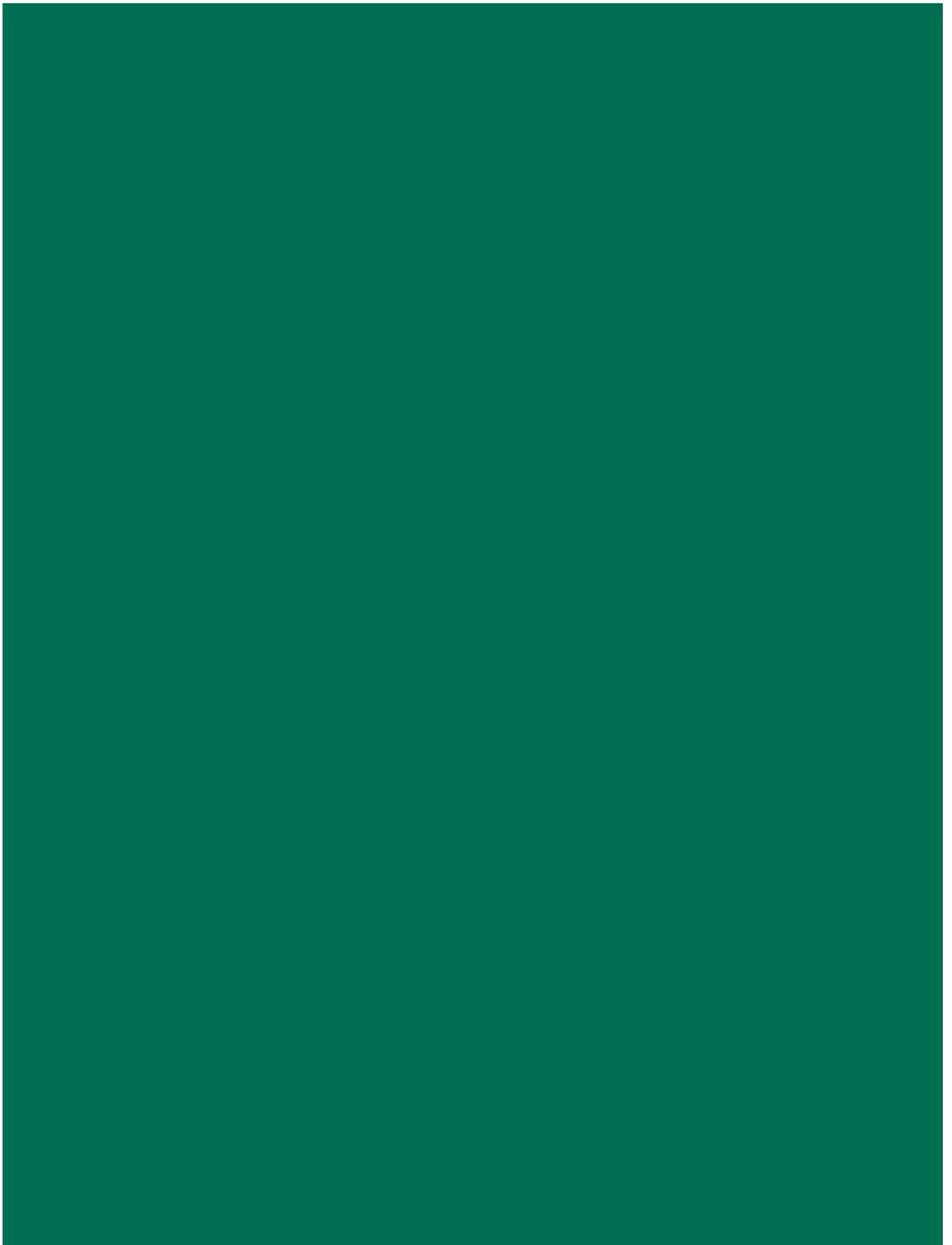
AN IN-DEPTH ANALYSIS

Investing in Chinese Equities

China's Evolving Equity Markets

FEBRUARY 2008

Northern Trust



FOREWORD

China's emergence as a modern economic power stands as one of the great stories of the past quarter-century. The growth of China's mainland stock markets in Shanghai and Shenzhen, and the emergence of "A-Shares" now provide Westerners with attractive new opportunities to invest in mainland companies while diversifying their portfolios. The key to reaching investors' goals is, and will be, understanding China's growth potential, the risks, the evolution of its market and effective strategies for participation.

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EXECUTIVE SUMMARY

China is the world's fourth largest economy behind the United States, Japan and Germany. The combination of China's growing domestic markets and export industries powerfully impact the global economy.

While China's economy dwarfs those of other emerging markets, restrictions on capital flows have caused China to be underrepresented in investment portfolios. In response, China has taken significant strides to liberalize its stock market. The Qualified Foreign Institutional Investor (QFII) program, introduced in 2002, permits foreign institutional investors to invest directly in stocks of Chinese mainland companies — "A-Shares" — for the first time (refer to key terms and definitions on page 4). Chinese overseas markets, primarily Hong Kong, offer a variety of other (non-A-Share) attractive stocks that provide exposure to the Chinese growth story.

Risk and reward. Western investors see great potential in A-Shares, which represent over 75% of Chinese market capitalization, while considering the risks posed by the Chinese market. Risk factors include barriers to entry (foreign investors must go through QFII), high P/E ratios, volatility, and rising costs and inflation. Structural weaknesses in China's economic/business environment also must be taken into account. They include disproportionate influence by State officials, lack of an effective accounting and legal infrastructure, lack of an active market place for corporate takeovers, the limited influence of independent directors, a dependence on global trade, and a centrally managed economy.

Nonetheless, a number of positive factors buoy Western investors: attractive performance by the Shanghai A-Share index, relative market inefficiency offering attractive opportunities, Chinese companies' shift to A-Share listings, which result in world leading IPOs (including PetroChina's US $1 trillion market capitalization), attractive non-A-Share stock classes, low correlation, and diversification from Western markets.

A holistic approach. A long-term, holistic approach may offer Western investors their best China opportunities. This approach includes exposure across A-Shares, H-Shares, and other classes of stock relating to Chinese-centric companies with offshore listings. Historically, a 10% allocation of overseas assets to Chinese A-Shares would have increased returns with little additional volatility. A 4% allocation to A-Shares plus an existing allocation to H and other offshore Chinese shares would have reduced volatility and increased returns.

Of the three pathways to A-Shares available to institutional investors, possibly the simplest and most direct is management by a knowledgeable firm with access to the QFII program. A strategy combining both the expertise of mainland and foreign-based investment management firms minimizes risk through diversification.

The question no longer is whether to invest in China but how and when. Given the size and global impact of the Chinese economy, Chinese domestic stocks (A-Shares) eventually will become a core part of every global portfolio. They will be particularly important because Chinese domestic stocks are not included in emerging-market indices, such as MSCI Emerging Markets, due to capital controls on these stocks. Thus most investors will have a structural underweight in A-Shares. As a result, investors who participate sooner rather than later may reap a disproportionate share of the rewards.

KEY TERMS AND DEFINITIONS

Securities

A-Shares: shares of Chinese-incorporated companies trading on the Shanghai or Shenzhen stock exchanges. These shares, quoted in Chinese Renminbi (RMB), are only open to trading by China's mainland residents or international investors under the Qualified Foreign Institutional Investors program (below). The A-Share market's total capitalization as of the end of December 2007 was US $4,156 billion comprising over 1,600 companies.

B-Shares: shares of Chinese-incorporated companies trading on the Shanghai (quoted in US$) or Shenzhen (quoted in HK$) stock exchanges. Unlike A-Shares, these can only be traded by non-mainland residents of China or by mainland residents with appropriate foreign-currency dealing accounts. B-Share total market capitalization as of December 2007 was US $34.5 billion comprising 112 companies. The B-Share market is limited in diversity and liquidity.

H-Shares: shares of companies incorporated in China and nominated by the Chinese government for listing and trading on the Hong Kong Stock Exchange. They are quoted in Hong Kong Dollars and can only be traded by non-mainland Chinese investors. H-Share total market capitalization is US $600 billion as of December 2007 with 146 companies on the H-Share market. The index is dominated by financial and energy stocks.

Red Chips: shares of Hong Kong-incorporated companies that trade on the Hong Kong Stock Exchange but focus primary business activities in mainland China. These stocks are quoted in HK$ and can only be traded by non-mainland investors. As of December 2007, the Red Chip market capitalization was US $606 billion.

Other offshore-listed shares: shares of companies incorporated outside of China include those listed with exchanges in London, New York, Singapore, and Tokyo.

Organizations

Qualified Foreign Institutional Investor (QFII) program: instituted in 2002 to attract foreign capital and expertise to the Chinese stock market. QFII enables non-mainland foreign institutional investors who meet program requirements to invest directly in the A-Share market and thus act like domestic mainland-Chinese investors. The current QFII investment quota was increased to US $30 billion in December 2007.

China Securities Regulatory Commission (CSRC): established in 1992 to regulate China's securities and futures markets. The CSRC drafts laws and regulations for the securities markets and supervises the various financial institutions in the securities and futures industry. The CSRC functions as an executive branch of the State Council, which is China's chief administrative body headed by the nation's premier.

State Administration of Foreign Exchange (SAFE): the government agency responsible for maintaining China's foreign exchange system. SAFE sets rules and regulations regarding foreign exchange activities and regulates foreign-exchange transactions in China.

PART I: CHINA'S POTENTIAL FOR CONTINUING ECONOMIC GROWTH

Only thirty years ago, China was an economically backward nation with a centrally planned economy that assured continuing poverty. Today, China maintains the world's fourth largest economy behind the United States, Japan and Germany.

China's global presence now includes membership in the World Trade Organization (2001) and the signing of a key regional free trade agreement in 2004 with the Association of Southeast Asian Nations, which will culminate in an ASEAN/China free trade zone in 2010.

The future should see China's economy and position continue to advance rapidly. Experts forecast that by 2050 China will be the world's largest economy (Figure 3).

FIGURE 1: GDP OF CHINA IN RELATION TO THE WORLD (NOMINAL) ESTIMATED 2007

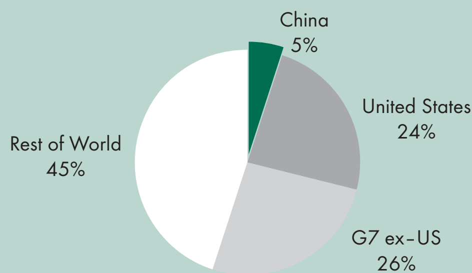
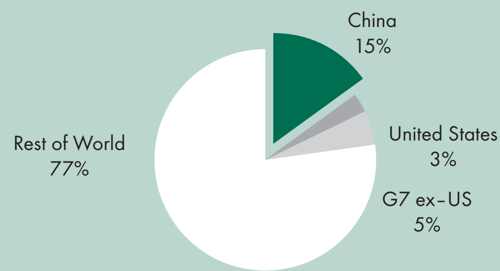


FIGURE 2: POPULATION OF CHINA IN RELATION TO THE WORLD ESTIMATED JULY 2007

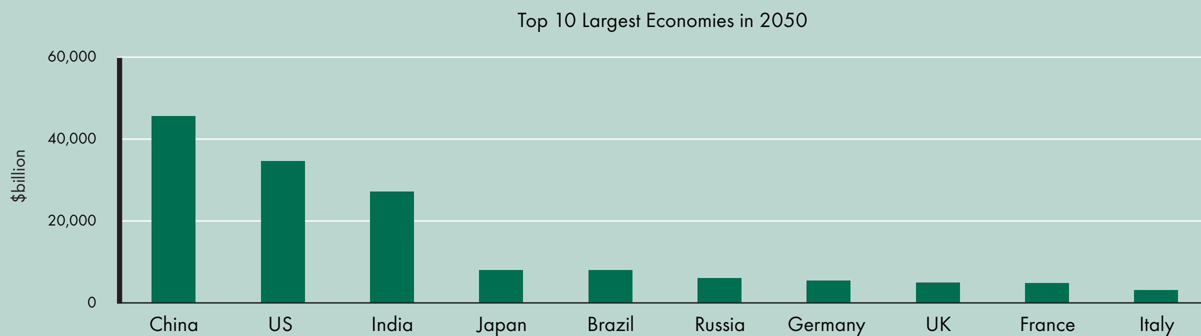


China, like the U.S., will soon boast a GDP share well beyond its percentage of the global population.

Source: International Monetary Fund, Central Intelligence Agency, Northern Trust Global Investments

FIGURE 3: 2050 GDP PROJECTIONS

China's GDP is projected to overtake that of the U.S. in three decades.



Source: Goldman Sachs

In concrete terms, the average Chinese person will get wealthier and fuel further growth among Chinese firms. No wonder that every major newspaper in the world today covers China at a depth unimaginable in the 1970s and '80s.

Five key factors

Many reasons exist for China's spectacular growth.[1] Five key factors include:

- Macroeconomic stability encouraging investment and savings. Wild fluctuations in GDP growth cause uncertainty about the future and provoke worry about the present. High levels of inflation discourage savings and distort spending. China has avoided these. GDP has grown at a constant pace over recent years — not high enough to create concern yet still impressive. Over the next several years, GDP is projected to grow at 10% — higher than for most emerging markets and far higher than the rate forecast for developed countries. At the same time, inflation has been low relative to growth as opposed to higher inflation levels in some other emerging nations. For example, both Russia and Brazil have recently experienced periods of hyperinflation — as high as 6,821% in Brazil in the early 1990s. Controlling fuel, food, and materials prices will play a key role in China's macroeconomic policy.

  Additionally, China's enormous foreign exchange reserves help the economy weather most short-term capital shocks, thus contributing to macroeconomic stability. Ironically, those reserves could represent one of the nation's biggest risks. Internally, a rising trade surplus and a currency pegged to the depreciating U.S. dollar require China to issue more Renminbi and increase the money supply. Externally, exporting countries with free floating currencies are pressuring China to allow the pegged RMB to appreciate as their own exports become increasingly less price competitive.

  The scales have tilted towards optimism, however. In July 2007, Moody's Investors Services upgraded China's long-term debt and foreign-currency to A1, its fifth highest rating. Moody's cites a "good track record of improving its fiscal position," and the "pragmatic reforms" of the government as contributing to its upgrade decision.[2]

- Human capital in the form of better education creating a more productive workforce. Education and skills correlate highly with increasing economic growth. The number of professionals and technically adept managers and workers has increased significantly, helping transform China's export mix to more sophisticated, higher-value products. Although traditional low-value goods like textiles and materials still constitute a high percentage of Chinese exports, a shift continues toward more capital- and technology-intensive industries, such as telecoms and office equipment.

FIGURE 4: CHINESE EXPORT MIX: A COMPARISON BETWEEN 1997 AND 2005

China's export mix is shifting towards high-value, technology-oriented products.

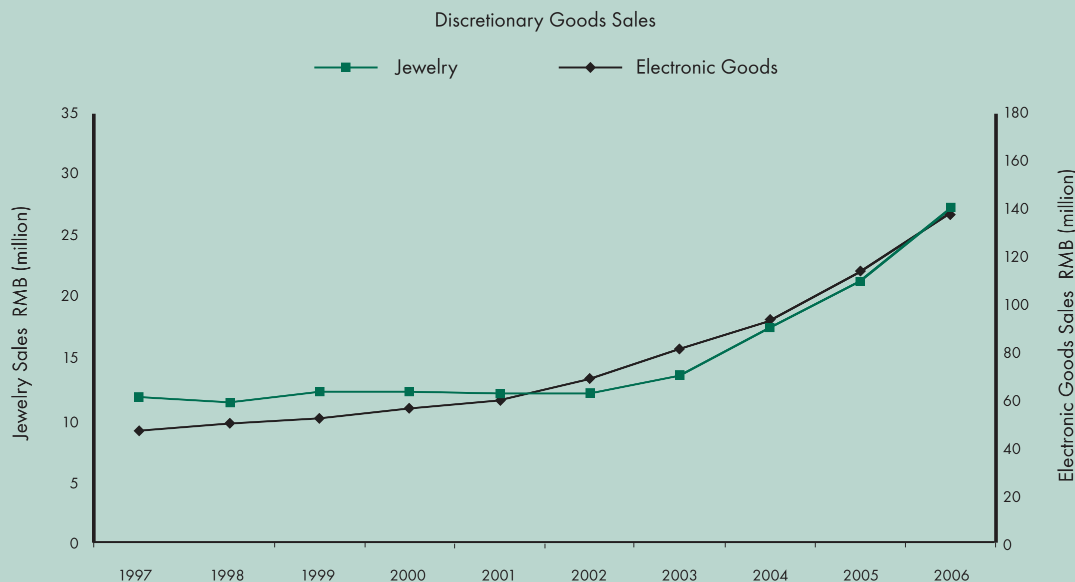
Industry Sector	Exports 2005	Exports 1997	Change in Export Mix
Textile and Apparel	18%	29%	(–11%)
Telecom and Electronic Equipment	23%	12%	11%
Food and Beverage	3%	7%	(–4%)
Other Sectors	12%	16%	(–4%)
Office and Equipment	15%	7%	8%
Petroleum and Chemical	4%	7%	(–3%)
Materials	13%	14%	(–1%)
Machinery	8%	5%	3%
Vehicles and Transportation	4%	3%	1%

Source: WTO, NTGI

- Government promoting conditions for growth and stimulating the economy as needed. While the Chinese economy gradually transforms to a free-market approach, Beijing maintains an active and important role — more so than in most other nations — stimulating the economy when free-market forces fail or work too slowly. Beijing has done much to provide and improve the necessary conditions for growth.
- Openness to free trade, shifting production to areas of comparative advantage. Such trade facilitates the transmission of technology, knowledge, and ideas across borders to further encourage growth, and China has made considerable strides to open its economy to foreign investment. Importantly, relaxing trade restrictions enables China to take advantage of two areas of comparative advantage: cheap, skilled labor, and excess manufacturing capacity. As a major exporter, China depends on the continued free flow of capital and knowledge, as well as mutual access among trading partners, to achieve continued growth. A slowing global economy or restrictive trade practices in key export markets would negatively impact China's export trade, the primary engine of growth.
- Domestic consumption, increasing the wealth of large urban populations. General consumption levels are rising, spurred by a new consumer class made up of well-paid young professionals in wealthy coastal areas. Overall consumption figures for urban households show major increases over the last decade or so.[3]

FIGURE 5: INCREASE IN SALES OF DISCRETIONARY GOODS

The purchasing power of Chinese consumers continues to rise.



Source: Thomson Datastream, NTGI

Increasing consumer demand primarily benefits domestic firms as foreign produced products remain too expensive for many Chinese consumers. A large number of domestic firms have emerged producing inexpensive copies of Western goods based on technology and ideas from foreign investors — often with little regard to international copyright. These domestic firms can grow into formidable competitors in both the domestic and export market, selling low cost look-alikes back to Western consumers, while at the same time stimulating domestic consumption of everything from electronics to automobiles.

The emergence of China's domestic companies as global leaders

The factors above have combined to alter the nature of China's domestic companies, and this warrants a closer look. Chinese companies currently boast many advantages over foreign counterparts, which stem from China's low-cost base and enormous potential domestic demand. For example, the *Wall Street Journal* reports that China Mobile has over 300 million subscribers, "well more than any other mobile phone network operator in the world".[4] It is adding to its lead by an estimated 5 million subscribers a month.[5]

Domestic companies also benefit from the ability to learn from foreign companies that have set up shop in China. Japan became a manufacturing powerhouse in the 1970s and '80s in great part because Japanese companies adopted foreign firms' knowledge and manufacturing processes. The ability to grow through gathering business intelligence is represented by Nanjing Automobile Company's purchase of the United Kingdom's MG automobile company in mid 2005. This purchase of an iconic British sports car brand came after decades of Chinese learning from foreign companies such as Volkswagen and General Motors.

Given these advantages, many commentators believe that Chinese firms can become world-class companies. Bernstein Research treats the emergence of these companies as having "disruptive consequences" on incumbent global industries.[6] Examples, including some fairly surprising ones, abound:

- Lenovo is one of the world's largest PC manufacturers, having acquired IBM's PC business in 2005. Sales stand at US $13 billion. Lenovo already accounts for one-third of China's large PC market.
- Haier has become the top manufacturer of compact refrigerators in the U.S. after expanding into the American market in 1999. It is also the fourth largest home-appliance manufacturer in the world.[7]
- Nanjing Automobile (see above) recently rolled out the first MG automobile built in China. The MG brand was acquired from the former MG Rover, originally based in Britain. Nanjing Automobile plans to produce 200,000 cars a year for a global market.
- China National Petroleum Company (PetroChina) became the first company worth more than US $1 trillion. China's largest oil company and by far the largest in the world, PetroChina operates in more than 20 countries, most being emerging nations holding the largest potential for oil exploration and development.[8] PetroChina tripled its value on November 5, 2007 — its debut day on the Shanghai Stock Exchange.
- Twenty-four Chinese companies appear in the 2007 edition of Fortune Magazine's Global 500 list, made up of the top 500 companies by revenue. Of those 24 companies, 11 are either already listed on China's A-Share market or plan to list in the near future. Fortune's 2005 edition listed only 16 Chinese companies.

Clearly, China's economic growth will continue. While the rate of that growth may vary, and the unknown may always crop up in the domestic and geopolitical spheres, China will likely retain the status of a major economic power for an extended period.

PART II: REVIEWING THE CHINESE STOCK MARKET: FORWARD PROGRESS

China has taken significant strides over a short period of time to create and liberalize its stock market. As with other elements of China's economic advancement, the pace of development has been deliberate yet unequivocal.

Prior to 1984, China's economic growth was financed with loans from China's state banks to state-owned enterprises. Because many loans financed social and political objectives, inefficient and unprofitable state-owned enterprises received most of the capital. A high volume of non-performing loans resulted. By the early 1980s, they threatened to sink the domestic banking system. Eager to stimulate the economy, relieve the debt burden of state-owned enterprises, and save the banking system, Beijing sought alternative sources of capital. In 1984, China listed its first stock to raise capital outside the banking system.

Establishment of a secondary market

In 1991, China established its first approved secondary market. Stock exchanges in Shenzhen and Shanghai opened for mainland investors. The State experimented with ways of selling shares during the market's infancy period. In the absence of a legislative or enforcement framework, the first steps were cautious. Initially the State deliberately underpriced IPOs and restricted supply to encourage investors to buy. Insiders, who were important clients of China's banks, borrowed money to get an allocation of underpriced stock then turned around and resold it on the secondary market, which, given a limited supply, bid prices up 100% to 150% on the first trading day. Since the State determined who could issue stock, the strongest firms didn't necessarily issue shares. At the same time, heavy insider trading failed to produce an efficient capital market.

To facilitate the sale of State-owned enterprises, China had introduced a split-share structure in 1992. Initially, this had a negative impact. A class of non-tradable shares was awarded to insiders upon the sale of a State-owned enterprise. These shares served as compensation for the transfer of assets to a newly listed entity, which could be traded on the stock market. The non-tradable shares represented ownership in a holding company, which controlled the voting rights of the listed enterprise. A remaining, smaller class of tradable shares representing ownership of the underlying listed entity was sold to private investors.

Confusion set in because both classes of shares were designated "A-Shares." Voting control heavily favored non-tradable shareholders, providing little protection to holders of freely tradable listed shares. The poor protection of minority shareholders combined with widespread insider abuses dampened confidence in the market.

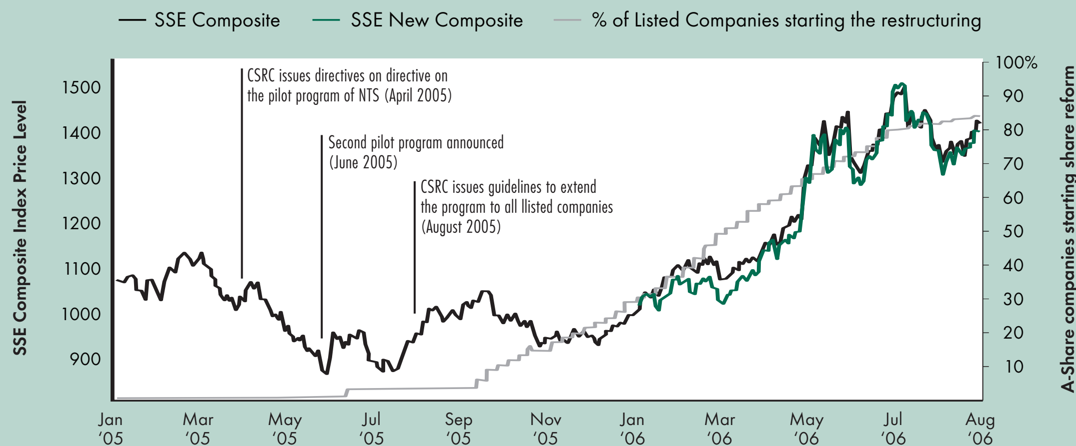
Seeking to increase domestic confidence and attract foreign capital, China announced plans to forcibly convert non-tradable shares into freely tradable shares. In 2005, the first reforms were implemented with non-tradable shares gradually abolished. Following these reforms, China's domestic A-Share market took off, riding a wave of investor confidence in a fair market (Figure 6 on the following page).

SHARE-REFORM GUIDELINES

Companies undergoing the share reform are required to sell their previously state-owned shares to private investors, with the price of the sale directly negotiated between both parties. Although the share reform technically enables all shares to freely float, only a percentage of shares are released for sale immediately after the reform. The remainder of the shares can only be transferred a year after the completion of the reform. The selling of these newly privatized shares in phases reduces the probability of a supply glut, while leading to a gradual increase in supply.

FIGURE 6: NON-TRADABLE SHARE REFORM TO MARKET PERFORMANCE

The 2005 market reforms led to a boom in share prices.



Source: Beltratti and Bortolotti (2006)

Attracting foreign investors: the QFII program

While Beijing was anxious to attract foreign capital, it also sought to maintain strict capital controls. In 2002, the Chinese Securities Regulatory Commission (CSRC) and China's State Administration of Foreign Exchange (SAFE) began to allow a small number of foreign companies to establish Renminbi accounts and register as Qualified Foreign Institutional Investors (QFII) to invest in the mainland A-Share market. The government believed that the market would benefit from the participation of select, large foreign institutional participants — mainly banks, investment firms, and insurance companies. These investors would transfer knowledge and expertise to domestic firms, and instill more confidence and discipline into the market.

Beijing set a QFII quota of $10 billion dollars allocated among large foreign firms meeting strict standards regarding size, capital, and experience. Initially, QFII met with limited enthusiasm. Pending the 2005 share reforms, foreign investors had limited faith in the fairness of the market. This attitude changed with the reforms of 2005, and the QFII quota was rapidly filled as foreign firms took advantage of the opportunity to access China's diverse domestic stock market.

Through QFII-qualified firms, the first China "A" funds became available to Western investors. After the 2005 reforms were implemented, and China's A-Share market heated up, these funds rapidly became oversubscribed. On December 9, 2007, Beijing responded by broadening the QFII program to US $30 billion from its initial US $10 billion. The tripling of the QFII quota was intended to expand the institutional-investor base, while ushering in foreign investment houses with international expertise and a long-term view of the markets.

Foreign listings and a huge pool of domestic capital

In 1993, eager to explore alternative sources of capital to support the domestic economy, China began raising capital for mainland companies on overseas stock markets. The State looked primarily to Hong Kong's mature and well-governed market to list and trade stocks of a select number of large mainland companies. The strategy has succeeded. Chinese mainland listings — H-Shares and Red Chips — now represent a significant percentage of the Hong Kong Exchange's trading volume.

However this strategy did not address the problem of efficient capital allocation in the mainland economy. Few domestic Chinese investors are permitted to buy stock outside the country. This much of China's enormous pool of domestic capital is still held by private investors in low-earning bank deposits. China's next priority is expansion of the domestic economy. Faced with increasing dependency on exports, growing disparity between wealthy coastal regions and poor interior ones, an aging demographic resulting from the one child regulation, and an increasing gap between rich and poor, China seeks to unlock the economic potential of the domestic consumer in order to build an economy capable of providing social support to a huge and aging population. At present China represents 13% of the World's GDP with 15% of the World's population. This compares to the US with 24% of the World's GDP from 3% of the World's population. Thus there remains great potential for internal growth as China taps into the savings of the world's largest consumer population which is likely to be reflected by growth of China's domestic stock market.

Two conclusions can be drawn regarding the development of China's stock market: considerable progress has been made and investor confidence has risen accordingly and considerable opportunity remains. This does not mean that investors do not assume risks in the Chinese markets. But those who become familiar with them or call upon professionals who understand these markets should find welcome new opportunities for portfolio diversification.

PART III: POTENTIALS FOR RISK AND REWARD: CHINA'S DOMESTIC A-SHARE MARKET

This section focuses on China's domestic A-Share market, since it comprises over 75% of China's market capitalization (see Figure 9 on page 14). It should be emphasized here that China's stock market, as markets anywhere in the world, presents a framework of risk and reward. China's rapid economic growth has not progressed in a vacuum. Business, trade, governance, and geopolitical conditions always remain subject to change. Therefore, while investors in A-Shares and other Chinese instruments have good reason for long-term optimism, let us, in the interest of due diligence, first examine the market's risks. These involve both concerns about A-Shares and structural weaknesses in China's economic/business environment.

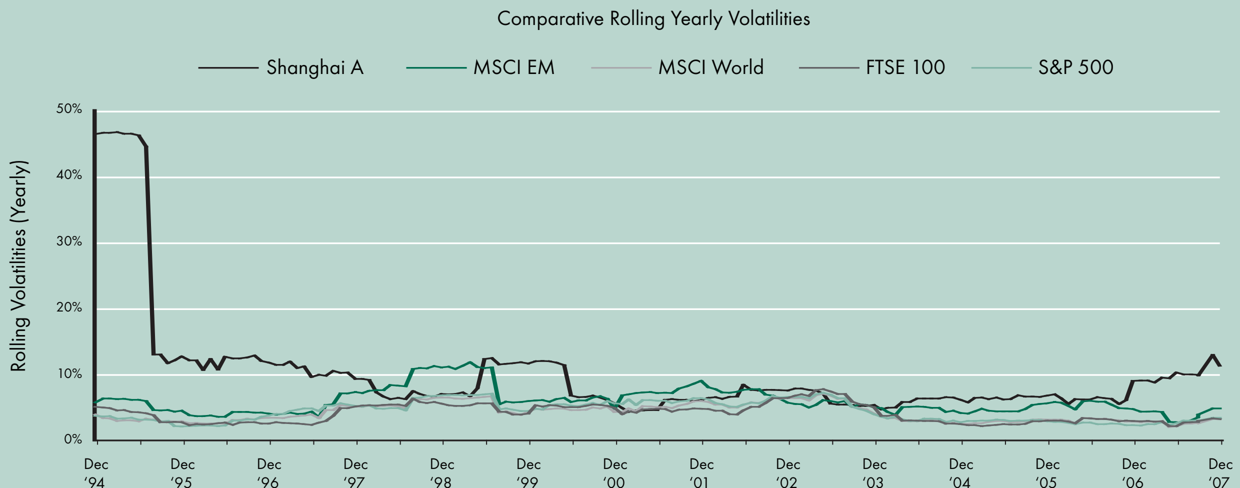
Considerations regarding A-Shares

While opportunities remain attractive, Western investors must be aware of several factors in order to make informed decisions about A-Shares and how to proceed in acquiring them.

- Volatility characterized by violent swings. While volatility has been high as measured by the standard deviation of monthly returns, it has dropped substantially since the implementation of market reforms. (Figure 7).

FIGURE 7: YEARLY ROLLING VOLATILITIES OF CHINESE A-SHARES AND OTHER MARKET INDICES

A-Share volatility was very high initially but has moderated considerably since 2000.

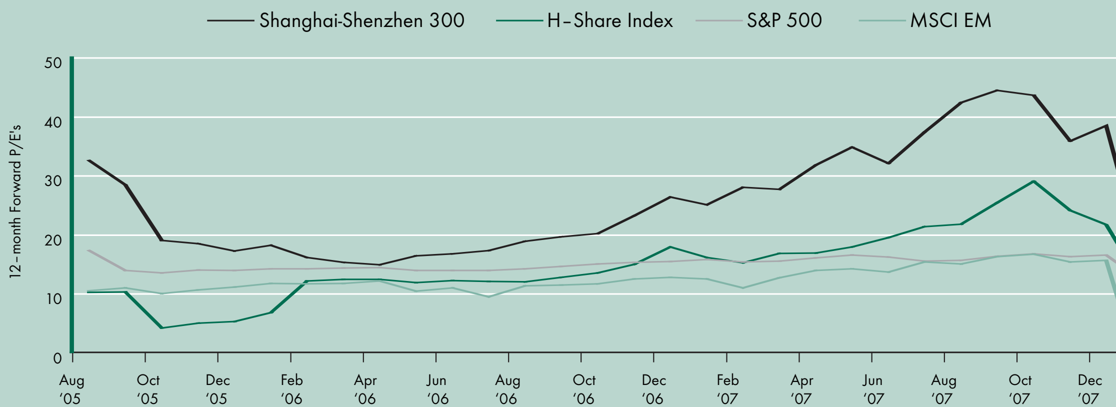


Source: NTGI

- High P/E ratios (Figure 8). Investors may be put off by high valuations, which make A-Shares look expensive. However, P/E ratios for A-Shares have generally traded higher than in developed markets. These ratios result from high expectations for Chinese companies due to the strong economic fundamentals as well the A-Share market being virtually a closed system; China's capital controls on the Renminbi permit domestic Chinese investors only limited investment in foreign markets through the Qualified Domestic Institutional Investors program (QDII).

FIGURE 8: COMPARISON OF 12-MONTH FORWARD P/E RATIOS

P/E ratios of A-Shares historically have been high reflecting limited investment opportunities for Chinese nationals and a large pool of domestic savings.



Source: Bloomberg, NTGI

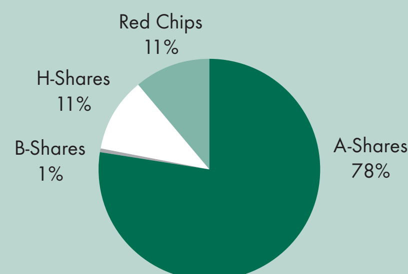
Although some Chinese companies have listed on both domestic (Shanghai or Shenzhen A-Shares) and foreign (usually Hong Kong exchange H-Shares) markets, the two listings are not directly comparable. The higher value of the A-Shares reflects the limited supply of investment opportunities on the mainland and the enormous pool of domestic savings desiring access to them. Because China's capital controls are unlikely to disappear in the foreseeable future, the valuation differential may continue to exist for some time. Foreign investors — with the exception of those accessing the QFII program — are prevented from entering the mainland A-Share market. In addition, China prohibits short sales of A-Shares. Thus no arbitrage opportunities exist between foreign-listed Chinese stocks and domestically listed A-Shares.

- Potential lack of total exposure. China's market offers a veritable alphabet soup of share types, each representing different characteristics and market exposure. Yet few investors can access all of them. Western investors following the country allocation of the MSCI Emerging Market Index will have a small exposure to China through foreign-listed H-Shares, Red Chips, and other offshore-listed Chinese companies. However, MSCI indices are limited to shares widely available to all investors, so none of their allocation will be in China's domestic A-Share market. Here lies a problem, as A-Shares constitute the majority of available Chinese market exposure (Figure 9).

An allocation to Chinese shares without a corresponding allocation to A-Shares leaves out over half of the available Chinese-share universe. Other share types tend to be a poor representation of the broader A-Share market. The H-Share market can be heavily skewed toward financial institutions and energy companies while the A-Share market is broader and diversified across sectors. Additionally, several industries have representation in the A-Share market but not in the H-Share market.[9] Again it should be noted that only QFII investors have access to all of China's stock markets and share types.

FIGURE 9: DISTRIBUTION OF THE UNIVERSE OF AVAILABLE CHINESE SHARES

A-Shares constitute the majority of available Chinese shares but are not reflected in most benchmarks.



Source: NTGI, Hong Kong Stock Exchange, Bloomberg

Structural weaknesses in the economic/business environment

In spite of strong growth fundamentals, the Chinese equity market remains a work in progress. For example, Beijing has made a substantial effort to improve the protection of minority shareholders and strengthen the market's regulatory framework, but much remains to be done. Challenges China still faces include:

- Continued disproportionate influence by State officials in company affairs — even after the non-tradable share reforms. Government entities, such as local municipalities, play an active role as shareholders, while State officials hold membership positions on company boards. According to Euromoney, the Chinese government controls as much as half the total A-Share market capitalization.[10]

- Lack of an effective accounting and legal infrastructure. China is rapidly bulking up its accounting framework, especially after the 2007 introduction of IFRS international accounting rules for mainland-listed companies. However, shortages of auditors and regulators weaken the legal infrastructure. Implementation of reforms sometimes lags behind legislation

- Lack of an active market for corporate takeovers. Although CSRC guidelines are clear on rules for corporate takeovers, a robust market for corporate control does not yet exist.

- Limited influence of independent directors. Directors representing the interests of minority shareholders generally still have limited ability to influence day-to-day company operations.[11]

- Dependence on global trade. An economic slowdown suffered by major trading partners — including the U.S. and E.U. — or friction with those major partners could substantially affect the Chinese market. China's relationship with the U.S. will have a big impact on its future growth. Figure 13 in the Appendix shows that the U.S. is China's biggest export destination; any economic slowdown or attempt at protectionism by the U.S.

will have serious repercussions. Such protectionist actions have been taken. They include blocking the sale of Unocal, an oil company worth US $19 billion, to China's state-owned China National Offshore Oil Corporation (CNOOC); the imposition of tariffs on Chinese makers of high-gloss papers; and an attempt by influential groups in the U.S. to classify China as a currency manipulator.

- A centrally managed economy. Beijing maintains considerable control over China's business and financial community. Actions taken for political or social reasons could lead to unintended consequences impacting the entire equities market. These consequences cannot adequately be predicted; they are unintended, after all. But miscalculations may cause large-scale harm to the market system.

- Inflation. Rising food costs are expected to have caused inflation to reach an 11-year high in 2007. The central bank is expected to respond with a raft of tightening measures, including strict control of bank lending, further withdrawals of liquidity, additional rate hikes, and a faster pace of currency appreciation.

- Environmental degradation and intellectual-property infringement. China will need to curb some of the worst offenses that have accompanied dramatic growth. These include environmental damage as well as slow progress to address infringements on patents and intellectual-property rights.

- A problematic banking sector. Reforming the banking sector is imperative as poor transparency and easy lending could destabilize the banking sector. However, reserve requirements have been raised substantially and some banks have received capital injections by China Investment Corporation (CIC), a Chinese sovereign fund. Continued support by CIC should mitigate these risks.

Factors attracting Western investors

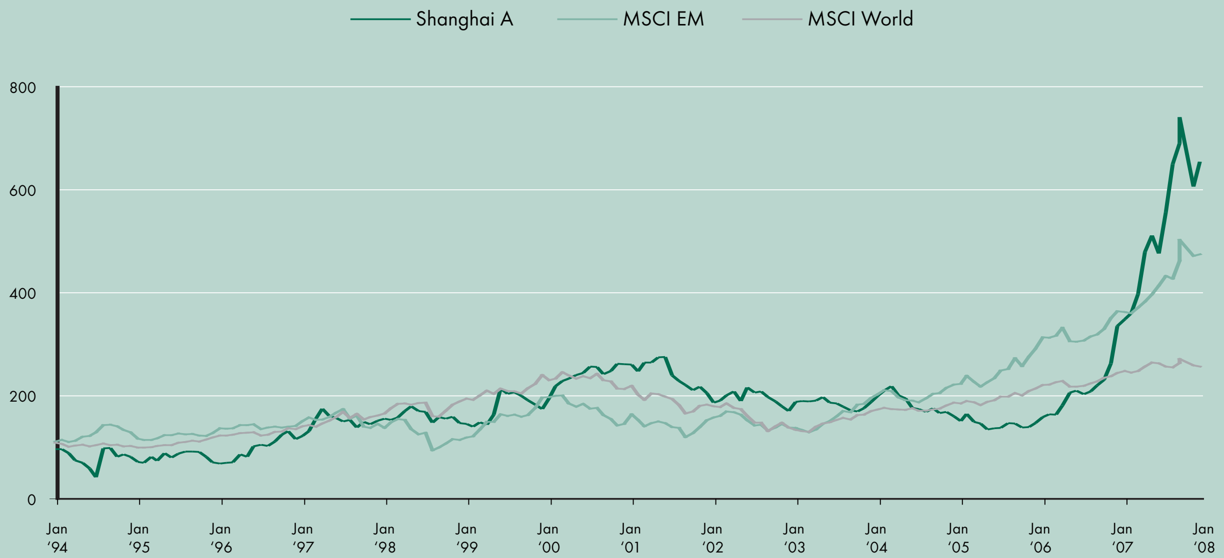
While China's stock market has risks, Western investors continue to weigh on the positive side due to a number of factors that bode well for the future. They include:

- Sound long-term performance by the Shanghai A-Share index. This proxy represents the available A-Share universe and provides the most compelling picture of the domestic market's potential. The long-run performance of the A-Share market since the end of 1993 has been better than both the Emerging Market and Developed World indices (Figure 10).

- Relative inefficiency offering attractive opportunities. Inefficient markets provide great growth potential through the discovery of undervalued issues, and China's efficiency level remains relatively low. For example, the number of analysts covering A-Share stocks is much smaller than for non-A-Share-listed stocks. Bloomberg data lists 1,150 analysts in China covering 1,415 A-Share stocks — approximately 0.8 analysts per company. In contrast, the U.S. ratio is closer to 2.3 analysts per company. In Hong Kong, the ratio is about 1.0. The lack of research coverage in the A-Share market results both from its shorter history and the relative underdevelopment of China's financial services infrastructure, including domestic brokerage houses. A single brokerage house covers a considerable majority of domestic companies listed on the A-Share market. This lack of wide coverage should present attractive opportunities for the dedicated investor looking for hidden value.[12]

FIGURE 10: PRICE PERFORMANCE OF SHANGHAI A-SHARES VS. WORLD INDICES

Chinese A-Shares suggest high future growth potential.



Source: Thomson Datastream

- The shift to A-Share listings. An emerging trend sees Red Chips and other non-A-Share companies seek A-Share listings in the Shanghai and Shenzhen exchanges. Almost all of these listings have been oversubscribed. Some larger listings include:

  — Ping An Insurance, China's largest life insurance company, which debuted on the Shanghai Stock Exchange on March 1, 2007. Ping An's IPO — US $5 billion — was the largest by any insurance company in the world.

  — China's CITIC Bank, which raised US $5.4 billion in its dual A- and H-Share listings on April 26, 2007.

  — China Cosco Holdings, the world's fourth-largest shipping company by container-fleet size, which raised US $1.98 billion in its A-Share IPO on June 25, 2007. China Cosco became the world's second-largest shipping company by market capitalization behind the Danish giant A.P. Moeller-Maersk.

  — PetroChina, the world's first company to pass US $1 trillion in market capitalization, listed on the Shanghai Stock Exchange on November 5, 2007.

  This shift continues. China Mobile, the world's largest cellular company by subscriber base, is poised for an A-Share listing in 2008.

- Attractive non-A-Share classes. While A-Share activity is indeed impressive, H-Shares and offshore-listed shares offer appealing attributes of their own:

  — Better-regulated markets than those for A-Shares, including greater transparency and superior corporate governance requirements.

  — Greater liquidity to freely invest and redeem shares.

  — Lower valuations, which can be cheaper securities than the same securities also listed on the A-Share market.

  As will be explained in Part IV, investors seeking exposure to China should consider a combination of both approaches rather than concentrate on one at the expense of the other.

- Diversification with low correlation. The Chinese market presents favorable diversification opportunities for Western investors. Correlation historically has been low, particularly of the A-Share market with other world markets (Figure 11).

FIGURE 11: MARKET CORRELATIONS OF MONTHLY RETURNS

Historically, correlations of the A-Share market with other world markets have been extremely low.

	Shanghai A-Shares	MSCI China H	MSCI Emerging Markets	MSCI World	S&P 500
Shanghai SE A-Shares	1	0.22	0.19	0.04	0.06
MSCI China H	0.22	1	0.61	0.41	0.44
MSCI EM	0.19	0.61	1	0.75	0.68
MSCI World	0.04	0.41	0.75	1	0.94
FTSE All Share	0.07	0.34	0.63	0.85	0.74
Hang Seng Index	0.07	0.65	0.73	0.66	0.63
Nikkei 225	–0.02	0.2	0.49	0.62	0.44
S&P 500	0.06	0.44	0.68	0.94	1

Source: NTGI, Zephyr Style Advisor, Thompson Datastream from January 1994 to February 2007

The A-Share market had almost zero correlation with overseas stock exchanges, including the rest of Asia, the U.S. and the U.K. The A-Share indices have slightly higher correlations with the MSCI Emerging Markets index, and as expected, an even greater correlation with the H-Share Index (MSCI China). Unlike the case for emerging markets, where correlations have been increasing, correlations for the Chinese A-Share market should continue to stay low in the foreseeable future.[13] The historically low correlation of the Chinese A-Share market with the rest of the world mainly results from capital controls in China.

The QFII program acts as a form of capital control with Beijing limiting the quota to restrict the free flow of foreign capital into the country. To qualify for QFII, a foreign fund management company must have at least US $5 billion in assets under management and have been operating continuously for the past five years. The repatriation of funds must be approved by the State Administration for Foreign Exchange (SAFE), which manages China's balance of payments system. While capital controls limit Western investors' avenues of access, they increase the diversification benefit of A-Shares by reducing correlation with Western markets.

> Other notable capital controls include the currency peg set for the Renminbi to the U.S. dollar. It determines that international capital flows largely do not affect the Chinese capital stock or the Chinese equity market in general. Capital controls most likely will be maintained for the foreseeable future, insulating domestic Chinese capital flows from the rest of the world.

On balance, many Western investors remain bullish on a long-term investment prospect for Chinese stocks and see great possibilities for A-Shares. The question remains: how do you proceed with investing?

PART IV: THE HOLISTIC APPROACH TO INVESTING IN CHINA

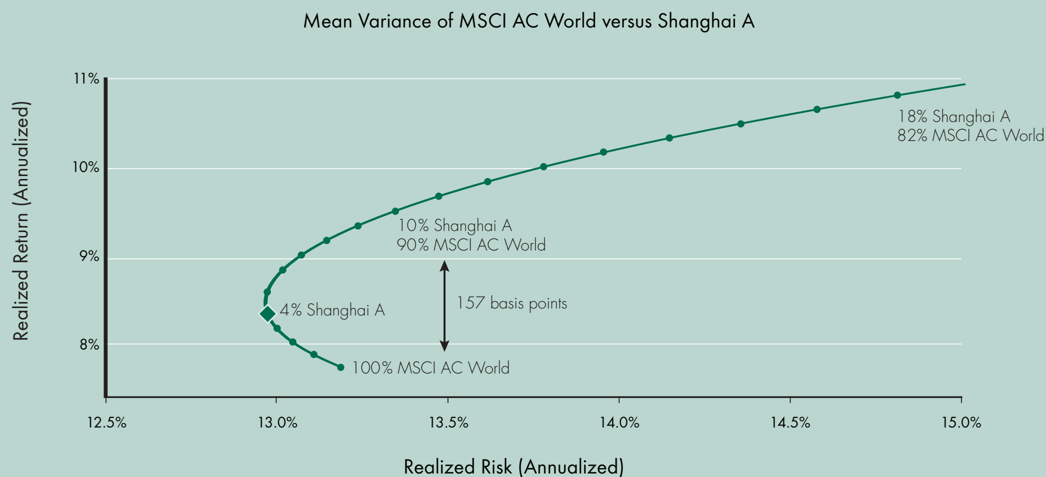
Investors have many reasons to support a long-term equity allocation to China, including A-Shares. While the possibility of a pullback can never be discounted, China's domestic growth provides strong momentum in this market.

To make the most of investment in China, investors should consider a holistic approach — one that includes exposure to A-Shares, H-Shares, and other Chinese-centric companies with offshore listings. This provides the opportunity to benefit both from China's growth and its halo effect on neighboring stock markets.

What size position should investors consider in A-Shares relative to international equity holdings? Figure 12 below shows the realized benefits and costs of adding A-Shares to an international portfolio index. This portfolio is represented by the MSCI AC World Index, which also contains a 1% exposure to Chinese non-mainland listed shares and other emerging market shares but not A-Shares.

FIGURE 12: EFFICIENT FRONTIER OF SHANGHAI A SHARE INDEX WITH MSCI AC WORLD (RETURN DATA FROM JAN. 1994 TO DEC. 2007)

Adding Chinese A-Shares increased returns by 157 basis points with little additional risk.



Based on monthly returns of the Shanghai A Share Index and MSCI AC World Index, January 1994 to December 2007. Source: NTGI.

Thirteen years of return data from January 1994 to December 2007 shows a hypothetical investor's allocation increasing from a purely MSCI AC World Index to a portfolio that includes a 10% allocation of Chinese A-Shares. *Returns increased by 157 basis points with little additional risk.*

Even if an investor had implemented a neutral investment policy holding China at market weight, the results would have been positive. According to current weights, China makes up approximately 4% of world market capitalization.[14] The corresponding point (◆ 4%Shangai A) on the graph above shows the reduction in risk that would occur with such an allocation. Put another way, with a 4% allocation to Chinese A-Shares, together with an existing allocation in H and other offshore Chinese shares, an international portfolio would see a risk reduction of 21 basis points and an increase in return of 62 basis points.

Of course, this exercise is based on historical data and is meant solely to illustrate the benefits of diversification with A-Shares. Nevertheless, one can argue that inclusion of A-Shares in a global portfolio may help reduce risk while potentially adding return.

Active investing in Chinese equities

Western institutional investors currently may take any of three pathways to investment in the A-Share market:

- Invest in actively managed A-Share funds set up by firms with QFII quotas.
- Invest in passively managed ETFs or index trackers set up by firms with QFII quotas.
- Large institutional investors apply directly for the QFII quota, although the application process can be time consuming and rather onerous.

The choice of pathways is extremely important. Active money managers in China vary considerably in skill and experience. The heated market for talent results in short tenure and frequent turnover. At the same time, the inefficient and under-researched market rewards those managers possessing skill and access. Several Western-based money managers have successfully made China's domestic markets a core competency by combining local expertise with a robust process and controls.

Few managers, domestic or foreign, have QFII status. Foreign investors can only access these managers as subadvisors to a QFII vehicle or fund. And there is much variability between China fund offerings available to Western investors. Many have no QFII quota and thus have very little A-Share exposure, missing over 50% of China's market capitalization.

CONCLUSION: CONTINUING GROWTH AND LONG-TERM OPPORTUNITIES

Not only will China maintain its major role in the world economy over the decades to come, it will likely strengthen that role. As G. John Ikenberry, Albert G. Milbank Professor of Politics and International Affairs at Princeton University, writes in the January/February 2008 edition of *Foreign Affairs*: "China's extraordinary economic growth and active diplomacy are already transforming East Asia, and future decades will see even greater increases in Chinese power and influence."

Investors should consider that:

- China's economy is projected to be the world's largest in about three decades
- Chinese companies are moving into positions of global leadership through knowledge acquisition and the demands made by competition
- Stock market reforms are instilling greater investor confidence
- An enormous pool of domestic capital is moving from bank deposits into the Chinese stock market
- The QFII program provides select Western investors with access to A-Shares and investment in leading mainland companies
- The A-Share market remains relatively inefficient, providing attractive investment opportunities
- The A-Share market currently offers low correlation with other world markets
- Models demonstrate that allocating assets in an international portfolio to Chinese A-Shares offers potentials for reduced risk and increased return

There are benefits to a holistic approach, diversifying investments in Chinese stocks, including but not limited to A-Shares. Returns may be better maximized by including A-Share funds managed by firms with established QFII quotas and knowledge of China's markets, economy and government.

The question no longer remains, "Should China be a part of a global portfolio?" Investors now ask, "What solution offers the right approach to the full spectrum of Chinese opportunities?"

APPENDIX: ECONOMIC NUMBERS AND PROJECTIONS

FIGURE 13: ECONOMIC STATISTICS OF CHINA

Economic Statistics[1]	US$ bn
GDP	2,871
Population	1,321
Foreign Exchange Reserves	1,202
Market Capitalization[2]	2,156
Current Account Balance	206

[1] 2007 estimates [2] A-Shares Jun 2007

	1980–2005
GDP Growth	9.7%
Inflation	5.6%
Population Growth	1.1%

Trade Statistics[3]	US$ bn
Current Account Balance	206.5
Exports	969.3
Imports	791.6

Main destinations of exports[3]	% of total
US	21.0
Hong Kong	16.0
Japan	9.5
South Korea	4.6

Main origins of imports[3]	% of total
Japan	14.6
South Korea	11.3
Taiwan	11.0
US	7.5
Germany	4.8

[3] 2006 figures

Source: IMF, The Economist, Thomson Datastream, WTO

GDP Per Capita[1]	US$
Nominal	2,174
PPP	8,855

Components of GDP[4]	% of total
Private consumption	38.0
Government consumption	13.9
Gross fixed investment	41.5
Exports of goods & services	36.7
Imports of goods & services	–31.3
Trade to GDP Ratio	64

Origins of GDP		% of total
Primary industry		12.5
Secondary industry		47.3
– Industry	41.8	
– Construction	5.5	
Tertiary industry		40.2

[4] 2005 figures

ENDNOTES

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