Fort Washington
Investment Advisors, Inc.

A member of Western & Southern Financial Group

DECEMBER 2009

John J. O'Connor, CFA
Managing Director
Investment Research &
Private Equity

M. Robert Maeder, CFA
Investment Manager
Private Equity

Investing Environment

"Foreign entrepreneurs invest here in order to make a profit, so we should ensure that they make more profits from investments in China than they can make from other countries."

— Deng Xiao Ping
Paramount Leader 1978-1990
People's Republic of China 1904-1997

In a very real sense, China is the indispensable economy in the world today. With many Western economies and Japan apparently entering a multi year period of deleveraging, trend line growth is likely to be sluggish, although punctuated with occasional bursts such as we may be experiencing presently. China, despite a shockingly large drop in its exports in the fourth quarter 2008, continues to power ahead. Accordingly, it is crucial for investors, both public and private, to have a point of view on China. Toward that end, Rob Maeder and I spent eight days in China this September speaking with people from private equity firms, hedge funds, accounting firms, law firms and consulting firms in an attempt to begin to form such a point of view. In this paper, we will summarize our key findings in a question and answer format. Many of these questions could be subjects of entire books. Of necessity, our answers will be succinct. Still, our hope is that Fort Washington clients will find our perspectives interesting and useful. We welcome your feedback.

Perhaps the wisest remark we heard was "There are no China experts." The speaker's point is that China is so big, diverse and rapidly changing that knowledge can have a very short life. Mindful of that cautionary note, we will attempt to answer the following questions, beginning with a few baseline questions followed by several more esoteric topics:

1. How is the government organized in China and what role does government play in business?
2. Can China transition from an export driven economy to a consumer driven economy?
3. What fundamental factors will drive investment returns in China?
4. What is the state of Chinese capital markets?
5. What is the state of Chinese private equity?
6. What are the merits of public versus private equity investing in China?
7. Are bubbles forming presently in Chinese securities and/or real estate markets?
8. What are China's biggest long term challenges?

1. How is the government organized in China and what role does government play in business?[1]

The government of the People's Republic of China ("PRC") wields deep and wide reaching power over its citizens and economy. This authoritarian characteristic makes China unique among the largest capitalist economies of the world, which are otherwise democratic. Some argue that China's authoritarian government has been a key reason for China's economic success, emphasizing the benefits of responsiveness and coordination. Alternatively, some worry that poor leadership or abuse of power by China's authoritarian government could eventually lead to social unrest. Given these considerations, it is clearly important to understand the structure and role of China's government.

Overview of Government Structure

The foci of power within China include the Communist Party ("CCP") and the State (referring to the formal government of the PRC). While the CCP is not officially a governing body recognized by the constitution, to a great extent it represents the real center of power within China. The CCP is comprised of over 70 million members led by the Central Committee, which is a 300 member body including the leading figures of the CCP, the State and the People's Liberation Army ("PLA"). The CCP and the State are tightly interconnected entities. Hu Jintao, perhaps the most powerful figure currently within China, is representative of this phenomenon. He is the General Secretary of the Central Committee of the CCP, the President of the PRC and the Chairman of the Central Military Commission which controls the PLA. While an extreme example, his broad scope of roles illustrates how the CCP is integrated within the formal government structure.

The State is the official government of the PRC. The State is primarily comprised of the National People's Congress ("NPC"), the Presidency and the State Council. The NPC is officially the legislative house of the PRC, but its decisions are heavily influenced by the CCP leadership. The President is the principal executive position of the State and is elected every five years by the NPC. The State Council is the primary bureaucratic body that oversees the full range of government ministries, from the Ministry of Finance to the Ministry of Health. The State Council is led by the Premier, currently Wen Jiabao, who is also a leading member of the Central Committee of the CCP. In the simplest terms, the State can be thought of as the executive arm of government, administering the policies formulated in close coordination with the CCP.

Clearly we've conveyed the point that the CCP is a uniquely powerful organization within China's government. However, it is also important to point out that the Chinese government is not a monolith. It is not a dictatorship, nor is it a single-minded entity with perfect consensus and coordination. Positions of formal authority are regularly rotated as is common within the U.S. government (for example, the President can serve only two five year terms). The CCP and State are comprised of different entities and factions whose levels of influence may wax and wane over time. Political decisions can often be a negotiation between these various groups or between national, regional and local authorities. In response to the current economic crisis, we have seen that China's government can act quickly and decisively, but this is not necessarily the norm.

The Government's Role in Business

During a discussion on this topic with one of our hosts in China, the point was made that "the Party and business are virtually one in the same." While this may be an exaggeration, there is truth in the statement. Business and government leadership are indeed highly integrated in China. The career of Rong Yiren illustrates this characteristic well. Rong held prominent positions in both politics and business over the course of his life. Most notably, Rong founded CITIC Group in 1978, which has grown to become one of China's largest state owned enterprises ("SOEs"), controlling 44 subsidiaries spanning industrial, financial and service sectors. On the political side, Rong was also a member of the CCP and was appointed Vice President of the PRC in 1993[2]. Overlap is common between SOE businesses and political leadership at all levels. Involvement in one sphere can lead to success in the other.

This phenomenon is in large part a function of China's socialist history. Prior to the opening of China's economy in the late 1970's, businesses were, of course, state-owned. In 1980, SOEs represented nearly 80% of China's GDP. Certainly, China's government has made great strides in moving to a market-based economy over the last 30 years. Over this time period, SOEs share of GDP has declined to near 30%.[3] This represents a dramatic shift away from centralized, bureaucratic planning to a capitalist model of independent market participants.

Despite this economic liberalization, it would be a mistake to assume that the CCP and State don't continue to exert significant influence over business. The government's use of five year plans is a key mechanism of this influence. Five year plans play an important role in directing legislative and business activity. For example, the current five year plan (2006-2010) is focused on continued economic growth and reform, urbanization, energy and natural resource conservation, environmentalism and enhancement of the education system.

During extreme circumstance, the government may deviate from this plan, as was the case with China's recent $585B stimulus package. The primary objectives of the package were to maintain economic growth and social stability, encourage industry consolidation, provide financial support to large SOEs and increase domestic consumption through social safety net initiatives. Fiscal stimulus was further augmented by the State's direct ownership and control of the banking system, which injected approximately $1T in new bank loans into the economy during the first half of 2009. Economic results suggest China has been successful in the near term, with GDP growth expected to reach ~8.5% in 2009.[4]

Summary

China's government and political system are unique among the leading world economies. The CCP possess considerable power with tendrils firmly secured throughout China's government and business institutions. The CPP appears to have demonstrated shrewd stewardship of the Chinese economy over the last 30 years, resulting in ~10% annual real GDP growth. As we will discuss, significant challenges remain to be addressed as China continues to transition from a socialist to a free-market model. Only time will tell if China's form of government is suited to the task.

2. Can China transition from an export driven economy to a consumer driven economy?

At 36% of GDP, household consumption in China is low by worldwide standards; in the U.S., for example, household consumption is roughly 70% of GDP. This fact is widely recognized in the investment community and in the political class. In fact, boosting domestic consumption has become an important growth strategy for Chinese authorities. Yet this notion of "weak" Chinese consumers requires some perspective. By any normal standard, household consumption has been booming in China; retail sales in China have increased over four fold since 2001.[5] The perception that the consumer sector has underperformed is driven by the fact that other sectors have grown even faster; household consumption has fallen from 52% of GDP in the 1980s to 36% currently.[6] Since consumer spending has not kept up with income gains, the consumer savings rate is a high 20-25% over the last twenty years.

Why is the savings rate so high? Several factors seem to be at work here:

- Reform of SOEs. The most striking rise in the savings rate occurred between 1996 and 1998, a period which coincided with the beginning of aggressive SOE reform which led to total job losses estimated at a staggering 65 million workers.[7] This recasting of the social contract, so to speak, likely increased consumers' desire to build a savings cushion.
- Demographics. China's one child policy guarantees an aging population, and people tend to save more as they age.

- China lacks a consumer lending infrastructure. An estimated 80-90% of Chinese consumers pay cash for automobiles. Mortgages can be difficult to obtain and require high down payments.
- China lacks a social safety net. In China's socialist past, the government provided numerous services in the fields of health, education and housing to its citizens. As policy migrated to a capitalist ideology, citizens became responsible for more of these expenditures, creating a need to save. One example is illustrative: government expenditures on health care as a percentage of total expenditures on health care fell from 51% in 1995 to 42% in 2006.

An often overlooked point is that there are two components of a national savings rate: consumer savings and corporate savings, in essence retained earnings. The corporate savings rate is also very high, currently 23% of GDP. Because many private businesses have difficulty obtaining loans, they must rely on retained earnings to finance expansion.

Turning back to the consumer, the primary focus of Chinese authorities is building a social safety net. If properly executed, this plan should have the dual benefit of encouraging consumption and easing social discontent, a concern that never strays far from the minds of the authorities. As part of the government's massive stimulus plan announced earlier this year, the government announced plans to overhaul China's health care sector. According to the plan, the government aims to cover 90% of the population with a basic health care plan; about 50% of the Chinese population is covered presently. The cost is estimated to be $120B annually. Moreover, plans are being studied to reform the pension system.

While encouraging, these initiatives may prove to have only a modest impact. The 850 Billion Renminbi (RMB) national health insurance plan works out to about $30 per capita per year. Private pensions remain woefully inadequate. Moreover, a nation constantly churning its labor force[8] needs some sort of unemployment insurance.

Summary

Building a modern social safety net is a strategic imperative for building a more balanced macro economic strategy. The bad news is the task is daunting and very expensive in a nation of 1.3 billion people. The good news is that, in the wake of the collapse in exports during the financial crisis, the authorities are well aware of the demands of the situation.

3. What are the key drivers of investment returns in China?

Any discussion of the drivers of investment returns in China must begin with size and growth. China is the third largest economy in the world behind the U.S. and Japan and ahead of Germany and France.[9] Moreover, China has the world's largest population at 1.3 billion people. Very impressive, indeed. However, when viewed on a per capita GDP basis the results are somewhat less impressive. According to IMF data it is ranked 100th in the world in per capital GDP behind Kiribati[10] and ahead of Egypt.

How are investors to think about China? Should the investor class view China as a poor country where the struggle for daily bread is a concern for millions of people or should China be viewed as the greatest investing opportunity since the U.S. emerged from the Civil War? Or both? While both views may be extreme, our sense is that the latter view is more plausible than the former. Consider some other statistics:

- 6.1M cars were sold in the first half of 2009, representing 17.7% year over year growth, making China the world's largest car market.[11]
- There are 688M mobile phone users in China, more than in the U.S. or Europe.[12]
- There are 298M Internet users in China at the end of 2008.[13]
- There are over 250 M people studying English in China everyday.

Companies that were early into China such as Nokia, Unilever and Yum! Brands have participated in the growth of China to the benefit of their shareholders. We think the trend that attracted these and other world class companies to China is the growing affluence of Chinese households. Consider the following data from McKinsey:

	2005	2008	2015
Affluent and Upper Middle Class[14]	15%	34%	60%
Middle Class[14]	48%	35%	20%
Poor[14]	35%	31%	20%

The emerging middle class in China is the hook that has drawn corporations from around the world to invest in China.

Growth is not the only fundamental factor that will drive investment returns in China. We believe that the structure of various industries in China will be rationalized and that process will lead to good investment returns. Hence, this industry rationalization may create significant M&A, restructuring and buyout opportunities. We caution, however, that a Schumpeterian wave of creative destruction is unlikely given the need to protect the social order. Still, the nature of capitalism is that industry structures get rationalized over time. When analyzing Chinese industry two factors stand out:

1. Industry profit margin disparity. While solid data on this topic is hard to find due to state owned enterprises, which lack financial transparency, competing with private owned enterprises, anecdotal reports from private equity firms suggest that firms with 45% profit margins compete with firms with 15% profit margins.[15] In developed economies, such profit margin disparities would not last for long.
2. Industry fragmentation. The private equity firm CDH has documented that in industries as varied as cement, drug distribution, cable TV and many others, the concentration of industry in China is much lower than in the U.S.

Another potential driver of returns for Chinese-based investments is currency appreciation. While a detailed discussion of the RMB relative to the dollar is beyond the scope of this paper, most economists believe the RMB is materially undervalued. In fact, there is fairly broad agreement that RMB appreciation may be an inevitable part of solving global imbalances. For the U.S., a weaker dollar would improve competitiveness of U.S. exports. For the Chinese, an appreciating RMB would improve consumer purchasing power and reduce the savings rate. So the argument goes. These points are debatable but it seems unlikely that currency is a risk element and it may be a source of return.

Summary

While nearly everyone recognizes growth of the middle class as a driver of investment returns, our sense is that the rationalization of industry structure within China represents a driver of investments comparable to organic growth. Consolidation will allow companies to achieve economies of scale and, in the process drive inorganic growth to complement the organic growth. Currency is a wild card but seems more likely to be a source of return rather than risk.

4. What is the state of capital markets in China?

"Securities, stock markets, are they good or evil? Are they dangerous or safe? Are they unique to capitalism or also applicable to socialism? Let's try and see. Let's try for one or two years; if it goes well, we can relax control; if it goes badly, we can correct or close it. Even if we have to close it, we may do it quickly, or slowly, or partly. What are we afraid of? If we maintain this attitude, then we will not make big mistakes."

— Deng Xiaoping
1992

We quote at length from Deng Xiaoping in 1992 to demonstrate the pragmatic, gradualist approach to financial reform on which China has embarked. China today has all of the institutions of a modern financial system. The central bank, the People's Bank of China, sets monetary policy and provides credit to the commercial banks, although it should be noted that China does not have an independent central bank; rather the People's Bank of China should be viewed as under the control of the government. The Shanghai and Shenzhen stock markets were organized in 1991 and, combined, have grown to be the second largest stock market in the world.[16] The corporate bond market, while thin, is growing. So while much has changed since 1992, the financial system remains dominated by the banks, for good reason as we shall discover.

The Chinese banking system consists of a core of four (known as the Big Four), state owned commercial banks and city banks. The banking system has historically been one of China's most regulated industries and is largely protected from foreign competition. The Big Four are enormous institutions, each with hundreds of thousands of employees and ranking among the 20 largest banks in the world. All important policy decisions at the Big Four are determined in Beijing.

One reason that the banking system continues to play such a central role in the financial system in China is that policy makers have been very sensitive to financial innovations that have the potential to draw substantive funds from the banking system. One reason for this policy may be that it is much easier to control flows of funds in the banking system than in the capital markets. The banking system has been the largest financing vehicle for money-losing SOEs, for example. Capital markets, which we discuss shortly, are an alternative to bank financing, but the stock market remains hobbled by governance and transparency issues and the corporate bond market is very small. Reform is occurring continuously but, in the spirit of Deng Xiaoping, is occurring gradually. Several of the Big Four have sold minority stakes to investors but they remain under government control. Many of the banks are burdened with a significant bad loan problem, the full extent of which is largely unknown. Going forward, the safest planning assumption is that reform will occur over an extended period of time.

Turning to the stock market, the first key point is that the capital structure of listed firms is dominated by noncirculating, largely government owned shares. Approximately 40% of listed firms' shares circulate either as A-shares (denominated in Chinese currency available only to Chinese citizens), B-shares (denominated in foreign currency and available to foreign citizens or Chinese citizens) and H-shares (Chinese companies listed on the Hong Kong Stock Exchange). This segmentation was originally due to the inconvertibility of the RMB and the desire on the part of policy makers to avoid exposure to destabilizing capital flows. One important implication of this structure is that there is very little market for corporate control since most shares are closely held. As such, the market's role in disciplining management of listed firms is minimal. Disclosure and transparency has long been an issue but the trend is clearly moving toward Western standards. Companies are required to post corporate reports on the Internet and accounting standards have been improved.

In November 2009, after nearly 10 years of planning, China's answer to the NASDAQ known as ChiNext opened. All 28 ChiNext stocks surged on their first trading day with gains ranging from 76% to 210%. While ChiNext has generated a great deal of excitement, the market is presently rather small; the total market capitalization is .08% of the Shanghai market and represents just 3% of the bank loans dispersed in September alone.[17] Still, this market bears watching. The NASDAQ started small too.

An interesting question is what drives Chinese stock prices. One study[18] found that among 40 emerging stock markets, individual firm share prices are more likely to move together in China than in any other market. The author's interpretation is that since there are limits on individual company information and there is little or no market for contesting corporate control, market fluctuation is best explained by reactions to government policy changes, especially those affecting market liquidity, rather than changes in individual company fundamentals.

One of the defining characteristics of the Chinese stock markets is their incredible turnover. The turnover of the Shanghai and Shenzhan stock exchanges last year was 927% and 987% respectively[19] versus 129% in the U.S. More than one observer characterized the Chinese public markets as a "casino."

Summary

Capital markets continue to evolve and modernize, but slowly. Banks are likely to retain their dominant position for the foreseeable future.

5. What is the state of China's private equity market?[20]

Over the last several years, China's private equity market has grown to become a principal component of Asia's private equity landscape. China's share of fundraising activity in Asia has grown from 6% in 2004 to nearly 30% by 2008.[21] Now at $13B,[22] China's market is roughly equivalent in size to those of Australia and Japan, which have historically been Asia's largest centers for private equity. Growth has been fueled in large part by liquidity and growth capital needs coupled with a robust IPO market. Numerous private equity firms have emerged to capitalize on this opportunity. Many of these firms exhibit a high degree of diversity, in terms of both sector focus and strategy. In our research we have found that Chinese private equity has emerged as a sizable, growing and dynamic market. As such, it is critical for us to understand and evaluate this increasingly important part of the global private equity market.

China's private equity market is distinct from that of the U.S. market in that it is dominated by minority, growth equity investments. Approximately two thirds of transactions take this form. Control, leveraged buyouts are rare. There are four key reasons for this phenomenon:

- Control positions are usually not available for purchase; entrepreneurs or government-entity sellers are typically unwilling to relinquish a control stake.
- Acquisition debt is largely unavailable in China; as discussed, the banking system is relatively immature and not structured to support such transactions.
- Leverage has not been necessary to generate attractive returns; high quality Chinese businesses exhibit strong growth characteristics, even if they participate in industries that would be considered mature in the U.S.
- In general, private equity management teams are less experienced at executing control buyout transactions in China.

China's private equity market has expanded rapidly in recent years, with investment activity growing at nearly 40% annually from 2004 to 2008. This growth has slowed in 2009, but activity remains robust and in line with 2008 levels. Despite the high rate of growth, the market is still relatively underpenetrated. China's private equity market is only 0.4% of GDP, compared to India at 0.9%, Europe at 1.4% and the U.S. at 3.3%.[23]

Growth in China's private equity market has primarily been driven by two key reasons:

- Entrepreneurs seeking liquidity and growth capital for privately owned enterprises (POEs); Chinese entrepreneurs value private equity firms because they can act as a bridge to public market liquidity through an IPO exit; further, private equity capital might be a more reliable source of funds for POEs because banks have a preference for lending to SOEs
- Government entities seeking to privatize SOEs; these sellers are increasingly interested in private equity capital as a source of liquidity for state owned assets; In fact, local and regional government officials are incentivized by the State to encourage private equity transactions within their regions

The end goal for Chinese private equity investments is most often an IPO. From 2006-2008, approximately 90% of private equity exits occurred through an IPO.[24] IPOs often occur within the Shanghai, Shenzhen or Hong Kong stock exchanges. They can also occur on other Asian or even U.S. exchanges. IPOs by private equity backed companies dropped dramatically in 2008, declining from $57.5B in 2007 to $11.1B in 2008 (-79.4% decline). Activity remained low during the first half of 2009 but has rebounded in the third quarter, and is now in line with levels experienced in the second quarter of 2008. Continued strength is expected in the final quarter of 2009.[25]

Unfortunately, data on Chinese private equity returns is not systematically tracked. As such, it is difficult to make generalizations about the level of returns in China relative to the U.S. market. FW Capital has reviewed the returns of a number of Chinese private equity funds, including one of the most active funds. Generally speaking, many of these portfolios are still young and have yet to generate significant realizations. However, more established funds have generated very strong realized returns over the past three to seven years, well in excess of top performing U.S. private equity funds.

As indicated, the landscape of the private equity firms in China is fragmented and diverse. UBS tracks approximately 40 players in the market, not including numerous pan-Asian funds that are also active in China.[26] Chinese private equity firms exhibit a surprising degree of diversity even though the market is still relatively young. Firms focus on a variety of areas that differ by stage, transaction size, industry sector, degree of economic control and seller type (SOEs versus POEs). Firms also demonstrate a diversity of differentiation, including:

- Depth of experience investing in China: As an emerging private equity market, there are relatively few players with a depth of experience in China; CDH is perhaps one of the longest tenured funds in China, with senior partners who have invested since the late 90s.
- Local versus foreign and pan-Asian firms: Local firms may have an advantage working with government sellers or entrepreneurs with a local bias; for example, Carlyle's pan-Asian firm has struggled in recent years as a number of their transactions were blocked by Chinese authorities.
- Access to government networks: Certain firms have unique access to government relationships; these relationships can provide a strong advantage in sourcing transactions from government sellers; for example, New Horizon Capital was founded by Winston Wen, the son of Premier Wen Jiaboa who oversees the State Council of the PRC.
- Independent versus affiliated firms: Selected firms are affiliated with larger institutions; while we feel this is generally a negative in the U.S. market, it can be a positive in China's market if it provides access to unique deal flow, market knowledge and operating expertise; this appears to be the case with CITIC Capital, a fund affiliated with the CITIC Group, the influential conglomerate mentioned earlier in this article.
- The typical forms of differentiation that we value in the U.S. also apply in China (e.g. domain expertise and operating capabilities); Capital Today is a good example of this; this firm possesses domain expertise in the consumer and retail sectors; they also have operating partners on staff, including former P&G executives.

China can support such a diversity of firms because the fundraising environment has been strong in recent years. Fundraising grew from only $1.0B in 2004 to a peak of $13.2B in 2008 (~90% annual growth). Fundraising activity continued to grow throughout 2008, but declined significantly during the first half of 2009. Anecdotally, LP interest seems to be building into the fourth quarter of 2009 and the first half of 2010.

A robust fundraising market can be concerning from an investment point of view because it can eventually lead to underperformance. This was certainly our experience with the U.S. venture capital market during the 1999 period. It is important to be mindful of this issue regarding China as well. However, keep in mind a couple of important characteristics of the Chinese market:

- First, as we have already discussed, China's private equity market is underpenetrated relative to the U.S., Europe and other Asian markets.
- Unlike Japan, Korea and certain European markets, there does not appear to be a cultural bias against private equity; for example, in Japan, sellers and management teams commonly view private equity funds as vulture investors; this attitude does not appear to be present in China.
- Traditional financing sources are relatively difficult for POEs to come by; for example, most bank lending is still directed to SOEs as opposed to POEs; as such, private equity can be a source of growth financing for capital constrained POEs.
- Finally, it is important to note that investment activity has largely kept pace with fundraising activity. For example, $13.2B of capital was raised in 2008 and $13.1B was invested. In other words, "dry powder" does not seem to be building, suggesting that demand for capital is expanding in line with supply. This contrasts with the current situation in the U.S. market with an estimated $1T of unfunded capital commitments.[27]

Of course it is important for potential investors to be mindful of other considerations as well. How are investment vehicles structured and have they been sufficiently tested by Chinese law? How do LP terms compare with those in the U.S.? How experienced, trustworthy and stable are private equity management teams? How effective are corporate governance standards and practices in protecting minority shareholders? How capable are Chinese CEOs and their management teams? These and other questions must be addressed prior to committing capital to Chinese private equity funds.

Summary

China represents a compelling market for global private equity investors to consider. While certainly affected by the global recession, China's market seems well positioned relative to other private equity markets. China's underlying growth fundamentals have exhibited surprising resilience. Investment activity has remained robust. Portfolio companies are generally not encumbered by excess debt. Moreover, leverage is not needed for new investments. The IPO market appears to be opening up to allow for exits. An array of sophisticated and differentiated private equity firms is active in the market. The strength of these indicators suggests that China may deserve a place in a diversified private equity portfolio.

6. What are the merits of private versus public equity investing in China?

As a private equity fund of funds, the only appropriate means by which FW Capital can invest in China is through a private equity vehicle. Therefore, as we consider China, we must evaluate both the investment fundamentals of China's economy and its private equity market. Previous essays suggest the long-term fundamentals of both are potentially attractive. However, it is also important to evaluate China's private equity market relative to the public equity market. Are investors significantly advantaged by investing in one market over the other? If the public market is found to be sufficiently advantaged, rationally we should question if it is prudent for FW Capital to invest in the private market. If so, it may be best for our limited partners to participate in Chinese equities through other means. We attempt to address this question by evaluating both public and private markets across a number of dimensions, including liquidity, market efficiency, informational asymmetry and corporate governance.

Liquidity: The public equity market has a clear advantage

As we noted earlier in this letter "There are no China experts." China's economy is changing so rapidly that even the experienced are at risk of finding their knowledge outdated. This certainly argues for liquidity. An insightful and informed public equity investor is undoubtedly in a position to move much more quickly than a private equity investor. Moreover, China's public equity markets are very volatile, which also argues for liquidity. Public equity investors may be able to capitalize on market irregularities that private equity investors cannot.

It is important to note that the public equity market is not nearly as liquid as that of the U.S. Average daily trading volume is only 212 billion RMB (~$30B).[28] Many publicly traded companies have a thin float with large closely held positions. Public equity investors may find it difficult to trade sizable positions in a timely fashion or risk the market moving against them. This characteristic does limit public equity investors.

Moreover, the average hold period for private equity funds is typically much shorter than we see in the U.S. A three to five year hold period is typical in the U.S. In China, 18 to 36 months has been common because of an active IPO market. These factors lessen private equity's liquidity disadvantage. Nonetheless, it is difficult to dismiss the superiority of the public equity market on this important measure.

Market Efficiency: Too close to call

Generally speaking, private markets are considered less efficient than public markets. Typically you have fewer players involved in the price discovery process. Moreover, capable private equity investors can create less competitive bidding situations by developing proprietary relationships. Our research suggests these inefficiencies may be heightened in China's market. Because contract law is less established in China, relationships can be a significant component of business decisions. When seeking a private equity partner, Chinese business owners place a high degree of importance on the quality of their relationship with the private equity firm, not just the level of their bid. This phenomenon can be particularly important when a government entity is selling a stake in an SOE. In these instances, valuation may actually be secondary to relationship considerations.

For very different reasons, the public equity markets also seem to be inefficient. Trading volume within China's public equity market is dominated by retail investors with short time horizons. At its peak in 2007, the retail share of trading volumes reached an estimated 80% to 90% of total volumes on the Shanghai Exchange.[29] Moreover, the turnover ratio has historically exceeded 900% (as compared to ~100% in the U.S.)[30] The active presence of unsophisticated investors with short investment time horizons should create opportunities for patient and savvy public equity investors.

A strong case can be made that both the public and private equity markets are relatively inefficient in China.

Informational Asymmetry: Here, the private equity market has the upper hand

Regardless of whether you are in the U.S., Europe or China, private equity investors have the distinct advantage of being able to invest with inside information, legally, of course. Private equity investors have full access to management, industry experts and any customer or competitor that is willing to speak with them. Accountants, law firms and consultants are engaged to scrutinize potential investments from multiple angles. This aspect of private equity investing is particularly important in China, where disclosure and transparency can be concerns. Chinese accounting and reporting standards are improving, but they are not yet near U.S. standards. A capable private equity partner should be better positioned to determine the fair value of a business and avoid costly mistakes resulting from poor transparency or even fraud.

Corporate Governance: Again, private equity has the advantage

Active corporate governance is the principal advantage China's private equity market has over the public equity market. Corporate governance standards and minority shareholder rights are not at the level we are accustomed to in the U.S. Moreover, an ethos of shareholder value creation is still emerging within China. These are issues for both public and private equity investors in China.

As noted earlier, a substantial portion of the shares of public companies are closely held, either by government entities or founding entrepreneurs. In addition, the shares that do trade publically are commonly held by retail investors. Institutional public equity investors play less of a role in corporate governance. As such, Chinese management teams may not always feel pressure to act in the best interests of public shareholders.

Private equity firms, on the other hand, typically pursue a strategy of active corporate governance, commonly with a presence on the board of directors. The most capable firms have deep networks within the government and business communities. These connections can help private equity firms exert influence with management teams in order to advocate for their limited partners. Private equity seems to have an advantage over public equity in this regard. Although, most private equity investments in China are for minority stakes which diminishes this advantage.

Summary: Neither market seems to have a clear advantage over the other

It is difficult to make the case that either the public market or the private market is uniquely advantaged over the other. Each market has distinct strengths and weaknesses. Liquidity is clearly a strong advantage for the public market, but this may be partially offset by private equity's informational and governance advantages. Both markets could represent attractive opportunities, assuming the right partner is chosen.

7. Are bubbles forming presently in Chinese securities and/or public markets?

The experience of the last decade has taught investors that nothing is more crucial to the creation and destruction of wealth than asset price bubbles. Duly conditioned, we in the investor class are on perpetual bubble-watch. Before considering China, the term "bubble" itself requires some elaboration. By way of definition, we define a bubble as a systematic under pricing of risk. This under pricing may or may not be associated with excessive leverage. An unlevered bubble, such as the technology stock bubble in the late 1990s, does not involve a cycle of leveraging against higher asset values. Hence, the bursting of the technology bubble did not lead to a marked deterioration of bank balance sheets and led to only a relatively mild recession. The more dangerous bubble is a bubble accompanied by a credit boom. The basic cycle has been understood, if not always recognized, by economists for years. Expectations about economic prospects lead to excessive lending against rising asset values. The increased demand drives prices up which, in turn, supports further lending, driving up prices further and ….well, you get the idea. A feedback loop forms between leverage and asset prices. When the bubble bursts and asset prices fall, loans go bad; bank balance sheets are strained sometimes to the breaking point, reducing the availability of credit. This process of deleveraging is the present state of the U.S. economy.

Turning to China, it is quite remarkable that investor sentiment has turned so rapidly from worry about a collapse in China to worry about a bubble in real estate and/or the stock market. Is that a commentary on the fickleness of investor sentiment or the rapidly changing economic reality in China?

To begin to form some understanding of Chinese real estate, some background is necessary. Since 1978, China's pace of urbanization has increased dramatically. In 1985, a series of economic reforms implemented in urban areas contributed to the real estate boom. In 1998, the government cut back its welfare housing program by making a private dwelling a "commodity" and granted the purchaser a right to own a newly built house for 70 years. With that change, home ownership became a financial investment. Residential real estate boomed in nearly every urban area in China. Rising land and housing prices eventually created affordability problems for the general public. In 2006, the National Development and Reform Commission found the ratio of housing prices to income averaged 12:1 in many large cities and had reached 27:1 in Beijing, significantly higher than the World Bank's suggested ration of 5:1.[31] Predictably, vacancy rates are rising. A 2009 report by the Shanghai Real Estate Research Institute found the vacancy rate for commodity housing in Beijing was 16.6%. Much of vacancy situation is caused by homes purchased by speculators as investors as fewer and fewer ordinary people can afford to buy homes.

The significance of this real estate boom is magnified by China's political system. In China, all land is initially owned by state and local government. Income from property taxes and land sales are a primary source of revenues for local jurisdictions. As such, local governments have been willing participants in the real estate boom. Moreover, large SOEs have been actively involved in the real estate market. Among the ten highest priced land purchases in the first half of 2009, 60% went to SOEs.[32]

The critical question becomes how much lending is supporting this boom. Here the numbers become very murky. There seems to be a bifurcation in the market between ordinary Chinese who purchase a home to live in and real estate speculators who purchase homes as investments. For the ordinary Chinese homeowner, only one quarter of borrowers have any mortgage at all.[33] For real estate speculators, mortgages are common but down payments range from 30-40%. The lenders to real estate speculators are the banks which themselves are SOEs.

The entire system has a closed loop feel to it. State and local governments, dependent on land sales and property taxes, sell land to SOEs who borrow from banks which are SOEs. The real estate SOEs construct housing to support urbanization and upgrades from welfare housing, but keep a portion of the land unbuilt, limiting housing supply and increasing prices. As with the U.S., the music ultimately stops when affordability issues price too many people out of the market.

Beijing apparently recognizes that real estate is a potentially destabilizing element in the economy. In summer, 2009 the Chinese Banking Regulatory Commission tightened rules on mortgages for investment properties, required banks to raise their capital ratios to 10% and to hold loan loss reserves equal to 150% of projected loan losses by year end. In November, 2009 the regulators further increased capital adequacy requirements.

Beijing is walking a tightrope – capital must keep flowing to promote economic growth and social stability but it must tighten real estate credit. The specter that haunts Beijing is a Japanese style housing collapse which has led more than a decade of economic malaise. Economic malaise is unpleasant but not overly destabilizing in a developed country like Japan. Economic malaise in a developing economy like China is a recipe for social instability, an unacceptable outcome.

What about the stock market? Is there a bubble in Chinese stocks? Given the volatility of the Chinese market any observations here may be obsolete by the time the ink dries. The primary source of concern regarding a potential Chinese stock bubble is the extent to which the huge increase in bank lending in 2009 leaked into the stock market.[34] However, the increase in bank lending also boosted economic growth and stabilized employment thereby passively affecting the real economy. Unfortunately, it is simply unknowable the relative weights of the two effects. There are several factors which are knowable and proved some comfort:

- Despite a nice rally off the bottom, the Shanghai composite remains nearly 50% below its peak level reached in late 2007.
- The implied discount rate of the Shanghai market is at a level comfortably within the normal range of the last eight years.[35] As a point of reference, at the peak of the market in late 2007, the market implied discount rate was at an all time low.
- The Chinese stock market is a relatively small part of the economy. The tradable market capitalization is just 32% of GDP versus 87% in the U.S.[36] Moreover; the participation rate by Chinese households is much less than U.S. households suggesting that direct effects of a market crash would be limited.[37]

Summary

As this is written, we worry more about a real estate bubble than a stock market bubble. The closed loop aspect of real estate in China is a concern. We wonder what would happen to world markets if a Chinese municipality were forced to restructure its debts or declare bankruptcy. Given that income from land sales and property taxes are a major source of municipal revenues, there is an element of vulnerability. As the saying goes: "Get rich or die tryin."

8. What are China's biggest long-term challenges?

As an emerging economy, China faces many challenges on its path to economic development. Prior essays have focused on the economic issues that will either benefit or challenge China in the coming years. However, there are a number of other challenges worth noting that will have a bearing on China's continued growth. Here, we will discuss a few pertaining to the environment, demographics and social stability.

Environmental Challenges

China's economy is heavily oriented to manufacturing and investment. This characteristic corresponds to resource and energy intensity that results in significant environmental challenges.

- China's economy is 50% to 60% more energy intensive than the U.S.[38] ; 70% of this energy demand is met by coal;[39] China's coal-fired generating capacity is forecast to triple by 2030.[40]
- China is the largest emitter of carbon dioxide in the world;[41] 5 of the 10 most polluted cities in the world are in China.[42]
- China's economy is also much more water intensive than the U.S.; China consumes 10x as much water than the U.S.(as measured relative to GDP.)[43]
- However, China is also relatively water poor, with per capita water supply only 25% of the global average.[44]
- Nearly 60% of China's rivers are too polluted to serve as sources of drinking water; nearly 30% are so polluted they can't even be used for industrial or irrigation purposes.[45]

China is encouraging investment in cleaner and more efficient production technologies and renewable sources of energy. However, a more potent solution hinges on whether or not China can successfully transition from a manufacturing/investment economy to a service-based economy. Of course, service activities are much less resource and energy intensive than manufacturing. As discussed, a transition to services will be important for the sustainability of economic growth, but it will also be important to the sustainability of the environment.

Demographics

An aging population has significant implications for economic growth. Japan and Europe are at the forefront of this challenge. Generally speaking, emerging economies are advantaged on this dimension. Emerging economies typically have younger populations with growing work forces. This characteristic provides an underlying long-term driver for growth. However, China is the notable exception. "China is unique in getting old before it has got rich."[46]

Over the last 35 years, China's economy has benefited from what is termed a "demographic dividend." China's working-age population has steadily grown in size relative to its population of dependents (ages 0-14 and >60). In fact, the ratio of dependents to working-age adults has declined by >50% over this period.[47] In other words, working-age adults have half as many dependents to provide for today than they did 35 years ago.

In 2010, this dividend flips to become a tax. Based on demographic forecasts, the ratio of dependents to working-age adults is expected to nearly double over the next 40 years.[48] The aging of China's population is driven both by China's one child policy and increases in life expectancy. This problem is compounded by the fact that a robust

social security system has not yet been put in place. Less than one third of China's workforce is currently covered by public pension benefits.[49] Thus, China's working-age population will experience an increasing burden to care for a growing population of dependents.

The most significant offset to this worrisome trend is another demographic phenomenon, urbanization. In the early 1980's over 80% of China's population lived in rural areas. Today that number stands closer to 50%. In developed economies, rural populations typically represent 10% of the total. Tremendous productivity gains have taken place during this transition. Per capita income for urban workers is approximately 3x higher than for rural workers.[50] Assuming China can continue to create urban employment, this trend could continue for some time. Again, a transition to a service economy will be important. Service industries are far more labor intensive than manufacturing industries. Growth in China's service economy has the potential to accelerate job creation beyond what is possible for an economy focused on manufacturing and investment.

Social Stability

As we discussed at the onset of this letter, China is not a dictatorship, but neither is it a democracy. Recent history shows us that democracies are typically more stable than authoritarian regimes. History also shows us that political and social freedom often go hand-in-hand with economic success. Thus far, China has been a notable exception. China's authoritarian political system underlies most concerns about the country's prospects for long-term stability. These concerns are exacerbated by evidence of increasing income disparity and increasing labor disputes, particularly in recent years. The Gini Coefficient is a common statistic used to measure the income disparity of a country.[51] Over the last 30 years, China's Gini Coefficient has increased approximately 70%, indicating a widening disparity in incomes.[52] China's statistics bureaus estimate that there were approximately 1,000 labor disputes reported in 2008. This is about double 2007 levels and 5x 2002 levels.

Certainly, China's social stability should be a significant concern when viewed in this light. But we must remember China's population has benefited greatly from the Communist Party. Under the Party's leadership, China has grown its economy ~10% annually over the last 30 years. More importantly, the Party's leadership has helped to lift a staggering 500 million people above the poverty line during this time period. 30 years ago, approximately 60% of China's population was living on less than $1 per day. That percentage now stands at 10%.[53] Certainly the Communist Party enjoys some goodwill as a result of this accomplishment. Recent surveys of China's population support this. One survey conducted by a Washington D.C. based think tank, The Pew Research Center, reported that 86% of Chinese respondents are satisfied with the direction of their country. This plays into the seemingly irrepressible optimism of the Chinese people which is a factor in the economic renaissance China enjoyed. Again, China's transition to a service economy should contribute to social stability. As noted earlier, service industries are relatively labor intensive. Ensuing job creation should be a significant deterrent to unrest.

Summary

Environmental problems, the aging population and the potential for social unrest are all significant challenges that China will need to face over the coming years. The common solution to these problems rests in China's ability to transition to a service economy. Currently export and investment activities contribute >50% to China's GDP, high by any measure. The transition to a domestically focused, service economy should result in a more sustainable growth model for China.

Fort Washington
Investment Advisors, Inc.

Conclusion

China's progress over the last thirty years has been nothing short of an economic miracle. Strong and steady economic advancement has lifted hundreds of millions of people out of poverty. All along the way, many have doubted China's ability to continue its trajectory of growth and development. However, betting against China has proven to be a losing proposition for many years now. Still, as we look into the future there are reasons to be concerned. Despite years of elevated growth, China's per capital GDP is still relatively low. Beijing will continue to be under pressure to deliver growth and the promise of a better life for the Chinese people. This will not be easy to do, particularly at a time when the sustainability of China's export model is called into question by a weakened U.S. consumer. So, what is China to do as it looks forward? Clearly, transitioning to a consumer and services oriented economy will be critical. But again, this will not be easy given the lack of a social safety net and the cultural propensity to save. Other significant challenges are present as well – a potential property bubble, environmental problems, an aging population and social stability. These concerns are hard to dismiss. However, it is equally hard to dismiss China's tremendous record of success. While China's future is uncertain, we would not bet against them.

John J. O'Connor
December 31, 2009

M. Robert Maeder

Past performance is not indicative of future results. This publication contains the current opinions of the authors but not necessarily those of Fort Washington Investment Advisors, Inc. Such opinions are subject to change without notice. This publication has been distributed for informational purposes only and should not be considered as investment advice or a recommendation of any particular security, strategy, or investment product. Fort Washington, or its affiliates, may from time to time provide advice with respect to acquire, hold, or sell a position on the securities mentioned herein. Information and statistics contained herein have been obtained from sources believed to be reliable but are not guaranteed to be accurate or complete. No part of this publication may be reproduced in any form, or referred to in any other publication, without the express written permission of Fort Washington Investment Advisors, Inc.

©2009 Fort Washington Investment Advisors, Inc.

Footnotes

1 Description of China's governmental structure and role in business is based on a synthesis of several sources, including FW Capital discussions with market participants, Ascension Capital research, "The Chinese Economy" by Barry Naughton and various news articles and internet sources.

2 CITIC Group website

3 Capital today, China National Bureau of Statistics

4 IMF

5 BCA Research. In 2007, China was the fifth largest consumer market in the world behind the U.S., Japan, U.K. and Germany and ahead of France.

6 BCA Research. This is a record low for China and most likely a record low for any major economy in the modern era.

7 Source: Morgan Stanley

8 China's government officials have admitted that over 20 million migrant workers lost their jobs in exportcentric Guangdong Province alone in the wake of the financial crisis and the collapse in exports.

9 Source: IMF

10 Kiribat is an island nation in the central Pacific Ocean.

11 Source: China Auto Industry Association

12 Source: China Ministry of Information and Technology

13 Source: iResearch

14 Upper Middle Class defined as annual income of $6K to $15K; Middle Class defined as annual income of $4K to $6K; Poor defined as <$4K per year.

15 Source: Hopu

16 Source: China Securities Regulatory Commission

17 Dragonomics

18 Morck, Yeung and Yu (1999)

19 Source: Chinese Securities Regulatory Commission

20 The following statistics are sourced from the Asian Venture Capital Journal (AVCJ) as of 1/31/09 unless otherwise indicated.

21 Statistics exclude capital raised through pan-Asian vehicles

22 Based on both fundraising and investment activity in 2008

23 UBS research and analysis

24 Based on the value of IPO activity versus the value of M&A exits

25 Ernst & Young

26 UBS

27 Credit Suisse

28 China Securities Regulatory Commission

29 CNBC

30 CSRC

31 Source: Stratfor

32 Source: Stratfor

33 Source: CLSA

34 89B RMB loans through the first 10 months of 2009 versus 5.3B RMB loans during the comparable period in 2009, an increase of 68%. Source: Financial Times

35 Source: Holt

36 Source: CLSA

37 Source: CLSA

38 Energy Information Administration

39 BCA Research

40 Energy Information Administration

41 BCA Research

42 Societe General

43 Societe General

44 Societe General

45 CLSA

46 "Peak Labour," Barbara Beck, The Economist, The World in 2010

47 Center for Strategic and International Studies

48 Center for Strategic and International Studies

49 Center for Strategic and International Studies

50 BCA Research

51 A Gini Coefficient of 0 is perfect equality and 1 is perfect inequality; the U.S. Gini Coefficient is currently 0.47

52 BCA Research

53 World Bank