

# Asian Real Estate in a Portfolio Context: Long-Term Opportunities

JIANPING (J.P.) MEI

**JIANPING (J.P.)**

**MEI** is an associate professor of finance at New York University.

**T**he real estate markets in Southeast Asia have been particularly weak since the Asian financial crisis hit in 1997. This has led many investors to question the wisdom of long-term investment in Asian markets. Many who heralded the Asian miracle a year ago now suggest that it was an Asian mirage. The Four Tigers who were so formidable only recently — Hong Kong, South Korea, Singapore, and Taiwan — look more like paper tigers today. And the so-called Tiger Cubs, notably Indonesia, Malaysia, and Thailand, look like kittens.

Under speculative attack from hedge fund managers and panic selling from investors all over the world, many equity markets in the tiger and tiger cub countries have fallen 50% or more from their peaks.<sup>1</sup> The financial crisis, coupled with foreign capital flight, has led to dramatic slowdowns in many economies. Vacancy soared and rents plummeted in many cities.

But the crisis has not been confined to Asia: Markets in Latin America and Eastern Europe have also suffered to a lesser degree. Many investors have decided that prudence dictates that they should avoid emerging market investments, and many investors have been selling their assets in emerging markets. The analysis here will show that these investors are wrong.

*Emerging market real estate today offers once-in-a-generation opportunities for investors.* Indeed, it is precisely after a major

shock in financial markets that investment opportunities are the most attractive. Brave investors will find the current time a uniquely favorable opportunity for long-term investment and for obtaining less volatile portfolio performance.

## A FUNDAMENTAL ANALYSIS OF ASIAN REAL ESTATE

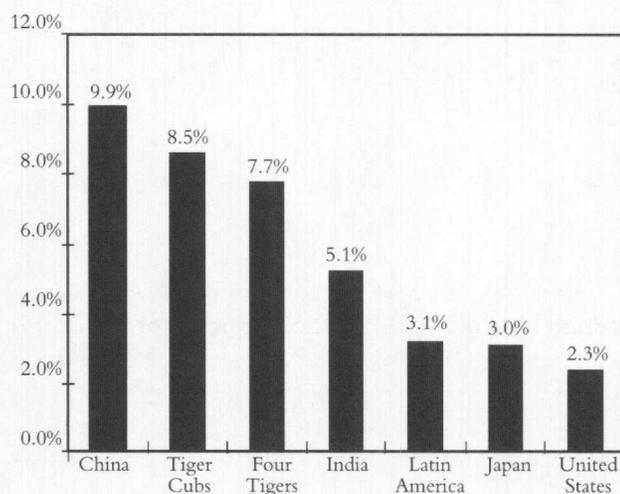
Why won't the Asian markets resemble the Japanese market crash of 1990, a bursting of real estate price bubbles, followed by many years of economic stagnation and equity market declines? The simple answer is that the current economic crisis reflects a structural adjustment of these economies after many years of break-neck growth. As a result, price bubbles do not affect the fundamental strength of these economies, which include low-cost labor coupled with increasing domestic demand pushed by a growing population. Thus, the current crises are likely to be shorter in duration, and the tiger economies should resume their robust growth once the health of the financial system is strengthened.

The fundamental difference between Japan and the rest of Asia is that Japan is a developed economy while the others are still-developing. Exhibit 1 presents data on the growth of various emerging markets over the past ten years in comparison to Japan and the U.S. Even if growth rates slow dramati-

cally in the future, they are still likely to far exceed those for the developed world once a recovery begins. Exhibit 2 provides some rough estimates on export as a percentage of total GDP production and the manufacturing labor cost across Asia. It is easy to see that Japan's competitive strength has been seriously eroded by its high labor cost. At over \$19 an hour, Japan's labor cost is higher than that of the U.S. (\$18.17), and second only to Germany (\$27.80).<sup>2</sup>

The Asian economies, however, are still enjoying a fairly low labor cost. For example, Korea's labor cost is about a quarter of Japan's at the end of 1997, while those of other nations are even lower. In essence, Japan is a mature economy that has to depend on increasing productivity for its growth, while the rest of East Asia can still benefit from their cheap labor. Exhibit 2 also shows why the strategy of exporting its way out of recession is doomed to fail in Japan, although it may succeed in other economies of Asia that have much higher export-to-GDP ratios. Despite its formidable size in the world trade, Japan's exports only account for less than 10% of its GDP. Export growth as a result of

### EXHIBIT 1 Real Annual Rates of Growth for Selected Economies — 1988-1997



The average growth rate for the Four Tigers is an equally weighted index of Hong Kong, South Korea, Singapore, and Taiwan. The average growth rate for Latin America is an equally weighted index of Argentina, Brazil, Chile, and Mexico.

Source: Jardine Fleming.

### EXHIBIT 2 Comparison between Japan and the Tigers (export and labor cost)

	Export as % of GDP	Manufacturing Wages (per hour) 1997
Indonesia	30.9	\$0.22
Malaysia	84.3	\$1.81
Thailand	30.6	\$0.39
Hong Kong	114.8	\$5.31
South Korea	24.7	\$4.29
Singapore	185.8	\$7.05
Taiwan	38.2	\$4.98
China	30.9	\$0.33
Japan	9.6	\$19.08

Data Sources: World Bank and Morgan Stanley Research.

currency devaluation can significantly improve the tiger economies, while the impact on Japan is likely to be less significant. Recently released export data for Thailand have confirmed this.

Therefore, Japan's GDP growth must come primarily from domestic demand. Unfortunately, there is a fundamental impediment that hinders this growth: its dramatic slowdown in the population growth rate. According to United Nation statistics, Japan's population is growing only at a minuscule 0.2% a year. In contrast, the populations of other Asian nations have much higher growth rates, with some growing at over 2% a year (see Mei [1998]). As a result, even with no increase in personal income, population contributes about 2% to overall GDP growth for other Asian economies, while the contribution is almost zero for Japan.

Urban migration factors are also quite favorable for long-term real estate investment. Massive urbanization caused by rapid industrialization and poor infrastructure (roads, electric and telephone service, etc.) will also have a positive impact on the urban property market. According to Mei [1998], by the end of 2015, nine of the ten largest cities in the world will be in emerging markets, and none of them will be in the U.S. Massive migration from rural areas to urban centers will exacerbate housing problems in these emerging market cities. For instance, Thailand and China's rural population account-

ed for 81% and 72% of the total population, respectively. But this large rural population is on the move.

The urban population is expected to increase quite rapidly by 2000. For example, in 1998 it is estimated that about 100 million Chinese migrant workers work in cities. Many emerging markets are already densely populated. India, for example, has almost *ten times* the population density of the U.S. South Korea is even more densely populated. Any further migration to cities would make urban land an increasingly scarce and valuable resource. The combination of massive migration and high economic growth can do wonders for vacant spaces. If Shanghai can maintain its 12% growth rate in space usage, then even with an overall 50% vacancy rate (90 million square feet of vacant space!), it could achieve full occupancy in only six years.<sup>3</sup>

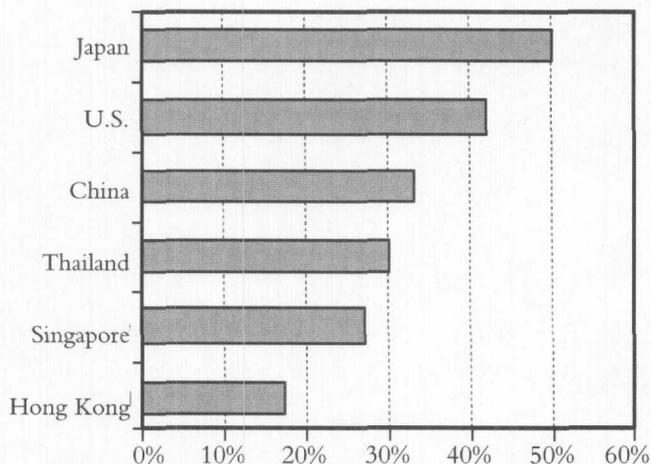
On the other hand, it may take a typical Japanese city seven to ten years to fill a 20% vacancy if the local economy is only growing at 2% to 3% a year. Given the difficulty in supplying new space on short notice, it may even be rational in some emerging markets to build in anticipation of future demand within specific local sub-markets.

Another difference is the tax burdens. Compared to Japan, most East Asian governments are more business-friendly and have more incentives for the private sector. Corporate taxes are notoriously high in Japan. According to a study by Goldman Sachs (Exhibit 3), the effective corporate tax rate is 50% in Japan, compared to 42% in the U.S., 33% in China, 30% in Thailand, 27% in Singapore, and 17% in Hong Kong. Moreover, the top marginal income tax rate exceeds 80% in Japan, one of the highest in the world. As a result, corporate Japan spends a lot of time "cooking" their books to avoid taxes. In comparison, most Asian economies have a much lighter tax burden and, therefore their economic climates have more freedom, which is favorable for entrepreneurship.

To be sure, the crisis has exposed some structural problems in the emerging markets that were too easy to overlook during better times. Some countries are hampered by obtrusive regulations and lack of government oversight over the financial sector. Moreover, many local banks frequently make loans to the well-connected rather than to the well-planned project. There will be no alternative to closing poorly managed banks, as the U.S. learned during the savings and loan crisis of the late 1980s. Moreover, many Asian businesses are family-controlled conglomerates making everything from

## EXHIBIT 3

### Effective Corporate Tax Rates



Data Source: Goldman Sachs.

potato chips to computer chips. They must be encouraged to become more focused, more efficient, and more competitive. Greater financial transparency will also help attract the financial capital needed for future growth.

### ASIAN REAL ESTATE: THE VALUE PERSPECTIVE

While this analysis shows that the foundations of Asian real estate remain strong, one important question that needs to be addressed is their value relative to the rest of the world. One important difference between the Japanese and the rest of the Asian markets is the size of their financial bubbles. At the peak of the Japanese market bubble in 1989, the price-earnings ratio reached a sky-high level of 90. But at the beginning of 1997, most Asian markets actually had quite low price-earnings ratios. For example, the price-earnings ratio was less than 20 for Thailand, Indonesia, Korea, and Hong Kong. While Hong Kong certainly has many overpriced real estate properties, the main problem for most tigers has not been their valuation levels but rather declining profits as a result of excess capacity. Thus, deflating the bubble is expected to be a much more painful experience in Japan's case. In fact, even after seven years of a bear market, the price-earnings ratio of the Japanese market still stands at around 40 (around 30

if GAAP is used), which is quite pricey compared to other markets even after adjusting for accounting differences. The tigers, on the other hand, have seen their P/E ratios plunge into the single digits.<sup>4</sup> As a result, a turnaround would bring more upside potential.

Moreover, the combination of falling currencies and falling property values has made these assets compellingly attractive. One amusing way to show how inexpensive emerging markets are is the Big Mac

Index compiled by the *London Economist* (see Exhibit 4). Due to the sharp currency devaluation, a Big Mac in Jakarta costs a fraction of one in the U.S. By the same token, Asian real estate is getting a lot cheaper for dollar users.

Exhibit 5 displays the daily room rates for four-star hotels in capital cities across the world. It is worth noting that the enormous currency changes that have taken place over the past few months have tremendously improved the competitive position of emerging markets, especially relative to the U.S. Indeed, in the U.S. there are now open discussions about the possibility of price deflation, caused in part by the expected flood of low-cost imports.

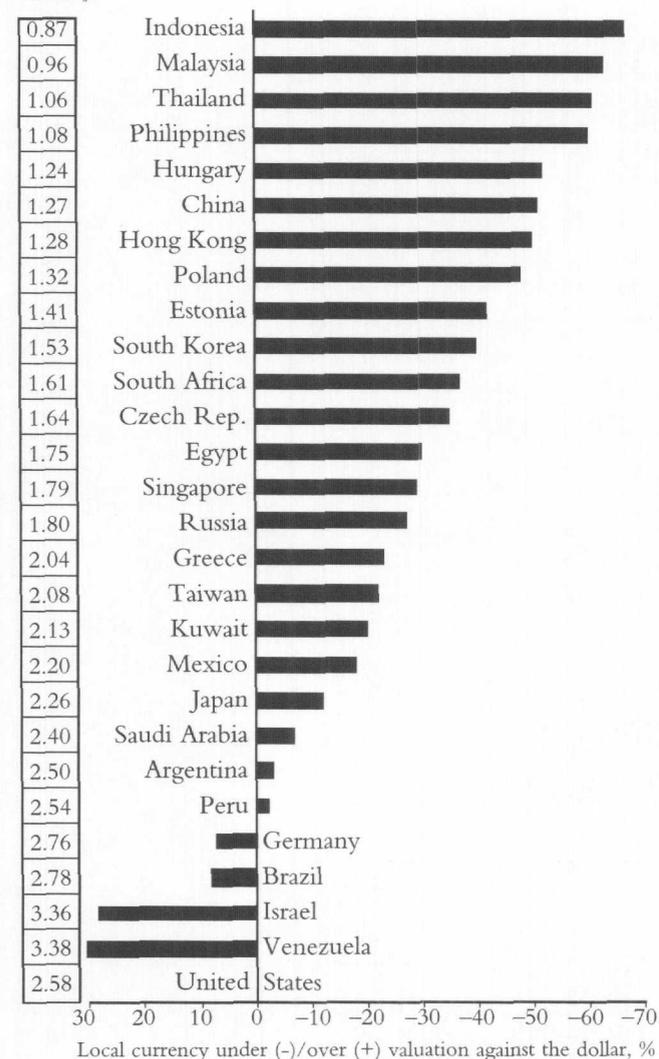
Adding to the attraction of emerging market investing is the realization that properties and their stocks in emerging markets are available at more attractive valuation levels than those in developed countries. Exhibit 6 presents the comparison of P/E ratios for property companies across different regions. The P/Es are from May 1998 for the various regional markets. Here one can see that the U.S. market appears very expensive (it has a high P/E ratio), but the Asian markets appear far more attractively priced. While critics point out that the earnings estimates in many Asian markets may not conform to U.S. accounting standards, the same conclusion can be drawn based on other valuation measures such as dividend yields. The higher potential growth expected from Asian markets could be purchased at lower earnings multiples. In other words, you can go where the future growth (and recovery) is and still buy at relatively attractive valuations.

The beauty of buying assets with high potential growths at low P/E multiples is that as the growth is actually realized, the P/E may rise. As investors become more confident of cash flow growth, property stocks are often rewarded with higher multiples. On the other hand, stocks at very high multiples present substantial risks. Suppose, for example, that in a particular period, growth is not achieved and earnings actually fall. The P/E is likely to fall as well, leaving investors with large losses. In fact, several studies referenced in Malkiel and Mei [1998] have shown that, in general, low P/E markets tend to produce higher rates of return than markets selling at higher earnings multiples.

In sum, the fundamentals are still very much intact and after a period of painful adjustment, most Asian real estate markets will recover. Note that after the so-called New York real estate market crash during

## EXHIBIT 4 The Big Mac Index

Big Mac  
Prices \$



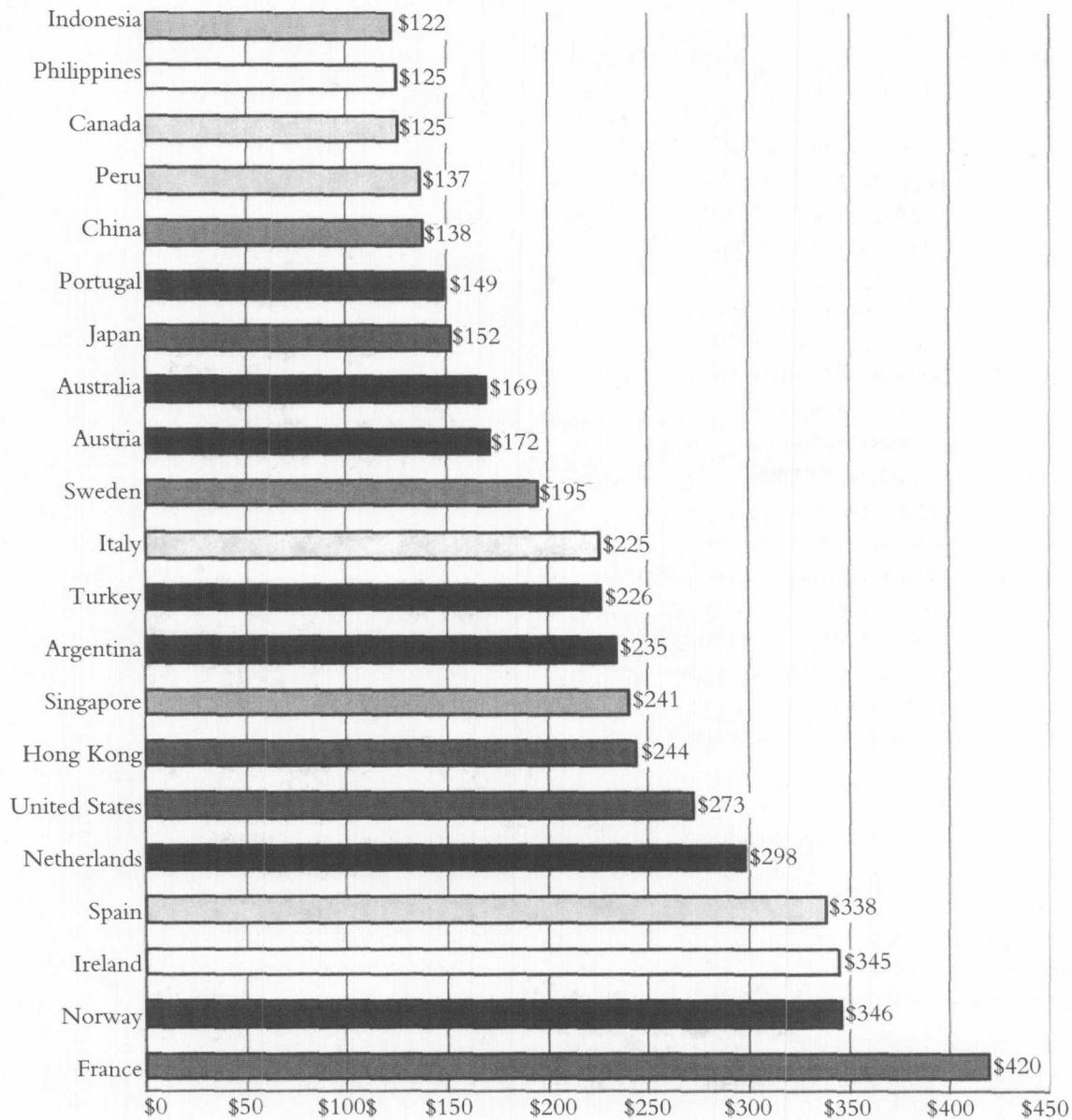
Sources: McDonald's and *The Economist*.

the early 1990s, many skeptics argued that the property market would take more than ten years to recover. Many properties were sold at fire-sale prices. But a little population growth, plus a bull market on Wall Street, led to a speedy recovery of the New York real estate market, producing exceptional returns for those brave bargain hunters throughout the late 1990s.

## ASIAN REAL ESTATE IN A GLOBAL REAL ESTATE PORTFOLIO

For all the attraction of investing in emerging markets, however, it is good to remember that the risks are quite high. The initial currency crisis has led to economic crisis in many countries, which has also created a

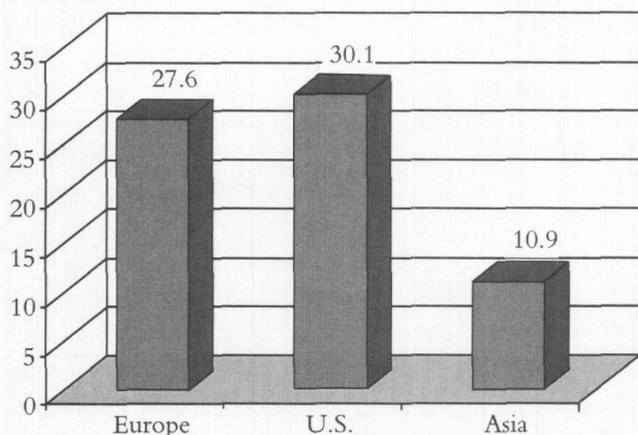
**EXHIBIT 5**  
**Four-Star Hotel Room Rates in Capital Cities**



Data Source: J.P. Mei Research, September 1998.

## EXHIBIT 6

### Comparison of PE Ratios on Property Stocks



Data Source: Datastream.

high degree of political instability in Asia. This political instability may breed ethnic tension (especially between the ethnic Chinese and the local population in most Southeast Asian countries) and create a hostile environment for foreign investors. The lack of stability is further aggravated by weak legal systems, the accompanying pervasiveness of weak accounting standards, and markets constrained by tight liquidity and high transaction costs. All these problems may keep investors at bay.

The presence of "crony capitalism," where licenses to build projects are given to a leader's family members, as well as arrogance and the unrealistic belief that any amount of debt can be safely assumed and that any building project, however grandiose, can be safely undertaken and financed with debt, adds to the risk factor. While some of these risks may be ameliorated as emerging markets develop, they have nevertheless created an investment situation rife with unprecedented volatility

(see Exhibit 7).

There is, however an approach that can help protect investors from the risk of emerging market securities. Diversification allows investors to add risky holdings to their portfolios in a way that can offer less risky (less volatile) portfolio performance. The trick is to find combinations of assets whose returns are not highly correlated. Thus, when one market or industry goes into a tailspin, the results are cushioned by stability, or even positive developments, in other markets. For example, a real estate portfolio consisting of Starwood Lodging and Patriot American Hospitality is highly, or positively, correlated, because all companies in the U.S. hotel industry tend to rise and fall together. A portfolio of Starwood Lodging and Singapore Land, on the other hand, would have a much lower correlation.

In practice, even in an integrated world economy, the same events have different effects on various national economies. The oil crisis of the 1970s had a more devastating effect on oil-poor Europe and Japan than on the U.S., which is at least partially self-sufficient in oil. On the other hand, the tenfold increase in the price of oil had a very positive effect on Indonesia, Venezuela, and the oil-producing countries of the Middle East. Similarly, increases in mineral and other raw material prices have positive effects on many developing nations rich in natural resources and negative effects on manufacturing in many developed countries.

## EXHIBIT 7

### Average Dollar Return and Volatility of Selected Markets: 1976-1995

Country	Average Annual Return	Number of Years in Which Returns Were Positive	Number of Years in Which Returns Were Negative	Highest Yearly Return	Lowest Yearly Return	Volatility Index U.S. = 100
Argentina	23.7%	11	9	456.5%	-61.9%	1073
Brazil	2.7	9	11	158.0	-66.7	440
Chile	27.3	15	5	141.9	-56.9	407
Greece	-0.02	10	10	141.1	-57.3	368
Hong Kong	22.3	15	5	117.1	-42.8	208
India	11.8	14	6	103.3	-34.2	201
Thailand	16.0	12	8	123.1	-36.2	326
United States	14.2	16	4	36.8	-6.6	100

Source: International Finance Corporation.

The key factor in which diversification can reduce risk is the correlation coefficient between asset returns (see Exhibit 8). If two properties' prices or returns are perfectly correlated (when one goes up, the other one always goes up), diversification will not smooth out portfolio fluctuations. But if some property values zig while others zag (the properties are then said to be negatively correlated), diversification can virtually eliminate risk. Fortunately, negative correlation is not required for diversification to work its risk-reducing magic. All you need is for individual properties to be less than perfectly correlated. The good news for investors is that correlations between various national markets are sufficiently low that diversification can reduce risk considerably.

Exhibit 9 analyzes the way international diversification actually worked from 1986 to 1997. The research uses computer models to simulate a variety of portfolios and plots performance in terms of average annual return (made up of dividends and capital appreciation) and risk (the volatility of quarterly returns). As the graph shows, a twelve-year investment entirely in U.S. property stocks as measured by the NAREIT index produced a low return (14.2%) along with a relatively low level of risk. Risk and return were higher when a twelve-year investment was entirely in foreign developed country stocks as measured by the Datastream European property index (14.6%). During a decade when the U.S. real estate market has produced fairly decent returns, and even accounting for the substantial declines in 1997, the South Asia property shares have produced quite amazing returns (18.6% in U.S. dollars).

During this period, European property return

## EXHIBIT 8

### The Correlation Coefficient and Diversification's Ability to Reduce Risk

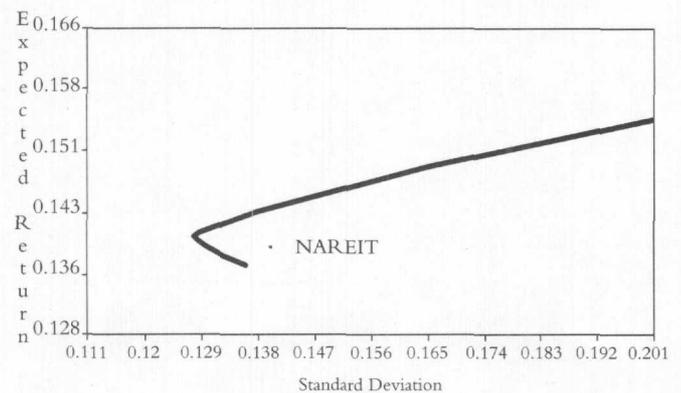
Correlation Coefficient	Effects of Diversification of Risk
+1.0	No risk reduction possible
0.5	Moderate risk reduction possible
0	Considerable risk reduction possible
-0.5	Most risk can be eliminated
-1.0	All risk can be eliminated

The less correlated stocks are in different markets, the greater the risk-reduction benefits of diversification.

WINTER 1999

## EXHIBIT 9

### Efficient Market Frontier with NAREIT, European, and South Asia Property Index Return



Data Source: Datastream.

and risk were somewhat higher than the NAREIT return. Allocating 78% of the portfolio to NAREIT stocks and 22% to European property securities produced the highest return with the least risk. The analysis then added the South Asia property index to the mix, creating simulated portfolios that contained different combinations of NAREIT, European, and Asian property stocks (see Exhibit 9). The intermediate points along the curve represent different combinations of Asian, European property, and NAREIT indexes. While it is clear that a portfolio heavily weighted in Asian property stocks is very risky (far more volatile than even a European property portfolio), there is a portfolio containing some Asian property securities that had the same risk as a purely domestic portfolio over that twelve-year period. This portfolio had 70% NAREIT stocks, 23% European property shares, and 7% in Asian property shares, and would have outperformed the NAREIT index by 0.52% per year. (As a matter of fact, the NAREIT index was not even on the efficient market frontier!)

Many investors in the U.S. maintain that foreign investing makes little sense and they use recent performance to make that point (U.S. real estate — REITs in particular — has done far better during the past three years than Japanese and emerging market real estate). But it is wrong to base investment strategy on a recent short period. During the 1988-1994 period, U.S. private real estate had capital losses of about 6% per year, while Indonesia had capital appreciation of 24% a year.<sup>5</sup>

REAL ESTATE FINANCE 91

Of course, that was just the time to buy U.S. real estate — not sell, especially during the market recession of 1990-1993. The best time to go global bargain hunting is after a sharp decline — not after markets have done well. Purchasers of Latin American real estate stocks, such as IRSA, did very well during and after the 1994-1995 peso crisis. And certainly the diversification benefits have remained intact. While periods of stress — such as October 1987 and last year's financial crisis — tend to send all markets down together, when one measures the correlations over quarterly returns, despite all the talk about globalization, real estate is still very much a local business. The real estate equities markets of the U.S., Europe, and South Asia remain very uncorrelated (see Exhibit 10). For example, the correlation between U.S. and South Asian real estate securities had been below 0.5 during most of the 1978-1998 period. The correlation even went down during the last few years!

If one is cautiously optimistic about the recovery of the Asian economy, an interesting question for investors is which Asian economies are likely to recover earlier than others? While the recovery process can be influenced by a host of social and economic forces, it is important to realize that economic recovery depends crucially on deleveraging, i.e., paying down the crushing foreign debt. Exhibit 11 presents the size of the crisis economies. Exhibit 12 presents total foreign debt relative to exports.

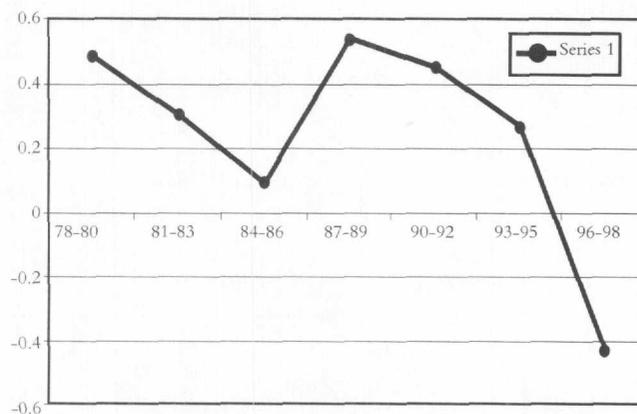
It is easy to see that the ratios of foreign debt to export (or GDP) were much smaller for South Korea and Malaysia. Thus, the deleveraging process may take three to five years for South Korea and Malaysia, but somewhat longer for Indonesia and Thailand. As a result, one would expect an earlier recovery for South Korea and Malaysia.<sup>6</sup> This is not to suggest that one should ignore Indonesia and Thailand for the time being. Given the size and diversity of Indonesia, which has almost five times the population of South Korea, the recovery process is likely to be uneven across different regions and cities. Thus, this article does not rule out the possibility that major Indonesian cities, such as Jakarta, may recover sooner than the rest of the country, although other political risks could affect market recoveries.

## SUMMARY

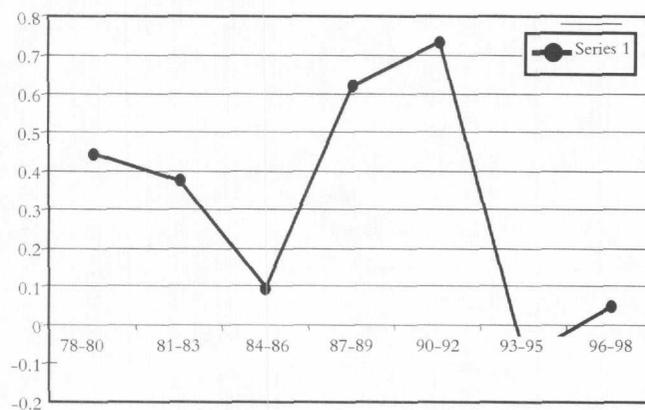
It has been a rollercoaster year in world markets. Before the Asian crisis, institutional investors expressed

## EXHIBIT 10

Correlation Coefficient between Returns to U.S. and European Property Shares



Correlation Coefficient between Returns to U.S. and Asian Property Shares

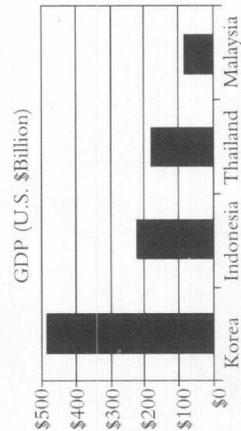
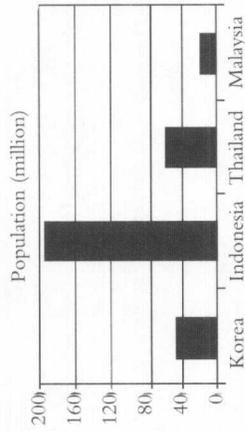
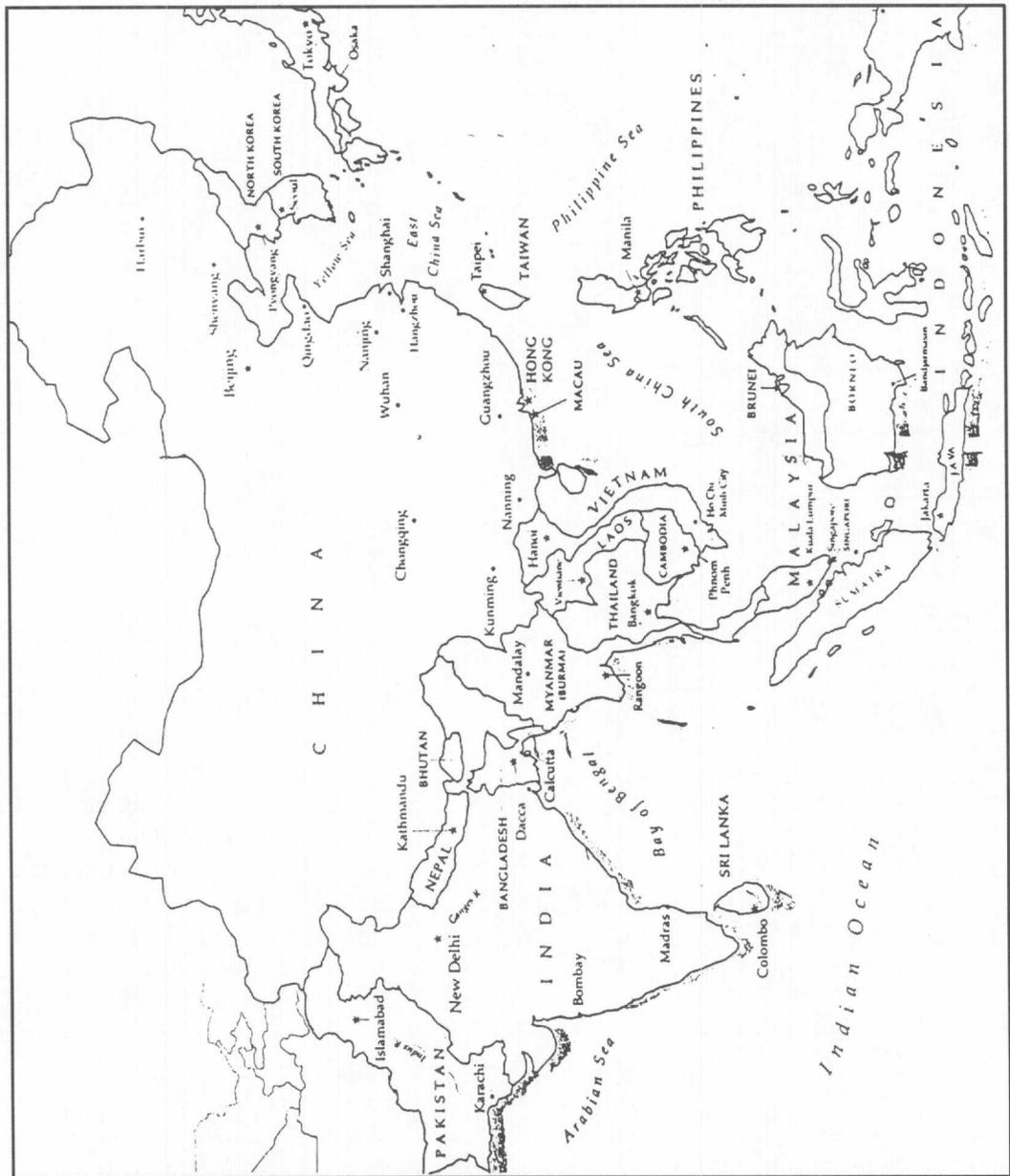


Data Source: Datastream.

strong interest in exploring investment opportunities in developing countries. This interest had emerged as a result of the rapid growth of international trade and the recognition that attractive opportunities may offer returns commensurate with risk and enhance diversification benefits. The present deepening crisis in Asia has led many investors to question the wisdom of Asian real estate investment. The analysis here strikes a more positive note. While many crisis economies may go through a painful three- to five-year deleveraging process and economic adjustment, the long-term prospects for the Asian real estate market remain good. The major chal-

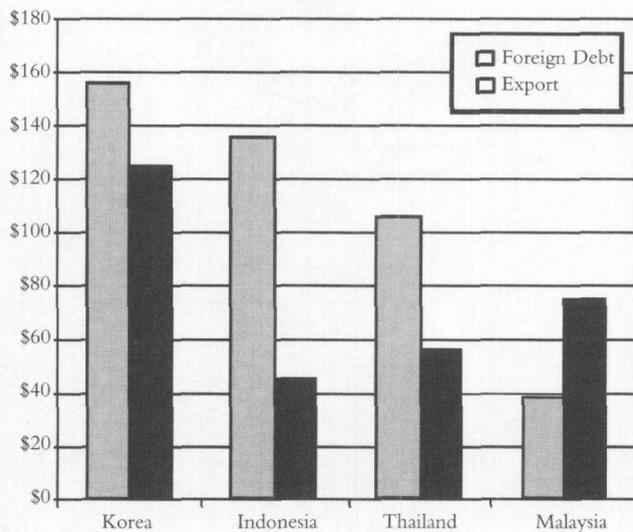
# EXHIBIT 11

## Population and GDP of the Four Asian Economies



## EXHIBIT 12

### Foreign Debts and Exports for Various Asian Countries (\$ Billion)



Note: Exports are based on 1996.

Data Sources: *BusinessWeek* and World Bank.

challenge for world institutional investors is how to get around the various real estate investment restrictions in various countries and to acquire high-quality buildings in the right locations. Now might be the right time to start the homework.

### ENDNOTES

This article is based on a speech given by the author to Fidelity's Annual Real Estate Forum on Martha's Vineyard. It summarizes some new research findings based on the author's book written with Burton Malkiel (who is the author of "A

Random Walk Down Wall Street"), entitled *Global Bargain Hunting: An Investor's Guide to Profits in Emerging Markets*.

<sup>1</sup>Sources: Datastream and the *Financial Times*.

<sup>2</sup>One should note, however, that these costs of labor statistics have not adjusted for labor productivity.

<sup>3</sup>The vacancy data are taken from a China housing study conducted by Richard Ellis and are confirmed by publications of the Shanghai Land Administration.

<sup>4</sup>The P/E ratios for the various countries mentioned here are derived from Datastream.

<sup>5</sup>See Malkiel and Mei [1998, Chapter 10] and Quan and Titman [1996].

<sup>6</sup>This faster recovery scenario assumes political stability in both countries.

### REFERENCES

Liu, Crocker, and J.P. Mei. "Evidence On the Integration of International Markets and Benefits of Diversification." *Real Estate Economics*, 1997.

Malkiel, Burton, and J.P. Mei. *Global Bargain Hunting: An Investor's Guide to Emerging Markets*. New York: Simon & Schuster, 1998.

Mayerson, Allen. "The Great Asian Steeple Chase." *New York Times*, June 25, 1995.

Mei, J.P. "Are the Foundations Solid for Emerging Market Real Estate?" *Real Estate Finance*, Winter 1998, pp. 6-11.

Miles, Mike, and J.P. Mei. "China Real Estate Investment: How Risky?" *Real Estate Finance*, 1995.

Quan, Danial, and Sheridan Titman. "Commercial Real Estate Prices and Stock Market Returns: An International Analysis." Working paper, University of Texas, 1996.

Radelet, Steven, and Jeffrey Sachs. "Asia's Bright Future." *Foreign Affairs*, November/December 1997.