



MainStream Monthly Research

We at MainStream are equal opportunity pessimists. With dire short (now – 6 months), intermediate (6 – 18 months) and long term forecasts (5 years) for the United States economy and the stock market, MainStream is also bearish on the economic prospects for the world in general and in particular, China.

Developing countries, with their relatively young populations and underdeveloped welfare systems, did not participate in the same debt financed spending spree that the rest of the world took part in over the last three decades. This allowed developing countries to emerge from the recent economic crises with healthier balance sheets and much higher growth rates than their developed country neighbors.

China in particular has fared extremely well in the face of a struggling global economy (Figure 1). China's GDP has grown over 600% from 2000 through 2011 and has doubled in the last four years – surpassing France, the United Kingdom, Germany, and Japan to become the world's second largest economy.

This exponential growth has been a by-product of China's smaller starting position (GDP is easier to double when starting out small), their massive population, a supportive government that on the surface has low amounts of debt, and massive amounts of fixed investment. Some might assume these factors will continue to propel China over the

next decade, but a closer look shows that China's current growth model is unsustainable in the long term.

A MORE DETAILED LOOK AT THE DRIVERS BEHIND THE CHINESE ECONOMIC MACHINE REVEALS: AN INHERENTLY UNSTABLE MODEL FOR GROWTH, AN ECONOMIC POLICY THAT IS FOCUSED ON SHORT TERM OUTCOMES AND NOT THEIR LONG TERM CONSEQUENCES, AND A SLOWING (POSSIBLY RAPIDLY) ECONOMY IN THE SHORT TERM.

China's success is not a recent occurrence. Since 1980, China has managed to grow their GDP by 12.3% per year (Figure 1), while the rest of the world grew at half that rate. During this time period, China's GDP expansion has actually accelerated at an increasing pace. China's GDP per capita has grown by 11.1% and their GDP as a percentage of the world's total has grown from 1.9% to 9.4%. Remarkable, given that their population as a percentage of the world's total has fallen from 24.8% to 19.6%.

China has come a long way, but in the eyes of many investors and economists, the potential for growth has not yet peaked as many are forecasting that current economic growth rates can be sustained in perpetuity. A more detailed look at the drivers behind the Chinese economic machine reveals:

- An inherently unstable model for growth.
- An economic policy that is focused on short term outcomes and not long term consequences.
- A slowing (possibly rapidly) economy in the short term.

Chinese Economic Policy

Though self described as a Communist state, China is a command economy that is supplemented by entrepreneurship. Roughly two-fifths of all value (GDP) generated comes from state owned enterprises SOEs and government expenditures. Private business output contributes the remainder of the country's overall economic output. Despite this mix,

Compound Nominal Annual GDP Growth

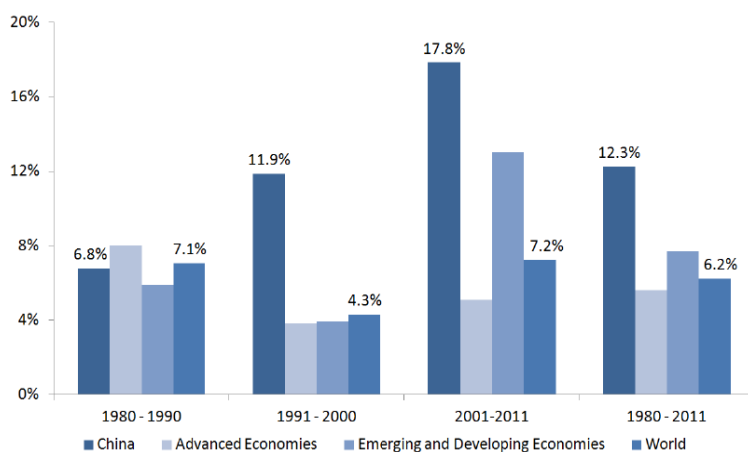


Figure 1. Source: International Monetary Fund

the government has an outsized impact on China's growth and the methods by which that growth is achieved.

This is primarily due to two factors:

1. The government's insistence on growth in production (GDP) regardless of whether it is accompanied by a growth in profits.
2. The high concentration of SOEs in the banking, construction, industrial production, communications, and resource industries.

China is a country with a population of 1.3 billion. Most are poor with 30% of the population earning less than \$2 per day. This disparity in income is of great concern to authorities. Based on the Gini coefficient, a scale from 0 to 1 that is used to describe the income equality of a country, wealth in China has continually become more concentrated in a smaller percentage of the population. The government has refused to publish figures for the last decade (2000 – 2005 figures are estimates) (Figure 2). China's Gini coefficient was an estimated .425 in 2005 and anecdotal evidence would put this number much higher today. Gini coefficients above .40 for long periods of time typically correspond to periods of social unrest and political instability.

The Chinese government has recognized the ramifications of income inequality, and has attempted to combat it with a "growth at whatever cost" mentality and increased social/welfare programs. The hope being that a rising economic tide will raise the living standards of urbanites while increased welfare programs will benefit the rapidly aging and those still living in rural areas. Unlike free market economies, where economic growth is the result of the pursuit of profits, Chinese authorities seek growth regardless of whether it produces self sustaining profits.

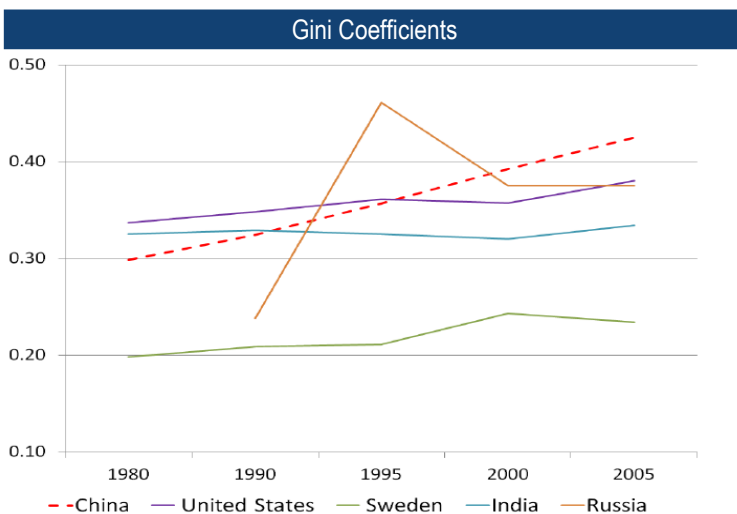


Figure 2. Source: World Factbook, CIA

Comparison of Consumption, Investments and Savings In High Growth Economies

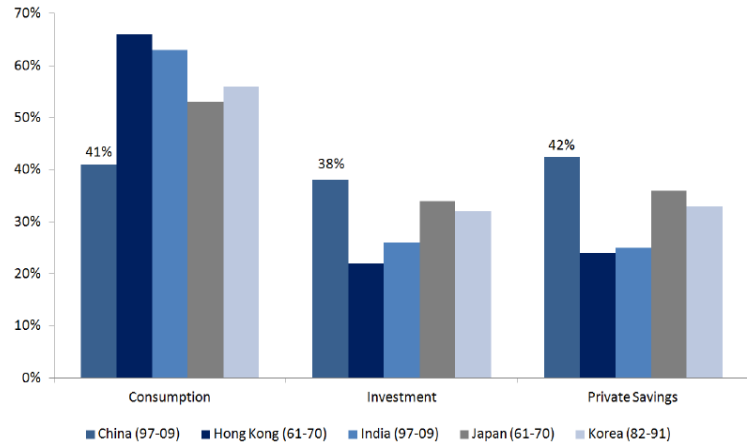


Figure 3. Source: Thomson Reuters

This has incentivized behavior that is a detriment to the economy:

- The government has given preferential financial agreements to large scale infrastructure projects designed (roads, airports, even entire cities) to employ the most people, while also increasing China's productive capacity. These types of projects have led to massive overcapacity in several industries.
- Local government officials are paid partly based on the economic growth of their region, regardless of the cost of financing.
- By decree, the central government has required local governments to spend money on stimulus projects, but local governments are limited in the amount of bonds that can be issued to fund these mandates. Instead, municipalities must seek funding from state owned banks. Banks then further influence state spending by the financing terms they choose to provide.
- Real interest rates are kept negative to promote spending, causing real estate to be the preferred method of savings for the average Chinese citizen. The result has been massive overcapacity in both commercial and residential real estate.
- Inflation is consistently under reported in order to: justify lower interest rates that promote debt financed spending and downplay the impact of food and energy price increases, which makes up the majority of spending for Chinese citizens.

Each of these factors have resulted in short term economic growth, but at the expense of balance sheet strength, overcapacity, stability, and ultimately long term growth.

Many countries have attempted to grow in similar ways only to experience extreme economic volatility. If China continues on its current path, MainStream believes it will be no different.

China's Consumption Growth

Rapidly developing economies, either command economies or free market economies, often experience an increase in investment and net exports as a percentage of GDP that corresponds to accelerating GDP growth (Figure 3). China's investment boom is only unique in the sense that:

- China has done this while maintaining and growing the highest savings rate in the world.
- Consumption growth has continually and increasingly lagged overall growth.

This has led to a lopsided economy (Figure 4). Investment as a percentage of GDP has risen from 35% of GDP in 2000 to 48% of GDP in 2011, while consumption has fallen from 45% to 34%. Since 1980, nearly 50% of the GDP growth in China has been directly linked to spending on investment and that number has risen to 61%, since the last global recession. This would not be problematic if current investment could support future organic consumption or export growth, or if this level of investment could be sustained. Neither is likely.

Consumption growth is unlikely to increase because it is already growing at a healthy pace, as its most inelastic component of GDP. Though consumption growth has lagged overall economic growth, it by no means has been slow. Private consumption has grown at a stable 10.2% per year over the last 30 years, while investment has grown by 12.8%. (By comparison, the United States experienced 6.4% consumption growth over that same period of time). Outside of Chinese government stimulus, it would take a long time for this growth trend to accelerate, while a drop in investment could create a rapid deceleration

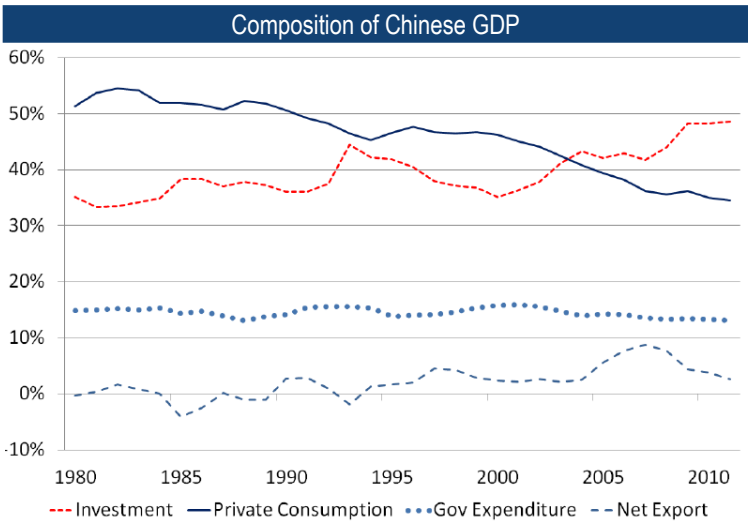


Figure 4. Source: Thomson Reuters

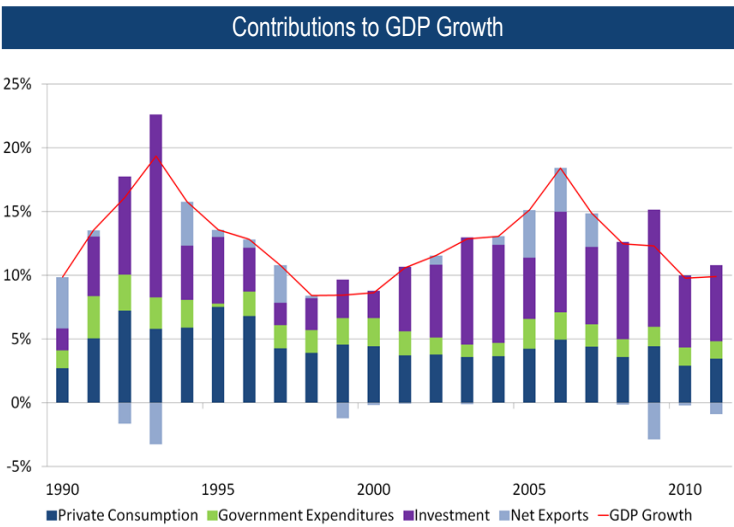


Figure 5. Source: Thomson Reuters

in consumer spending. Typically, consumption grows and falls smoothly outside of depressions and economic recoveries. As non-discretionary purchases for basic staples - food, utilities, clothes - continue in difficult economic times, there is normally little variation in consumption growth on a year to year basis (Figure 5).

On-going investment is critical to Chinese growth. If investment grows at half its historical rate over the next five years (6.4% instead of 12.8%), consumption would have to grow by 15% per year in order to sustain a 10% growth in GDP. This would be very difficult on a standalone basis. The possibility of this is even more remote, given that a drop in investment would likely have a negative effect on private consumption.

China's low consumption and high investment is partly fueled by the populace's incredibly high propensity to save (Figure 3, Page 2). Since the adoption of the one-child policy in 1978, savings as a percentage of GDP has slowly increased. Prior to the implementation of this policy, retirement in China was handled on a family-by-family basis. The lack of countrywide welfare programs necessitated that the younger family members take care of the elders when they were no longer able to work.

The one-child policy made this incredibly difficult as births per woman fell from 5.8 in 1968 to 2.9 in 1978. Families responded by moving to urban areas where jobs with health benefits and retirement plans were more plentiful (in 1978 81% of the population lived in rural areas, today its 49%) and by saving more. Initially the government solely relied on the (debt funded) growth of urban areas to support this trend, but the last ten years they have supplemented this "growth at whatever cost" strategy with the expansion of welfare programs.

The New Rural Cooperative Medical Care System (NRCMCS) and the recently enacted pension program are examples of new welfare programs designed to help Chinese with rising medical and retirement costs. The NRCMCS, instituted in 2005, is China's attempt at making healthcare affordable for the 650 million rural citizens in China. The pension program, which was enacted in 2009, seeks to provide a pension payment for every rural resident and unemployed citizen once they have reached the age of 65. Though these measures will likely be successful in promoting consumption growth, they pose several long term threats to the economy:

- 80% of the premiums for the NRCMCS are paid for by the federal and local governments without any tax or contribution by the populace. Over 550 million Chinese citizens are currently covered under this plan.
- The plan is not entirely inclusive. It covers 75% of healthcare costs for those who utilize rural clinics, but the vast majority of the 400 million Chinese that make less than \$2 per day live in rural areas and cannot afford to make the extra payments.
- The increased coverage has caused out of pocket healthcare expenses to drop (Figure 6), while increasing overall expenditures.
- Currently the 100 million Chinese receive government issued pensions, but these pension payments are equivalent to \$.30 per day.

These programs will be tested as China's population continues to age. China currently has 120 million people over the age of 65, which is roughly 9% of the population. By 2025, there will be 230 million people over the age of 65 (15% of the population). The efficacy of these welfare programs in addressing the needs of this growing

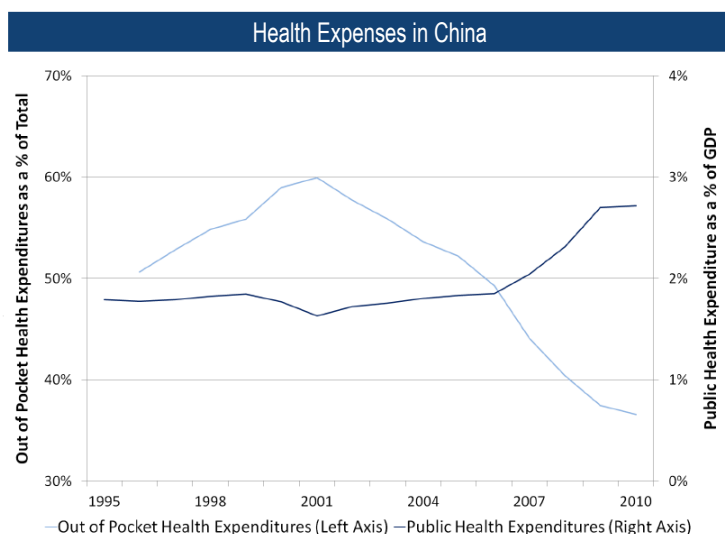


Figure 6. Source: The World Bank

subsection of the Chinese population will determine whether savings or consumption grows over the next several decades.

Credit Growth and Overcapacity

The real problem that faces China is sustaining its three decade run of investment growth. This streak is unprecedented in both length and magnitude (Figure 3, Page 2). The overcapacity and over leverage this growth has created is often ignored when talking about the Chinese economic miracle.

Overcapacity is evident in nearly every government influenced sector of the economy.

- China has more excess cement production capabilities than the combined consumption of the US, Japan and India. This is on top of the 30 billion square feet of real estate currently under construction.
- There are 64 million vacant office and real estate units. It is estimated that nearly a quarter of commercial real estate is vacant.
- China has more bridges (with 15,000 more being built every year) and highways than the United States. This is despite having fewer rivers and one fourth the number of cars.
- Idle steel capacity in China is greater than the entire productive capacity of Japan and South Korea combined.
- Construction is underway that would increase China's steel producing capacity by 60 million tons, which will equal 5% of the world's total capacity.
- Idle aluminum capacity is that of India, the 7th largest aluminum producer, and is four times greater than Russia, the second largest producer of aluminum in the world.
- In the last decade, China has constructed entire cities (Ordos, Zhengzhou New District, Dantu, etc.) designed to house up to 1,000,000 people, that remain entirely vacant.
- The Chinese government has also commissioned the construction of airports and large shopping centers far in excess of what is needed. Since 2005, 37 of 45 airports have been built in very low population density areas. The South China Mall, the world's second largest mall built in 2005, is still 99% vacant.

These projects were commissioned by the Chinese government to meet regional growth targets and employ an influx of people migrating from rural areas to cities; they were not designed for profit, which will remain an elusive objective as capital continues to be misallocated.

Impact on State Owned Banks

From 2000 to 2008, \$1.00 of GDP was generated for every \$1.50 of government debt issued. Today \$7.00 of debt is needed to produce \$1.00 of GDP. This means the risks and costs of these projects have been transferred to state owned banks, which are responsible for the financing. The lack of return, due to overcapacity and preferential financing given to SOE contractors and developers, has put state owned banks in a very precarious position.

Since 2008, the loan portfolios of the six largest state owned banks have grown by 40% per year. An estimated 30% of these loans currently between \$1.7 and \$2.2 trillion total loans outstanding represent 20% of China's GDP. Reports also estimate that 30% of these loans are currently non-performing and there is evidence that 10% of these loans have not had a single payment (principal or interest) paid against them.

The central government needs these state owned banks to continue to issue loans to fund growth. As of now, municipalities and regional governments have little power in issuing their own debt. The central government sets an issuance limit for municipalities (\$31.4 billion per year from 2009 to 2011 and nearly \$40 billion in 2012) that is far below the investment needed to fund major infrastructure projects. By limiting the local governments' sources for funding, the central government can exert greater authority by only allowing the state owned banks to fund those projects that the central government deems beneficial.

Banks are systemically important to the Chinese economy and even though the losses would likely be covered by the central bank in the event of massive default, it would come at the expense of future credit



Figure 7. Source: Markit, HSBC.

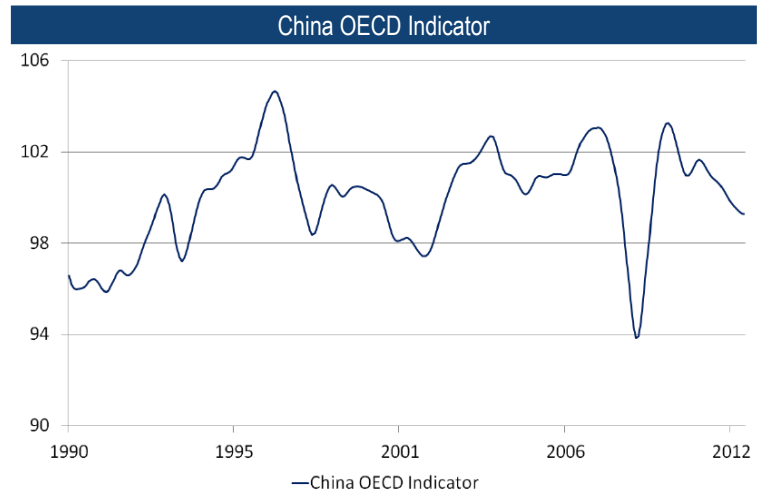


Figure 8. Source: Organization for Economic Cooperation and Development

growth. The household sector, who would ultimately foot the bill through increased taxation, will undoubtedly bear the ultimate burden.

Summary Outlook

The issues of investment, consumption and a growth at all costs government strategy will likely become problematic over the next several years rather than in the short term. Although MainStream is currently seeing a weakening Chinese economy, it is not entirely apparent in the reported GDP numbers. Chinese electricity output, manufacturing PMI (Figure 7) and OECD indicator (Figure 8, an index measuring economic growth) all show signs of an economy slowing at an accelerating rate.

MainStream foresees the government handling the current slowdown much as it has combated every slowdown for the last two decades: SOE funded infrastructure spending. The economy may be able to handle this model for several years, given China's current account surplus and relatively low debt to GDP ratio. In the long term, China's real GDP growth will revert closer to 5% and not the +10% that has become common over the last three decades.

Resources and References:

Statistics presented in this article include data from Pivot Capital Management, Kynikos Associates, Corriente Advisors, GMO Asset Management, KPMG, as well as proprietary research.

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