# Investment Strategies to Exploit Economic Growth in China

by

Burton G. Malkiel, Princeton University
Jianping Mei, New York University
Rui Yang, Boshi Fund Management Company

CEPS Working Paper No. 122
December 2005

Burton Malkiel is a Professor of Economics at Princeton University. Jianping Mei is an Associate Professor of Finance at the Stern School of Business, New York University. Rui Yang is Director of Research at Boshi Fund Management Company. Jianping Mei has or had been a consultant and financial advisor to the following financial institutions: Prudential Financial, Fidelity, UBS, Boshi, Koo's Group, and W.P. Carey. Some of these institutions may have investment in securities mentioned in the paper. We are grateful to Princeton University's Center for Economic Policy Studies for financial support.

**Investment Strategies to Exploit the Growth in China**

Burton Malkiel, Jianping Mei and Rui Yang

Since the beginning of the economic reforms two decades ago, the economy in China has enjoyed a real growth rate of 9.6 percent per year. We believe that China is only in the early stages of its rapid-growth period. China is likely to enjoy rapid growth for decades to come at rates well above those of any other large country in the world.

In this paper we will first show why China will enjoy growth rates of economic activity well above those in the developed world. But economic growth does not necessarily translate into high security returns. Indeed, returns from investments in Chinese equities have been unattractive for the past decade and corruption and corporate governance issues as well as a variety of restrictions make direct investment in Chinese opportunities difficult. But we will also show that Chinese equities are now attractively priced relative to their earnings, their historical valuations, and their growth rates and that some risks have been alternated overtime. We will then proceed to examine the potential rewards and risks of the various indirect methods U.S. investors can use to access the Chinese market. For example, we will examine the lower risk strategies of investing in companies not necessarily domiciled in China, but which sell to or service Chinese consumers and producers and thus can profit from the rapid future growth of the Chinese economy. We conclude that a mixed strategy involving both direct and indirect methods of investing in China's future is likely to provide the best risk/reward tradeoff for investors.

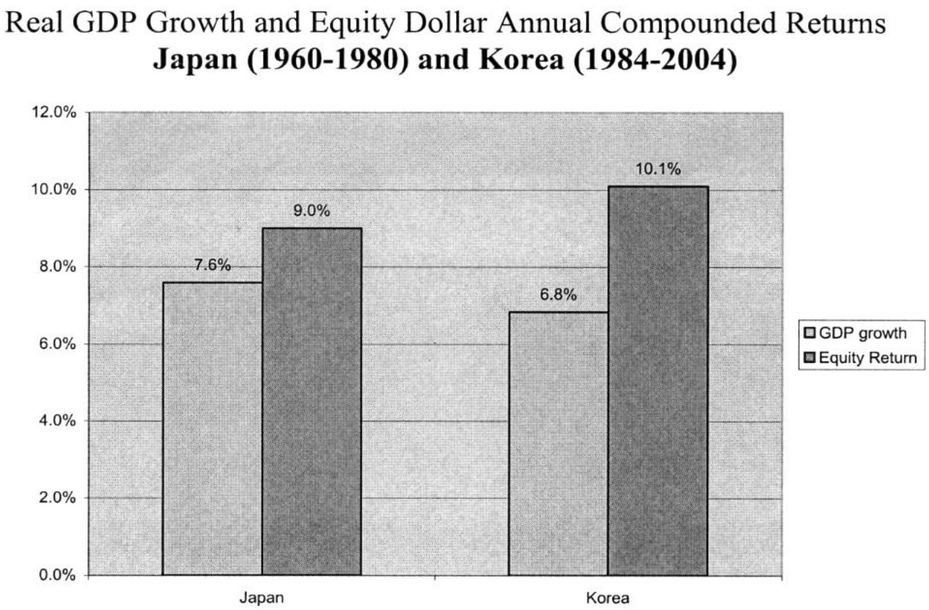
## China's Future Growth

The legendary movie producer Samuel Goldwyn was quoted as saying that predictions are very hard to make; especially about the future. Similarity, it is difficult to project the future growth of companies and economies. Errors in forecasts are more the rule rather than exception. Nevertheless, we believe that there is an excellent probability that the growth of the Chinese economy will continue to be exceptionally rapid over the decades to come. We believe this to be a high probability forecast for three reasons: 1) the market economic institutions necessary for growth have already been established and China has already enjoyed years of success: 2) a pragmatic and intelligent government exists that will continue to guide the economic transformation of the economy and 3) there is an abundance of underutilized human capital in China as well as the considerable savings necessary to fuel future growth.

In his excellent book on the Chinese economy Gregory Chow (2003) demonstrates that an ostensibly Communist government can adopt institutional changes that allow market forces to play a positive role in promoting economic growth. The household responsibility system created a revolution in agriculture in the Chinese economy. The energy of township enterprises played a vital role in the early years of China's rapid growth. An open policy of encouraging foreign investment contributed to growth by allowing the importation of technology, capital and managerial know-how. Moreover, the competition from private enterprises forced state enterprises to become more efficient.

An intelligent and pragmatic government, dedicated to the pursuit of economic growth, also gives us reason to believe that rapid growth can continue. Whatever the merits and demerits of the Chinese political system, years of experimentation have given government leaders first hand experience with the merits of a market-based system. The Chinese are unlikely to abandon such a successful system. The consensus regarding market reforms that has been developed thus far, as well as the infrastructure building undertaken by the government, will help provide a positive environment for future growth. Moreover, we expect continued structural changes that will transform the economy increasingly to one that is market based and avoids the heavy hand of over-regulation.

Exhibit One




The hosting of the Olympic Games in 2008 may well be a watershed event for the Chinese economy. The investment firm of Goldman Sachs has noted that there are remarkable similarities between China now and Japan in 1961 and Korea in 1985, three years before the latter two countries hosted their first Olympic games. Both Japan and Korea enjoyed long periods of economic growth and structural change from the period beginning with their planning for the Olympic Games. China's GDP per capita is still quite low, similar to that of Japan and Korea at the time they hosted the games. There is thus no reason to believe that China is nearing the end of its rapid-growth period. Exhibit One shows the real growth of economic activity as well as the real equity return of Japan and Korea during the twenty years following their planning for the Olympic Games.

But by far the most important reason to believe that growth will continue is the high quantity and quality of human capital in China. Human capital in the form of a skilled and hard working labor force, as well as an entrepreneurial culture, is undoubtedly the most important engine for economic growth in the future. And China has well over 100 million potential workers eager and ready to join the labor force. No other developing country has the available human resources and the accompanying ambition and culture to sustain growth at the level that is possible in China. The Chinese have a great sense of history. They know that they were great in the past and that they can climb to the top again. As Chinese enterprises begin to operate under more transparency and better legal protections, and with China's entry into the WTO and the increasing openness that such membership implies, we believe that the economy can continue to grow at rates well above the average in the developed and developing world.

In considering the competitive advantage of China in an increasingly integrated world economy, it is important to underscore the important cost advantage enjoyed by China. During the early 2000s it has been estimated that city dwellers in China earned about 60 cents per hour. Peasants had incomes of about one third that amount and therefore flooded into the cities seeking a better life with greater economic opportunity. The investment firm of Alliance–Bernstein has estimated that foreign joint ventures in the Chinese auto industry pay total compensation to labor of about five dollars an hour. Total compensation costs in the U.S. and Germany auto industry are about \$53 and \$65 respectively. With a huge reserve army of cheap labor, China can continue to keep labor costs low.

While wages are even lower in other parts of the developing world, only China offers an optimal mix of not only low wages but high productivity and a relatively advanced supply-chain infrastructure. Moreover, highly skilled Chinese workers such as engineers can be hired at a fraction of the cost of similarly-trained workers in the West. This explains the enormous growth of foreign direct investment in China, as foreign firms attempt to exploit the labor-arbitrage opportunities. According to China's Ministry of Foreign Trade and Economic Cooperation, foreign related firms now produce over half of China's exports.

There are always scenarios where the growth forecast we have presented will not be realized. Rural unrest as the income distribution in China becomes increasingly skewed is always a possibility. Political instability can never be ruled out. A not fully developed legal system and a lack of credibility in the governance structures of Chinese institutions could interfere with the prospects for growth. The Chinese banking system is extremely fragile, nonperforming loans are high, and China has had to rely on informal (often family oriented) lending systems rather than its undeveloped capital markets to finance its growth. But the probabilities are high that China will develop the systems needed to become a global macroeconomic powerhouse and that world class companies will develop that can produce growing profits and that also can disrupt many western enterprises. The disruption can result from two sources. First, Chinese companies appear to have an almost insatiable appetite for raw materials such as petroleum. Second, the ability of Chinese manufactures to offer quality goods at low prices will have a powerful effect of manufacturing companies throughout the world. If China manufactures and sells some product globally, its price is likely to go down. If China needs to buy something—such as a raw material—its price is likely to rise. The implications of these developments for both investors and the world economy are enormous.

Is Growth Sustainable?

While the outlook for growth looks positive, critics argue that China's high economic growth rate may not be sustainable because of its input-driven growth model: China depends on an increasing use of labor and capital inputs to manufacture growth. This argument has some merit since recent Chinese growth has been increasingly driven by its massive infrastructure investment as well as by speculative property investment in some major cities. Investors are especially alarmed by the fact that recent economic statistics reveal that real investment in China accounts for over 40% of its GDP, while consumption account for only about 40%. This compares with a 20% investment and 70% consumption share in the United Sates. This high investment rate coupled with low cost labor reminds people of the input-driven growth by many Asian countries before the Asian financial crisis of the late 1990s. As correctly pointed out by Paul Krugman, input-driven growth, without improvement in total factor productivity (TFP), will sooner or later hit the wall of diminishing returns and lead to a drop in future economic growth.

Chinese consumption data could be somewhat underestimated, however, due to poor reporting. For example, one of largest consumer sectors, the restaurant business, suffers from severe under-reporting. Moreover, high investment rates were necessary to provide the infrastructure required for the economy to grow. At the beginning of the 1990s, there were almost no highways linking Chinese cities. Railroads were the only dependable method of public transportation. Since the 1990s, tens of thousands of miles of highways have been constructed, forming a large transportation network around the country. In addition, many airports have been built and domestic air travel has become common practice. While there has been property speculation in some major Chinese cities, such as Shanghai, most of the Chinese urban population still live in tight living quarters with poor amenities. Therefore, there appears to be ample demand to absorb the high rates of urban real estate development. And while nonperforming loans (NPL) are high, they are largely the result of state financing of inefficient state-owned enterprises. The total of NPL and explicit government debt is low in relation to China's GDP, and unlike other Asian countries that faced financial crises, China's foreign exchange reserves are large.

## Risk Assessment

Political stability is of paramount importance for the continuation of economic growth. While China is still a one-party state, ruled by the communist party, the government is one of the most pro-business and pro-growth in the world. In recent years, the government has also adopted new policies to address income disparity and social safety net issues. While political control is still quite tight, the Chinese people are increasingly enjoying more personal freedom. With its policy objective of building a more harmonious society, the government is expected to quickly address major grievances of the population before they build up, while also maintaining a tight control on political dissent. Continued economic growth is necessary to maintain domestic political stability.

Investors must keep a close eye on China's rocky relationship with Taiwan, however. China has repeatedly threatened military invasion if Taiwan declares its independence. This has the risk of dragging the U.S. into a military confrontation with China, which could be devastating for the global economy. The good news is that, because of increasing economic ties, there are increasing pressures to find some common ground to maintain the status quo.

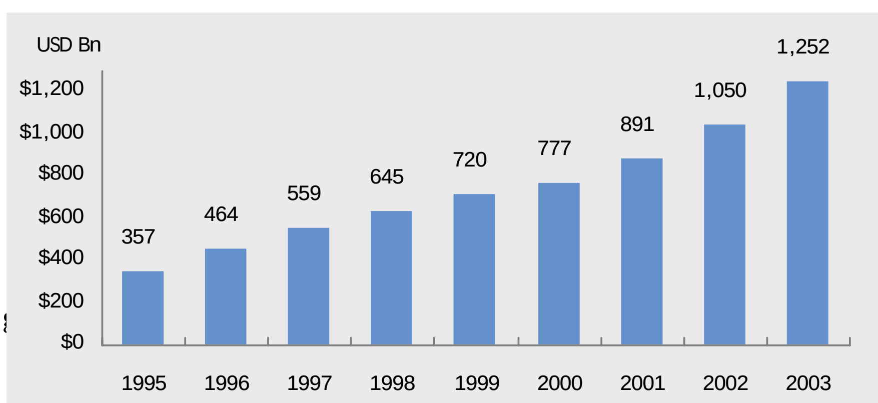
Another potential conflict is a deterioration of the political relationship between China and Japan. While there are some trade and territory disputes between the two countries, the real issue has to do with the historical animosity between the two countries and the emergence of China as a world power. One of the lessons of World War I was that the emergence of a new world power deeply affects the geopolitical interests of existing powers. Failure to find an accommodation could lead to serious setback of globalization.

Another major concern to international investors is China's financial stability. Reports of gross mismanagement and corruption of Chinese banks are alarming and call China's financial stability into question. These problems are uncomfortably similar to the crony capitalism and non-performing loan issues that plagued many Asian banks before the financial crisis of 1997. As noted above, however, China's debt to GDP ratio is low and its foreign exchange reserves are high.

The saving grace to China's antiquated financial system is its high and growing domestic savings shown in Exhibit Two. At over 40 percent of National Incomes, China has one of the highest saving rates in the world. The accompanying rapid increase in savings deposits has alleviated the pressure of non-performing loans. Moreover, by lowering its deposit rate to almost zero, the central bank is essentially asking the population to subsidize its inefficient banking system. Thus, in the absence of a political crisis, we do not believe there will be a liquidity crisis in the Chinese banking system.

Exhibit Two

Rapid Increase in Chinese Domestic Savings (in US$)




The ... xchange reserves. ... China's financial system. Recently, the government has used its massive exchange reserves to inject close to $100 billions into the ailing state banks to recapitalize them and prepare them for overseas listing. Goaded by the pressure of becoming international listed public companies, we expect that some banks will eventually transform themselves from simply government purses to truly for-profit financial institutions.

While the state-owned banking sector is grossly inefficient, it is worth noting that there is a rapid spread of private banking activity across China, especially in the affluent South. This activity fills an important gap in the supply of much needed credit to private enterprise. According to the Chief Executive Officer of Boshi Fund Management Company, Xiao Feng, private lending among relatives, friends, and neighbours may account for as much as one-third of lending in China. A study by Allen, Qian and Qian (*Journal of Financial Economics*, 2005) comes to a similar conclusion. Because of personal trust and family bonds, the default rates on private loans is close to zero, in sharp contrast to over 25% default rate characteristic of the loans of the state banks. Thus, China's backward financial system is supplemented by a highly efficient underground banking sector, which has provided the rapidly growing private sector with much needed capital.

Another important source of capital is foreign direct investment (FDI) in China. Because of its relatively welcoming foreign investment environment, China has replaced the US as the country which attracted the most FDI in the world, receiving over $61 billion in 2004. FDI has not only provided China with much needed capital investment and technology, they have also provided China with access to global capital markets.

## Accounting Concerns and Corporate Governance

In China, investors have a vivid saying for investing in Enron and WorldCom-type companies. It is called "stepping on mines". Unfortunately, in China's short fifteen-year market history, there have been too many instances that investors' wealth was blown away by false accounting.

Under the strong leadership of its Vice Chair Laura Cha, a former Hong Kong market regulator nicknamed the "Iron Lady," the Chinese Securities and Regulation Commission (CSRC) has implemented numerous accounting and disclosure rules for listed companies and has enforced strict penalties against local accounting firms during the early 2000s. The strong enforcement of these rules has uncovered many skeletons in the listed companies' closets, and has contributed to a 50% drop in Chinese A-share market index. As a result, investors are now keenly aware of the accounting and disclosure problems and market prices have adjusted to better reflect the risks as well as the opportunities involved in investing in Chinese companies.

Moreover, the CSRC has also amended Chinese corporate law to empower minority shareholders. Public investors are given special voting privileges that essentially amount to veto rights on many corporate actions. This has forced the majority state-owned companies to react to the grievances of public investors by materially increasing the quantity and quality of corporate disclosure. The painful experience of "stepping on mines" has also educated millions of investors in China, particularly the emerging institutional-investor community. The careful scrutiny of mutual fund analysts has revealed numerous accounting frauds including "Eastern Electronics", a Chinese version of WorldCom. Professional investors have had an unambiguously positive influence. Newly listed companies enjoy better pricing, if they have large institutional shareholdings, increased disclosure, as well as a reputable accounting firm to approve their financial statements.

China's entry into the WTO heightened public awareness of the importance of corporate governance. It is remarkable that the official document of the 16$^{th}$ congress of the Communist Party published in Nov. 2002 included the term "corporate governance" and its importance for economic reform. Now, it is common practice for government officials to mention poor corporate governance and lack of fiduciary responsibility as the two main problems of Chinese corporations. There is broad awareness that, unless China can improve corporate governance, operational efficiency and technology progress alone will not be sufficient to place Chinese companies on the world stage. While old habits die hard, numerous enforcement actions have made Chinese firms increasingly aware of the huge penalties involved in committing account fraud. We are well aware that large risks remain, but past problems that led to severe declines in stock prices, need not be prologue to continued unsatisfactory performance of Chinese equities.

Will Economic Growth Be Reflected in High Investment Returns? Why We Are Bullish on the Chinese Stock Market

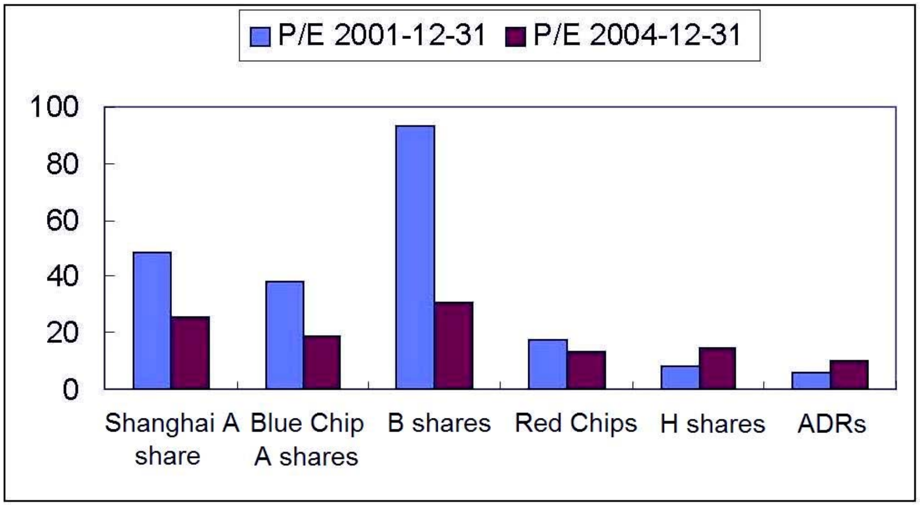
During the early 2000s, while economic growth roared ahead at over 8% per year, China's nascent stock market had a surprisingly poor performance. Despite improved earnings and falling interest rates, China's market index had fallen by more than 50%. Does that imply that China's stock market simply does not reflect economic growth?

On the contrary, we believe the poor performance reflects encouraging structural changes in its stock market, which have laid down a foundation for a sustainable bull market the future. These changes include: first, a welcome adjustment of market valuation levels from average multiple of 40-50 times earnings to a more reasonable average of about 20 times earnings for large companies, comparable to the P/E multiples for large S&P 500 companies. Such an adjustment suggests that the Chinese stock market is maturing and moving away from one that was largely speculation driven to one that is more value oriented and that better reflects the investment risks described above. It also reflects the increasing influence of domestic as well as foreign institutional investors who are more sensitive to equity value. Secondly, the "visible hand" of the government his gradually been replaced by the "invisible hand" of the market in determining IPO pricing. As a result, IPO pricing has become considerably more restrained, reflecting higher uncertainty in companies' prospects, and also leaving investors with a decent compensation for the risk taken.

Third, the recent valuations reflect a gradual convergence of market valuations of Chinese stocks to those traded around the world. A unique feature of equity financing is the coexistence of an alphabet soup of A shares(sold to domestic), B, H, and N shares, (sold to Hong Kong, U.S. and other foreign investors), respectively. Historically, these markets were segmented with the domestic market valuations influenced largely by short-term speculators who drove the market valuation of A and B shares to very high valuation levels (see Exhibit Three). The opening up of China's capital market since 2004 has caused the convergence of domestic valuation levels towards those of overseas markets. As we can see, many domestic Chinese stocks now sell at quite attractive valuation levels in comparison to U.S. stocks.

Exhibit Three

Comparison of Valuation Levels across Different Markets in 2001 and 2004




*Source: Boshi Fund Management Company.* Shanghai composite index: consists of all A-shares traded on the Shanghai Stock Exchange. Blue Chip index: 200 blue-chip stocks selected by Boshi Fund Management Company. B shares index: consists of all B-shares traded on Shanghai Stock Exchange. Red Chip index: 60 overseas domiciled companies listed on the Hong Kong Stock Exchange. H Shares index: Chinese companies listed on the Hong Kong Stock Exchange. ADRs: Bank of New York China ADR Index.

In order to compare relative valuation levels of Chinese equities, we selected 59 relatively large Chinese firms. Their estimated long-term earnings growth rates were obtained mainly from Boshi Fund Management Company，one of the largest mutual fund company in China. Price-earnings multiples (P/E) were obtained by dividing the stock prices as of early 2005 of the 59 firms by their earnings per share. We then picked a sample of 79 similar firms in the U.S. and obtained the same data. The estimated long-term growth rates were obtained from I/B/E/S (the International Brokerage Evaluation Service). Each Chinese firm was matched with one or more U.S. firm located in the same business and industry. For example, Exxon Mobil in the United States (8.6 percent expected growth, P/E of 15) was coupled with China Petroleum (19.6 percent expected growth, P/E of 18).

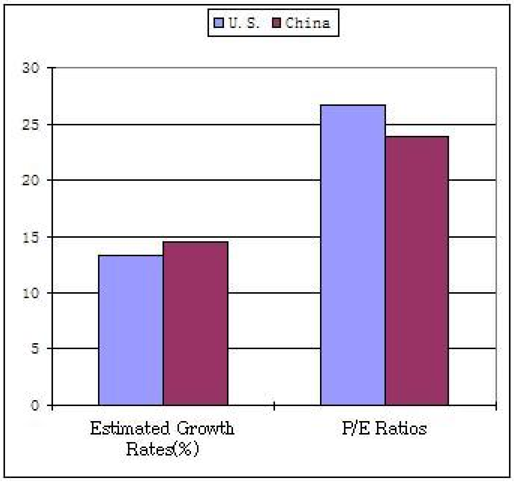
Exhibit Four presents the results of the analysis. We see that Chinese stocks tend to have higher growth rates at and lower P/E ratios. Moreover, growth-to-P/E ratios tend to be considerably higher for Chinese stocks. The attractiveness of buying stocks with high potential growth rates low P/E multiples is that the risk of P/E compression is minimized. Moreover, as the growth is actually realized, the P/E may rise. As investors become more confident of future growth, stocks are often rewarded with higher multiples.

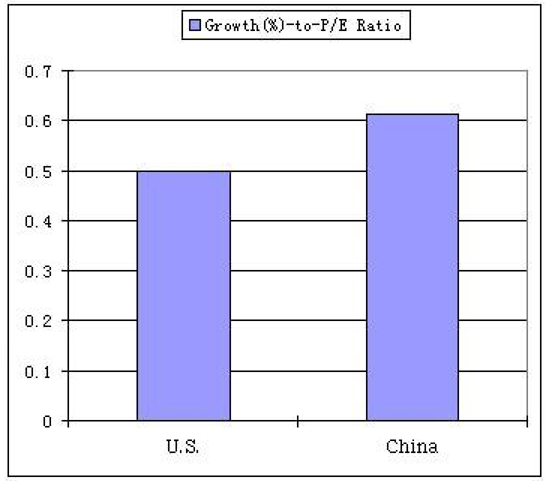
We may also compare entire markets rather than individual companies using the same approach. We can calculate growth to P/E ratios for each national market. The growth rate used is the ten-year growth rate of each country's GDP from 1995-2004. Since corporate earnings and GDP growth tend to move together (in countries with private ownership and improving corporate governance), the real GDP growth rate is a reasonable proxy for future earnings growth. As is shown in Exhibit Five, Chinese stocks tend to have higher growth rates and lower P/E ratios.

It is worth noting, however, high economic growth does not necessarily translate directly into earnings growth or equity returns. We know that the MSCI China index has significantly under-performed MSCI emerging market index over the last ten years, despite China's stellar GDP growth. While the argument does have some merit,

## Exhibit Four

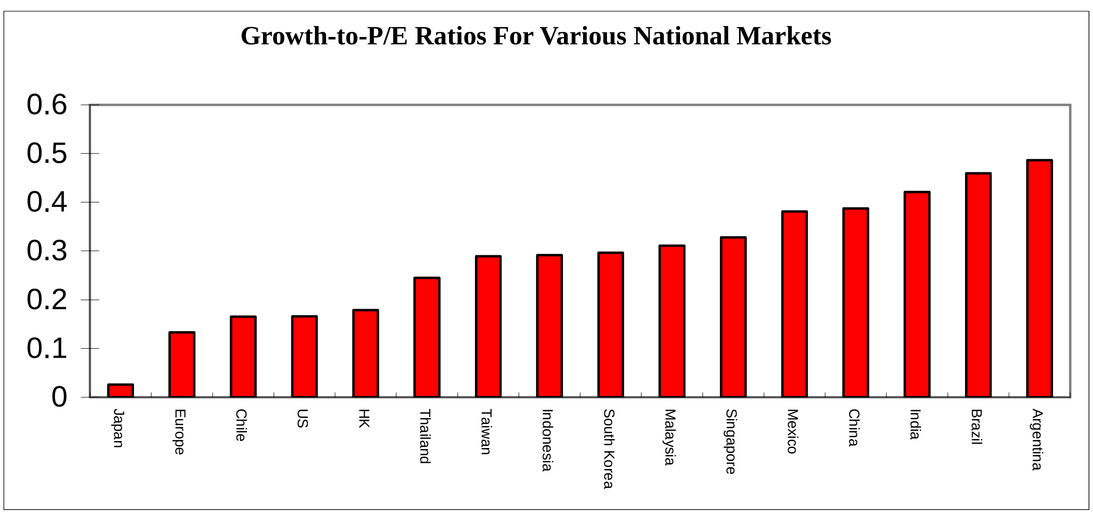
## Valuation Comparison between Chinese and U.S. Companies




Note: The comparison is made between 22 comparable sectors in US and China. There are 79 firms in the US sample and 59 firms in the China sample. The P/E and earnings growth estimates for US firms derive from Bloomberg and IBES. Those from Chinese firms were provided mainly from Boshi internal research with some additional estimates provided by I/B/E/S.

## Exhibit Five




Note: Real GDP growth rates are from 1995-2004, except Indonesia (2000-2004). Ratios were based on March 2005 market prices for respective national market indices.

we believe that China's equity market will more closely reflect its economic growth in the future for several reasons: First, China's equity market is much more mature than it was in its infancy ten years ago and many growth companies were not listed. At the time, the index was skewed by a few large companies that entered with fairly rich valuations relative to their growth prospects. With the gradual development of China's financial markets and access to global capital, many blue-chip Chinese companies, such as PetroChina, China Unicom, and China Merchant Bank, are now listed on China as well as on international stock exchanges. These companies have enjoyed earnings growth commensurate with China's economic growth. Secondly, we believe that recent corporate governance reforms will lead to better treatment of minority shareholders. Moreover, as more privately owned companies go public, the personal fortunes of many managers will be closely tied to the stock price. Thus, we foresee more and more companies will be run with an objective of maximizing the stock price. Finally, we should note that the MSCI China Index is heavily weighted with large state-owned enterprises and has underperformed the Dow Jones, Shanghai, and Shenzhen stock indexes.`

Potential Currency Appreciation

A further benefit to investors from investing in China is the likelihood that the Chinese RMB will appreciate in the future. As a result of the rapid growth in trade and a high savings rate, China runs a huge trade surplus with the U.S. and has accumulated an impressive foreign currency reserve second only to Japan. Much like Japan in the 1980s, China is facing strong pressures to appreciate its currency value. As Exhibit Six shows, during the period of Japan's most rapid growth, the Japanese Yen appreciated substantially against the U.S. dollar.

We do not expect that China will let its currency to appreciate sharply against the US Dollar over the short term. It took over thirty-five years for the Japanese Yen to appreciate from 400Yen/dollar to about 100 Yen/dollar. Because of its large and growing labor force, China will wish to maintain an undervalued currency to make its exports competitive. But we believe that large and growing trade surpluses are not politically sustainable in the long-term. China has recently allowed its currency to appreciate by 2% versus the US

Dollar. We expect this is just the first step. China will be under continued heavy pressure from the US and EU to adjust its currency to restrain its growing trade surplus.

Exhibit Six

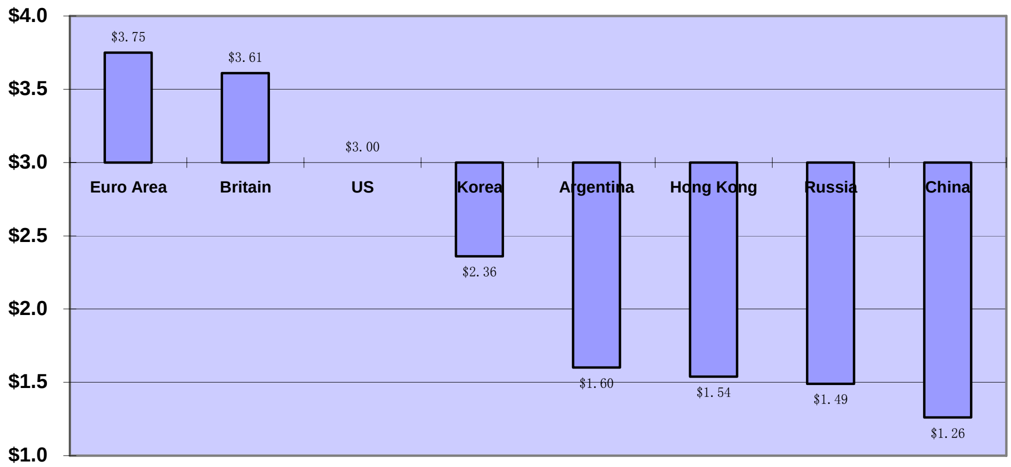
The Appreciation of the Japanese Yen

Yen/dollar exchange rates (1960-2004)


The pressure will be especially strong given the currency's large deviation from purchasing power parity. While the precise magnitude of the deviation is hard to estimate, one interesting statistic is the "Big Mac" index provided by the (London) Economist. As Exhibit Seven shows, at the end of 2004, the RMB appeared to be undervalued by as much as 60% against the dollar. As a result, we expect the currency to appreciate gradually in the near future, offering dollar investors a natural hedge against the weakening dollar.

Exhibit Seven

Estimates of Purchasing Power Parity The "Big Mac" Index (December, 2004)




*Source: The Economist*

Strategies For Investing in China

Several strategies are available to U.S. investors who hope to benefit from the continued rapid growth of the Chinese economy. Here, we present the advantages and risks involved in each.

a) Open-End US Mutual Funds

While China's growth provides a historical investment opportunity, there is no doubt that direct investment in the Chinese stock market is risky. As shown in Exhibit Eight, the Chinese stock market was more than twice as volatile as the U.S. market during the 1995-2004 period, even though the U.S. market itself went through a spectacular boom-bust cycle. Moreover, there is also large firm specific volatility for individual companies. Thus, it is imperative that investors have a broadly diversified portfolio to minimize their investment risk. The easiest place to start is to buy mutual funds sold in the U.S. that invest in Chinese stocks. Based on relatively low expense ratios and reasonable past relative performance, we have selected six U.S. mutual funds for individual investors shown in Exhibit Nine.

Exhibit Eight

Average Dollar Return and Volatility of Selected Markets, 1995-2004

| 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 (United States=100) |
|---|---|---|---|---|---|---|
| Argentina | -0.15 | 6 | 4 | 131.92 | -46.55 | 248.83 |
| Brazil | 6.53 | 5 | 5 | 140.71 | -45.72 | 206.81 |
| Chile | 2.40 | 3 | 6 | 80.43 | -28.06 | 107.78 |
| China | 6.93 | 5 | 5 | 65.14 | -20.62 | 220.04 |
| Greece | 11.62 | 6 | 4 | 87.17 | -42.71 | 131.61 |
| Hong Kong | 5.42 | 5 | 5 | 68.30 | -24.48 | 125.97 |
| India | 1.73 | 5 | 5 | 81.79 | -30.16 | 152.33 |
| Thailand | -11.06 | 5 | 5 | 136.67 | -75.48 | 170.43 |
| United States | 9.97 | 7 | 3 | 32.07 | -23.36 | 100.00 |

Exhibit Nine

Open-End Fund Shares (9/30/05)

| | PRICE | Morningstar Rating | Expense ratio % | NAV ($M) | Trailing 5-year returns Av. Annual (%) |
|---|---|---|---|---|---|
| AllianceBernstein Great China | 12.82 | ★★★ | 2.00 | 49 | 8.84 |
| Columbia Greater China Z | 25.73 | ★★★ | 1.64 | 95 | 8.67 |
| Dreyfus Premier Greater China | 21.12 | ★★★ | 1.80 | 149 | 9.53 |
| Fidelity China Region | 18.08 | ★★ | 1.77 | 425 | 5.70 |
| Guinness Atkinson China & | 19.33 | ★★★ | 1.67 | 120 | 6.14 |
| Matthews China | 14.67 | ★★★★ | 1.50 | 411 | 15.99 |

*Source:quicktake.morningstar.com/Fund,http://finance.yahoo.com All Funds are no load.*

b) <u>Closed-end Investment Company Shares</u>

An alternative approach is to purchase closed-end fund shares sold in the U.S. when they are selling at discounts from their net asset values. While the price of a closed-end fund tends to deviate from its NAV (and therefore may not always be sold for full value), they can have certain advantages which make them suitable for investing in China. One advantage is that, unlike open-end mutual funds, which tend to be forced to buy at the top and sell at the bottom due to the fickle whims of fund flows in the marketplace, managers of closed-end funds have more control over the timing of their purchases and sales of securities. If investors wish to redeem their Chinese investments, the closed-end fund manager is not required to sell portfolio holdings. This aspect is advantageous when dealing with Chinese shares because the transactions costs of buying and selling are quite large. Another advantage is that investors may earn excess returns when buying at deep discounts, because the discounts on closed-end funds tend to mean-revert. Exhibit Ten lists three selected funds based on past performance and relatively low expense ratios. During 2005, two of those funds sold at substantial discounts.

Exhibit Ten

Selected Closed-end Fund Shares

(Data for October 2005)

| | PRICE | Morningstar Rating | Premium /Discount | Expense ratio % | Trailing 5-year returns Av. Annual (%) |
|---|---|---|---|---|---|
| Jardine Fleming China Region (JFC) | 12.18 | ★★★ | -14.61 | 2.22 | 9.18 |
| Greater China (GCH) | 15.60 | ★★★★ | -14.72 | 2.28 | 15.41 |
| China Fund (CHN) | 24.07 | ★★★★★ | -0.90 | 1.41 | 31.14 |

*Source: quicktake.morningstar.com/Fund, http://finance.yahoo.com*

c) Investing through Hong Kong, Taiwan, Japan and U.S. Companies

Followers of Warren Buffett in the U.S. can take comfort in knowing that one can find a similar wise man in Asia. His name is Kashing Li, nicked named "superman" by his fans and ranked the No. 28 wealthiest person in the world by *Forbes* Magazine in

2003. Mr. Li came from quite humble background. He fled communism to Hong Kong in the 1950s and started as a plastic flower salesman. Both diligent and thrifty, he started investing in real estate in the 1960s when Hong Kong real estate was depressed during China's Cultural Revolution. Later he shrewdly bought Hutchison, a venerable Hong Kong-based British conglomerate, during another market bottom. He was one of the first to see Canada's attraction for worried Hong Kong residents before the 1997 China takeover. He then successfully bought and developed prime real estate in Vancouver in the late 1980s before the massive exodus. Later, he was also the first to see the economic potential of globalization and has built and operated numerous ports in Great Britain, Hong Kong, Indonesia, Panama, Shanghai, Shenzhen, and other major cities around the world. Now, every time one buys something "made in China", the product is most likely to have been loaded from one of Mr. Li's ports and shipped to America.

Mr. Li was also the first to undertake large scale real estate development in China. He owns the largest upscale development store in Beijing as well as many other properties in China. He also made substantial investments in wireless telecom companies around the world before they were fashionable in the late 1990s. In 1999, he sold a 45% stake in British wireless Orange PLC for a US$2 billion profit shortly before the pieces of such properties declined sharply. For years, Kashing Li has acquired a stellar investment track record through his flagship vehicle: Hutchison Whampoa, a company listed on the Hong Kong stock exchange with business holdings in financial services, infrastructure, investments, manufacturing, real estate, retail, telecom, and utilities. Over the 1987-2004 period, the company has provided investors with annual dollar returns of 13.3%, and has out-performed the Hong Kong market index. The company represents a well diversified and lower risk indirect method of benefiting from the growth of China.

We are bullish on the long-term prospects of Hutchison Whampoa, because Mr. Li has developed a successor management team. While Mr. Li is still active at age 76, he has groomed his two capable sons, Victor and Richard, as well as a team of professional managers, to take over the business. Both sons have achieved outstanding investment performance on their own. For example, younger Richard took Tom.com and other internet companies public during the feverish dotcom bubble. The stock was hundreds of times over-subscribed and people had to line up overnight outside brokerage houses to get shares. Like his contrarian father, after Richard sold Tom.com at its peak, he immediately used the cash and stock from the sale to have acquired relatively inexpensive Hong Kong telecom, in a takeover battle with Singapore Telecom.

Because of better corporate governance, more professional management, large exposure to China business, as well as lower asset valuations, we believe many Hong Kong listed local companies are lower risk investments than indigenous red-chip Chinese companies listed locally as well as overseas. These local companies include Li & Fung (a very successful outsourcing and trading firm), Shui On Group (run by Vincent Lo, nicked named "King of GuanXi" and the most consistently successful foreign real estate investor in China), and HSBC and Hang Seng Bank, two financial giants which are expected to generated well over 50% of their business from Greater China.

Because of increasing economic integration with China, some Taiwanese companies also offer unique opportunities for capitalizing on China's growth. Taiwan is the second largest high-tech chip producer in the world. By expanding into China, many Taiwan chip makers has achieved a potent mix of technology know-how, worldwide market access and cheap labor and they are very well positioned to meet the needs of a growing Chinese market as well as demand from around the world. Two examples are the blue-chips TSMC and UMC. Both are also listed as ADRs on the New York Stock Exchange. Another long-term financial vehicle is China Trust, the largest Taiwan financial conglomerate. Because of its expertise in financial services as well as in real estate development in China, we believe its business there is poised for considerable growth, especially if there was any warming up of relations between China and Taiwan.

While investors may be put off by recent anti-Japanese protests in China, the simple truth is that China and Japan' economies are highly complementary and China has become Japan's third most important trading partner after U.S. and EU. While China has become an important outsourcing center for Japanese companies, increasingly, Japanese companies there make products for domestic China market. The steady growth of the Chinese middle class has also created significant demand for Japanese products. The Goldman Sachs China-related Japan stock basket has outperformed Japan's stock market index (TOPIX) by 35% since during 2003 and 2004. Assuming continued economic growth in China, we believe Japanese machinery, chemical, transportation equipment, and steel companies will enjoy steady increases in demand from China. Japanese companies likely to benefit are Hitachi Construction Machinery, Asahi Glass, Nippon Steel, Mitsui & Co, Teihaiyo Cement, Daikin Industries, and Mitsubishi Electric.

Some U.S. companies will also benefit from China's growth. WalMart purchased $18 billion of merchandise in China in 2004. WalMart has done more than any other company in the world in putting "made in China" on the U.S. retail landscape. WalMart also has considerable retail business in China. With its formidable outsourcing and logistics network, WalMart is expanding rapidly in China, building many stores in urban population centers. While China is investing heavily in its transportation infrastructure, its distribution system is still antiquated and not efficient. This gives U.S. companies such as UPS a significant advantage. While UPS is still making heavy investments in its China network and the business is not yet profitable, we believe investors will enjoy significant earnings gains when the network is up and running. ProLogis, which is a REIT, offers investors exposure to both China's transportation industry, and also to China's real estate. Another successful U.S. company operating in China is Yum! Brands, Inc. The company owns two highly popular restaurant chains in China, KFC and Pizza Hut.

A rapidly growing but aging middle class population with money to spend should bring new demand for many U.S. drug and medical equipment companies. The propensity of the Chinese to save should also benefit asset managers. While China's asset management business still in its infancy,, AIG, Merrill Lynch, INVESCO, and Prudential, have established their foothold in China and have formed joint venture fund companies.

While indirect investments in U.S. and Japanese companies to gain exposure to China's growth are lower risk strategies, they are not pure plays. These companies will enjoy rapidly growing opportunities in China but such activities will still account for only a small percentage of overall revenue. Moreover, U.S. and Japanese companies are subject to overall market movement in the U.S. and Japan and thus they offer fewer diversification benefits than more direct investment in companies that do most of their business in China.

d) Direct Investment in Chinese Companies Listed Overseas

The globalization of world capital markets has made direct purchase of Chinese shares much easier since many local companies list their shares in New York as American Deposit Receipts (ADRs). Moreover, many Hong Kong and Taiwanese companies that have substantial exposure to China's growth—either by selling their products directly to China or outsourcing their productions there—list their shares in New York as well. According to the latest count by the Bank of New York, 61 Chinese, 113 Hong Kong, and 107 Taiwanese companies have ADRs traded on various U.S. stock exchanges.

Exhibit Eleven

Selected ADRs of Chinese Companies

| ADR ISSUE | SYMBOL | EXCH | INDUSTRY | Price (10-10-05) | P/E | Market Cap （10-10-05） |
|---|---|---|---|---|---|---|
| CHINA UNICOM | CHU | NYSE | Mobile Telecom. | US$8.03 | 19.78 | US$10.09B |
| CHINA MOBILE (HONG KONG) | CHL | NYSE | Mobile Telecom. | 23.08 | 16.35 | 90.94B |
| PETROCHINA COMPANY | PTR | NYSE | Oil & Gas Producers | 78.81 | 9.04 | 138.57B |
| CHINA LIFE | LFC | NYSE | Life Insurance | 30.22 | 17.1 | 20.85B |
| CHINA PETROLEUM & CHEMICAL | SNP | NYSE | Oil & Gas Producers | 43.70 | 7.24 | 37.89B |
| CHINA NATIONAL OFFSHORE OIL | CEO | NYSE | Oil & Gas Producers | 65.10 | 10.51 | 26.73B |
| CHINA TELECOM CORPORATION | CHA | NYSE | Fixed Line Telecom. | 36.43 | 10.00 | 29.48B |
| SHANDA INTERACTIVE ENTERTAINMENT | SNDA | NASDAQ | INTERNET GAME | 24.47 | 18.19 | 1.72B |

*Source: Bloomberg.*

One advantage of investing through ADRs is that one avoids the costs and difficulty of trading directly in overseas market. Another advantage is that the listing requirements of the U.S. Securities and Exchange Commission demand a higher level of conformity to

American accounting and reporting standards. Since the Chinese authorities tend to use these companies to showcase China's development, internal monitoring of corporate governance also tends to be stricter.. Exhibit Eleven lists some of the largest companies traded in New York.

Drawbacks to investing in ADRs are that they are less liquid than comparable U.S. companies and they offer only a limited coverage of the large Chinese economy. Thus they do not provide a way to obtain a diversified portfolio of Chinese stocks. Hence, investors may consider the purchase of some blue chip companies traded on the local Chinese exchanges such as A shares directly. At present, qualified foreign institutional investors may purchase A shares on behalf of their retail investors. To mitigate the risk of poor corporate governance, we recommend the purchase of shares in certain more easily monitored sectors, such as energy, transportation, utilities, and consumer goods.

e) Closed-end Investment Companies Selling at Deep Discounts

Rather than buying individual Chinese companies, an attractive strategy for investing in China directly is the purchase of closed-end funds trading at substantial discounts on the local Chinese stock exchanges. While these funds are unfortunately not available to U.S. individual investors due to China's currency controls, they are available in limited quantity to institutional investors through the Qualified Foreign Institutional Investors (QFII) program. These closed-end funds have several advantages:

First, most funds currently trade at substantial discounts of over 30 percent, twice the size of average discounts of similar overseas funds. A listing of the largest of these funds is shown in Exhibit Twelve. Second, because of the lack of blue chip companies and the presence of speculation (and possibly manipulation) in the domestic market, Chinese market indices tend to be unstable and costly to track. While China has recently started to offer index funds and exchange traded funds (ETFs) to local investors, not too surprisingly, closed-end funds have enjoyed somewhat superior performance to the market indices over the last few years. Thus, closed-end funds offer advantages over indexing in the China market. Third, many of these funds have limited lives of 8-12 years. Thus, the discounts should converge to zero at the liquidation of the fund, offering investors a potentially sizable capital gain. Moreover, since more and more Chinese institutional investors are holding these funds, the pressure for earlier liquidation is building up and investors may enjoy large capital gains if early liquidation is approved. Our major concern here is still the corporate governance issue, however. Because many fund companies are still owned by the state and there is often poor alignment of manager incentives and responsibility, there have been cases of personal enrichment at the expenses of fund investors. However, after several regulatory crackdowns, the general perception is that the fund industry now is one of the most transparent in China. American institutional investors can purchase these shares through Morgan Stanley, UBS, Citicorp, and other large financial institutions who have obtained QFII quota.

Exhibit Twelve

Large Chinese Closed End Funds Selling at Deep Discounts (March 2005)

| Name | Price (Yuan) | Scheduled Liquidation Date | Discount (%) | Market Cap (100m Y) | Investment Objective |
|---|---|---|---|---|---|
| Anshun | 0.624 | 6-15-2014 | -43.0 | 18.72 | Growth |
| Fenghe | 0.542 | 3-22-2017 | -47.72 | 16.26 | Value |
| Jinxin | 0.496 | 10-21-2014 | -48.48 | 14.88 | M&A |
| Kerui | 0.701 | 3-12-2017 | -41.2 | 21.03 | Value |
| Tianyuan | 0.574 | 8-25-2014 | -45.7 | 17.22 | G&V |
| Yinfeng | 0.532 | 8-15-2017 | -45.55 | 15.96 | G&V |

*Source: Boshi Fund Management Corporation and Lipper. G&V-Growth & Value*

f) <u>Investing in Chinese Real Estate</u>

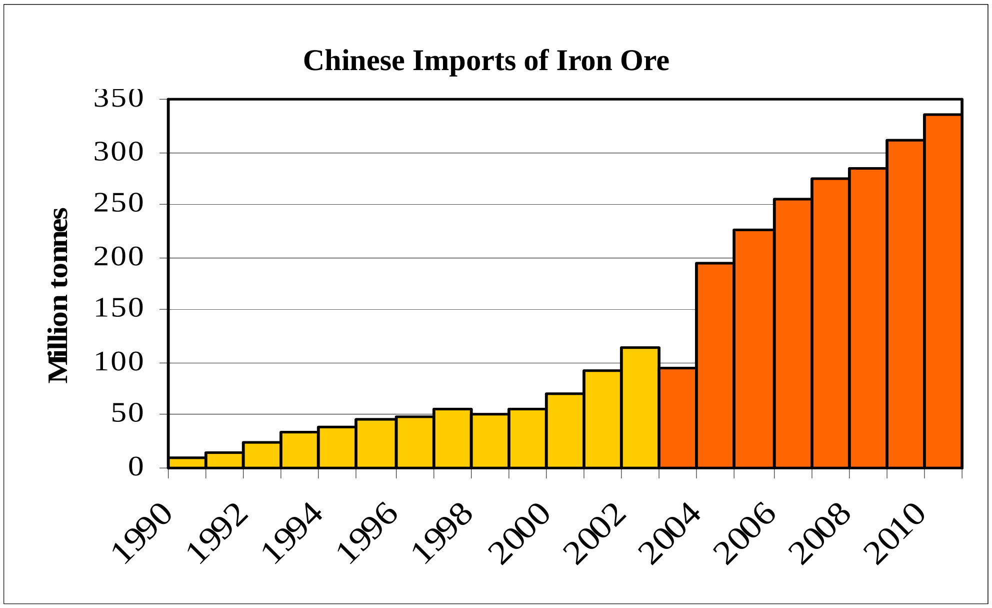
One of the main drivers of the Chinese real estate market has been massive urbanization due to rapid industrialization and poor infrastructure (roads, electric and telephone service, etc.) in rural areas. The Chinese urban population has almost tripled from 172 million to 502 million in 27 years. In addition, about 100 million Chinese migrant workers are working in cities. According to a United Nations study, by the end of 2015, Shanghai and Beijing are expected to have a 50 percent population increase and will have over 20 million inhabitants each. Such growth has put tremendous pressure on urban land prices. For example, according to a report by the *World Journal*, a standard burial plot with tombstone sells for US$6,000 in the Ba Bao Shan cemetery outside Beijing, 50 times more than a similar sale in 1985! This represents a compounded increase of 21% per annum, well above the rate of inflation and the returns from stock and bonds over the same time period. Moreover, the newly sold plots are not as desirable in location or "Fend Shui" as the Chinese believe.

Most individuals and institutions lack the expertise to evaluate Chinese property investments nor do they have the experience to navigate through China's complicated legal system. Poor liquidity and high transaction costs also make it very difficult to turn a property into cash if funding needs or investment prospects change. (Given the poor corporate governance in most Chinese real estate development companies, we do not advise investors purchase property company stocks at the present time.) However, both Hong Kong and Singapore are expected to approve the establishment of Real Estate Investment Trusts (REITs) dedicated to investing in Chinese properties by 2006. The Chinese government is also expected to approve the listing of REITs in the near future. These REITs should provide excellent vehicles for overseas investors since they will provide liquidity, diversification, and growth potential.

g) Investing in Natural Resources

The substantial economic growth we anticipate for China and the increased consumption we project for its huge population imply a growing demand for commodities, such as oil, iron ore, copper and timber. Exhibit Thirteen presents past and projected Chinese demand for iron ore. As a result of growing Chinese demand, the prices of many commodities, such as copper, are near their historical high levels for the last 25 years. Commodities are also found to have low correlations with equities and bonds, making them good addition to a well-diversified portfolio. All portfolios should include some exposure to material resource investments. We recommend investing in natural resource equity funds rather than in a commodity futures fund. Equity funds generally enjoy the same benefits as commodity futures funds but tend to have lower expense ratios as well as to provide dividend income. (There is, however, one low cost exchange traded fund, the Easy ETF GSCI, that tracks the Goldman Sachs Commodity Index with an expense ratio of only 0.45 percent annually) Exhibit Fourteen presents a sample of natural resource equity funds that offer investors low cost investment vehicles.

Exhibit Thirteen




*Sources: Financial Times.* Projections From Naissance Capital

Exhibit Fourteen

Selected Natural Resource Funds (10/11/05)

| | NAV | Morningstar Rating | Expense ratio % | Total Assets ($M) | Trailing 5-year returns Av. Annual (%) |
|---|---|---|---|---|---|
| Fidelity Select Natural Gas | 39.16 | ★★★★ | 0.94 | 1940 | 13.31 |
| ICON Energy | 31.10 | ★★★★ | 1.35 | 993 | 20.71 |
| RS Global Natural Resource | 33.37 | ★★★★★ | 1.50 | 1661 | 26.84 |
| Vanguard Energy | 56.02 | ★★★★★ | 0.31 | 8777 | 20.09 |

*Source: quicktake.morningstar.com/Fund,http://finance.yahoo.com*

Conclusion

We are convinced that the Chinese economy is likely to be one of the fastest growing in the world over the years ahead. Rapid growth provides the raw material for generous security returns. We understand the substantial political and governance risks that are associated with investment in China. But no other developing country has the human resources and the accompanying ambition and culture to sustain such rapid growth for years into the future. Moreover, the enormous pragmatism of a Chinese leadership, committed to rise to the top of the world economy, gives us comfort that our investment recommendations will prove to be profitable.

We have outlined several strategies that we believe will allow investors to exploit the growth in China while minimizing investment risks. These include the purchase of Chinese equities either directly or through funds that own diversified portfolios of Chinese companies, especially closed-end fund shares that sell at substantial discounts from their net asset values. We have also recommended lower risk indirect methods of exploiting the growth on the Chinese economy through the purchase of such vehicles as natural resource funds that should benefit from China's seemingly insatiable appetite for raw materials. Moreover, we have suggested that a variety of companies not domiciled in China will benefit from China's growth through trade and/or foreign investment. Many companies in Taiwan, Hong Kong, Japan, and even in the U.S. have increasing economic ties to China's growth. Investors may well want to employ a mixed strategy that uses some investments from each of the attractive alternatives we have listed.

One final comment deserves attention. Securities markets in the developed world are all relatively richly valued. Bond yields are low throughout the developed world. Moreover, risk spreads between risky and safe debt securities are near all time lows. Projected equity returns are at best in the single digit level given the very low dividend yields at which equities presently sell. It is clear that the amount investors are being paid in extra return for bearing risk is lower than has historically been the case. In such an environment, investing in the growth of the emerging market economy with the most rapid growth would appear to have a very attractive risk reward ratio.

Finally, the investment strategies we have recommended have important diversification advantages for portfolios that are largely invested in developed markets such as the United States. The correlations of the returns from many of the investment strategies we have suggested with the returns from the broad U.S. stock market have been quite low over the past several years. For example, the five-year correlation between the Chinese Shanghai A Shares Composite market index and the S&P 500 has been 0.40. The correlation of the natural resource funds and the U.S. market has been essentially zero. From an overall portfolio standpoint, investing to exploit the growth of the Chinese economy is likely to improve substantially the risk return tradeoff of most portfolios holding domestic equities.

## References

Allen, Franklin, J. Qian, and M. Qiari (2005). "Law, Finance, and Economic Growth in China," *Journal of Financial Economics* 77: 57-116.

Allen, Franklin, J. Qian, and M. Qiari (July 2005). "China's Financial System: Past, Present, and Future," working paper, JEL classifications 05, K0, G2.

"China: Changing the Way The World Does Business" (2005), *The Bernstein Journal* 3(1, Spring): 7-12.

Chow, Gregory C. (2003). *China's Economic Transformation*. Blackwell Publishers.

Chow, Gregory C. (October 2005). "Corruption and China's Economic Reform in the Early 21st Century," Princeton University, Center for Economic Policy Studies working paper 116.

Goldman Sachs (2004). *Growth and Development: The Path to 2050*, http://www.gold mansachs.corn./insight/research/reports/99.pdf.

Krugman, Paul (1994). "The Myth of Asia's Miracle," *Foreign Affairs* 73(6): 62-79.

"The Big Mac Index," *The Economist* (December 16, 2004). http://www.economist.com/markets/bigmac/displayStorycfm?story_id=3503641.