of course, was unsustainable. And so, although Asian earnings continued to outperform, between 1990 and 1993 Asian equity prices have merely matched the world benchmark. The equilibrating process came through a massive compression of premia, illustrated at the bottom panel of the chart. By the end of 1993, with the cycle of pessimism reaching a trough, the massive 70% premium of 1988 has given way to a 20% discount.

The next upcycle was as sharp as it was short-lived. In a few months, Asia moved from a discount to a

35% premium, with its equities outperforming the world benchmark by as much as 80%. However, in this instance, global investors were clearly looking at the wrong crystal ball. In 1994, Asian earnings took a beating exactly when world earnings bottomed out, with the result being a sharp drop in relative earnings. What followed was another compression of premia, which are only now approaching neutral levels.

The premium/discount pattern in Chart 4 is interesting in light of the much-discussed "end" of the Asian miracle. As we suggest below, the latter fear may be premature, at least with respect to Asia's economies; but as far as its stock markets are concerned, the "miracle" is indeed winding down.

As an *aggregate* asset class, Asian equities have "emerged" – indeed, "over-emerged" – about a decade ago. After a period of significant excesses, Asia's underlying earnings are now traded more or less on par with world earnings. The period of gradually narrowing emerging-markets discounts is probably over. From now on, the movement of the discount/premium index is likely to be cyclical rather than secular, making relative earnings the key variable to watch.

As of now, Asian earnings remain in a deep cyclical slump, aggravated by the structural problems in Thailand, Malaysia and Korea (although the latter's impact on the Asian investable index is small). The Asian business cycle has only recently bottomed out, which means that its impact on reported earnings is not likely to be felt before next year.

The implication is that relative earnings will continue to head south. Given that these earnings are currently traded at par with world earnings, and allowing for further deterioration in sentiment, the Asian investable index is likely to continue underperforming the world benchmark.

Latin America

In contrast to Asia's rapid "maturation," Latin America remains true to its reputation as the world's oldest emerging market. As illustrated in Chart 5, after five centuries of foreign investment, the region's earnings are still traded at considerable discounts to world earnings, and the compression process is still ongoing.

Despite this difference, foreign investors have proven to be as shortsighted with Latin America as they have with Asia, particularly in 1993-1994. The mania which pushed Asian equity prices to excessive premium during that time has done the same for Latin America. Unlike in Asia, however, foreign investors *continued* to bid up Latin American equities relative to the world benchmark throughout 1994 – despite ample evidence that world earnings were improving while domestic earnings were deteriorating.

In this light, the 1994 crisis could be only partly "blamed" on Mexico. Its fundamental underpinnings derive from the long-term divergence between regional and global earning trends, as well as from the apparent refusal of investors to take these trends into consideration.

Looking ahead, Latin America equities, unlike their Asian counterparts, could still benefit from a further compression of the earnings "discount." Indeed, because of its earnings boom so far this year, Latin America has outperformed the world benchmark by about 25%, while its earning discount has narrowed by less than 15%.

The earnings upleg in Latin America seems to be reaching a crescendo, which implies that within the next year or so relative earnings will begin

trending downward. However, judging by the experience of past euphoria and by the current enthusiasm about the Latin American "regime shift," investors may well choose to ignore these developments even as they unfold.

If this scenario were to unfold, the Latin American discount will narrow rapidly. The region's equities will continue to outperform, but investors will be buying an increasingly expensive and risky asset.

Europe, the Middle East and Africa

The region of emerging Europe, the Middle East and Africa (EMEA) is a heterogeneous artifact, amalgamated by the International Finance Corporation for the purpose of benchmarking. Moreover, the index has undergone significant changes over the past several years, with the inclusion of the transition economies of Eastern Europe after 1994, of South Africa in 1995, and of Israel forthcoming in 1998. Thus, the historical patterns of its relative earnings, prices and the associated discount become relevant primarily since the mid 1990s.

*Emerging markets
will continue to
underperform in the
near term, but remain
a sure bet for
the long haul.*

Chart 5
Latin America

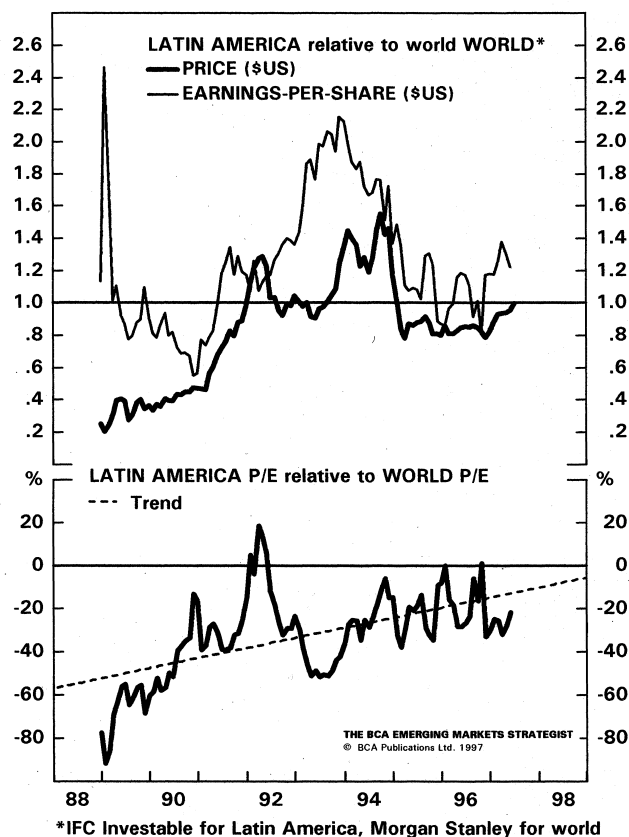
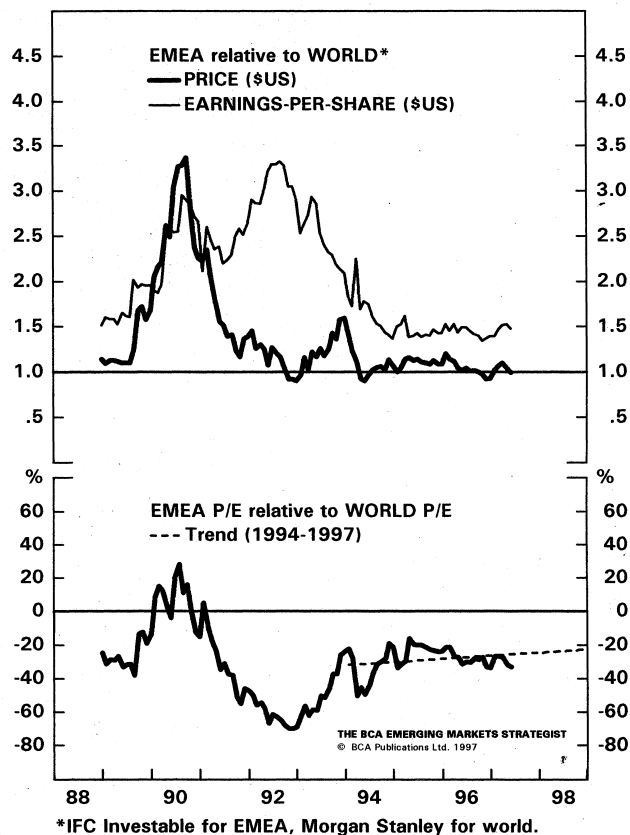


Chart 6
EMEA



As illustrated in Chart 6, the EMEA earnings discount narrowed significantly during the 1993-1994 period, but that was entirely due to a sharp fall in relative earnings. Since early 1995, EMEA's earnings have risen slightly faster than the world's average, and with the relative price index remaining flat, the discount has now widened sufficiently relative to its recent trend to warrant some compression.

Similarly to Latin America, here too the earnings upcycle is no longer young, particularly in South Africa and Turkey which account for 62% and 12% of the EMEA investable index, respectively.

In contrast to Latin America, however, the lack of excessive optimism on the part of foreign investors is likely to prevent EMEA investable index from significantly outperforming the world index anytime soon.

The long-shot: Asia or Latin America?

Asian earnings remain in a downtrend, and the absence of any meaningful discount against the world benchmark suggests that investors have only a thin cushion to lean on. In Latin America, on the

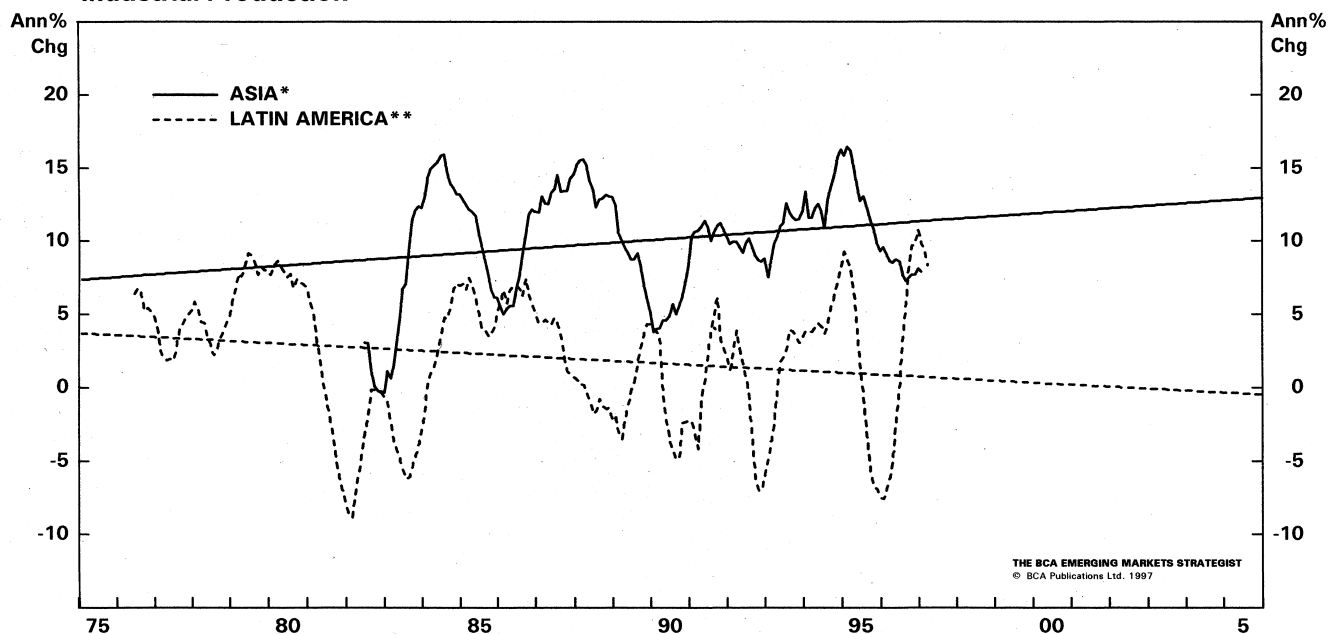
other hand, the earnings trend remains positive (albeit at a late stage), with further upside offered by the existence of a significant discount. The medium term outlook therefore seems to be in Latin America's favor.

In the longer term, however, Asia may still come out on top. Part of the reason is illustrated in Chart 7, which contrasts industrial growth rates in the two regions. Several features are worth noting:

- First, Asia has so far displayed a much faster industrial growth, averaging 10.4% over the 1983-97 period, compared with a mere 1.6% in Latin America for the same period.
- Secondly, the historical growth trend is positive for Asia but negative for Latin America; in other words, growth rates have *accelerated* in former, while *decelerating* in the latter.
- And thirdly, although twice as high as Latin America's, Asian growth rates have nevertheless been far less volatile.

Since the early 1990s, Latin America has been going through a "regime shift," in which statism is giving rise to liberalism. So far, however, this shift has left

Chart 7
Industrial Production



NOTE: Series are smoothed as 6-month moving averages

*China, HK, Taiwan, Singapore, Korea, Malaysia, Thailand, Indonesia, Philippines

**Argentina, Brazil, Mexico

little positive impact on the region's growth rates. These rates continue to oscillate around an average of zero, with no perceptible change in trend.

The reason is partly rooted in those structural problems which could not be easily solved by liberalization. At less than 20%, Latin America's savings rate is a mere half of Asia's. This makes it much more dependent on capital inflow and hence vulnerable to periods of receding global liquidity. Another hindrance to growth is Latin America's unequal, and *worsening* distribution of income. According to the World Bank, the income ratio between the top and bottom 20% of the population has risen to 18.7, up from 15.3 in the 1970s. By contrast, over the past quarter century, the same ratio in Asia fell to 6.6, down from 8.4. This factor not only limits the growth of a mass domestic market in Latin America, but also contributes to its greater political risk.

As long as these two parameters continue to weigh on Latin America, the region will find it difficult to break loose from its low and volatile growth pattern.

Unlike Latin America, Asian countries have generally maintained a much more "mercantilist" regime, which is perhaps responsible for some of their infamous over-investment problems. However, it is easy to exaggerate the extent of these problems. In contrast to Latin America which is becoming predominantly urban, Asia is still an agrarian

society (for instance, 70% of China and India are still rural). Thus, as long as the urbanization and industrialization of Asia continue, excess capacity pressures are likely to prove cyclical rather than secular.

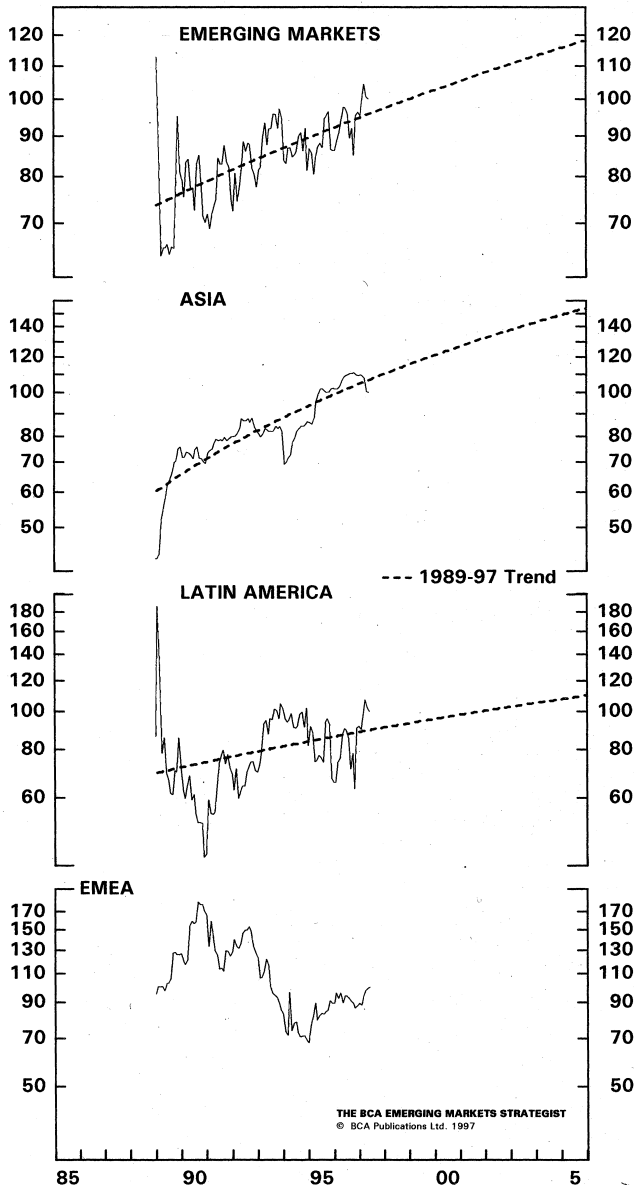
The implication is that Asia's investment boom is likely to continue. While its overall growth rates might not accelerate further, they are nevertheless likely to remain high and relatively stable for the foreseeable future.

Chart 8 plots real earnings per share in the different emerging markets regions. In this chart, the pattern of Asian and Latin American earnings well mirrors the differences in their industrial performance.

The Asian earnings trend is the steepest of all the regional indices, while its short-term cyclicity is the smallest. Indeed, as the chart makes clear, the emerging markets asset class owes its upward trend to Asia, while most of its cyclicity comes from Latin America. (The overall EMEA trend is negative, but given the drastic redefinition of the index over the past few years, the trend could well turn positive in the future.)

Assuming that earnings for the various aggregates follow their present trends for the next few years, Table 1 summarizes the implications for long-term investors (EMEA is excluded because of its indecisive earnings trend).

Chart 8
Real Earnings Per Share *



NOTE: Series are rebased with May 1997 = 100.0
* IFC Investable Index
* \$US Earnings per share deflated by the US CPI

All in all, these projections suggest that current pessimism about Asian markets is probably misplaced. Asia's earnings growth will likely more than compensate for the present lack of a discount to cushion investors' fears. The projections also indicate that the longer-term outlook for Latin American equities - while positive relative to the world index - in fact trails that of Asia, as well as the emerging markets asset class as a whole.

Investment conclusions

- Global financial integration makes emerging markets subject to the same liquidity conditions

Table 1
Emerging Markets Upside*

	Asia	Latin America	Emerging Markets
Projected 2005 earnings relative to world average (based on historical trends)	+85%	+29%	+39%
Current prem / disc relative to world index (+/-)	nil	-20%	-20%
Projected 2005 price performance relative to world index**	+85%	-61%	+74%

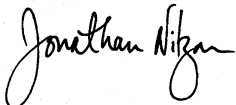
* EMS projections.

** \$US deflated by the US CPI.

affecting the developed markets. In addition, as emerging markets mature, there are fewer opportunities for buying heavily discounted markets. The implication is that **stock performance is becoming increasingly affected by earnings growth.**

- Foreign investors are generally backward - rather than forward-looking. For the emerging markets, this means that **relative earnings offer a good leading indicator for relative price performance.**
- World earnings follow a stylized cyclical pattern, whereas emerging markets earnings tend to zigzag tightly around a fairly linear trend. This means that **world earnings are pivotal for determining the relative course of emerging markets earnings.**
- **The pattern of world earnings growth has not been significantly altered by the "technological revolution" and corporate restructuring.** The one year outlook is for world earnings to grow by another 10-30%. Over the longer-term, these earnings are likely to continue oscillating around a very moderate upward trend.
- **The medium-term outlook is for emerging markets earnings to lag behind world earnings.** This has negative implications for the relative performance of emerging markets. However, the downside for emerging markets is cushioned by the fact that they are traded at a 20% discount to the world index.

- ***In the longer-term, emerging markets earnings should rise faster than world earnings.*** Based on our projections and assuming that the existing discount is gradually reduced to zero, by 2005 emerging markets will have outperformed the world index by a compounded 74% in real \$US terms.
- Because of differences in their stage of the business cycle and prevailing discounts, ***the short-term outlook for Latin America is better than for Asia.*** Despite its current woes, however, ***Asia is still the long-term favorite.*** Latin America remains shackled by a low saving rate and a worsening income inequality, and until these problems are rectified, its earnings growth will remain slower and more volatile than Asia's.



Jonathan Nitzan
Senior Editor