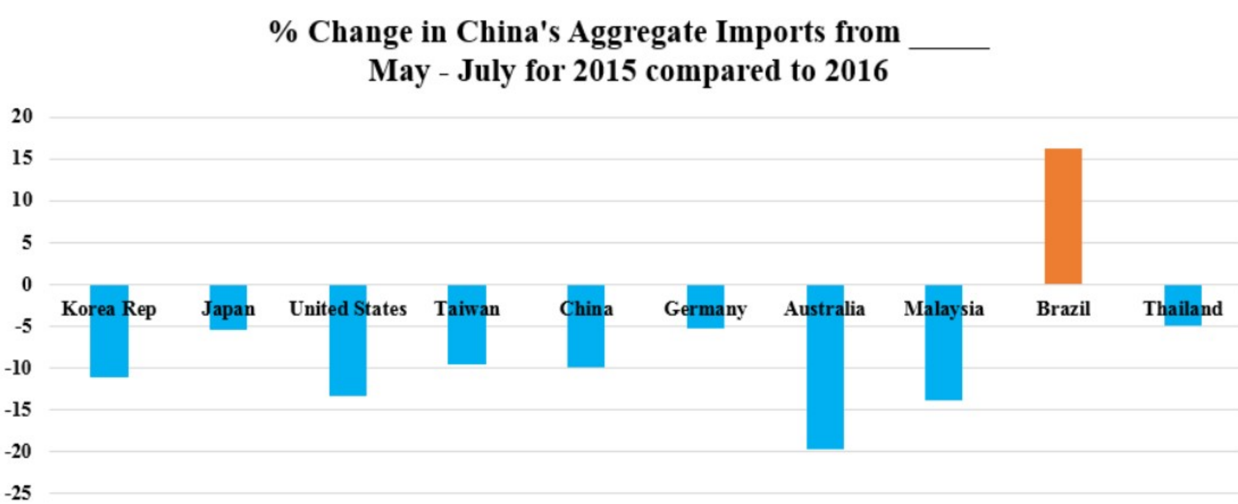
Lecture 5

A Survey of the Chinese Economy

The Chinese economy is clearly one of the faster growing of the large economies of the world. It is quickly becoming the focus of attention throughout the world in nearly every field of human endeavor. Its massive scale and potential is mind-numbing. It is experimenting with a new and arguably contradictory type of political and economic structure which will help to define it for the 21st century – that is, a strong centralized government coupled with a free-wheeling, profit-oriented, and high production economy. We do not know where China is headed.

Not everyone believes that this type of system can be maintained. China has been called the "world's factory" because of the enormous concentration of manufacturing and exporting industries that have been set up there. China is exporting to nearly every part of the globe. Figure 1 below shows recent growth in China's imports from its top ten trading partners. We have purposively omitted Hong Kong and

Figure 1

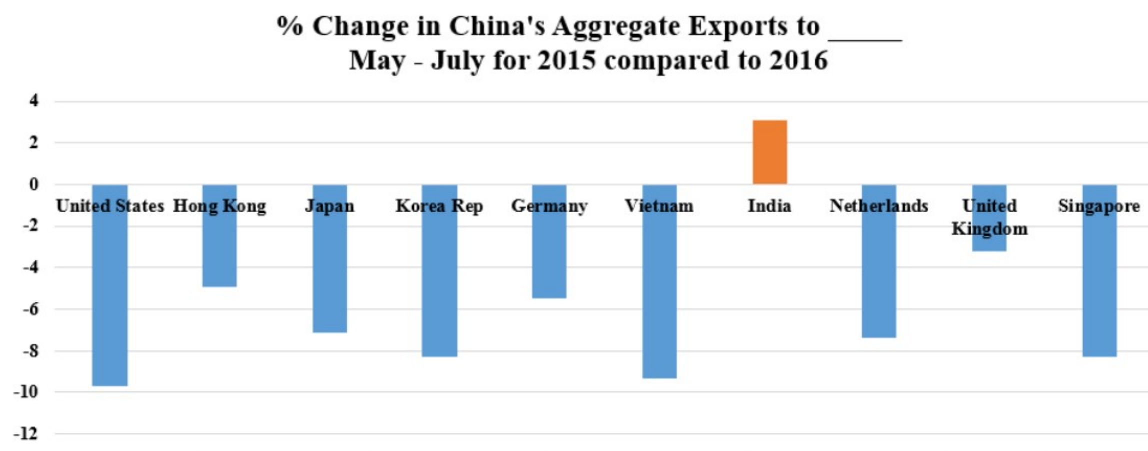


Source: China Trade Statistics -- http://research.hktdc.com/

Macau (they are located after Taiwan, and before Australia). Statistics for the Korean Republic is presumably both North and South together, but is heavily weighted towards South Korea (or the Republic of Korea).

One would think that the US is China's major trading partner. However, this is an illusion. Among relatively rich countries we should at least look at the percentages in the figure relative to population. If we consider population, the US has roughly 300 million. South Korea has about 50 million people. Thus, the average South Korean buys 60% more from China than the average American. But even this is imprecise because we have not considered the relative number of

Figure 2



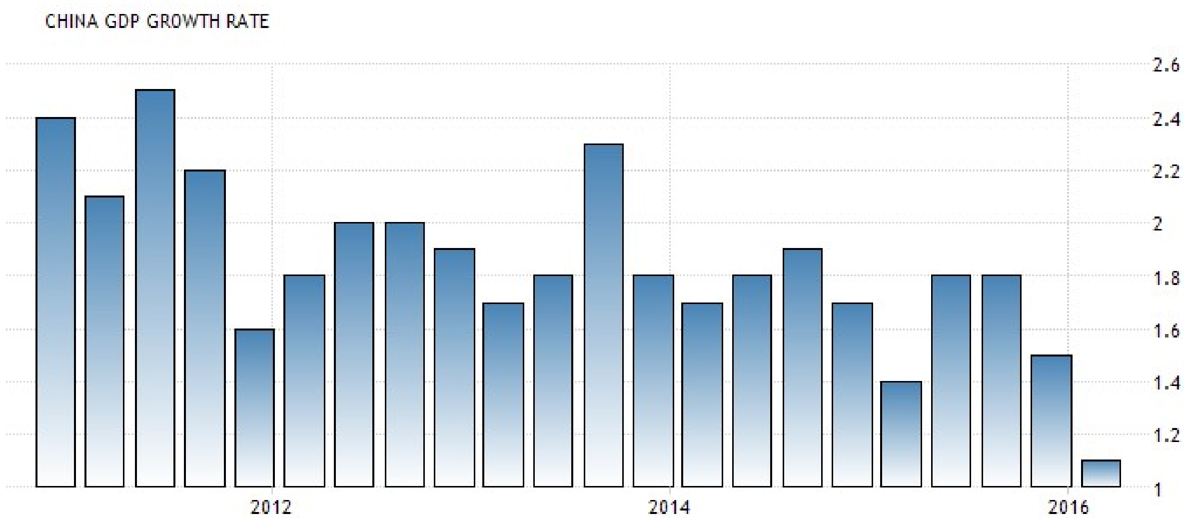
Source: See Figure 1

companies who import from China. Interestingly, the average Japanese and the average American import about the same value from China, and the average German only slightly more. The relation of Korea and China underscores how that a small technically advanced country can catalyze its economic performance by harnessing the productive resources of a large country like China through mutually beneficial trade. Taiwan is also in the same position as Korea, but has not been as successful in powering its economy through trade with China. Both of the two figures above show the dramatic decline in trade with China for nearly all countries (both imports and exports).

1. Real Economic Growth in China:

The first thing that one notices about Chinese economic growth from 2000 to 2010 is that growth averaged about 10% per year over the period. At this 10% real growth per year on average, China was able to double its real GDP every 7 years. Subtracting a population growth of 0.6% (World Bank Data) from this 10% growth yields a per

Figure 3 QoQ Growth Rates for China

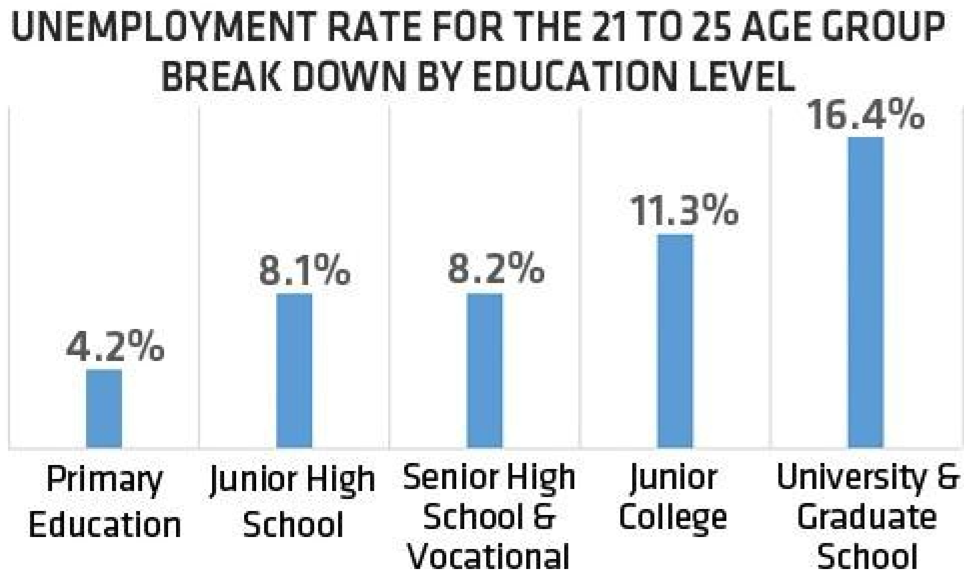


capita GDP growth of 9.4%. This means a doubling of per capita GDP every 7.7 years – a remarkable achievement. Certainly China is not growing at this rate now, it has not done so since 2010. Most economists believe China is in what is called a state of conditional convergence, which means that it will slowly converge on the growth rates of most developed countries; rates that are in the range of 3%. The convergence is called conditional because it depends on many conditions (e.g. the level of capital per worker) or socio-economic factors (e.g. the growth of the labor force and their skills).

2. Unemployment

We will not consider overall unemployment for China since these figures do not seem to be very realistic (the official rate does not move outside of 3.9% - 4.4%). A recent survey within China returned a youth unemployment rate of 9.6 % for people 16 - 24 years of age. The breakdown is given below in Figure 4. Bad news for university

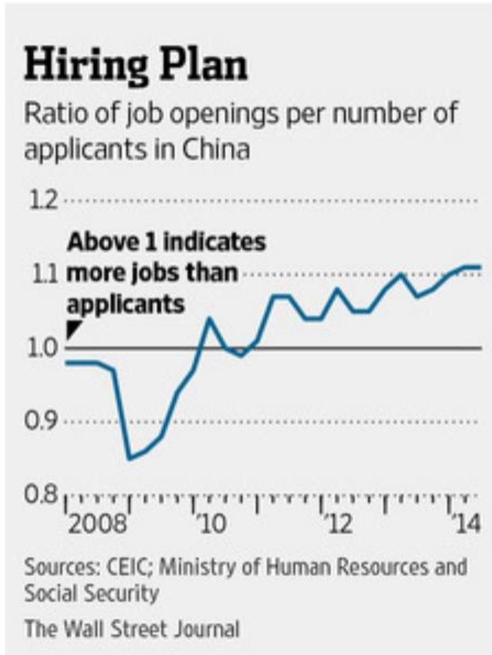
Figure 4



Source: China Household Finance Survey (2012)

Secondary Source: http://www.cnbc.com/id/101433696#

and graduate school students. Many of these youths come from perhaps families that are better off and such students do not feel the urgency to get a job immediately. Note the rate for primary school educated workers is 4.2% which is close to the official rates for workers as a whole at 4.08%. Recent stories in the Wall Street Journal indicate that China's leaders are looking at employment data that is different from the official statistics put out for public consumption (See next page).



In fact, as far back as 2012, surveys of Chinese households indicated that urban unemployment was above 8% (twice the official rate). Some surveys say it is only 5%.

3. Inflation in China

Inflation is very much different from economic growth and unemployment since it is very easy to record and to observe. It cannot be hidden very easily and data that are manipulated are quickly and easily shown to be flawed by a simple process of inexpensively surveying a few places over time. Of course, the most reliable data are the exchange rate data and the interest rate data. These are few in number and open to the public every day. Prices are somewhat more complicated because there are many goods and the geographic dispersion of price rises can be an issue. As always there are the important problems of substitution bias and quality bias in price indexes that are constructed. Old and expensive products are switched out of the market basket for new and cheaper products. Thus, the representative market basket naturally changes over time. Not in a day, or a week, or a month, but over several years this substitution within the basket becomes important. Economists refer to this as the substitution bias. Also, the qualities of some goods change over time and the price increases we measure are really just measuring these quality changes. Economists worry about these two biases in the indexes when measuring the average level of prices. For China these two biases must be extremely hard to handle because China is a dynamic society with many new products and competition for market share happening quickly.

Figure 5

The Chinese inflation rate over the past couple of years has been relatively stable at about 1.8 - 2.3%. Figure 5 shows the effect of the two deregulation periods beginning around 1987 and 1994 when prices rose rapidly after being freed, only to plunge when counter measures on credit were imposed. Chinese leaders have claimed that market prices are free to move, but this is difficult to believe when the goals and functions of the National Development and Reform Commission are viewed.[1]

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[1] Here is what the NDRC writes on its website as one of their many functions...

> To summarize and analyze fiscal and financial situation, participate in the formulation of fiscal, monetary and land policies, and formulate and implement price policies; to analyze the effects of implementing fiscal, financial and land policies and supervise and inspect the implementation
> of price policies; to set and adjust the prices of important commodities that are regulated by the state and important tariffs and charges and according to relevant legislations investigate and deal with price monopoly and activities that breaches (sic) the price

Figure 6

We have seen that current Chinese inflation is roughly 2% per year. However, Figure 6 above shows that nominal wages in manufacturing are rising at about 12% per year. It follows that real wages in Chinese manufacturing are growing about 10% and are doubling in 7 years. It must be admitted that even with a low initial wage, it does not take long for Chinese firms to become non-competitive with such quickly growing labor costs. China will eventually price itself out of the market, making many of the firms that undertook substantial investments there in the 1990s and 2000s financially nonviable.

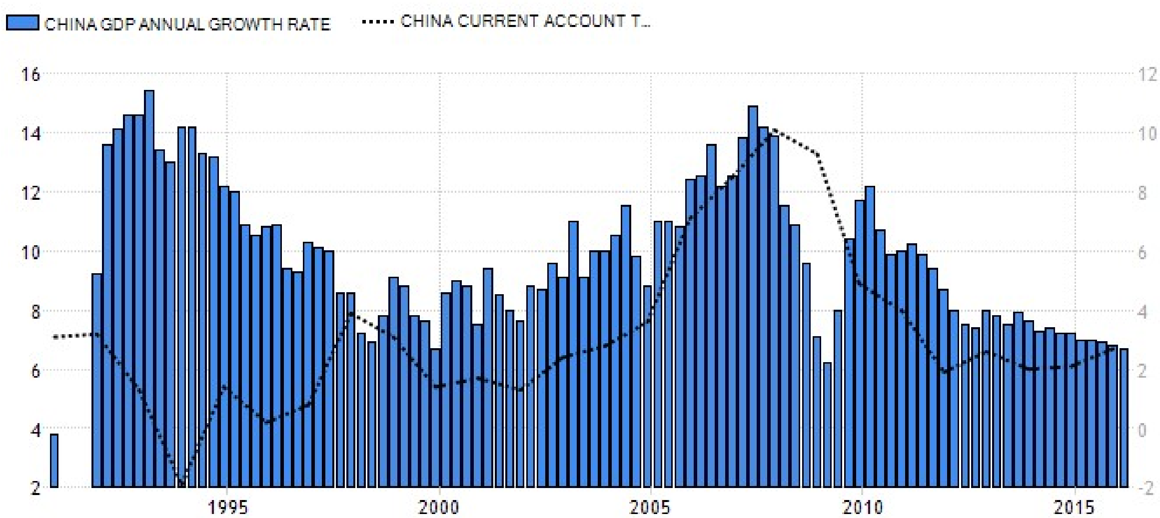
4. Current Account to GDP Ratio

The Chinese economy has been reliant on external sales to power its growth. Even domestic investment, which has played an unprecedented part in generating economic growth in China, requires strong, expected growth of external demand to justify its high levels for a country such as China. One statistic we can consider that reflects external demand is the current account surplus as a percentage of GDP.

regulations; to control and monitor the total size of China's foreign debts, optimize its mix, and promote the balance of international payments. (my emphasis)

Figure 7 shows the Chinese current account to GDP ratio where we have superimposed Chinese growth on top of it. In the 1990s the current account was less an engine of growth and more a respondent to growth so that high growth drove up

Figure 7 Current Account / GDP versus GDP Growth

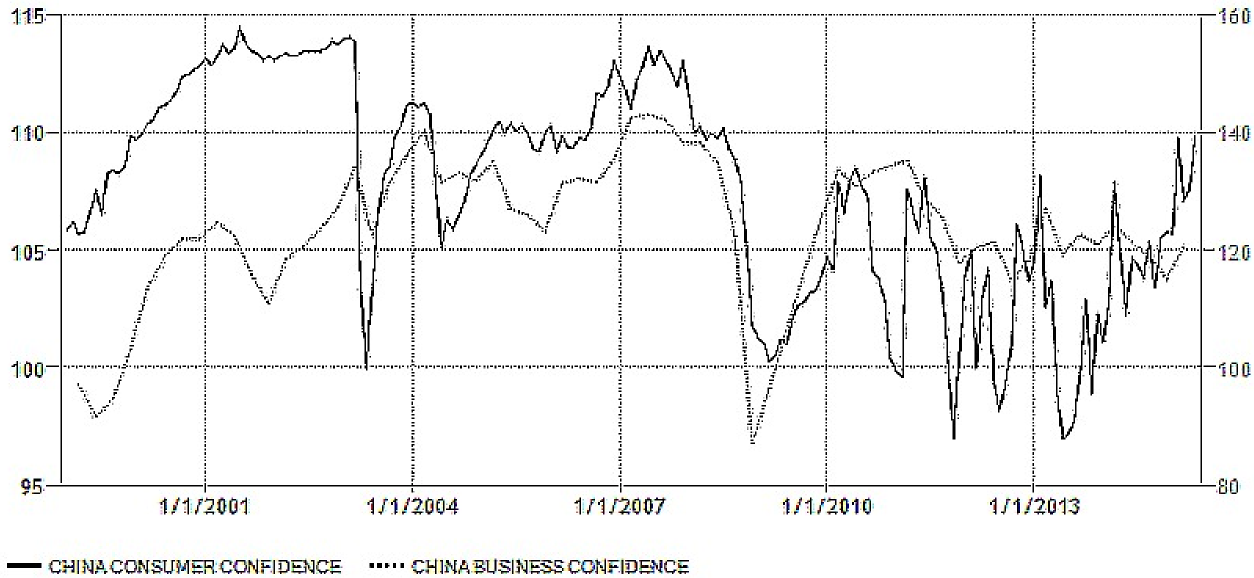


imports without a significant pickup in exports, especially to the US which experienced recession at the time. From 1998 on, the current account was a driver of growth in China, along with investment. You can easily see why that economists are thinking a movement away from external demand as a driver of growth (i.e. rebalancing) will lead to lower growth.

5. Confidence

An important component of sustaining growth is confidence. If consumer and business together have confidence, growth has a better environment in which to flourish. China's consumer confidence became choppy and uncertain after 2010. It has been rising since early 2013, but it is wildly unstable. Business confidence is not nearly so unstable. As can been seen in Figure 8, business confidence in China has tracked the trend of consumer confidence well. This is interesting since consumption has not been a significant part of the demand for business goods. Both consumer

Figure 8



confidence and business confidence move with the economy and both fall greatly during recessions. As tradingeconomics.com states...

> "In China, the consumer confidence index is based on a survey of 700 individuals over 15 years old from 20 cities all over the country. This composite index covers the consumer expectation and consumer satisfaction index, thus measures the consumers' degree of satisfaction about the current economic situation and expectation on the future economic trend. The Index measures consumer confidence on a scale of 0 to 200, where 200 indicate extreme optimism, 0 extreme pessimism and 100 neutrality."

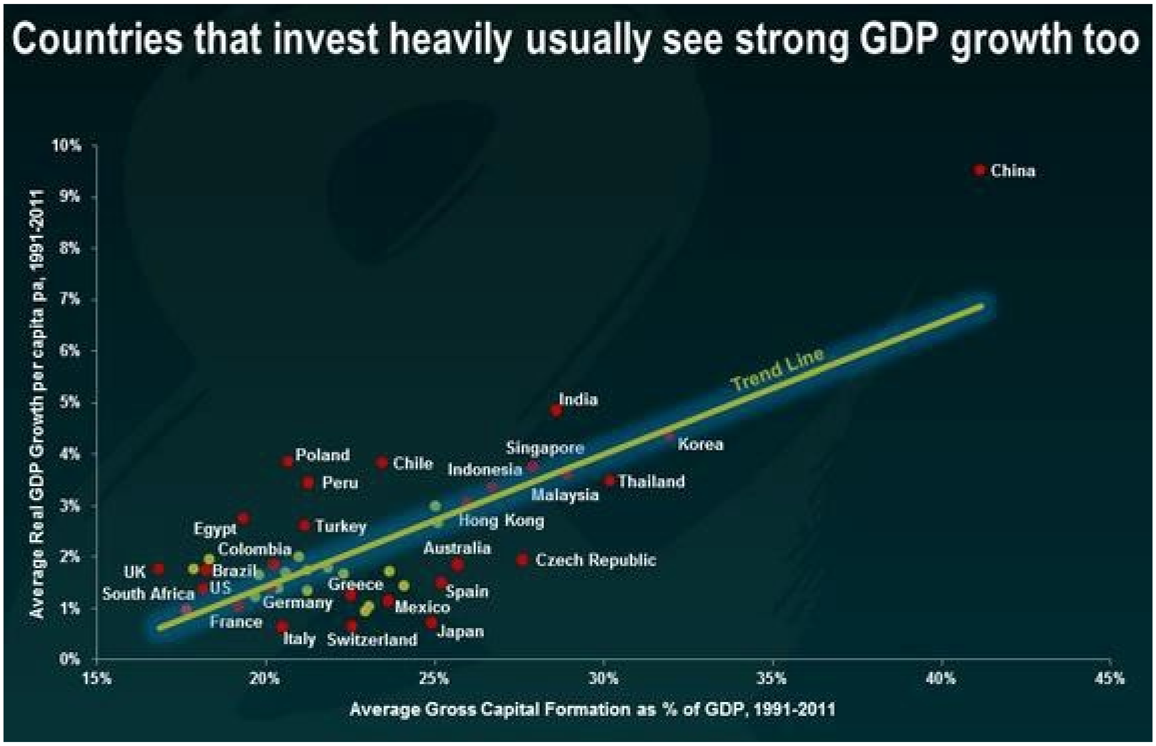
whereas

> "Entrepreneur Confidence Index range between 0 and 200, reading above 100 indicates that business climate is good and optimistic, below 100 shows poor and pessimistic outlook."

6. Investment to GDP

China has relied on external demand and investment to power its economy. Just how out-of-line has China's reliance on investment been? This can be seen in Figure 9 below. But, most observers believe

Figure 9



Source: M&G Investments ["China’ s inv e s tme nt/GD P ra tio so ar s to a to t ally un su sta inab le 54.4%. Be afraid."]

this level of investment cannot be sustained. It must fall and this has led people to champion China's transition to a consumer society and a stronger welfare state. However, since 1939 economists have recognized the possible existence of accelerator-multiplier interactions. This means that if investment is purposively reduced by the Chinese government and this in turn reduces growth through the multiplier, that these falling growth rates will then cause investment to again fall (presumably through expectations effects and falling orders) by the accelerator. The multiplier will therefore intensify the drop in investment and a recession may very well be generated. In other words, China has the chance of an economy spiraling out of control, since growth depends on high investment and such investment depends on high growth. Just like your body temperature depends on your health, but your health also depends on your body temperature (i.e. you can die from being too hot).

Figure 10

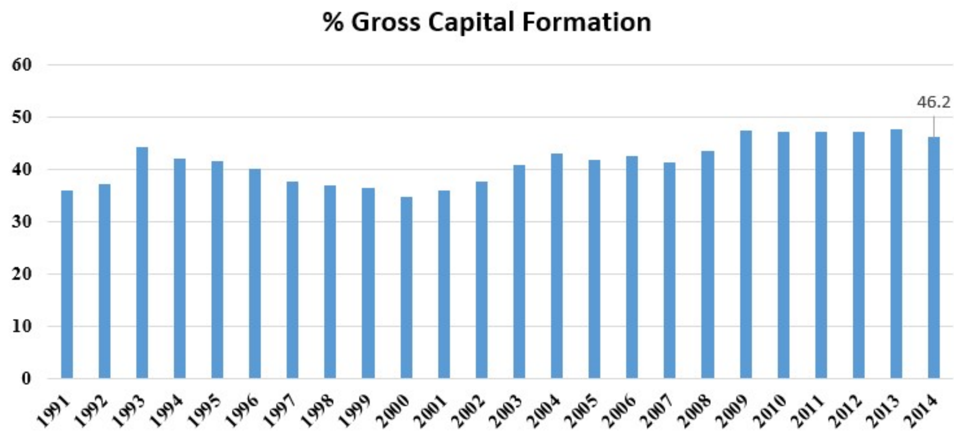
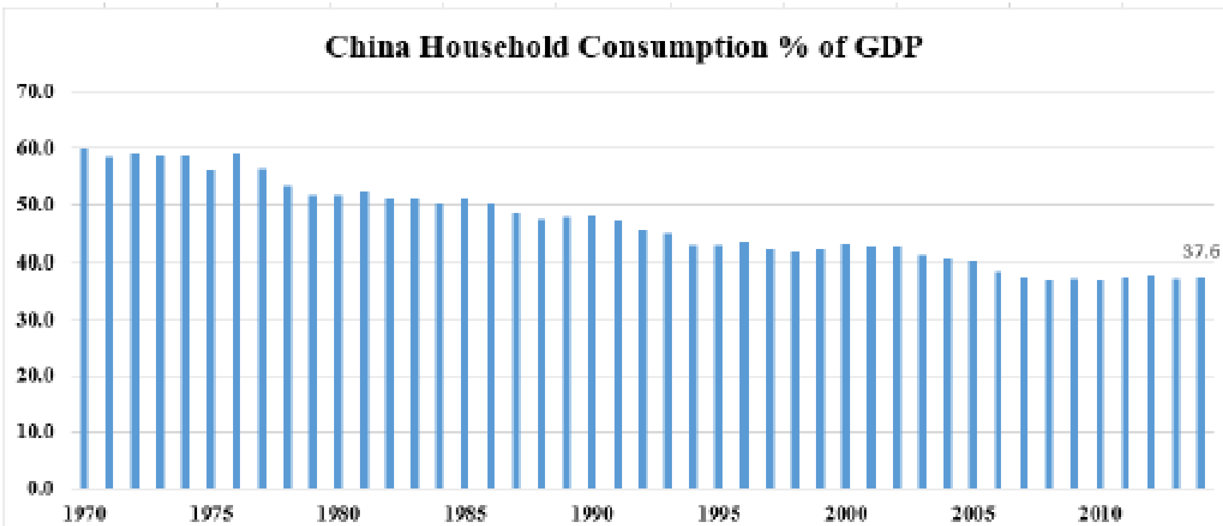


Figure 10 above shows that China has committed to investing an enormous amount of its national output, roughly 50% in recent years. What is more is that China is running current account surpluses. This of course requires a population that is willing to cut back on its consumption expenditures. China's household consumption is [35% of GDP] while the same item in the US is 69% of GDP. It also means that government final consumption expenditure cannot be too large a fraction of GDP. In China, government expenditures stand at about [14% of GDP] while the comparable figure in the US is 16-17%. The US is much closer to world averages. This shows that the so-called rebalancing of the Chinese economy away from investment and trade and more to consumption and government expenditure will be a monumental task. It is certainly not clear that such an unprecedented transformation of an economy can take place smoothly. Naturally there are some very informed observers that see the rise of Chinese household consumption as one of the great movers of the world economy in the future. ([See S. Roach discussing this]).

Here is a figure showing household consumption in China.



China Household Consumption % of GDP
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1970
1975
1980
1985
1990
1995
2000
2005
2010
37.6