

# The state of China's economy 2009

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## Introduction

Over the past few decades there have been numerous forecasts predicting an "imminent collapse" of the Chinese economy. Some of these have a strong Anglo-Saxon ideological bias with little substantive theoretical or empirical support, while others offer standard economic principles in defense of a negative forecast. More recently, however, these pessimistic forecasts have been fewer in number and less dire. Meanwhile, some other analysts have offered quite favorable economic performance forecasts. Who appears to have been correct?

This paper will examine some past forecasts, and then evaluate the current performance of the Chinese economy. The first section will provide a brief summary of some previous forecasts. Analysis of the recent performance of China's economy will be presented in the following section, including trends over the past 5 of both standard macroeconomic and some socioeconomic indicators, using both Chinese and non-Chinese data sources. The third section will evaluate the overall state of the economy at present, weighting performance indicators both according to their relative importance to Chinese policy makers as well as to non-Chinese analysts. The following section will suggest the likelihood that the economy's performance during 2003-2008 is likely to continue for another five years. The final section will offer a summary and conclusions as to the likelihood that China's economy will inevitably collapse within the next 5 to 10 years

## An inevitable reversal of economic performance?

Some China observers with a not very subtle Anglo-Saxon bias in favor of a "free-market entrepreneurial economic system, in which the state's role is limited to the provision of justice and arbitration according to clear and legitimate rules," not only question the reliability of the reported favorable macro economic performance of China's economy (Simon 2002), but go further and predict that the economy will inevitably "collapse." A typical negative assessment was provided by one analyst whose argument received some support within the academic community. He argued in that due primarily to difficulties China would face after it entered the WTO along with its "outdated" state-owned enterprise sector and the lack of competition in the economic environment surrounding their activities an economic collapse of the Chinese economy was "coming" (Chang 2001). One prominent international relations expert endorsed this prediction, describing the author's work as "[q]uite simply the best book I know about China's future" (Chang 2002A).<sup>1</sup>

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<sup>1</sup> Other reviewers cautioned against arriving at a similar "exaggerated" conclusion (Dodson). One argued that Chang's "angry book" was an anti-communist "polemic" with a bias reflected by his father's having left China under unfavorable circumstances (ChangB). Another review credited the book with being "entertaining" and "full of colorful anecdotes," but also being guilty of containing "contradictory" statements and "some noteworthy factual errors" (ChangC).

While fewer dire forecasts have been offered over the past few years, predictions that the Chinese economy's favorable performance would experience a reversal continue to be offered. Long time China analysts Tom Rawski and Charles Wolf Jr. have asserted that the reported high rates of GDP growth were not likely to continue. Rawski has questioned the credibility of annual real GDP growth rate reports consistently in excess of 9%, claiming such rates were actually below 6% (Gang 2003). Further, he believes that poor economic decisions made by Chinese policy makers, especially regarding investment, would contribute to a lesser performance. Wolf predicted lower GDP growth rates due to the "interdependent", cumulative effect of China's rising unemployment, poverty, social unrest, corruption, AIDS and other epidemic diseases, environmental problems (including water), rising energy consumption, inflation, a fragile financial system, reduced FDI and the conflict with Taiwan (Gang 2003). These analysts, and others who have offered negative forecasts for China's economy, have raised legitimate concerns and identified sources (e.g., corruption, rising income inequality, a "crippled" banking sector, WTO membership, environmental degradation plus water shortages, and weak state-owned enterprise sector) that could be expected to contribute to a poorer economic performance. However, in retrospect those forecasting a poor performance for China's economy in the near future have tended to overestimate the unfavorable effect of these negative factors while underestimating or failing to account for other macroeconomic factors that have combined to more than offset the overall impact of these negative factors on the economy's performance.

Some analysts have refuted the pessimistic forecasts while arguing against any imminent collapse. Nicholas Lardy's 2002 refutation emphasizes that integration into the world economy after China joined the WTO has had positive economic effects throughout the country (Dodson 2002). He cites empirical evidence that demonstrates China's tax revenues are rising, the M1 measure of money supply growth is increasing, as has been the growth of China's imports. All three trends, Lardy argues, are a sign of positive economic performance in excess of the 6% GDP growth that Rawski claimed actually occurred during the 1998-2001 period. Lardy also notes that SOE profitability increased post 1998 and that the banking system is slowly developing a "credit culture" while simultaneously downsizing (employment) wise - thus becoming more profitable (Dodson 2002).

While identifying some weaknesses in China's economic structure - especially a relatively weak banking system and extensive rather than intensive causes for productivity increases, many Chinese economy analysts have tended to agree that "impressive" GDP growth has occurred and is likely to continue in the near future, the market sector continues to expand, governance is improving - albeit slowly, WTO membership has been beneficial after China opened up its economy further, and structural transformation (reallocating labor to industry from agriculture) has been stimulating growth (Woodrow Wilson International Center 2005). A 2007 forecast accurately predicted many of the favorable performance indicators that subsequently were experienced in China throughout the first half of 2008 (including the continuation of a large trade surplus and GDP growth over 9%), and generally held the view that Chinese leaders would be likely to adopt policies that would emphasize more balanced growth, reduction of income inequality, and some alleviation of the more serious environmental problems. However, these same analysts seem to agree that environmental degradation, financial sector weaknesses, and growing income inequality would remain problematic US - China Business Council, 2008B).

## **China's economic performance circa 2003 - mid 2008**

The macroeconomic and socioeconomic performance indicators selected as the basis for evaluating China's economic performance over the 2003-2008 period include: real GDP growth, inflation, unemployment, job creation, income distribution, poverty, the Human Development Index (HDI), business confidence, consumer confidence, status of the banking system, trends in the stock market, government budget balances (internal and external), exchange rate stability, FDI, and environmental quality. Each will be discussed individually in this section, while the following section will combine them to offer an overall evaluation of the economy's performance.

China's unprecedented sustained rates of real GDP growth remain impressive.<sup>2</sup> Growth averaged over 10% from 2003-2006, and exceeded 11% in 2007. Average annual industrial growth rates have exceeded 15% in recent years. For the first-half of 2008 real GDP growth was about 10%, with the remainder of 2008 and 2009 forecast to be in the 9% - 9.8% range (US-China Business Council 2008B; Morgan Stanley 2008; *The Economist* 2008E; *China Daily* 2008B). Recent research indicates that rather than inhibiting GDP growth the state-dominated industrial sector has been a positive contributor - particularly for steel, oil, and chemical production (Li and Putterman 2008). Rising domestic consumer expenditures have coincided with this growth, and it is estimated that consumer spending during 2008 was contributing about two thirds of the country's GDP growth versus less than 50% in 2007 (*The Economist* 2008A, p. 68). However, rapid GDP growth rates are a concern to the extent that they have been overheating the economy and contributing to both inflation and poor environmental quality.

Meanwhile, inflation (CPI) rose over 8% for the mid 2007- mid 2008 period, before declining to an annual rate of about 6% during the summer of 2008 (National Bureau of Statistics of China 2008C; *The Economist*, 2008D, p. 89). For the previous 5 years inflation had remained low, ranging from 1.2% in 2003 to 4.8% in 2007 - averaging 2.6% for this period (National Bureau of Statistics of China 2008C). The 2007-2008 steep rise in inflation, the fastest pace in a decade, was fueled by serious increases in the price of food (particularly meat and poultry) and crude oil, with growing public concerns also over rising prices of education and health services as well medicine.<sup>3</sup> In 2007 food prices rose over 12%, with price increases in meat, poultry, oil and eggs all exceeding 20%. Some analysts forecast there will be moderately lower rates by the end of 2008 and throughout 2009 (*The Economist* 2008B). An interesting aspect of inflation has been the underlying causes of rapid increase in pork prices, which have gone up almost 50% during the mid 2007-2008 period. While higher incomes have pushed up demand for a greater percentage of pork in the typical family's diet, supply has decreased. This decrease has been attributed partly to an unanticipated rise in the death rate of pigs from various diseases, and to changes in peasant pork producers'

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<sup>2</sup> In 2005 China's economy was estimated to be about 1/5 the size of the USA's in terms of nominal GDP. Some recent estimates rank China's GDP as almost equal to that of Germany. When PPP was taken into consideration pre 2007 estimates were that China's GDP was second in the world only to that of the USA. However, some analysts questioned how large China's economy was in Purchasing Power Parity terms. A 2007 World Bank study lowered previous PPP estimates of the size of China's economy by 40%. The revised estimate, using new price information for China, places China's GDP in PPP terms relative to the USA much lower. However, this finding does not detract from the high real GDP growth rates China continues to experience (Morrison and Martin).

<sup>3</sup> Private health care clinics are emerging all over China. Health standards tend to be high, the equipment modern, the quality of the service very good - but the price of many services typically would be a high percentage of the average Chinese family's income.

behavior. It is believed that the rapidly rising stock market prices and real estate values (over 20% on average for the past few years prior to mid 2008) induced some peasants to invest in stocks and real estate rather than in piglets for pork production (National Bureau of Statistics of China 2008A).

Urban registered unemployment has averaged about 4.2% since 2003. However, some estimates of unemployment for the entire economy exceed 9% (*The Economist* 2008D). Job creation has become a concern, especially among new university graduates who fear that although there are plenty of manufacturing jobs there is a relative shortage of jobs "suitable" for them.<sup>4</sup> Their education lacks specific training and most of them have had little or no work experience by the time they finish their university studies. Their fears are fueled by the rapidly growing number of graduates each year. In 2007 there were 1.2 million students in graduate school and about 310,000 graduates for the same year. Vocational secondary schools had enrollments of about 20 million students and over 5 million graduates for the same year ("Statistical Communique" 2008).

China's rapid GDP growth also has coincided with a dramatic increase in income inequality as the upper 20% of income earners have experienced a considerably greater increase in their incomes relative to their rural counterparts. For example, urban per capita incomes grew at an average rate of 12.4% between 2003 and 2007, while rural per capita net income growth averaged under 9% annually (US - China Business Council, 2008B). This difference is increased by the distribution of social benefits such as education and health care. Such benefits are received to a greater extent by urban dwellers, while most of the working poor receive relatively few social benefits. Women's incomes have suffered more as there is considerable evidence of gender discrimination in the workplace (Wan 2008). Gender earnings differentials also have increased throughout urban China, especially among lower paid workers. The hardest hit have been the "low paid group of female production workers with relative low education working in non-state owned enterprises" (Wei and Li 2008, p. 243). Thus, it is not surprising that China's Gini coefficient for income distribution has risen steadily from 40.3 in 1998, to 44.7 in 2001, and then to 46.9 in 2007 (UNDP 2002-2007, 2008).

Despite the widening rural-urban income differentials the trends of China's incidence of poverty, Human Poverty Index, Human Development Index, and Gender Development Index all have been favorable. High rates of GDP growth and job creation have combined to lift over 250 million Chinese poor out of absolute poverty over the past few decades (Angresano 2005, p. 471). This favorable outcome is reflected in China's Human Poverty Index, computed by the UNDP. This index measures the percentage of the population that lies below a threshold level of health (the probability of not living past age 40), education (adult illiteracy rate), access to clean water, as well as including the percentage of children below the age of 5 who are underweight for their age. China's Human Poverty Index value is 11.7 (using 1990-2005 data), which ranks it 29th out of 108 poor countries for which this index has been calculated. About 7% of the population was not likely to live beyond age 40, less than 10% were considered illiterate, 23% do not have access to clean water, and only 8% of the children ages 0-5 are underweight for their age. The percentage of Chinese estimated to be living below the \$1 per day poverty line was 9.9% for China over 1990-2005, while the figure for the officially define "National poverty line" was only 4.6% (UNDP 2008).

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<sup>4</sup> This was the view of numerous graduate students I interviewed while lecturing and doing research at Hainan University during 2007 and 2008.

China's HDI value increased more than any other country in the world over the 1975-2005 period with the exception of Egypt. China ranks 81st out of 177 countries included in the UNDP's analysis. This favorable performance can be attributed to rising average life expectancy (about 72.5 years of age in 2006, up from 70 in 2000), an adult literacy rate of over 90%, an education enrolment ratio (primary, secondary and tertiary levels of education) of almost 70%, and a GDP per capita measured by PPP that exceeds \$6700. China's Gender Development Index ranked even higher (73rd in the world). This index is computed using the same performance indicators as the HDI (health - using life expectancy as an indicator, knowledge - using adult literacy and combined enrolment ratios as indicators, and standard of living - using \$ PPP GDP per capita earned), but captures inequalities in achievement between women and men. That is, it is the HDI adjusted for relative gender equality or inequality. The greater the gender disparity in basic human development, the lower a country's GDI relative to its HDI. China's GDI ranking is 16th among the world's poor countries, due to an average life expectancy for women that well exceeds the world average, high literacy and enrolment rates for women, and a relatively high (and growing) per capita income earned by women (UNDP 2008).

Favorable GDP growth and the surge in FDI (see below) have contributed to the maintenance of strong confidence among business executives throughout the 2000 - first quarter of 2008 period, especially in the construction, information transmission, computer services, and software industries. However, China's "Entrepreneurs Confidence Index" declined slightly during the second quarter of 2008, particularly among entrepreneurs in small and medium enterprises. (National Bureau of Statistics of China 2008A). A significant factor contributing to the reduced confidence was rising labor costs (*The Economist* 2007). Meanwhile consumer confidence was shaken by escalating prices. Consumer confidence declined from its recent high of 97.4 in June, 2007 to 94.1 by late spring of 2008, before rebounding in June to 95.1 (National Bureau of Statistics of China 2008B). The reversal has been attributed to a moderation of prices as well as the perception that the Sechuan earthquake rescue and rebuilding efforts have been favorable (*The Wall Street Journal* 2008).

Nearly every forecast pointing to an imminent collapse of China's economy has argued that a key contributing factor would be triggered by insolvency of the banking system. Considering the estimated extent of non-performing loans (NPLs) that China's four large banks were experiencing by the year 2000 (ranging from about 30% to over 50% of all loans these banks had extended) and the struggling financial condition of many state-owned enterprises that had received these loans, such arguments had considerable credence. Strong policy responses were introduced. In 2001 Asset Management Companies were established to assist with introducing banking system reforms while seeking simultaneously to write off some of these bad debts prior to initiating the privatization process whereby foreign investors would be invited to engage in joint ventures (Zhou 2007). More than twenty foreign investment banks, including Merrill Lynch, Goldman Sachs, Deutsche Bank, Citibank and Bank of America became active in acquiring some of the Chinese banking systems' NPLs. They began to set up equity joint ventures with Chinese banks under the supervision of the asset management companies to work towards alleviating the banking system's problems while providing these foreign banks an entry into China's huge financial market. More recent monetary policy measures (primarily to combat inflation) have included raising reserve requirement ratios almost monthly in 2007, while interest rates were increased about half as often. Further, restrictions on bank lending were imposed after most banks reached their annual ceiling. However, on the local level lending for fixed-asset investments continued to increase despite central government edicts.

The outcome of the reforms, assistance from foreign banks, and rapid GDP growth (that favorably impacted the economic status of many state-owned enterprises) has been a vast improvement in the sustainability of China's banking system as a large reduction in the percentage of loans classified as NPLs has occurred. According to one analysis the NPL rate of major commercial Chinese banks declined from about 18% in 2003 to under 9% by 2005 (China Banking Regulatory Commission 2007). Foreign banks saw a decrease in their NPLs during 2007 of about \$45 million while their NPL ratio declined as well (China Banking Regulatory Commission 2007). Thus by the end of 2007 "[f]or the banking system as a whole the NPL share stood at 6.17 per cent, reportedly the lowest level ever recorded and down around 1 per cent from the 2006 level" (Geiger 2008). Another study concluded that in terms of both the total stock of NPLs and the ratio of NPLs in China's commercial banks favorable trends have continued through 2008, with the booming economy and banking system reforms contributing to this trend. By the end of June 2008, the NPL stock in commercial banks (including large commercial banks, joint-stock commercial banks, city commercial banks, rural commercial banks and foreign banks) had declined by over RMB 25 billion to about RMB 1.25 trillion,<sup>5</sup> while the NPL ratio was reduced by 0.59 percentage point from the beginning of this year to 5.58% (China Banking Regulatory Commission 2008).

Relative to other world economic powers China's financial sector appears strong in late 2008. It is ironic that as the USA financial sector is facing unprecedented liquidity problems, causing bankruptcy and sales of some financial giants, China is being courted to inject funds into the troubled US investment bank industry. In late 2007 Morgan Stanley sold almost 10% of its stock to China's sovereign wealth fund, and it was considering selling a stake of 49% to this same fund as the September 2008 crisis reached a peak.

The Chinese stock market has been one of the worlds most volatile since its inception less than a decade ago. The Shanghai Composite Index rose from just over 1000 during the summer of 2005 to exceed 6000 two years later. This rapid increase induced many Chinese, including peasants, to invest in stocks. The Index peaked at over 6100 during October 2007, then dropped over 60% by mid August, 2008 - one of the worst performances by any stock market in the world. Higher inflation, a slowdown in exports, restrictive monetary policy (that included raising the commercial bank's reserve requirement) have each been cited as contributing to the decline. The sudden extensive decline induced many Chinese people to become angry at their government for not introducing policies to reverse the downward stock price trend (Zhixin 2008).

Unlike the stock market China's fiscal balances are the envy of many wealthy countries. The government budget balance has shown a surplus for the past few years, steadying at about 0.5% of GDP during much of 2008 (*The Economist* 2008D). China's external balances are favorable as well. China has become the world's third largest global trader as its exports increased from about \$438 billion in 2003 to over \$1.2 trillion in 2007, while imports grew from \$412 billion to over \$950 billion during same 2003-2007 period. Although the percentage change of export volume has declined each year since 2003, growth remains strong as export volume increased about 17% from mid 2007 to mid 2008. After the country's balance of trade surplus hit a record high in 2007 there was an anticipated

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<sup>5</sup> The September, 2008 exchange rate is \$1 = RMB 6.85.

slowdown of exports during much of 2008<sup>6</sup> - but the balance of trade remained positive, reaching almost \$250 billion from August 2007 - August 2008. Meanwhile the country's current account balance was over \$370 billion during the same period, or about 8.6% of GDP (*The Economist* 2008D). The favorable external balances and high (and rising) levels of FDI brought China's foreign reserves to well over \$1.8 trillion, up about 50% from 2006. China continues to lead the world in FDI received. In 2006 FDI exceeded \$70 billion, although that amount represented an 8% decrease from the previous year. However, in 2007 FDI rose almost 14% to over \$82 billion (US-China Business Council 2008A), and then during the first four months of 2008 absorbed FDI increased by almost 60% over the comparable period for 2008 (Ministry of Commerce 2008). This surge supports the findings that ranks China #1 in the world in terms of the FDI Confidence Index (AT Kearney 2008). China's international balances and FDI flows help explain the 17% appreciation of the RMB from \$1 = RMB 8.276 in 2005 to \$1 = RMB 6.85 during the summer of 2008.

Offsetting the many positive indicators of China's economic performance, in addition to the rising Gini coefficient, is the fact that China may now be the world leader in emitting pollutants into the environment - and the economy and virtually the entire population are suffering from continued declines in water and air quality. China now accounts for about one-sixth of the world's greenhouse emission. During 2008 China became the world's leading emitter of climate-warming gases as emissions rose 8% over the 2007 level, although China's per capita emission of CO<sub>2</sub> (about 5 tons per year) is well below the 20 tons per capita USA CO<sub>2</sub> emissions (Rosenthal 2008; UNDP 2008). Unfortunately, while China has signed and ratified the Kyoto Protocol as a non-Annex I Party to the Protocol China is not bound by specific targets for greenhouse gas emissions (UNDP 2008).

Throughout China there are visible signs that global warming is having detrimental effects as temperatures have been changing, droughts have become more frequent and longer lasting, storms and flooding are occurring more frequently while rainfall patterns have been altered. Unless the rapid rates of GDP growth are lowered and corresponding production methods altered in an environmentally-friendly manner the volume of greenhouse gas emissions will continue to increase. In particular, China's dependency upon heavily polluting coal-fired power plants will need to be reduced, although the surge in oil prices has induced just the opposite reaction. Further, China would need to lower output of cement, aluminum and plate glass - the production of each being a major contributor to greenhouse emissions. That would require the construction boom to be reduced.<sup>7</sup> Thus, considerable policy measures need to be introduced to alleviate growing environmental problems even though "China has been 'acting progressively on environmental policy' in the past year, developing plans to shut down highly polluting small and midsize industries and for more alternative energy" (Rosenthal 2008).

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<sup>6</sup> Factors contributing to this trend included the slowdown in world economic growth, the RMB appreciation, rising wages in some of China's manufacturing sectors, and rising shipping costs due to oil price increases with corresponding fuel surcharges added by shippers.

<sup>7</sup> There is evidence that a high percentage of recently constructed housing remains vacant. Some builders have been accused of purposely leaving them vacant in the speculation that prices will rise considerably, which seemingly has had the effect of raising the price of other apartments as well.

## **Summary of the economy's overall performance, and its current state**

Taking into account the top priorities of China's policymakers, which has remained rapid and balanced economic growth, with a growing interest in reducing inflation, the Chinese economy has performed very well. Its real GDP growth rate has remained world's highest over the past three decades. However, inflation has increased the past two years, although it declined modestly starting mid 2008. The particular fear among policy makers is that rising prices of staples such as food will trigger social unrest. Some subsidies to keep food prices lower have been introduced in the interests of maintaining social stability. Urban unemployment has been kept low, another high priority for policy makers, although evidence indicates a growing problem in rural areas as well as among those recent university graduates seeking entry into the labor market. Very favorable results can be found when the absolute values and trends of China's Human Development Index, Human Poverty Index, and Gender Development Index are considered. Improvement of each has received high priority from central policy makers. Business confidence remains strong, although some fear that rising labor costs may dampen that confidence. Foreign confidence in China's economy remains very strong, as evident by China remaining the world's largest recipient of FDI as well as retaining its #1 ranking in the FDI Confidence Index, and by the 2008 surge in FDI. Meanwhile, consumer confidence remains favorable, and there has been a growing contribution of consumption to GDP. Fiscal balances and external balances have been especially strong, as has the strength of the RMB. There have been adjustments to growing international competitive pressure through greater import substitution with more output of higher value added goods such as autos and computers. These adjustments are having a positive impact on China's external balances, international competitive position, and domestic earnings.

The improved status of the banking system has been particularly noteworthy since China's banking sector was considered dangerously weak by those forecasting the collapse of the economy. The recent dramatic stock market decline and potential bursting of the property values bubble could, however, introduce new problems into the financial system. The RMB remains overvalued according to "market" estimates, China's external balances are unusually high, the distribution of income (particularly urban versus rural as well as male versus female) has widened, and environmental conditions worsened. When the priorities of China's policy makers are considered, an overall evaluation of the economy's performance would be favorable to Chinese policy makers, as rapid GDP growth has been maintained and urban unemployment has remained modest. Foreign analysts who assigned different weights to key macroeconomic and socioeconomic indicators would acknowledge the growth and employment performance, but would correctly point out that inflation, income inequality, and environmental degradation remain serious problems that unless alleviated could have a substantial negative impact on China's overall performance in the near future.

## **The future**

What is the likelihood that China's economy will continue to perform favorably rather than experience a substantial reversal of what has been an economic performance that has featured, among other achievements, unprecedented rates of rapid real GDP growth and poverty reduction? Can the high rates of GDP growth be maintained without changing the current mix and methods of production mix so as to alleviate environmental degradation



problems? According to the consensus among expert analysts<sup>8</sup> the immediate future looks bright, with no imminent collapse predicted.

China's GDP growth is likely to remain above 8% with per capita income growth of about 4% annually over the next 5 years, although China will remain a relatively poor - but a rapidly developing - country. Persistent inflation problems are not forecast, but concerns about the country's ability to both reduce income inequality and environmental degradation remain widespread despite central government efforts to improve both conditions. In particular, little reduction is expected of environmental problems if high GDP growth rates continue without substantial policy changes that would alter production methods and the use of heavily polluting inputs such as coal and petroleum. The banking system's solvency is expected to continue improving as the non performing loan problem continues to abate, although negative interest rates for savings depositors due to high inflation and the potential impact of continued stock market volatility and the possible bursting of the property value bubble would adversely impact China's financial sector.

Government fiscal and external balances are forecast to remain positive<sup>9</sup>, as are high levels of FDI. However, the large "substantial" current account balance could prove problematic according to some analysts. Such balances almost ensure that the RMB likely will continue to appreciate gradually (towards what some Chinese financial exports argue would be a "market" \$1 = RMB 5 rate). Meanwhile, export growth is expected to continue declining slightly (from over 40% a few years ago), but there is no indication that China is about to lose its international competitiveness by a substantial amount in the near future as its manufacturing sector for exported goods remains both "robust" and relatively efficient. Thus, China is expected to remain the most important contributor to the world's GDP growth.

These forecasts likely will not be altered due to the winter 2008 heavy rain and snow in Guangdong, late spring earthquake in Sechuan, or Summer Olympic Games. In the greater Guangdong area a only a modest negative effect on GDP growth from the adverse weather has been predicted, and it is likely there will be more of an effect on GDP here than in Sechuan (see below) since the greater Guangdong area accounts for a much higher percentage of China's GDP than does Sechuan (*China Economic Review* 2008). Higher state investment in response to the need to rebuild some infrastructure may serve to offset some of the decline in Guangdong's manufacturing output. Similar forecasts have been made about the impact of the Sechuan earthquake that affected five other provinces: Gansu, Shaanxi, Henan, and Yunnan, and Hubei. An estimated 34 million people were affected by the disaster, and over 10 million homes were either severely damaged or completely destroyed. Also severely damaged were about 30,000 hectares of farmland, 100,000 hectares of rice paddies, and a large amount of farming facilities - including more than 30,000 farm machines. In addition, over 7000 kilometers of irrigation canals also were damaged, as were many water and sanitation facilities. Power transmission facilities as well as thousands of kilometers of roads and tunnels also suffered considerable damage. Despite the enormous damage the impact on China's economy is anticipated to be modest given the area's relatively small contribution (less than 1%) to the country's GDP. Further, as with Guangdong, the considerable investment in new infrastructure and the outpouring of domestic and

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<sup>8</sup> Particularly those at the Asian Development Bank, OECD *The Economist*, US-China business Council, and World Bank.

<sup>9</sup> China's holdings of foreign reserves are so great that during the USA financial crisis Morgan Stanley approached the China Investment Corporation, a sovereign wealth fund, about purchasing up to 49% of Morgan Stanley stock.

international aid (in excess of \$6 billion) will inject expenditures into Sechuan's and neighboring damaged provinces that will lessen, and perhaps even offset the overall negative economic impact of the adverse weather and earthquake activity. Some Chinese economists even predict that extensive reconstruction expenditures actually will boost growth (*China Economic Review* 2008). However, it is also possible that such a dramatic increase in investment could add to the inflationary pressure already plaguing these provinces (World Bank 2008).

Much has been written about the likely impact of the 2008 Summer Olympic Games. All analysts agree that Olympics host nations and the host city experience both short and long term dynamic effects - both of which are difficult to predict. It has been argued that based upon empirical evidence from previous Olympic games one should not expect that the direct and indirect investments made by the host country will "create large and lasting economic benefits" to the host city (Owen 2005). It undoubtedly was the not case for some previous summer games (Montreal, 1976) and Athens, 2004) where there was a substantial difference between forecasts and actual outcomes as both cities incurred considerable net costs.

While it is too early to offer a convincing monetary estimate of the impact, the likelihood as to whether or not the Olympics will positively impact China's economy can be analyzed. However, prior to the start of the Beijing Olympics optimistic forecasts were made by some Chinese organizers. One estimate made by a leading member of the Beijing Olympic Organizing Committee was that net profit would be about \$30 million (Yang 2008). Further, an International Olympic Committee official gave Beijing a chance to be among the most profitable of all summer Olympic Games.

After the July, 2001 IOC decision to award Beijing the 2008 Olympic Games there was increased popularity of tourism in China. During mid 2001 to mid 2008 period tourism increased about 7% (Yang 2008) a year and was up almost 21% in 2007 from 2006 (Sands 2008). Beijing had almost 4 million tourists in 2007, an increase of almost 12% over 2006 (Sands 2008). These tourist figures provided one reason for optimistic tourist visits and expenditures forecasts for the summer of 2008. One forecast predicted that about two million tourists would visit Beijing during the Games, with each foreign visitor assumed to be spending an average of almost \$1000 for hotels, transportation, dining, entertainment and hospitality services (Koehler 2008). Further, it was assumed that on average each Chinese visitor who visited Beijing for the Games would spend an average of almost \$150. Another analyst estimated that spending in Beijing and in other Chinese cities where the same tourists were expected to visit would generate \$4.5 billion (Yang 2008). It is not clear whether or not the higher estimate factored in an expenditures multiplier effect. The overall impact of tourism during the period of the Games was 10% to 20% lower than forecast as the number of tourists to visit Beijing during August of 2008 fell short of the forecasted 2 million.

Beijing appears to have realized positive income and employment effects prior to the start of the Games. The city's annual output grew an average of 12% over the previous five years, boosted by the additional Olympics-related investments which contributed an estimated 4.5 percentage points to the city's growth between 2002 and the start of the Games (Koehler 2008; Sands 2008; Qiu 2007). Both residents' per capita incomes and employment levels increased in the process. Estimates of the number of new jobs created - particularly in construction, logistics and high-tech manufacturing positions - by Olympic-related spending ranged from 1.8 to 3.6 million (Yang 2008; Koehler 2008), with the official registered unemployment rate in Beijing declining about .25 percentage points to 1.84% prior to the start

of the Games (Qiu 2007). Some of those newly employed realized improvements in their human capital as many had to learn rudimentary English and acquire some additional skills for dealing with a diverse range of foreign athletes, coaches and tourists.

There were, and will continue to be, the considerable gains for Beijing (and other cities, including Shanghai and Tianjin, where Olympic venues were located) ensuing from the high levels (about \$40 billion by the start of the Games) of direct and indirect investment for Olympic venues (about \$2 billion), infrastructure such as transportation (including for high speed trains), communication, a new air terminal, highways and city roads, buses, subways, and environmental improvements. One estimate was that the total investment for projects related to the Olympics would eventually reach \$180 billion over the next decade (much of which has been integrated into China's 10th 5-Year Plan) for post-Olympics environmental and infrastructure investments (Koehler 2008).

Income received from an unprecedented number of Olympic sponsors, the sale of television rights and expanded advertising efforts was considerable. Sale of television rights to NBC and sponsorship from multinational firms such as Visa, General Electric, McDonald's, Samsung and Kodak generated about \$2.5 billion (Yang 2008). Large Chinese firms such as Lenovo, Air China and China Mobile also used the occasion of the Olympics and the world spotlight on China to boost their advertising expenditures. Advertisers' expenditures throughout China for 2008 are estimated to have risen about \$4 billion with additional expenditures on Internet advertising forecast to rise 30% during the same year (Sands 2008). Another source of revenue (yet to be determined) was generated realized by about 800 official Chinese merchandisers of more than 5000 Olympics' products that were sold throughout 2007 and 2008 all over China (Yang 2008).

The cityscape of Beijing was transformed as infrastructure was modernized (especially stadiums, the airport, parks, subways, roads) - improvement that were the "culmination of seven years of national investment, planning, concentrated state power, national mobilization and hard work" which one American visitor for the Games argued created a more beautiful and efficient airport and transit system in Beijing (and Shanghai) than exists in New York City (Friedman 2008). In addition to the additional conveniences to travelers offered by the new airport terminal, public transportation improvements will make transfers to and from the airport more comfortable and faster. Six new expressways now link the center of Beijing with the airport, as well as other cities. There is now a new high-speed train linking Beijing to Tianjin. Within Beijing the subway system has been improved and a light rail system introduced, while over 300 kilometers of streets were either constructed or refurbished. Traffic on all of these will be coordinated by a new high-tech control system. Some dilapidated housing and urban buildings were torn down and rebuilt, historic areas refurbished, and some national historic sites including the Forbidden City were restored.

Some high technology investments include over \$3.5 billion to transform Beijing into a "digital city" that features "widespread use of digital and broadband telecommunications, wireless transmission and networking technologies, and 'intelligent technologies,' including smart cards" (Sands 2008). In the process Beijing's scientific and innovation capabilities have been enhanced, retailers' ability to market their products has been upgraded. All of these changes should enhance Beijing's appeal to foreign tourists and investors. Foreigners also will appreciate that 100 new hotels were constructed, with foreign investors active in ownership. Evidence that overbuilding of hotels designed to service tourists and participants

attending the Olympic Games may have occurred bodes well for lower lodging rates for future tourists and business travelers.<sup>10</sup>

Efforts were made to incorporate environmental improvements into all new infrastructure construction so as to make Beijing cleaner and greener. The latest 'green' criteria such as assuring water and energy saving practices were adopted by all newly constructed hotels (Koehler 2008). The new taxis and buses introduced to replace old, heavily polluting gasoline- or diesel-consuming vehicles were equipped with catalytic converters designed to meet the stringent EU environmental and fuel standards in an effort to improve air quality (Sands 2008). Improvements to roads were accompanied by extensive planting of trees and other landscaping projects. A legacy of the Olympics is that Beijing has far more trees, bushes and lawns, while outside the city 20 natural reserves were created to protect forests, wild plants, animals, wetlands, and geological formations (United Nations Environment Programme 2007). Many Olympic facilities featured a solar power system to supplement the conventional power system so as to make the new stadiums and arenas perhaps the most environmentally friendly sporting arena in the world (Koehler 2008). Within Beijing new wastewater and solid waste treatment plans have been built. Nationwide recycling efforts have been increased, and a ban on the use of plastic bags for retail sales has also been introduced.

The outcome of these environmental efforts could be observed during the Games as air quality was not as poor as had been widely feared. However, it remains to be seen whether or not air and water quality improvements can be sustained. The key is the rate at which China can reduce the number of energy-intensive, heavily polluting, coal driven factories and energy facilities by introducing alternative energy sources such as natural gas, wind power, and geothermal, and also how policy makers are successful in shutting down or relocating some heavy polluters in the chemical and coal mining industry (Qiu 2007). Overall, Beijing's Sustainable Development Plan faces challenges to make future growth and development both sustainable and environmentally friendly by improving both air and water quality along with both wastewater and waste management processing.

There is the potential for considerable future revenue to be realized from the nearly \$2 billion invested in constructing or refurbishing venues for the Olympics. Unlike recent summer games hosts China built their state-of-the art Olympic venues strategically with the intention of hosting revenue -generating events in the future. By most accounts these venues, and the success of the Games created a very positive image of China for both those in attendance and the billions of foreigners who watched on television. This improved image, combined with an "Olympic Legacy" could very well translate into higher levels of both tourism and investment (Koehler 2008). Visitors and television viewers undoubtedly were positively impressed by the infrastructure and transport facilities that will make Beijing even more attractive as a tourist destination, the first exposure for many to China's historical and cultural heritage, as well as the genuine hospitality of the Chinese people as reported by many attending the Games. It is anticipated that one future effect of the Olympics will be that China is likelier to host more international events in track and field, swimming and diving, basketball, soccer, sailing, as well as cultural events such as concerts in some venues built or refurbished for the Olympics. Further, the many training centers constructed in preparation for the Games will continue to provide Chinese athletes with excellent training facilities. (Koehler 2008). There is an anticipated economic impact of the growing sports industry in China which could grow, according to one estimate, by 20% annually following the Olympics

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<sup>10</sup> It was estimated that about 20% of hotel rooms in Beijing were vacant during the Olympic Games.

(Sands 2008). These positive outcomes should offset the negative effects of the Olympics which were more social than economic: displacing some local residents and shutting down some area transport and industry during the Games, as well as the unfavorable image created when some protestors were forced to leave China during the Olympics.

Taking all economics and image effects of the Olympics into consideration, the estimate made by the President of the Beijing Olympic Economic Research Association prior to the Games that foreign tourism to Beijing could surge about 8% to 9% annually is credible (Rogers 2008; Sands 2008). Realizing a net economic benefit has been made likelier due to the ability of Olympic organizers to have made extensive use of volunteers (up to an estimated one million) while experiencing virtually no labor problems during construction - thereby keeping future labor costs low (unlike what occurred in both Montreal and Athens). When all potential benefits and costs factors are considered, along with the likelihood of greater tourism and FDI over the next 5 years, it is reasonable to predict that China could very well reap a greater, albeit perhaps modest, economic return from its Olympics' investments than previous hosts of the Olympic Games.

### **Summary and conclusions**

Taking into consideration data provided by both Chinese and respected international sources of macroeconomic indicators the Chinese economy, as well as the likely impact recent events within China, no imminent collapse of the Chinese economy appears likely over the next five years. Rather, the economy is likely to continue to perform favorably when GDP growth, urban unemployment, external and domestic fiscal balances, stability of the banking system, FDI, and exchange rate stability are given relative importance. As the world financial crisis unfolds China may wind up owning substantial shares of some major financial institutions. Thus, as 2009 approaches, China's economy is stronger and more fiscally sustainable than every G-8 members' economy. However, Chinese policymakers will need to address more aggressively growing environmental and income inequality while preventing higher rates of inflation - particularly for food and health care, if China's economy is to continue on its favorable path.

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