Class 5: China’s Economic Power - Can China Become a High-Value Economy?

John Simke for G. Raymond Chang The School of Continuing Energy at Ryerson University, November 3, 2011

The Numbers

GDP (current exchange rates): $5.93 trillion (U.S. $14.5 trillion)
GDP (Purchasing Power Parity): $10.12 trillion (U.S. $14.5 trillion)
GDP per capita (CER) $4,382
GDP per capita (PPP) $7,544
Annual growth rate: 10.4%
Economic growth 1980-2010: >1000%
Inflation rate: 4.9%
Unemployment rate: 4.2%, but excludes many millions of rural people
Exports: $1.58 trillion
Imports: $1.33 trillion
Foreign reserves: $3.2 trillion

GDP by sector:

- Industry: 46.8% (U.S. 19.8%)
- Services: 43.6% (U.S. 79.0%)
- Agriculture 9.6% (U.S. 1.2%)

GDP by driver:

- Private consumption: 35.4% (U.S. 70.3%)
- Government consumption: 13.3% (19.4%)
- Investment: 42.3% (15.4%)
- Net exports: 8.9% (-5.2%)

Public debt: 17.6% of GDP (U.S. 70%)
Fiscal Deficit: 2.0% of GDP (U.S. 12%)
Gini Coefficient 41.5 (U.S. 36, Canada 32)
How Does the Chinese Economy Work?

- China has moved over the last 15 years to an economy that is two thirds private sector owned and operated. There are in excess of 1 million small and medium-sized businesses. However, the strategic sectors are still run by State-Owned Enterprises (SOEs) that dominate the economy. The system is best described as state capitalism or a managed market system.

- Overall, the economy is based on three elements: Exports, investment in construction and infrastructure, and control over resources and prices. Domestic consumption, the major driver of developed economies, is relatively far less important in China. Unlike in the Soviet Union, consumer goods are available, but most people cannot afford them.

- The government, through the SOEs controls access to key resources such as raw materials, energy and skilled labour as well as capital. Favoured sectors and organizations get first access to these, and then other private sector organizations compete for the rest.

- The state controls prices of key inputs, largely keeping them artificially low. This is particularly true of interest and electricity rates, but also labour. This enables corporations, particularly SOEs to make large profits, which help fund the state and its mega projects.

- Almost the entire financial services sector is state controlled. The allocation of available capital is strictly determined by state policy. For example, the government decided that there should be significant development of urban real estate to accommodate growing numbers of urban dwellers. Cheap financing has been provided to developers, resulting in a massive building boom and feared bubble.

- The policy of subsidizing corporations and the government effectively penalizes workers and savers. Workers wages have not kept pace with inflation, social benefits
have been eliminated or cut, and the low interest rates (2%), combined with a higher inflation rate (5%) mean that savings lose value. However, workers still save a huge proportion of their income because they must pay for increasingly expensive real estate, health care, education for their children and their retirement. Overall, the system, while lifting hundreds of millions out of abject poverty, transfers wealth from workers to the financial system and SOEs.

- As noted another major dimension of economic policy is to encourage exports. Special Economic Zones and an artificially low value for the Renminbi have made exports a major driver of the economy, giving rise to massive foreign reserves.

- A third key aspect of economic policy is large-scale infrastructure investment, including massive hydro-electricity projects such as Three Gorges, the West-East Gas pipelines, massive electricity grid development, nuclear plants, high speed rail networks, airports and highway networks. These are largely developed through SOEs, with foreign partners and private sector suppliers. Again, these are largely financed through domestic savings and export earnings. China has invested far more in infrastructure than any other developing country and its hyper-rapid growth is attributed partly to this.

- In summary, the state decides where resources will be allocated and makes sure that state priorities are followed by allocating resources to those priorities. Private investment and initiative are permitted, but as a secondary activity after key state priorities. Many western commentators just cannot get their minds around a system that is not based on market prices and as a result many believe that China is misallocating resources and that the whole system is a “house of cards”.

Would China be better served by a market economy, where private players make most economic decisions?

Is Chinese Economic Growth Real and Sustainable?

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<th>The Problems and Challenges</th>
<th>The Positive Factors</th>
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<td>Excessive reliance on exports makes China vulnerable to downturns in other countries</td>
<td>China has built a world class infrastructure that gives it a long-term competitive advantage</td>
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<tr>
<td>China has energy shortages and difficulty moving energy around the country due to an inadequate transmission grid. This threatens major economic disruptions</td>
<td>China has built a global network of relationships to secure its access to oil and raw materials</td>
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<tr>
<td>China is excessively reliant on imported oil,</td>
<td>China has a massive pent up consumer</td>
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and other materials making it vulnerable to geopolitical events, particularly in the middle east.

China has a serious corruption problem, meaning that economic decisions are not made solely on their merits.

There has been over-investment in real estate, creating a “bubble” of unoccupied real estate inventory that threatens the banks.

The government has also over-invested in infrastructure such as high speed trains and airports which are under-utilized and not really economically justified.

The banks have large volumes of “bad” loan that might affect the banks’ viability.

The income and wealth distribution are highly unequal, leading to social disruptions.

The reliance on migrant labour from the countryside makes labour productivity low, which will limit longer term growth.

China抄 products from the West and Japan and is incapable of developing its own products, making it at best a middle income country long-term.

China relies excessively on SOEs that are not really economically viable because they are highly subsidized.

Long-term environmental damage, including water shortages will hinder China’s economic growth.

China’s one-child policy will lead to a gradual slowing of population growth and an ageing of the population, reducing economic vitality.

demand that will fuel the next wave of economic growth.

Foreign investment in China will be huge for many years in response to availability of labour and the consumer market, creating more economic growth.

China is making massive investments in higher education that will pay off in long-term scientific and technology leadership.

The government has sufficient cash to cushion any problems in the banking sector.

China’s five year planning process sets a strategic long term direction.

“Total factor productivity” in China has been growing at 4% per annum for 30 years, the greatest rate in history, indicating that China’ investments are bearing fruit.

The agricultural economy is still under-developed, and once it is made more productive, China will become a “food powerhouse”.

The government can afford a stronger social safety net and is in the process of creating it. This will improve the welfare of Chinese consumers and cause them to spend far more of their income, boosting sustainable growth.

China has an underdeveloped service sector, in areas such as retail, tourism, hospitality heath care and education. The growth of this sector, once it is given priority, will spur further economic growth.

China is the natural hub for east Asia, and is gaining economic advantage by becoming the prime player in that region.

Will China eventually make it into the club of developed countries with upper-middle incomes, such as Japan and Korea have done?
Can China Become a High Value Economy?

- It is conventional wisdom that China has built its economic transformation as the manufacturer of relatively simple products for the developed world - everything from toys, housewares, apparel and almost any other manufactured product we see in stores.

- This has been possible because of China’s low cost labour and the ability to take a design and manufacture it almost anywhere that labour and raw materials are available, including relatively low-cost energy and facilities, and good access to ports.

- The conventional wisdom is also that China will not be able to manufacture more sophisticated equipment and products that require a high degree of technological expertise. This would include such items as computer software, avionics for aircraft, specialized machine tools, control systems for manufacturing equipment and generally anything that requires customized design and engineering as opposed to mass production.

- China can already produce almost any high technology product, such as cell phones or computers that are standardized in design and are produced on a mass basis. In many cases, China will take the most sophisticated components from elsewhere and assemble these into a final product, which may have a “Made in China” label on it, but which will include intellectual property from more developed countries.

- China has as one of its top priorities, the development of a technology capacity that is able to compete with any other country. There are several advantages and disadvantages that China has in achieving this goal:

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<th>Advantages</th>
<th>Disadvantages</th>
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<td>A huge domestic market that ultimately will need unique products that the developed world is not geared to develop</td>
<td>China’s competitive advantage has been cost. As long as this is the case, it will have difficulty creating competitive advantage on the basis of talent.</td>
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<td>Massive availability of government capital, either directly or through state-owned banks</td>
<td>Lack of an experienced venture capital community</td>
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<td>A high level of government commitment, which will have the willingness to experiment and fail</td>
<td>Lack of a strong innovation community or tradition</td>
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<td>A huge number of STEM (science, technology, engineering and mathematics) graduates from universities every year</td>
<td>Reputation for stealing intellectual property, which will limit sharing by others</td>
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<td>Lack of experience with specific technology niches such as exists in</td>
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- Generally a high cultural priority for education in society
- Other countries, such as Japan, have shown that you can go from a low value to high value economy within a couple of generations
- In a population of 1.3 billion there will be many geniuses
- China’s needs for advanced solutions in energy, transportation and environment. This might be where China develops niches.
- China has a long history of breakthrough inventions, such as gunpowder

Germany or the U.S.
- The best graduates often leave China and those educated elsewhere often do not come back
- A generally less than attractive quality of life compared with the developed world, making talent attraction and retention difficult
- Possibly a lack of willingness to just let people innovate “on spec”
- Lack of experience commercializing new technology
- Confucian values of respect for hierarchy and bureaucracy may not foster innovation

Can China become an innovator?