

China Growth Picture: Real or Fiction?

Brian P. Cunningham, Principal, Chief Investment Officer, CFA

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The People's Republic of China has surfaced as one of the foremost capitalist economies leading the way out of the 2008 depression and now rivaling first world powers in growth and consumption. China commands a massive population and its tactful government has an exacting grip on the spigot of capitalism, letting in a steady flow of free market policies while it keeps the west at arm's length. China's second quarter GDP growth rung in at 10.3% and it is one of the only economies not flirting with deflationary concerns as it devours natural resources to fuel its infrastructure expansion.

Interestingly the Chinese markets have lagged behind much of the developed world in 2010. Is China's growth story souring in investor's stomachs? In light of the turbulence that has characterized 2010 several pros and cons of investing in China have surfaced:

Pros:

- Agile stimulus programs*
- Market leading growth in a tumultuous world economy*
- Robust balance sheet*
- Control of short-term US debt*
- Insulation from systemic risks*
- Massive consumer base in its 1.3 billion citizens*
- Room for expansion as both an exporter and internally driven consumer*
- Proclivity of world investors amid the choices of emerging markets*

Cons:

- Government regulation of markets and limits on foreign investments*
- Lack of transparency into the housing and banking sectors*
- High-end housing supplies that far outstrip demand*
- Off balance sheet lending coupled with untimely bank IPOs*
- Dubious quality of GDP growth*
- Disconnect between income of average citizen and the buying power needed to drive internal consumption*

China carries with it countless pros and cons, and the ensuing paper has delved deeply into many landmines that may be hidden in the Chinese economy. A high-quality investment thesis should heavily scrutinize a strategy's upside and downside with analytic skepticism. *China Growth Picture: Real of Fiction* has assaulted China from

all angles, but at least in the near term, we believe China will not develop into a black swan or bursting bubble.

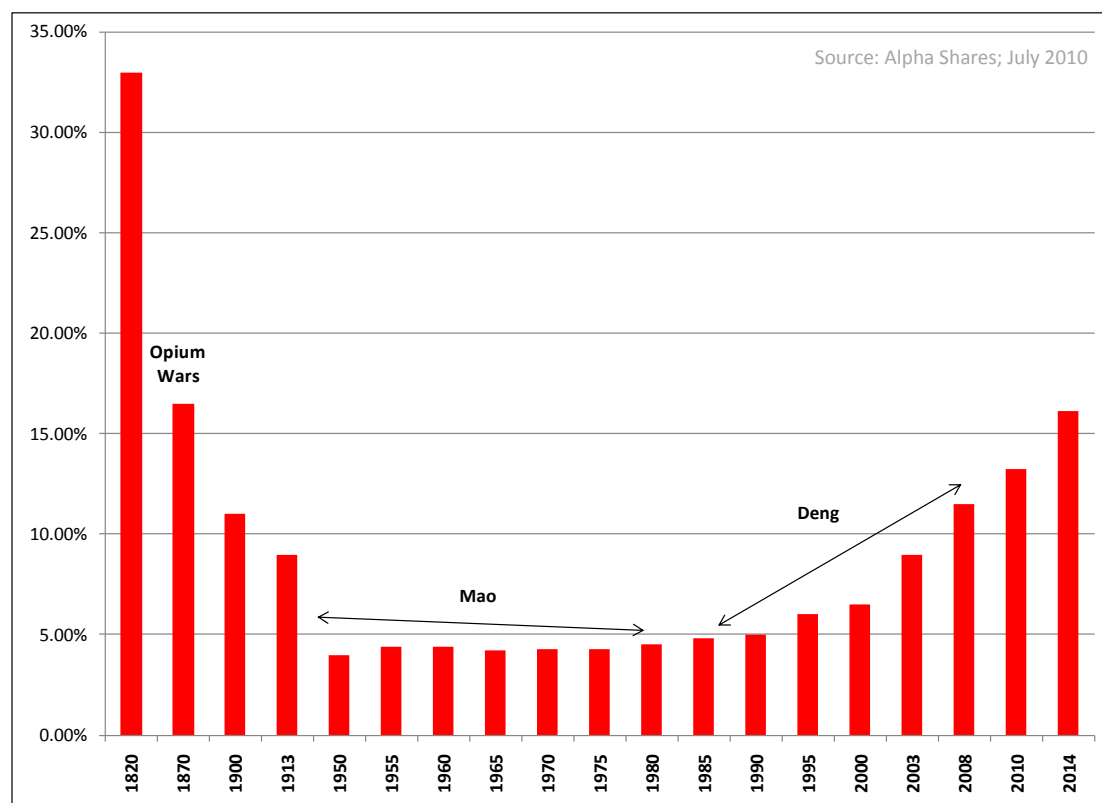
Ballooning government deficits, growth stunting austerity measures and tidal waves of systemic risk have coalesced into an investing landscape that now demands global diversification and implores asset allocators to find returns outside the "safety" of the developed markets. China seems to fit this bill. China may not grow at the torrid pace that it has in the past, but GDP growth is unlinked to market performance. Rather, investors' expectations about growth and relative opportunities are what will drive the Chinese markets higher. The developed world is being forced to de-lever resulting in an economic slowdown while China, the last bastion of communism, is ramping up expansion and will likely prove to be a massive incubation ground for capitalistic growth. As a result, we believe Asian markets such as China will provide an interesting investment alternative for the foreseeable future.

A Growth Machine Reborn

Out of the wreckage of the late 1990's Asian financial crisis, the 2000-2001 dot com bubble and the more recent credit crunch, the most populous country in the world has materialized as the next great investing frontier. By strict definition, China is still viewed as an "emerging" market. This has more to do with how institutions view their investment portfolios rather than the size or scope of China's economy or market. However, China makes up a sizeable portion of world production, and is on track to eclipse Japan as the world's second largest economy. What is interesting is not only the current size of the Chinese market but the fact that at one time (1820), China was the world's largest economy. Both of these features can be seen in the graph on page 2.

Today, China is widely viewed as the current and future engine of world financial growth. Its economy and stock market have all ballooned in recent years and many believe this massive growth will continue for some time. China recently released second quarter 2010 figures for growth in Gross Domestic Product (GDP) of 10.3%. Albeit lower than the 11.3% rate in the first quarter, the number is still consistent with China's growth over the last decade. During this period, real GDP growth (i.e. adjusted for inflation) has been reportedly as low as 8.7%

Figure 1: China's GDP as a Percent of World Total



China's economic evolution and important factors to analyze are: supply and demand for housing, the disparity between the types of real estate being developed and the types that are actually needed, as well as the financing avenues that are funding these projects. The latter is an interesting piece of the puzzle and clearly includes securitization, not unlike that seen in the U.S. in the mid 2000's. If a substantial portion of Chinese development has been funded through off balance

during the recession of 2009 and as high as 14.2% in 2007. Although some investors are betting on a continuation of the great Chinese economic machine, others believe it is a bubble waiting to burst. Moreover, the quality of China's GDP growth has been called into question and speculation about the validity of the consistent and robust numbers continues to surface.

As many developed nations have done, China has leveraged its growth rate with significant stimulus and liberal use of debt. China was one of the first countries to pull the trigger on a massive stimulus program in 2008 which allowed it to lead the world's economies out of the "great recession". However, unlike developed economies, China has pushed state controlled entities to lend and encouraged real estate and infrastructure development. Recently stimulus measures have been reduced and even tightened in some areas but the focus of real estate development is simply being redirected from commercial and high end housing to affordable public housing. Finally, with the rest of the world focusing on reducing debt and implementing austerity measures, the global recovery is slowing substantially. Therefore, China will no longer be able to rely as heavily on exports and will need to look for increased internal consumption to maintain a high level of economic growth.

In order to truly understand the dynamics of China's progress, one needs to peel back the layers of its closely guarded economy. Real estate is a key component of

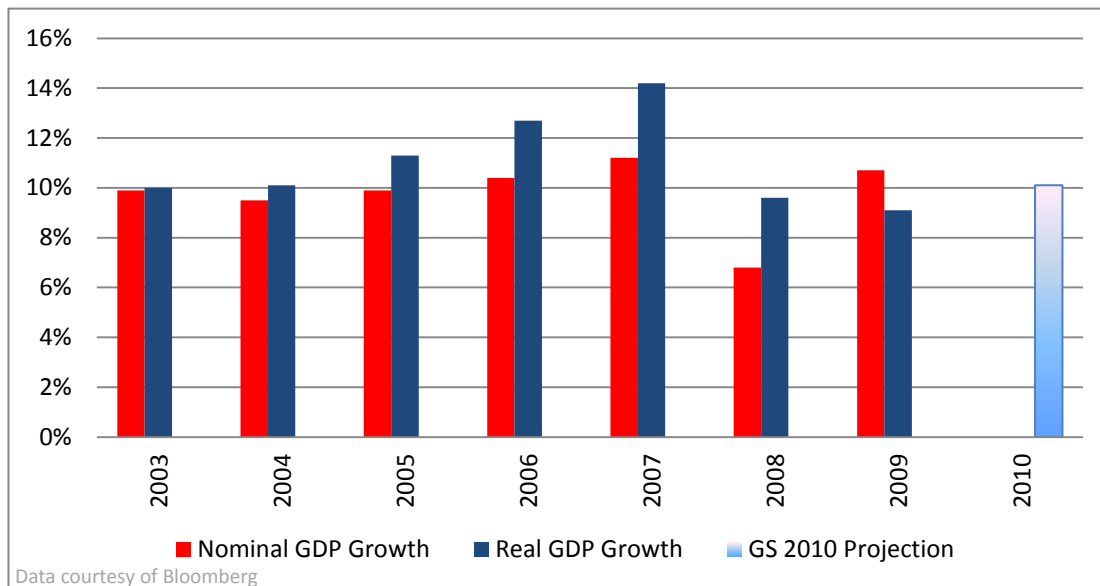
sheet methods like securitization, then why are China's largest banks raising even more capital by coming to market with such massive public offerings? Internal consumption is another question mark as some analysts believe exports will slow commensurate with world growth requiring a larger internal consumer market to fuel future production. Other issues which are not necessarily unrelated include commodity consumption, auto sales and wage pressures. These and other factors must be understood in order to place a probability on future growth rates in the region.

Current Projections of GDP Growth

Irrespective of past success, there are many signs that growth in China is slowing. A number of analysts have recently reduced their outlook. Barclay's for example, recently eliminated its forecast for China to raise interest rates this year based on the declining likelihood of inflation in the region. UBS forecasts fourth quarter growth at 8.5%. Stephen Green, the head of China research at Standard Chartered Bank in Shanghai said, "There's no more need for tightening happening in China" due to the slowing expansion.¹ Goldman Sachs recently cut its forecast for 2010 GDP growth from 11.4% to 10.1%. Others reducing their growth estimates included JP Morgan Chase and Royal Bank of Scotland. Even the Chinese government has admitted that they face an

economic slowdown. Premier Wen Jiabao suggested that the international financial crisis including the nature of the global recovery will present mounting challenges to China's economy.

Figure 2: China's GDP Growth



In spite of a forecasted economic slowdown, debate continues regarding Beijing's need to provide more stimulus or conversely, to cut back on lending and increase property restrictions. Some believe that the government will withdraw curbs on real estate purchases and approve more investment and infrastructure spending. Others believe this is unlikely. According to GaveKal Research, "the reason (real estate curbs will not be withdrawn) is that the government is determined to shift the center of gravity of the housing market from high-end homes to low-cost social housing, and this shift cannot occur unless Beijing maintains the squeeze on high-end developers for at least another three to four quarters". They also believe that the government is still trying to exit the massive stimulus actions of the last two years which amounted to 20% of GDP in 2009 and 10% in 2010. The preferred path for future growth is from internal consumption rather than exports or government stimulus.

The consensus seems to be that China cannot maintain its recent torrid pace but will likely grow its economy at a 7-9% pace for the near term. According to Harvard University economist Dwight Perkins, the high growth phase has at best another decade before it levels off.² Furthermore, expansion will be challenged by demographics as the working population ages and shrinks. China's one child policy will likely incite rising wage pressures thereby dampening low-end exports such as toys and apparel. According to the Center for Strategic and International Studies, demographic changes added approximately 1.8% per year in economic growth since the 1970's. Going forward this contribution will probably

fall to less than 1%. Unfortunately China's historical low wage advantage is coming to an end. Countries such as Vietnam and Pakistan already enjoy wages that are one third that of China. Clearly China will need to focus on productivity enhancements similar to those employed by

developing nations over the last few decades. Finally, there is a widening gap between China's massive rural population and its affluent consumers. It is unclear whether the country's infrastructure and stimulus spending will extend far enough to gather a large enough portion of rural consumers to help facilitate China's transition from the world's biggest exporter to an

internally consumer driven market.

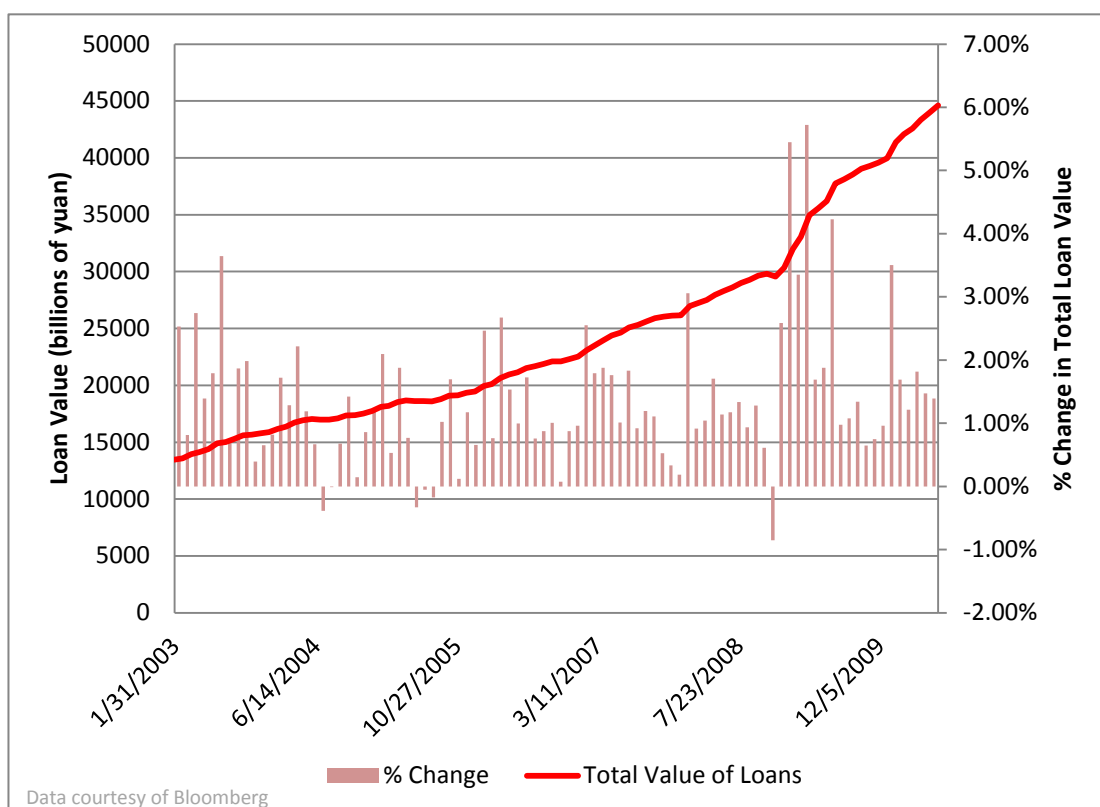
The banking system, especially state owned institutions, has been the center of China's recent explosive growth. Last year one third of economic output was supplied via bank lending. Banks are on track to add 20% to this year's output, which will result in \$2.5 trillion of new credit over a two year period. This compares to credit borrowing of 18% of GDP during the U.S. credit boom.² As a result of this explosive credit growth, it is important to assess the current health of the Chinese banking sector and determine whether the recent real estate bubble has caused deleterious flaws in the system. The total value of loans made by Chinese financial institutions has increased by 47% since the end of 2008. Additionally, the rate of lending has spiked substantially over the last year, with the total loan value jumping up by as much as 5.72% in some months (see Figure 3).

Signs of a Bubble

Chinese Banks

Chinese banks seem to have a voracious appetite for capital. Agricultural Bank of China (ABC), China's largest bank in terms of customers, recently went public in a \$19.2 billion IPO and authorized the underwriters to expand the offering to over \$22 billion which would make it the largest IPO ever. Other Chinese banks are also planning on raising capital this summer. According to

Figure 3: Total Value of Loans Made by Chinese Financial Institutions



that get revenue from local taxes, land sales and central-government transfers”. Measures instituted by Beijing to cool down the property market have resulted in lower local revenues from land sales. The amount of loans in trouble has been estimated as high as 40% and China’s Ministry of Finance has recently revoked certain guarantees.³ In June, the China Banking Regulatory Commission said it had concerns about the lending to “local government financing

Patrick Chovenec, an associate professor at Tsinghua University’s School of Economics and Management in Beijing, “Chinese banks have already announced plans to raise at least 300 billion yuan (\$44 billion) over the next few months by selling stocks and bonds. In addition to ABC, the last of China’s big four state banks to list, the other three – Bank of China (BOC), Industrial and Commercial Bank of China (ICBC) and Construction Bank of China (BoCom) – are set to raise tens of millions in secondary offerings.” He also notes that a large number of midsize banks are planning on raising capital.

Many are concerned why the banks are so eager to raise capital in such a depressed capital market environment. Over the twelve month period ending July 16, 2010, the Shanghai Composite index was down nearly 23%, hardly a great time to float an IPO. Questions abound regarding the health of banks balance sheets and whether they have been properly disclosing bad debts. Banks were forced by the government to help stimulate the economy which resulted in \$1.5 trillion of lending in 2009 alone. The quoted percentage of non-performing loans (typically less than 2%) has been far below the 20% plus levels seen during past lending booms.

It appears that Chinese regulators are now concerned with the ability of local and provincial governments to back guarantees. According to a July 27, 2010 Bloomberg article, “China has more than 1,000 county level governments and hundreds of city and municipal councils

vehicles”. In fact they have told banks to report their exposure by the end of last month. At the end of last year, the nation’s five largest banks had 2.3 trillion yuan of exposure to these financing vehicles. Furthermore, it is estimated that Chinese banks will likely fail to recoup 23% of the 7.7 trillion yuan lent to finance infrastructure projects and that only 27% of the loans can be repaid in full by cash generated from these projects.⁴ All of this places the banking sector’s health under serious scrutiny and some wonder whether shareholders will end up standing in line behind the government should a bailout be required.

If the known liabilities are not bad enough, banks “off balance sheet” lending simply adds more question marks. To cool a very speculative real estate market (more on that later), the Chinese State Council issued a number of policies in mid-April designed to reduce an overheated market. The result has been a reported decrease in lending. However, according to Fitch Ratings, lending may not have decelerated as much as stated due to a slew of off balance sheet financing via informal securitization. Fitch believes “the vast majority of these transactions are not publicly disclosed by Chinese banks, and few, if any, traces of the loans remain in financial statements”.⁵ This practice has resulted in a huge understatement of credit growth and default exposure. Fitch estimates that in the first half of 2010 alone, the amount of loans extended was much closer to 5.9 trillion yuan than the stated 4.6 trillion.

This 28% difference may seem insignificant relative to the amount of debt outstanding but it represents a very large portion of the newly issued credit.

There may be a belief that as long as the quality of loans remains high, there should be little to worry about in terms of a credit crisis. However, there are a handful of Chinese banks involved altering their balance sheets through securitization which creates a tremendous liquidity risk. If this all sounds eerily like the sub-prime crisis recently endured by the U.S., it's because it is. Although the circumstances and assets may differ slightly, the concept is the same as is the lack of transparency, the huge conflicts of interest and the inability of many of the assets to provide adequate cash flow and repayment. Fitch noted that the China Banking Regulatory Commission (CBRC) was troubled enough by the recent trend in securitization to issue a temporary halt on trust company participation. However, they also suggest that such a ban will be difficult to execute and could hurt GDP growth at a time when an economic slowdown is already putting a crimp on the economy. Moreover, there appears to be a practice of paying current deals off with funds from new issuance and of the 2.3 trillion yuan in outstanding product, 40% will mature in the second half of 2010 and another 25% will come due in the first half of 2011. With a lack of cash flow from the underlying asset pool, new issuance is the only means of refinancing.

One of the primary drivers of securitization is to free up banks capital and enable more lending. However, in some cases, maturities of the loans within these securities exceed the maturity of the products themselves. Again, if new issuance is reduced or halted, banks would be required to bring these loans back on to their balance sheets, thereby straining capitalization and loans to deposit ratios. Could this be another reason for recent capital raising efforts of the banks?

To date, the securitization market has had little in the way of legal framework or standardized disclosure requirements. Fitch notes that the regulators have focused the bulk of their attention to directing certain aspects of the transactions which include the following changes in guidelines at the end of 2009:

- Requiring full ownership of loans be transferred to trust companies in each sale,
- Prohibiting banks from engaging in certain re-purchase agreements to buy back loans they had already sold,
- Banning banks from selling credit-backed wealth management products (CWMP's) built around their own loans; and
- Encouraging more liquidity and diversity of assets within multiple loan securities.

Chinese banks and trust companies were creative enough to adjust to the 2009 rules most of which revolved around

enlisting other institutions to play a role in the securitization with certain pre-determined arrangements. The result is transactions that are much more difficult for regulators to track and securities that will be more difficult to unwind in case of default. As the level of scrutiny on these products has risen, it has created even worse disclosure on the part of Chinese banks in an area that was already fraught with poor disclosure. According to Fitch, certain banks that were actively involved in transactions last year are barely showing up as involved in 2010. This data contradicts the bank's own salespeople who have stated to Fitch that business remains strong. In addition, there has been a rapid growth in the trust sector and as a result products issued by trust companies such as credit-backed and credit equivalent trust products (CTP) has expanded. The volume of both CWMP and CTP issuance increased tremendously in 2009 and appears to have flattened out in 2010. The recent figures may represent the affect of a moratorium on trust products. However, the statistics are somewhat suspect with the decline in transparency.

Although new product issuance has stabilized, the size of the average deal has risen by some 50%. The 2.3 trillion yuan in products that now sits off balance sheets of Chinese banks is estimated to be 10 times larger than year end 2007. Trust companies now derive the bulk of their profits from securitizations and state-owned Chinese corporations are now the fastest growing investor segment. As noted earlier, banks like securitization because it frees up their balance sheets for more loans. But why would investors chase these deals especially when they saw what happened in the U.S. during 2008? One reason could be the government's limitation on speculative real estate purchases. Beijing has restricted families from purchasing second homes in the city. They have also raised the down payment from 40% to 50%. Therefore, high yielding securities tied to real estate provide an investment alternative. From institutions standpoint, they see very little risk and have trouble distinguishing these securities from a typical bank deposit. Unfortunately, the differences are vast.

Let's look at the product features as described in the July 14, 2010 Fitch report:

- Asset pools are typically very concentrated and loan-only CWMP's are often built around a single loan to a single borrower while mixed asset loans have more loans but often still to a single borrower.
- There is no secondary market so investors have to hold the product to maturity. Beginning this year, some issuers allow investors to redeem early.
- There is no tranching to allow investors to differentiate credit risk.
- There are huge conflicts of interest where a single bank can and often does play the role of loan originator, product distributor, custodian and loan

manager. The 2009 guidelines addressed this to some extent but the practice continues to happen.

- Finally, monies from various deals are often commingled such that investors are paid off from a new pool rather than the assets that were tied to their particular product.

The latter point strikes us as something very similar to a Ponzi scheme. Regardless, the end result of the latest securitization game will likely be the same as prior designs; a liquidity squeeze leading to insolvent institutions or at the very least, a major hit to earnings. Perhaps this is why the latest IPO by Agricultural Bank of China was lukewarm at best. According to GaveKal foreign investors such as sovereign wealth funds from Qatar and Kuwait accounted for just 40% of the fund raising targets in Hong Kong (via H-share). All of these investors had previous investments or ties to China. Notably absent were any U.S. institutions. As we witnessed in the U.S. sub-prime crisis, the inability to

repay off-balance sheet investments led to a quick demise of many longstanding and large financial institutions while crippling many others. If growth in China slows too quickly, the implications could be grave. A decrease in liquidity available coupled with an increase in non-performing loans could have a cascading affect on infrastructure and real estate lending. In addition, investor losses could result in reduced consumption especially if savings rates drop. If the Chinese government had to provide a safety net and further stimulus, would that reduce the amount of its U.S. government debt purchases and increase the level of U.S. interest rates needed to continue to fund western deficit spending? All of these scenarios are unfavorable especially considering current conditions.

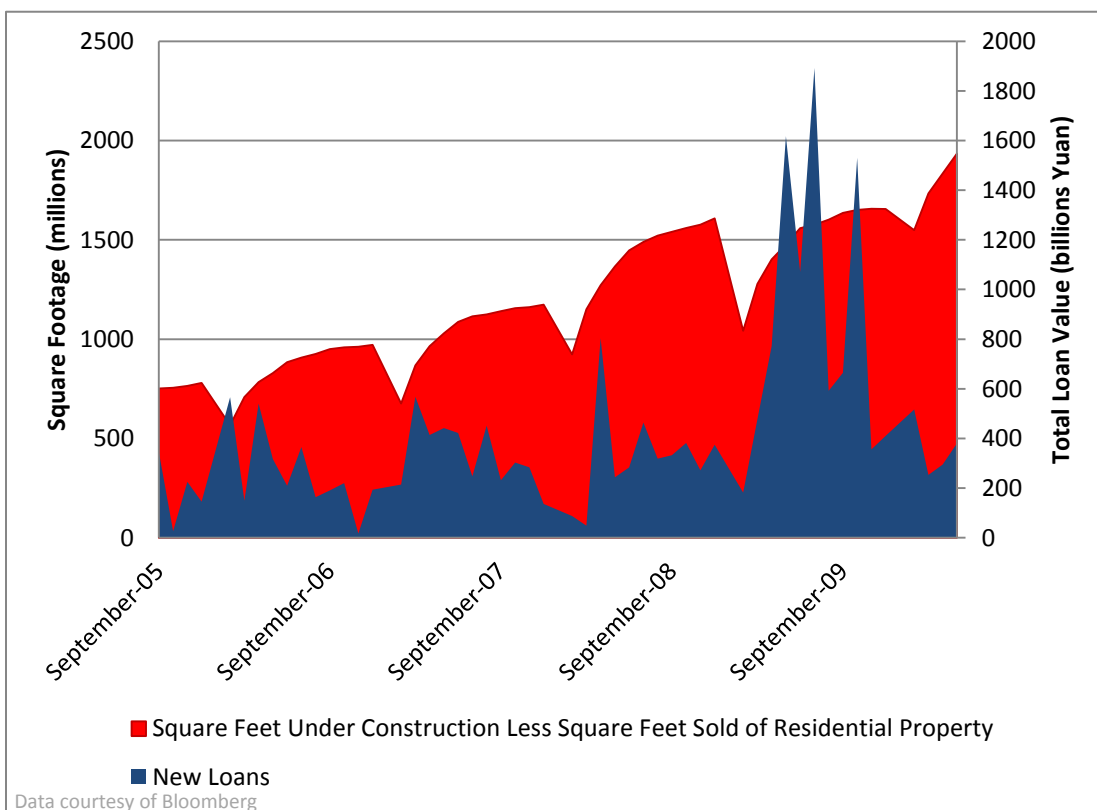
China Real Estate and Overbuilding

One of the primary drivers of Chinese credit expansion over recent years has been the real estate market. Many have discussed potential overheating especially in

commercial and high end residential developments (see Figure 4). As mentioned, authorities have already taken steps to cool down the market but will it be too little, too late? Or are recent policies simply a ploy to redirect resources from one sector to another (i.e. high end residential to a focus on public housing)? Let's begin the discussion by taking a look at some data and observations from various sources.

- The South China Mall is the second largest shopping mall in the world. It was opened in 2005, has a 1,500 store capacity, 7.1 million square feet and is 99% empty.⁶
- Ordos, a city built in Inner Mongolia for 1 million residents on speculation sits empty.⁶
- There is currently 30 billion square feet of Chinese real estate in the works, which would work out to a 5'x5' cubicle for every man, woman, and child in the country.⁷
- Regarding a development in Jilin City, a "relatively

Figure 4: Growth in Real Estate Supply Relative to Loan Demand



depressed and out of the way part of China”, “This particular project, we were told, had 100 buildings....the last of which had just been completed. Over the past two years, prices had risen from RMB 3,000 per square meter to RMB 6,000. The entire project was 90% sold out. It was clear, though, that it was also completely unoccupied. Row upon row of buildings stood in pristine luxuriousness, with not a resident in sight”.⁸

- Based on estimates from electricity meter readings, there are 64.5 million empty apartments and houses

in urban areas of China. This is at least 5 times larger than the U.S. home inventory.⁹

- High end apartments in China are typically sold as a “shell”, with no floors, no walls and no appliances.....¹⁰
-These shells are going for \$100 - \$150 per square foot, so a typical 1,100 square foot condo would cost around \$150,000.¹⁰
- The typical per capita income in China is roughly \$3,500 which with a two income household is similar to a couple in the U.S. with a \$40,000 income buying an \$800,000 home.¹⁰

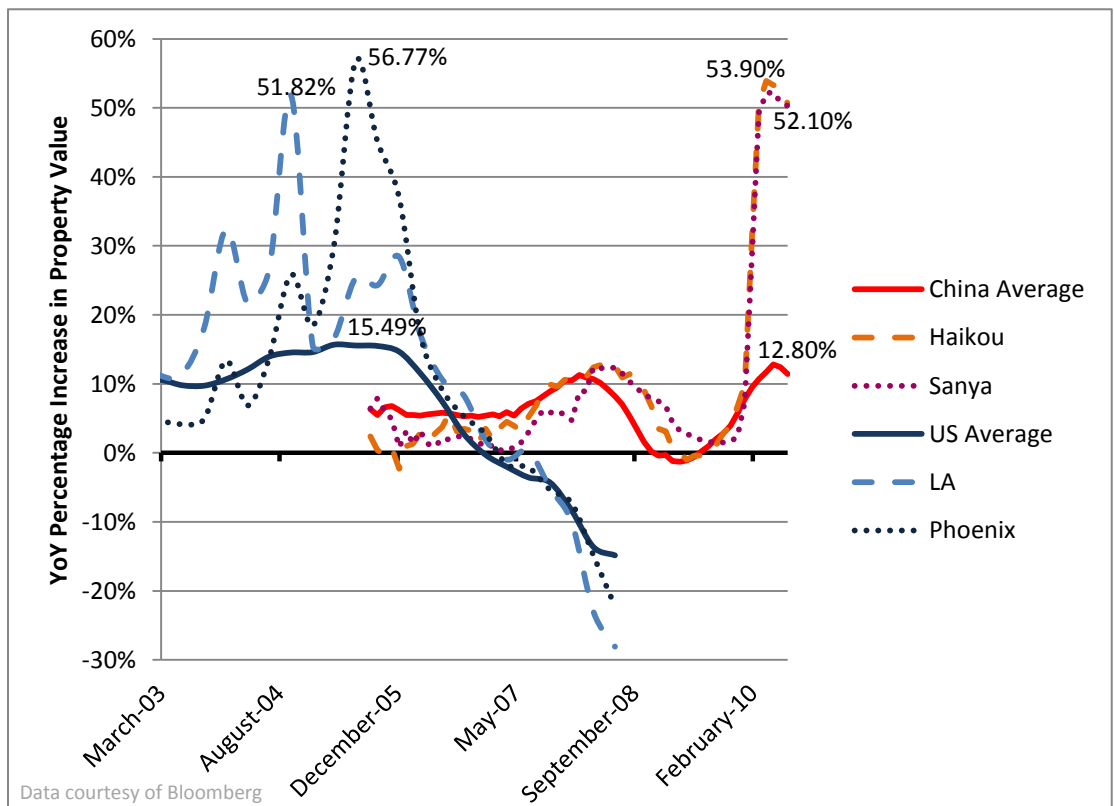
Stories such as these seem almost unbelievable but the facts support the truth.

According to Elliott Wave Research (EWR), China has been experiencing a rapid increase in the prices of vacation and retirement homes. As the following graphic shows, prices in the Hainan Islands have been going nearly vertical. This compares to price increases in Los Angeles and Phoenix in the mid-2000’s. Jim Chanos of Kynikos likened the speculation to Miami in 2005 or Dubai in 2007. EWR notes that prices don’t simply collapse but follow a parabolic curve. This means that the property bubble may have many years to run its course.

Some believe that the key to a soft landing in property prices is to change the target from high end luxury apartments to public or social housing. Social housing has a number of components including price controlled housing and low-rent housing. In general, this is affordable housing for the masses. Unfortunately, in some cases this shift from high end to affordable housing would require conversion of high cost land that has been purchased on speculation. In this regard, certain similarities can be drawn between Hong Kong’s history and China’s future. Nearly 50% of Hong Kong’s population lives in some form of subsidized housing yet in total, Hong Kong ranks in the top five globally for the most expensive housing. Hong Kong has historically maintained a tight control of land supply.

They lease rather than sell land. Unlike Hong Kong, China is a sprawling country that does not have nearly as limited a supply of land. However, China has experienced a mass urbanization with the number of residents flocking toward urban areas increasing by some 16 million per year over the last decade (see Figure 6). This has caused property prices to swell much to the disdain of Beijing. The government prefers privatization of public housing and in fact began moving in this direction in the late 1990’s. Unfortunately, as noted, land prices are a major stumbling block. Similar to Hong Kong, there are certain middle class and wealthy Chinese that don’t want to see the bottom fall out of the price of land. This includes government officials, employees and owners of property firms and the banks which have lent to developers or carry the land as collateral.¹¹

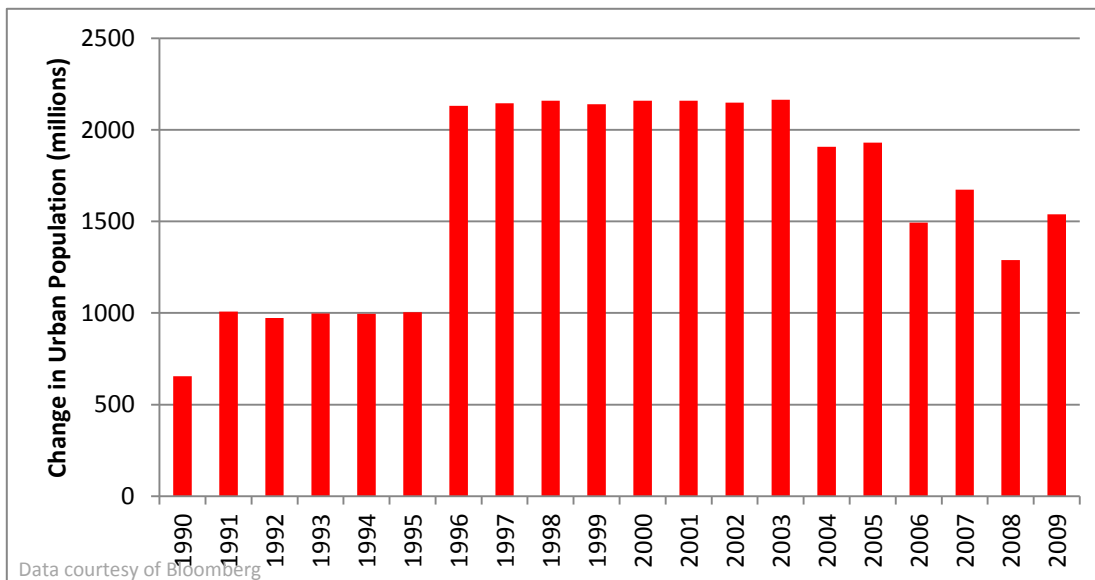
Figure 5: Comparison of Property Bubbles



The conflicts of interest are not much different from those discussed in the securitization of property loans. In fact, many developers have ownership interests in the banks providing lending and holding collateral. All these factors make it even more difficult to build affordable housing. The key is to compel state-owned developers to participate in public housing, thereby making it affordable for the lower class population which makes up the vast bulk of China’s 1.3 billion residents. Unfortunately, Beijing must also contend with the individual

municipalities who are thwarting land sales. According to GaveKal, a common strategy is to demand unrealistic minimum bids which for the first half of 2010 has resulted in 40% failed land auctions.

Figure 6: Year over Year Change in China's Urban Population



Unlike Hong Kong the bulk of the low end housing in China is developed by the private sector which in China includes state-owned entities (vs. government agencies). A great deal more land is being sold for set prices which results in lower returns for the developers. Therefore, it is easy to see how the system can be gamed with rigged auctions such that the developers winning bids for low end housing also get preferential treatment from Beijing for higher margin projects, re-classification of industrial land and political promotion. Unfortunately, the end result is the same as witnessed in Hong Kong with the big getting bigger and the smaller, less capitalized developers being driven out of the market. This further reduces competitive forces leading to less efficient markets.

Regardless, Beijing is making 1.8 billion square meters of land available for development in 2010. This is roughly twice the supply in 2009. Of the 1.8 billion square meters, 25% is earmarked for public housing and another 52% is restricted to small to medium sized houses (under 90 square meters).¹² Therefore, construction will continue albeit at a slower pace as lower profit margin building provides a disincentive.

When all the pieces of the puzzle are assembled it reveals a number of structural issues. First, certain inefficiencies exist regarding the deployment of capital. One quid pro quo after another, results in artificially high prices and speculation in the high end housing and commercial sectors. As more and more leverage is applied to an asset that has arguably more room to decline in price versus going up, the systemic risk increases geometrically. Fortunately, to date it appears that the masses in China

have not used real estate to artificially increase their net worth and buying power. The typical leverage used during the bulk of this decade was approximately 34%. Due to the large indirect government involvement, market and illiquidity risk may not surface for many years to come, if at all.

Moreover, resources are being diverted to lower margin building which will likely slow the construction growth rate somewhat over the coming years. However, we do not believe it will bring things to a screeching halt. This will provide some support to the labor and commodity markets. However, as we will explore

next, demand for items such as steel and cement may decrease. Time will tell if the Chinese government is taking proper actions to cool the market and hence soften the blow. Nevertheless, foreign investors may encounter trouble via their investment in funding conduits such as the banks or a slowdown in demand for building materials and other commodities.

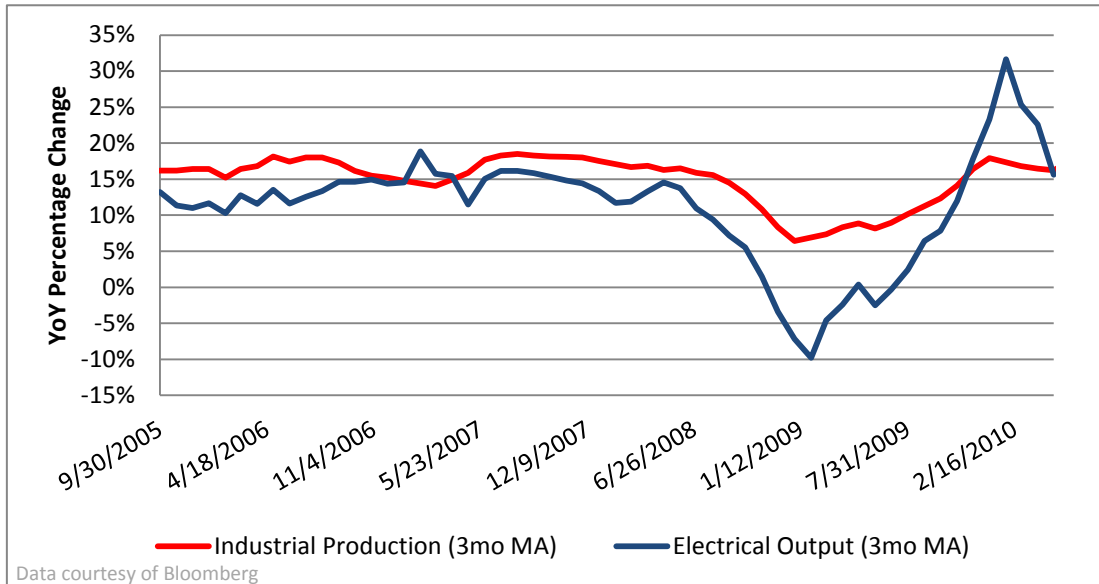
Commodity Prices

China has an insatiable appetite for commodities. The International Energy Agency recently announced that China consumed 2.25 billion tons of oil “equivalent” last year making it the largest energy consumer in the world.¹³ According to John McClure of Profit Score, “With one-fifth the population, China consumes half the cement, a third of the steel and a quarter of the aluminum produced in the world.” In 2009, China consumed 47% of the world’s coal or 3 times the amount consumed in the U.S. It is anticipated that China will import 150 metric tons of coal this year which is double what it imported last year. This amounts to roughly 60% of the coal produced in Australia alone. According to Standard Charter Bank, electricity demand has grown by an average of 14.3% per year since 2004, nearly four percentage points faster than GDP growth.¹³ However, there is a high correlation between electricity demand and GDP growth and based on the data shown in Figure 7, the torrid pace in electricity demand has slowed in recent periods. This could be indicative of further declines in GDP growth. China is the largest consumer of copper and their consumption has grown 24% per year over the last five

calendar years ending 2009. Copper is a main component utilized in housing construction and although the average amount utilized in home construction is not known, it's probably somewhat close to the average 400 pounds per home used in the U.S.

increase since March 2009. Some of the slowdown may be attributable to traditionally weak summer months. However, many analysts believe that the slowdown is attributable to an increase in consumer inflation and a general slowdown in economic activity.

Figure 7: Correlation Between Industrial Production and Electrical Output



Clearly the explosion in China auto consumption is real. According to Nationmaster.com, the number of cars per capita in China is only 10 per 1,000 residents. This compares to 765 per 1,000 in the U.S. With these types of numbers, demand can only increase but the question is at what rate. Interestingly, the amount of utility derived from automobiles has some similarities to real estate. In a recent article,

As previously discussed, if building slows down it will likely have a negative impact on commodity prices. There tends to be a very high correlation to the change in construction growth in China with the year over year percentage change in steel, cement and copper demand. GaveKal estimates that steel production for the second half of 2010 will be flat. Rising iron ore costs will also negatively impact margins at steel producers. Finally, they believe that growth in cement production will slow from the 13% growth rate witnessed from 2003-2007 to a 7-8% growth rate going forward.¹² Lower commodity prices will likely result in continued deflationary pressures around the world.

Auto Sales

Although recent sales of automobiles in China have slowed, the country remains the largest market in the world with 13.6 million vehicles sold in 2009. China has become General Motor's largest consumer and they are forecasting sales of 2 million vehicles this year, four years ahead of GM's forecast. GM reported that June sales were up 23% to 176,486 vehicles and first half 2010 sales increased 49% to 1, 209,138 vehicles. During the same period, Ford reported a record number of autos sold in the country. In total June sales of autos in China rose 1.04 million or 19% from the year earlier period. According to the China Automotive Review, total sales for the first half of 2010 topped 7 million units which was a 30.45% year over year increase. Even though sales continue to increase, the latest month figures were the smallest

Patrick Chovanec shared a story from a visit to his local (Beijing) Toyota dealer.⁸ He had a conversation with one of the salesman regarding a noted discrepancy between automobile sales and gasoline consumption. Apparently the amount of gas consumption is low relative to the number of cars sold. The salesman suggested that many Chinese buy cars not out of necessity but rather to convey status. In fact, these same consumers are buying cars even though they cannot afford apartments. Based on the low odometer readings, the salesman suggests that many of these buyers weren't aware of the high cost of gas and maintenance and hence don't drive much. With millions of vacant housing units and cars that are underutilized, how can China maintain its torrid economic growth?

Inflation or Deflation?

In general, developed economies are facing two major challenges that have been built up over many decades. First, consumers have been on an almost addictive buying spree that was funded with ever increasing amounts of debt. At first the debt was used to purchase appreciating assets such as homes with the belief that prices would never decline. These appreciating assets were in turn used like ATM's to consume more goods, supposedly increasing lifestyles. Recently, the loan collateral has fallen in value resulting in a form of debt deflation. Second, governments have steadily increased the amount of debt outstanding to fund entitlement programs such as long term pensions and health care. A recent Ad Hoc

Comment by GaveKal estimated that some 91% of public budget concerns are comprised of these entitlement programs. China, like most Asian nations, is not facing these problems and therefore has much more flexibility when it comes to monetary and fiscal policies.

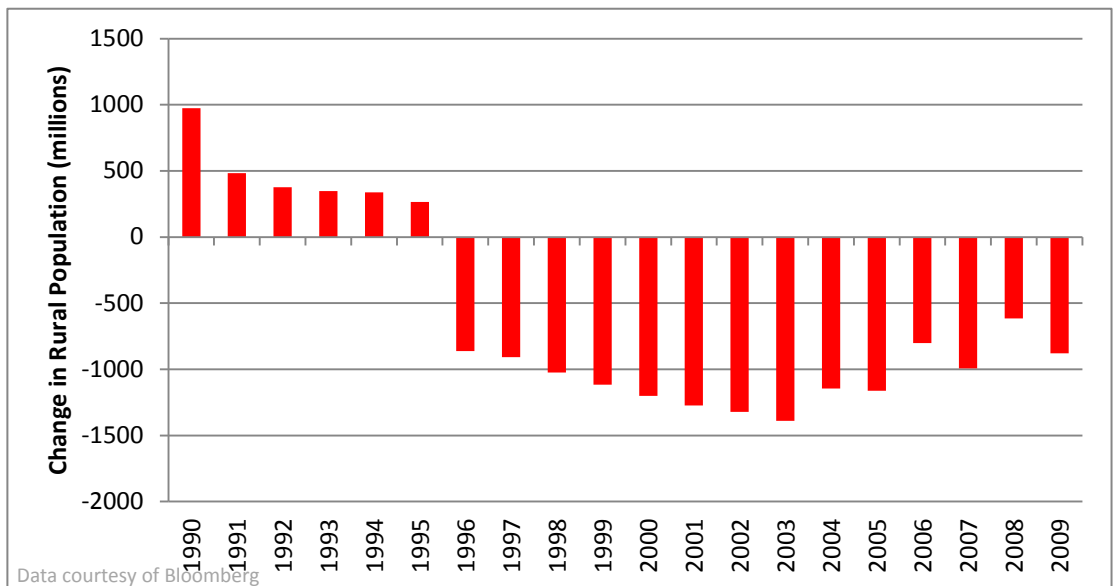
To date, inflation has not been a huge issue for China. In recent years, the Chinese Consumer Price Index peaked at 5.9% (2008) and fell throughout the financial crisis to negative territory in 2009. Since then, year over year growth in consumer prices has ranged from 1.9% in December 2009 to 3.1% in May 2010. The recent reading in June of this year was down slightly to 2.9% and the average headline inflation rate for the first half of 2010 was 2.6%. So far inflation has been pushed primarily by housing and food cost increases. The government's recent actions to cool down the real estate market will likely reduce housing costs. Supply of agricultural goods is expected to increase which will likely hold back food price inflation. Finally, with a slowdown of worldwide economic growth, demand for exports will fall thereby limiting price increases. Regardless, the Economist Intelligence Unit (EIU) is still forecasting consumer price inflation of 3.2% through the remainder of 2010 and 2011. Therefore, what component could potentially maintain price levitation?

For years one of China's greatest resources was the seemingly bottomless pit of cheap migrant labor. As manufacturing opportunities increased and jobs became more lucrative, hundreds of millions of workers left their homes in the countryside and migrated to coastal manufacturing zones (see Figure 8). Cheap labor coupled with increased manufacturing capabilities fueled export growth. Now, this cheap supply of labor is drying up and China's one child policy has resulted in a shortage of capable laborers. The number of younger workers is decreasing and the working age population, ages 15 to 64, is expected to peak by 2015. Moreover, the Xinhua News Agency recently reported that by 2050, 25% of the population will be over 65 years old. Competition for skilled, youthful workers is now beginning to turn the tide in favor of employees who are bargaining for higher wages.

On June 2, 2010, Hon Hai Precision Industry Company, the largest manufacturer of electronics and a major supplier to Apple Inc., announced that it would increase wages for workers by some 30%. Hon Hai had made headlines for the number of workers at their Shenzhen plant that had committed suicide. In addition to wages, other forces may have been at work at Hon Hai. The internet has opened the eyes of the typical Chinese worker especially in the area of worker rights. Non-economic issues such as overcrowding, long hours and unhealthy work environments are coming to the forefront. Although no firm link has been made between the level of wages and workers mental health, Beijing has clearly been concerned about a growing gap in wealth. In fact, the government has recently been increasing the minimum wage.

China still has a wide discrepancy between what State-owned enterprises, and the private sector, pay their workers. The average monthly salary for certain State-owned sectors such as telecommunications and natural resources are often three times the level of employees

Figure 8: Year over Year Change in China's Rural Population



working in the private sector. When including benefits such as housing, the discrepancy can increase to 5-10 times. The public has become outraged and college graduates are being driven away from the private sector. As such, sometime this year the government is expected to enact a new minimum wage law that was originally drafted in 2008. The wage increase will be pegged to the local consumer price index and require each province to submit their guidelines to the central government. Many provinces and cities have already increased their minimum wage but the new guidelines will eliminate things such as including overtime pay in the calculation.¹⁵

Examples such as Hon Hai lead us to believe that market forces are beginning to have an even bigger impact on

wage growth. Already in 2010 China has experienced 9 major strikes at Japanese auto plants and their suppliers which disrupted supply. Just in time manufacturing significantly reduces margin of error and increases the impact of strikes. For example, workers at Atsumitec Auto Parts, a major supplier to Honda went on strike July 12th demanding higher wages. The strike ended 10 days later with workers receiving a 45% increase in monthly pay. Other industries are experiencing wage pressures as well. Yum Brands was recently approached by a labor union demanding higher wages for certain KFC outlets in spite of the company insisting that it already pays employees more than the legal minimum wage.

As noted a very large part of the China growth engine has been exports. However, with a slowing global economy coupled with wages that are already higher than other developing nations (and continuing to rise) it's difficult to make a case for exports continuing to sustain historical growth rates. In fact, it's been argued that internal consumption will be the key to China's (and developed nations) future growth. It seems logical that rising wages will lead to increased consumption. Although this point may be true, the better question is when will China transform into a consumption led economy?

When we look at recent history, what we find is that China as a whole has not been consuming more, rather savings have grown. Certain economists have proposed that rising savings rates have been due to weak entitlement programs or lifecycle issues. When a worker loses their manufacturing job, there is no solid social safety net. They don't have unemployment insurance and hospitals only accept cash, which results in individuals saving more.⁶ Recently, two economists at Tsinghua University, Bai Chong'en and Qian Zhengjie have suggested that the vast bulk of the increase in the savings rate since 2000 has been due to government and corporate sector. From 2000-2007 household savings has stayed relatively constant at 15-17% of GDP with households saving roughly one quarter of their income. However, household consumption has dropped from 46% of GDP in 2000 to 35% in 2008. The conclusion from these statistics is that household income's share of GDP also fell.¹⁶ In other words wages have grown slower than GDP and household consumption as a percentage of GDP fell.

Going forward, wages will have to rise faster than economic output in order for consumption to increase. In fact, wages will have to grow at a tremendous pace as in spite of recent wage hikes, most Chinese workers still make barely enough to meet living expenses. As a result, we believe the shift from an export driven to consumption driven economy will be a long term phenomenon which could play out over many years or decades. In fact the most aggressive view we could find was a January report by Credit Suisse that predicts China's share of global consumption increasing from 5.2% to 23% by 2020. At that time, China would surpass the United States as the

world's largest consumer market. This analysis comes with its own set of assumptions and aggressive or not still takes a decade to play out.

It appears that when all of the pieces of the puzzle are assembled, one sees slower growth for the immediate future. Slower growth coupled with potent monetary and fiscal tools should allow China to keep inflation in check. On the other hand deflation does not look like an immediate threat either as leverage is relatively low and loans backing certain inflated real estate assets are primarily controlled internally by the government. The most likely outcome is controlled inflation with manageable price increases.

Quality of Growth

A discussion of production would be incomplete without some analysis of quality. All too often, we take data at face value without questioning the validity of the numbers and to what extent they provide value or in economic terms, utility. Does it really matter if a company or country produces lots of goods that nobody wants? When all is said and done, our efforts and capital should be applied toward increasing the quality of life both today and in the future. The question becomes at what point does an economy or system run into diminishing marginal utility? In other words, how good is good enough?

Qingdao a port city in the Shandong province is a good case study. Construction is booming and highway traffic is congested. The local government began construction on a \$1.4 billion, 17 mile bridge across the bay. Shandong Hi-Speed Qingdao Expressway, a State-owned company is building the bridge covered by bank loans. Also under construction is the Qingdao Jiaozhou Bay Undersea Tunnel, a massive 7,800 meter tunnel that will cost 3.298 billion yuan (\$485 million) to complete. The first undersea tunnel was completed in April and is open to traffic and a second tunnel is expected to open to traffic in the first half of 2011. The bridge will cost nearly three times as much and according to Min Zhengliang, an economist at Qingdao University, it will save a mere 20 minutes in drive time. Clearly the infrastructure project adds to GDP but experts like Mr. Zhengliang question the value projects like these add to the population.

Another case in point is Ordos, an inner city in Mongolia that was built for 1 million residents. Ordos sits empty with no residents. We have also discussed the South China Mall. This is the world's second largest shopping mall with some 7.1 million square feet and 99% of the space is empty. These and other similar projects have added to GDP, but provide no current value, no economic utility. It's like eating cotton candy versus a steak. One is bigger but doesn't fill you up and in fact has a detrimental effect on your health.

In a recent interview with Bloomberg, Jim Chanos discussed China's GDP and stated "People are rewarded at almost every level of government for making their economic growth numbers". He goes on to say, "In China it starts with, We are going to grow nine percent next year. Now how do we get there?" In a classic open market environment, decisions are made based on supply and demand with the latter being driven by how much individuals believe that a product or service will enhance their well being. In a communist or closed system demand can be created based on the perceived good of the whole. An extreme but good example of created demand comes from Chovanec.¹⁷ "All the government had to do was take all the laid off migrant workers and hire them to dig a hole in the ground one day and fill it up the next. Since the total would be added to National Income, the government could simply pay them enough to hit whatever GDP target it had in mind." Clearly in this example, there is no value added to society and the exercise is similar to a one time increase in revenue often reported by corporations.

Chovanec goes on to provide more realistic examples of expediting or masking the true nature of GDP growth such as acceleration of infrastructure projects, building that goes unoccupied and driving up levels of inventory (in China retail sales are counted when goods are manufactured and shipped, not when the consumer buys the product). We must also keep in mind that finite resources would limit this type of "stimulus", but countries such as China that run surpluses have some flexibility to game the system.

Nevertheless, at some point market forces win out and productivity must increase in order to maintain certain growth rates. Today, capital flows globally and will eventually migrate toward the opportunities that provide the highest potential return. China already has a history of nationalizing bad debts and punishing external capital providers, as proven in the mid-1990's during their banking crisis. Although it is not uncommon for investors to make the same mistakes over and over again, sooner or later the markets demand fair compensation for the risks taken. As a result, we believe that over the long term, China will need to shift its emphasis from quantity to quality. This may take the form of productivity enhancement, more transparent capital markets or improvements to health and welfare programs. If historical GDP numbers were embellished then the combination of a maturing economy, slowing global growth and capital market demands may result in future GDP growth below current estimates. Even if growth rates come in at the 6-8% level this should be at least three times greater than growth experienced by developed nations.

Conclusion

Historically, China has enjoyed very high economic growth rates that. These rates are beginning to decline and may fall further by Chinese standards. Nevertheless, they are likely to exceed most other nations in the world. Many have pointed to various signs that the economy is reaching a bubble stage and is poised to burst. Examples of these signs include increasing levels of bank lending, untimely bank capital raising efforts, an illusory level of non-performing loans and securitizations that are eerily similar to the infamous mortgage pools developed in the U.S. prior to the latest financial crisis. Regarding the latter, approximately two-thirds of the 2.3 trillion yuan of loans that were recently securitized in China are coming due in the next two years. With artificially high asset values, how will these loans be re-financed? In addition, there is a huge maturity mismatch with many of the underlying loans having maturities that are significantly longer than the securities themselves. High real estate costs coupled with potential lending illiquidity certainly increases systemic risk.

There are numerous examples of overbuilding in the real estate sector including the nearly 65 million housing units that remain unoccupied. An oversupply of real estate and limited demand would typically result in a huge slowdown in building. It appears however that the sector may only slow slightly as China shifts its focus from high end housing and commercial to low end housing construction. This shift still has certain hurdles as current landowners may be reluctant to part with high priced speculative property. Assuming construction does not fall off substantially a bursting of the real estate bubble may also be softened or at minimum delayed by a government backstop. It is difficult to untangle the web of related parties to various real estate transactions but little doubt that the government is a party to many of the organizations involved.

It is estimated that the real estate industry makes up over half of China's GDP. China has also been one of the world's largest consumers of building related commodities including steel, cement, copper and coal. If the real estate industry does slow, then the implications are for commodity prices to decline. With the vast majority of developing nations already experiencing economic slowdowns the downward pressure on commodity prices could last for several years. This is also confirmed by the slowdown in auto sales.

The global economic slowdown combined with rising wages will also have negative implications for continued growth in China's exports. The government would like to see the economy shift more toward internal consumption and wage growth may help on that front. Unfortunately, wages have not kept pace with GDP growth so the Chinese consumer has actually become poorer in recent years. Therefore, it may take many years for the transition

from an export driven to an internal consumer driven market to materialize. Inflation does not seem to be an issue and probably won't for the near future. Declining housing costs for the masses, lower commodity prices including food and slowing export growth should keep prices in check.

Finally, there is a question of whether China has truly been a growth machine or somewhat of a mirage. There has clearly been a lot of building in both the real estate and infrastructure areas but how much of this building has added value to the life of the typical Chinese citizen. We believe that at least to date, the GDP numbers have overstated the actual gains in productivity. Productivity, capital market efficiency and social programs must improve going forward in order to improve the quality of GDP as well as provide an engine of growth to the rest of the world. In summary, the evidence points toward a bubble that is unlikely to burst but an economy that will experience continued slow growth for many years.

While China may be the next "black swan" as some have predicted, we believe a more likely outcome is an economy that will do fine by itself but one that cannot carry the rest of the world on its back. This will be especially true for the more advanced developed economies that must face their own issues not the least of which is the need to reduce debt while striving to

maintain gargantuan social entitlement programs. China's version of slow growth will likely still exceed most nations by a multiple thereby placing at least a floor under most asset prices and providing market growth that western nations will envy. After all, everything is relative.

About the Author



Brian Cunningham is a co-founder and Principal of 361 Capital LLC. 361 Capital specializes in the design, implementation and monitoring of large multi-manager portfolios that integrate both traditional and alternative investments as well as actively managed portfolios of exchanged traded funds (ETFs). Brian has over 26 years of experience in the investment

management profession and has personally provided investment advisory services to numerous institutions and is the Chief Investment Officer of 361° Capita. Mr. Cunningham can be reached at (720) 346-0086, ext. 304 or brian@361capital.com.

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