CHINA – GROWTH AND ITS CHALLENGES

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I  CHINA – AN EMERGING ECONOMIC GIANT

The extent to which China will be affected by the subprime loan crisis and the current world recession is of great concern to the Chinese government. China has experienced tremendous economic, growth and economic and political change since the introduction of its Open Door policy in 1979. Indeed China’s rise to world prominence as an extremely successful player in world trade has to a certain extent been eroded the economic supremacy of the West. China’s current economic position could surpass that of the West in light of the current economic conditions.

China, a nation with the world’s largest population of over 1.3 billion, has become powerful and rich. Amazingly in less than 30 years it has gone through an industrial revolution similar to that which took place in the West two centuries ago, but in one eighth of the time. Its economy has quadrupled since the late 1970’s and aside from the current economic crisis, is predicted to double over the next decade. Indeed the Carnegie Endowment for International Peace predicts that China’s economy will overtake the United States by 2035. A major catalyst in its economic growth was its membership of the World Trade Organization in 2001. This led to its virtually nonexistent legal system developing rapidly with the promulgating of hundreds of business related laws and regulations.

China’s economic growth has been extraordinary. For example in 1977 China’s GDP stood at 7.6 per cent. By 1978, a period of one year during which the reform period began, China’s GDP rose to an annual growth rate of 11.7 per cent although

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1  ‘How China sees the world and how the world should see China’ The Economist 18th March 2009
this figure has moved up and down due to internal events such as the massive earthquake in 1976, and the Beijing Massacre in June 1989. China’s export figures have risen from USD 13.7 billion in 1979 to USD 762 billion in 2005 representing 10 per cent of the world’s total exports. In the same period imports grew from USD 16 billion to USD 660 billion. In 2007 China’s GDP enjoyed a real annual growth rate of 11.7 per cent. Not surprisingly China failed to escape the economic downturn due in large part to its dependence on export markets. In November 2008 the World Bank predicted that 2009 would see the growth rate slow to 7.5 per cent, however the International Monetary Fund now predicts a 6.7 per cent growth rate for 2009. It expects that exports will fall and domestic consumption will decline because of rising unemployment and lower consumerism, a factor affecting all national economies. China is likely to see negative export growth in the coming year, a factor that bodes ill for a country that relies heavily on exports.

Regardless, China is a resilient country accustomed to dips in its economy. For example, in the period 1978 – 1982, communes were broken down and farms given back to families to work in the agricultural sector, resulting in a high agricultural output. 1983-85 saw double digit growth due to the start of foreign investment into China and the development of non government enterprises. Then following the Tiananmen Square massacre in 1989, foreign investment dropped back and the GDP fell to 4.1 per cent. In 1992 Deng Xiaoping undertook a Southern Tour which resulted in massive foreign direct investment along the coastal areas resulting in record trade and a GDP growth of 14.2 per cent. After a dip in GDP following the overheated economy in the years 1997-1999, the GDP rose steadily from 1999 to reach 11.4 per cent in 2007. Remarkably during this economic transition China has managed to lift 220 million people out of abject poverty.

The economic recession alone will not affect China’s economy as there are other internal factors at play that will have a negative impact on China’s continuing growth. Poor environmental standards have an effect on China’s GDP. It is experiencing rising wages which will see a number of companies move out of China and into other Asian countries. It will now face unemployment problems as many of its local factories are faced with closure due to the downturn in consumer consumption.
II THE GAP BETWEEN RICH AND POOR

The gulf between rich and poor is one of the major problems facing the Chinese government and the gap is continuing to widen due to rapid urbanization.\(^\text{12}\) Around 400 million people live in the towns and cities on the coast, while around 900 million live in small villages in the countryside that are by western standards, poor.\(^\text{13}\) More and more poor people are moving into the towns seeking work as laborers with the result that Chinese cities have a floating population of 80 to 130 million people around 30.9 per cent of the total population.\(^\text{14}\) One of the reasons for this has been the move to a market economy which has displaced millions of workers who have been retrenched from the state owned and economically unsound state owned enterprises.\(^\text{15}\) As the GDP has risen so has the standard of living of a large percentage of its population. The rising middle class live mainly in the large cities of Shanghai and Beijing and other coastal cities such as Guangzhou, Shenzhen Nanjing and Shenyang. Growing inequality has arisen as a result of prosperous coastal provinces and the poorer interior provinces.\(^\text{16}\) This rising middle class now has access to mortgage loans and home ownership as evidenced by the ever increasing building of condominium towers. This is the new face of China, a rapidly rising class of consumers which seek to enjoy the prosperity enjoyed by the West. However, these demographical changes are likely to lead to social unrest unless the Chinese government ensures that the ever increasing gap between rich and poor is dramatically narrowed. Because the Chinese government is well aware of the problem due to its history of peasant rebellions in 2005 the Communist Party announced its 11\(^{\text{th}}\) Five Year Plan for the National Economy and Social Development. A feature of this plan is a shift away from the emphasis on Deng Xiaoping’s policy of some people getting rich first before the introduction of policies that would promote social harmony.\(^\text{17}\) Now social harmony it the government’s key priority.

III COMPETITION FOR INVESTMENT

Changes are afoot in China to try and achieve social harmony. New labour laws have been introduced to protect workers but are resulting in less profits for overseas investors who have long relied on a cheap and massive labour force willing to work

\(^\text{12}\) L Lim ‘China boom leaves many behind’ BBC News 19 July 2004 <news.bbc.co.uk/1/hi/world/asia-pacific/3906641.stm> 30 August 2008
\(^\text{13}\) ‘The Future of China and North Asia From here to 2030’ Free World Academy p5 <ww.freeworldacademy.com/globalleader/china.htm> 1 September 2008
\(^\text{14}\) ‘Major Cities’ Embassy of the People Republic of China in the Republic of Indonesia’<id.china-embassy.org/eng/zgjk/zgjk/xzqh/87288.htm> 1 September 2008
\(^\text{15}\) Op cit n13
long hours for a mere pittance. As a result labour costs are rising with wages rising close to 25 per cent a year in some industries.\textsuperscript{18} As a result of these reforms, some companies have moved part of their operations elsewhere to other countries such as Vietnam and India where labour is cheaper, labour laws are lax or nonexistent and tax benefits greater. A survey conducted by Booz Allen Hamilton and the American Chamber of Commerce in Shanghai found that nearly one in five companies state they plan to move at least part of their China operations to other countries.\textsuperscript{19} Others remain in China because of the vast national consumer market. Another factor is the change of industry base as the Chinese government shifts the country from old low technological industries to new high tech industries.\textsuperscript{20}

IV RISING ENERGY CONSUMPTION – ENVIRONMENTAL CHALLENGES

A An Increasing Problem

China’s rising consumption of energy poses a major challenge for the Chinese government. In 1996 China and the USA each accounted for 13 per cent of global steel production.\textsuperscript{21} By 2005 a different picture had emerged – in that year China accounted for 35 per cent of global steel production.\textsuperscript{22} It accounts for 48 per cent of global cement production, 49 per cent of global flat glass production and 28 per cent of global aluminum production.\textsuperscript{23} The USA’s share dropped to 8 per cent and China’s share of the market rose to 35 per cent.\textsuperscript{24}

China is now the world’s second largest energy consumer and the world greatest emitter of green house gases.\textsuperscript{25} Its electricity use has doubled since 2000.\textsuperscript{26} Electricity generating capacity in 2006 was 620 gigawatts (GW) compared to 1100 GW in the USA and 730 in the European Union.\textsuperscript{27} In 2001 China accounted for 10 per cent of global energy demand and was able to meet 96 per cent of that figures with local energy supplies. In 2007 the situation has changed dramatically. China’s share of the energy market increased to 15 per cent of the global energy demand and is now reliant more and more on outside supplies of oil gas and coal.\textsuperscript{28} The

\begin{itemize}
  \item \textsuperscript{18} ‘Investors Seek Asian Options to Costly China’ New York Times World Business 18 June 2008 \texttt{<www.nytimes.com/2008/06/18/business/worldbusiness/18invest.html> 12 July 2008}
  \item \textsuperscript{19} ‘South China factories on the move – relocation has begun’ China Briefing News 11 April 2008 \texttt{<www.china-briefing.com/news/2008/04/11/south-china-factories-on-the-move-%E2%80%8E> 12 July 2007}
  \item \textsuperscript{20} Ibid
  \item \textsuperscript{21} Op cit n17
  \item \textsuperscript{22} Ibid
  \item \textsuperscript{23} Ibid
  \item \textsuperscript{24} Ibid (taken from a study by D H Rosen and T Houser of China Strategic Advisory Group)
  \item \textsuperscript{25} Ibid
  \item \textsuperscript{26} E Martinot Li Junfeng Worldwatch Report ‘Powering China’s Development – the role of Renewable Energy’ Worldwatch Institute Washington DC November 2007 p5
  \item \textsuperscript{27} Ibid p9
  \item \textsuperscript{28} Ibid p4
\end{itemize}
demand for energy by sector is as follows:- industry accounts for over 70 per cent of energy consumption, residential use accounts for 10 per cent, commercial accounts for 2 per cent and the transportation sector 7 per cent. China’s steel makers use one fifth more energy per ton than the international average with cement manufactures needing 45 per cent more power and ethylene producer’s 70 per cent more than producers elsewhere.

70 per cent of China’s primary energy comes from coal compared to less than 25 per cent in Japan and the USA. Even though it is the world biggest producer of coal, it imports massive quantities from Australia. In 2006 China bought AUD491 million worth of coal from Australia – a 51 per cent increase from the previous year. It also bought AUD3.8 billion worth of iron ore, an increase of 100 per cent from the previous year. The Australian Bureau of Agricultural and Resource Economic forecasts that between 2001 – 2050 China will quadruple the amount of power from coal fired stations surpassing the United States as the world’s biggest coal based energy producer. China has been engaged in the rapid construction of coal fired power stations as 80 per cent of China’s electricity comes from coal. Another problem is that most of China’s coal is found in the country’s interior and has to be transported to the coast by train using massive amounts of diesel. As coal supplies are not limitless, the Chinese government is understandably worried about security of supply. The DOE/EIA reports that known world coal reserves are 1028 billion tons. World consumption in 2003 was 10,561 million short tons with an annual 2.5 per cent growth rate between 1990 and 2030. At this rate of consumption coal reserves will run out in less than 100 years.

China imports nearly half of its oil. Given that there is an estimated 1.2 trillion barrels of oil proved remaining in the world, the growing consumption of oil by China will impact on world oil prices. Current world consumption is 20.3 billion barrels per year. In 2005 China and India consumed 9.4 million barrels of oil a day.

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30 Op cit n26 p9
32 ibid
34 ibid
36 Op cit n 26 p6
rising to 10.9 million barrels in 2006.\(^{38}\) It is predicted that these two countries together will consume 22.1 million barrels in 2012.\(^{39}\) China is expected to consume 62.5 per cent more oil in 2020 compared to 2006. However this figure is well below consumption rates in other industrial countries; for example, in 2006 China consumed 1.3 tons equivalent (toe) of oil compared to 4.2 toe in Japan and 7.9 toe in the USA.\(^{40}\) It is salutary to realize that if China increased its per capita oil use manifestly over the next few years world oil supplies could run out by 2050 (although further more significant reserves may be discovered).\(^{41}\)

B Health aspects

The pollution from China’s fossil fuel use is taking its toll not only on the environment but on the health of its citizens. International pressure on China to undertake a massive environmental cleanup has been brought to the fore by the Beijing Olympic Games 2008. Cleaning up pollution imposes yet further costs on overseas investors. Yet against this background the Carnegie Endowment Report on China considers that these stumbling blocks are unlikely to undermine China’s long term success even in light of the environmental damage and pollution.\(^{42}\) That may well be true in the long term but as others observe, the effect of pollution may be wiping out a large percentage of China’s GDP growth when account is taken impact pollution is having on the health of its people. The World Bank puts the cost of China’s air and water pollution at $100 billion a year; 5.8 per cent of its GDP.\(^{43}\)

Chinese people are exposed to air, noise and water pollution and related health problems. It is now the largest emitter of carbon dioxide deriving from fossil fuel use in the world.\(^{44}\) China with its encouragement of foreign investment in manufacturing industries has inherited foreign pollution by default, a matter that is often overlooked by countries quick to point the finger at China’s appalling pollution problems. China has 20 of the world’s 30 most polluted cities.\(^{45}\) The State Environmental Protection Agency (‘SEPA’) has reported that almost two-thirds of the 300 cities it tested in 2002 failed to meet minimum World Health Organization

\(^{38}\) ibid  
\(^{39}\) ibid  
\(^{40}\) ibid  
\(^{41}\) ibid  
\(^{43}\) Op cit n33  
(‘WHO’) standards. The atmosphere in China contains high quantities of sulfur dioxide, ozone and particulate matter. The average particulate level in Beijing is 141 micrograms per cubic metre of air whereas the maximum safety standard permitted in the USA is 50 micrograms and 40 micrograms in the European Union.

It is estimated that each year 300,000 Chinese die prematurely from respiratory disease as a direct result of air pollution. Many thousands suffer from pollution related illnesses such as emphysema, heart conditions and blood disorders. Respiratory disease is now such a serious health issue that, in 2000, it was the fourth largest cause of death in urban China. For example, the city of Lingen has occupied first place on China’s pollution charts for the last three years with some official calculations placing the death rate at ten times the national average.

The OECD has forecast that by 2020, pollution will cause:

- 600,000 premature deaths in urban areas,
- 9 million person-years of work lost due to pollution-related illness,
- 20 million cases of respiratory illness a year,
- and 5.5 million cases of chronic bronchitis and health damage which could cost 13 per cent of gross domestic product.

As recently as 30 June 2007 it was reported that Beijing recorded its worst air quality for seven years. Particulate pollution in the air is mainly caused by car exhaust fumes and farmers burning stalks in nearby Hebei, Henan, Shandong, Jiangsu and Anhui provinces. Beijing, which aims to have 245 blue sky days a year, recorded 110 such days in the first 6 months of 2007.

Acid rain and brown haze composed of mostly particulate matter is causing havoc not only to China but Japan and Korea. On some days in Los Angeles nearly one quarter of the particulate matter in the atmosphere is considered to be of Chinese

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49 Ibid
50 Ibid
origin. Throat and nose infections affect nearly every traffic policeman in the booming southern city of Guangzhou because of air pollution. Beijing is shrouded in a thick soup of pollution causing locals to cough and spit.

The negative economic impact of environmental issues on the Chinese economy is estimated to result in an 8 per cent drain on GDP. The Chinese government is aware of these problems and it appears that in recent years there has been a major shift in its approach to foreign investment as dirty industries are being deterred from setting up companies.

C The water crisis

With five times the population of the USA and far less water, China is exposed to a continuing water crisis. Due to its demography the bulk of water is found in the southern China. Water shortage is proves to be a serious challenge facing the Chinese government. Industrial and agricultural irrigation accounts for most water usage nationwide. The amount of water available per head of population is estimated to be one quarter of the global average. Ground water is being pumped out faster than it is being replenished. Effluent from polluted rivers has contaminated over 160,000 square kms of ocean off China’s shores. The World Bank estimates that this problem costs 1 per cent of China’s GDP. Overall the total price tag for water and air pollution is estimated to be USD100 billion a year; 5.8 per cent of China’s GDP.

D Traffic congestion

Car ownership has quadrupled in the past decade. The National Bureau of Statistics released the 2007 National Economic and Social Development Statistical Communiqué on 28 February 2008, which reports that by the end of 2007 China’s number of privately owned vehicles overall has increased by 32.5% to 15.22 million. The number of civilian vehicles is 56.97 million including 14.68 million

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56 J Yardley ‘Beneath Booking cities China’s Future is Drying Up’ New York Times 2 October 2007 <haleglobal.yale.edu/display.article?id=9747> 30 August 2008
57 Op cit n33
58 ibid
59 Op cit n33
60 ibid
three wheel motor vehicles and low speed vehicles. At the moment there is one car for every 92 people, in contrast to Australia where the ratio is one car for every two people. Beijing alone is said to add 1000 cars to its roads every day. The market will continue to grow. China is the third largest automaker after the US and Japan. VW has massive operations in China and is the dominant foreign automaker with 30 per cent of the market.

V THE GOVERNMENT’S RESPONSE

The 11th Five Year Plan for National Economy and Social Development calls for an all round well off society by 2020. It foresees the construction of a harmonious society based on the ‘scientific outlook of development. The plan contains five harmonization initiatives:-

- Harmonization in the development of urban and rural areas (greater priority to the development of rural areas and solving of problems concerning farmers);
- Harmonization in regional development (greater assistance to less developed areas);
- Harmonization between economic and social development (expansion of employment opportunities and enhancement of social security and public services such as medical care and education);
- Harmonization between economic development and the human and natural environment, with a greater emphasis on resource preservation and the protection of the natural environment;
- Harmonization between domestic development and the opening up policy (acceleration of domestic market growth while keeping to the opening up policy).

The Plan recognizes that rapid industrialization has brought with it many problems. Though the Plan calls for the pursuit of common prosperity, it also calls for the sustaining of high growth in order to double China’s GDP per capita by 2010 from 2000 levels. This requires an annual growth rate of 7.2 per cent. It also calls for energy consumption to decelerate per unit GDP by 20 per cent from the level at the end of the 11th Five Year Plan, a challenge that may well be unrealistic when account is taken of its increasing reliance on fossil fuel fired power stations. The

63 ibid
64 Op cit n61
65 Op cit n47 p10
plan targets the expansion of fiscal expenditures for the purpose of enhancing public goods and services and in particular on the infrastructure development and education in order to modernize rural villages.  

A Planning for energy needs and environmental protection

China has launched a comprehensive environmental protection program including the protection of virgin forest and natural grassland resources, water pollution control projects and sewage disposal. This has to continue and to become more concentrated, because China’s increasing industrialization requires high energy and water inputs which are likely to cause problems of sustainability, resource supply and eco balancing. Rising prices in oil and minerals will also cause difficulties for the Chinese economy. Issues such as labour standards, child labour and forced prison labour that have caused problems in the past have to a certain extent been addressed by the new Labour Laws, although their effectiveness is yet to be determined.

Planning for China’s future energy needs is of vital importance. China needs to clean up its current energy sources, improve and increase energy efficiency and move to renewable energy. The Chinese government plans to close small power coal-fired plants with a capacity of less than 25 megawatts and prevent the construction of plants of less than 300 megawatts. Plants totaling 50,000 megawatts will be closed by 2010. Small coal mines are not only highly pollutive but contain poor quality coal and pollute water supplies and are manifestly unsafe. The Chinese state run news agency Xinhua reports that 11,155 mines of this nature have been shut down since 2005. Coal fired plants are to be cleaned up and all new ones are required to install filters in smoke stacks to remove sulphur dioxide, the cause of acid rain. Current estimates are that nuclear energy provides around 7GW of China’s electricity capacity and is to be increased fivefold by 2020. As with all plans for improvement the policing of environmental laws is of fundamental importance if there is to be any improvement, China’s State Environmental Protection Agency (‘SEPA’) is currently unable to deal with environmental problems effectively as it is short staffed and not in a position to enforce environmental laws. Another reason for its ineffectiveness is its reliance on local bureaucrats over whom it has no authority.

69 ibid
70 Ibid
71 ‘op cit n33
72 ibid
73 ibid
74 US Department of State<http://www.state.gov/g/drl/rls/hrrpt/2007/100518.htm> 5 March 2009
75 Op cit n33
76 Op cit n26 p9
77 op cit n33
78 ibid
In order to meet its 2010 environmental target the Chinese government increased spending on energy efficiency and greenhouse gas emission reduction schemes by 78 per cent by 2008. The cost was in the region of USD5.89 billion. It also plans to lower the discharges of key pollutants by 10 per cent. It plans to implement energy saving programs including technological transformation in factories, introduce substitutes for oil, and introduce the use of energy efficient light bulbs. It plans tackle problems of pollution in major rivers and lakes. 

Remarkably China is set to rival other nations in the area of wind power and solar photovoltaics. It has already dominated the market for solar hot water and small hydropower. It has in place the Renewable Energy Law adopted in 2005 which has five main goals:

- To establish the importance of renewable energy in China’s national energy strategy;
- To remove market barriers;
- To create markets for renewable energy;
- To set up a financial guarantee system;
- To create awareness skills and understanding.

Its framework requires the national government to formulate development targets, strategic plans and financial guarantee measures for renewable energy. It also establishes a framework for the sharing of the extra cost of renewable energy among certain consumers and it creates economic incentives for so doing. Its key provisions require power utilities to purchase power from renewable energy generators. Power consumers must pay for the extra cost of renewable power. In the area of biomass it stipulates an RmB 0.25 kilowatt hour feed in tariff premium added to provincial specific average coal tariffs. Annually it achieves US$6-10 billion in hydropower. China obtains 8 per cent of its energy and 17 per cent of its electricity from renewable sources. In 2006 the capacity from wind power doubled probably as a result of the government’s requirement that power companies obtain a minimum share of power from wind and other renewable. China is the worlds’ largest market for solar hot water and now has nearly two thirds of global capacity.

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80 ibid
81 ibid
82 ibid
83 Op cit n26 p5
84 ibid p6
85 ibid p14
86 ibid p14
87 ibid p14
88 ibid p14
89 ibid p5
90 ibid p5
91 ibid p5
Ten per cent of Chinese households rely on the sun to heat their water. This technology is spreading rapidly. For example in just a few years, the Chinese company Suntech power Holdings Ltd has become the worlds’ fourth largest producer of solar cells with a market value of more than US$6 billion, although to date most of its products are exported.

China produces almost 130 GW of hydropower annually. This source of power was boosted in 2007 with the coming into operation of the Three Gorges Dam. Total hydropower is expected to add 18 GW to China’s energy capacity by 2009 amounting to 85 billion kilowatt hours of electricity annually. Further projects are the 6 GW Xiangjiaba plant on the upper reaches of the Yangtze River to be completed by 2015.

Biomass from sugar cane waste and rice husks is still in its infancy, though biofuels for transportation are produced in the form of ethanol from corn, and biodiesel from waste cooking oil.

VI CONCLUSION

This article has attempted to put into context the problems facing China in the current global economic crisis. Its export market will be badly affected as the West pulls back on consumption. It too has announced a USD586 billion economic package to stimulate domestic demand but it cannot influence overseas markets. It will no doubt ride the recession and remain the dominant economic player in Asia and ultimately become a global leader because of its resilience. But its ability to deal with internal social problems of a rising middle class pitted against a massive poor population is critical in order to maintain social stability if it is to continue to thrive.

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92 ibid p6
93 Ibid p9
94 Ibid p9
95 ibid p5
96 ibid p7
97 China’s GDP to slow to 7.5 per cent in 2009 ‘China Daily