

# A Different Development Model in China's Western and Eastern Provinces?

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## Abstract

Economic growth in China has declined between 2008 and 2009. The global financial crisis of 2008/9 has shown a number of structural weaknesses in the Chinese economy, such as the functioning of its capital and labor markets and the substantial income differences between the developed eastern and less developed western provinces. Migration is the linchpin of China's development model; workers move from the western to the eastern provinces and back, in particular because of the crisis. How has China reacted to the financial crisis of 2008? After assessing the Chinese stimulus program and its negative effects on liquidity in general and the financial sector in particular some of the resulting issues, such as a dual development model for the eastern and western part of China and the development of the internal market at the expense of more export will be reviewed, before assessing which factors can still constrain China's ascent.

**Keywords:** China Dual Development Crisis Provinces

## 1. Introduction

A number of structural weaknesses in the Chinese economy became clear during the crisis of 2008/9. We will discuss distortions in the functioning of China's labor and capital markets and the substantial income differences between the developed eastern and less developed western provinces. Migration is very important in explaining the success of China's development model. Workers from the western provinces have moved in large numbers to the eastern provinces. Some of them were forced to go back during the recent crisis.

In this article we analyze what the consequences of the global financial crisis for China are and how China has reacted to the crisis of 2008. We start with assessing the Chinese stimulus program and its positive and negative effects. In particular we assess its effects on liquidity in general and the financial sector in particular. Then some of the resulting issues, such as a dual development model (different for the eastern and western part of China) and the issue of developing local consumption instead of depending on exports will be analyzed, before assessing what all this means for the relative position of China in the world economy. We will argue that China in the meanwhile continued its ascent as a superpower.

## 2. The Financial Crisis in General

The 2008 crisis started as a financial crisis in the United States (US) and became an economic crisis with worldwide repercussions. It came to Europe and Asia, originally in the form of less trust in the financial markets, but also resulted in a decline in demand, and eventually resulted in a global economic crisis. A number of structural weaknesses of China's capital and labor market became clear during the recession. In the labor market we note that in times of crisis migration flows may reverse, as it happened in China in 2008/09. Currently there are shortages of skilled labor in eastern provinces and some of the migration flows have reversed again in 2009. To solve these problems unskilled migrant workers were hired for higher wages for jobs requiring skills. In the capital market we see additional lending, which is promoted by the Chinese government to stimulate the economy, but which has also undesirable effects.

Because of the economic crisis of 2008/09 economic growth in China declined at the end of 2008. Exports decreased rapidly and it is estimated that millions of Chinese workers lost their jobs and many returned to their provinces in the western part of China. Subsequently in November 2008 the Chinese government launched an

important stimulus program. A lot of funds for infrastructure development were made available and cities and provinces were also invited to make a contribution. Much of the currently rapidly increasing growth is due to the stimulus package of 500 billion dollar [1]. What were the effects of the recession for the Chinese economy? Van Dijk [1] distinguishes short and medium term effects and looks at the rebound (**Table 1**).

### 3. The Crisis in China

The Chinese economy has grown rapidly since 1978 in particular in the big cities in the eastern part of the country, fueled by the Special Economic Zones located closely to these cities. Because of the recent economic crisis growth declined from an average of 10 to 7 percent in 2008, but exports declined almost 40 percent at the end of 2008 (for August 2009 the decrease was 23 percent compared to a year earlier; NRC, 14-10-2009). According to the Asian Development Bank economic growth in Asia was only 5 percent at the end of 2008 [2]. The IMF announced that China's growth would decline from 9.3 to 8.5 (China Daily, 8-11-2008). February 2009 the figures would be adjusted to 6.7 percent. The Chinese government later announced 8.9 percent growth for 2009, indicating the crisis did not last long.

Rapid urbanization is a key driver for socio-economic change in China!<sup>1</sup> Agglomeration played a major role in China's growth and was reinforced by increased government investments in cities which later attracted more foreign direct investment (FDI). Big cities benefited in particular from these policies and investments made by the national, provincial or municipal authorities. However, the crisis resulted in 23 million unemployed workers, who mostly had to go back to their province of origin. In particular textile, games and furniture industries suffered (Financial Times, 25-8-2009). The Chinese press also pointed to the decline in the ship building and machine industry (China Daily, 8-11-2008). This number

of unemployed workers would be about 20 percent of the 130 million migrants that moved to the eastern cities during the last decade. During the first half of 2008 60.000 companies closed down and FDI dipped. In the second half of 2008 another 80.000 companies closed down and that only in the Chinese power house the Pearl River Delta near Hong Kong. Reasons mentioned in the Chinese press, besides the financial crisis, were the Olympic Games, heavy snow storms at the beginning of 2008 and the earthquake in Sichuan in May 2008.

Western provinces have grown more slowly in the past than the eastern provinces and many workers from these provinces migrated to the eastern provinces to find a job, sending back a substantial part of their revenues. At least 130 million migrated during the last decade and another 200 million is expected to leave the rural areas in the next decade, willing to work for a low income and continuing China's competitive advantage, until a serious graying of the one child population will start after 2020. China wants to change the regional imbalance by stimulating the economic development of the western part of the country. Policies like promoting investments in the west, stressing the availability of cheap labor and space and facilitating loans have been implemented.

At the same time economic growth is leveling off in the mega cities in the eastern part of China and picking up in the regional capitals in the western provinces. The eastern provinces need investments for the upgrading of their infrastructure and housing stock and to move towards a more capital intensive model of production, while labor and space intensive industries move to the western provincial capitals. These developments may change the migratory flows, where the eastern provinces need more skilled workers and the potential migrants from the western provinces can find employment in the more labor intensive industries that shifted west. This development would also contribute to the development of China's internal market and wean it off from its export bias.

**Table 1. Repercussions of the financial crisis for Chinese cities.**

	Higher unemployment and the need to support unemployed workers
Short term	Problems with social services for migrant labor: schooling, health, housing, etc
	Reversal in migration flows
	The impact of the one child policy
Medium term	Growth of intermediate towns
	Decline of Chinese export-oriented development model
	Urban spending has increased
Rebound	Shortage of skilled labor
	A different kind of urban development, including attention to ecological aspects

<sup>1</sup>We do not discuss the negative impact of economic growth on the expansion of cities and the resulting demand for rural land [3]. They found that economic growth of 10 percent results in 3 percent expansion of urban land!

China reacted to the crisis by putting together a stimulus plan of more than 500 billion dollar to be spent in 2009 and 2010 (**Table 2**). According to some estimates the program concerns between 15 and 17 percent of the Gross Domestic Product (GDP; Financial Times, 22-10-2009). The focus is very much on improving infrastructure and dealing with the consequences of the Sichuan province earth quake of May 2008.

Most of the money is spent on infrastructure and only a small part on services, such as housing or health care. One may wonder whether all this money is new money, or whether planned investments have just been moved forward. In total about US\$ 409 billion has been made available in the form of loans since the crisis started (Financial Times, 25-8-2009). Some of these expenditures had to be financed by the provinces or cities themselves. The stimulus program is meant to be temporary. What is going to stimulate the economy once these funds are exhausted? The current program is certainly going to lead to a substantial government debt, which needs to be served and could lead to crowding out of private investments by dynamic small enterprises in China. Usually these smaller companies create the jobs that China needs desperately.

Early 2009 the Chinese Prime minister announced that a second stimulus program was considered (Financial Times, 2-2-2009). The second program of fiscal measures would help to keep the growth of the economy at 8 percent. The first program was already considerable. 500 billion dollar additional expenditures in two years is almost as much as the 800 billion president Obama received from congress after his election to fight the recession, although the American economy is three times the Chinese.

The Chinese New Year in 2009 was really the turning point for the Chinese economy. In the eastern Guangdong province by the end of February 2009 more than 90 percent of migrants had come back to this province,

**Table 2. First Chinese stimulus plan of more than 500 billion dollar for 2009 and 2010.**

Type of expenditure	Share (%)
Infrastructure: rail roads, highroads, airports & electricity grid	45
Repair activities after the Sichuan province earth quake	25
Rural development and infrastructure projects	9.25
Ecological and environmental activities	8.75
Housing projects	7
Innovation activities	4
Health care, cultural and education activities	1

Source: Wall Street Journal (28-11-2008).

meaning three things. It shows determination among migrant workers to move permanently to the east coast. Secondly, these workers still seem to be necessary and finally a large numbers of these migrant workers is still living outside the Chinese social security system [4]. Fleischer *et al.* [5] summarize the major factor determining economic development, which so far tended to favor the eastern provinces. According to Fleischer *et al.* [5] regional development is the result of physical capital, human capital, infrastructural capital, new technologies and market reforms.

Out of a 20 million population in Shanghai there are at least three million migrant workers<sup>2</sup>. They represent one third of all workers in Shanghai. This is one of the reasons why the municipal government decided to allow inhabitants who are both 'only child' to have two children. Such a policy would also result in a more even age distribution of the future population, which currently tends to be skewed because of the one child policy. Currently the debate on illegal labor heats up in China, because some workers in the eastern provinces now come from neighboring countries. The official slogan for migrants is "special group, equal treatment", but it would be quite a step forward if these poor people would be given citizen's rights!

Migration leads to problems in the city and in the country side<sup>3</sup>. Migrant labor is often misused in the cities, for example in Shanghai, although officially rights of migrants are inviolable<sup>4</sup>. The average wage of unskilled labor in China is about US\$ 7 dollar per day. Plans to deal with the current social exclusion of migrants are developed. Changing the situation of migrants in the big eastern cities require different policies, such as legal adjustments: changing the Hukou (residency permit) system and recognition of migrant rights. In the past the migrants would just get temporary residence permits. The Guangdong Province subsequently announced plans to safeguard the rights of migrant workers and their

<sup>2</sup>On a trial basis by the end of 2002 already 770,000 such workers had received an integrated assurance, covering medical expenses, occupational injuries and allowances for retirement paid by their employers [6].

<sup>3</sup>Chinese newspapers describe the problems under heading like: "Fear over countryside childcare" (or: Home alone in country side). Another type of problems is battles over the user rights for the land the migrants have left behind. The China Daily recently wrote about these protests under the title "Suzhou protests over payouts for seized land".

<sup>4</sup>The Shanghai Star (9 December 2004) gives an example of seven migrants from the countryside who had been working under a labor contractor who was in charge of the construction job but fled without paying the workers' wages when the project was almost finished. They then attempted to commit suicide by consuming large quantities of drugs in their temporary shed in the city of Shenyang in Northeast China. The solution the Chinese have found for these kinds of problems is that the workers should start registering themselves in the city, which is not very likely for most migrants, who know they are not supposed to leave their rural areas.

families in this province. This floating population of about 23.3 million temporary workers is about one third of the 78.5 million permanent residents in the province<sup>5</sup>.

#### 4. China's Unequal Development

China has a large number of provinces and can be split in three (west-central-east) or two parts (taking middle and far west together) as will be done in this contribution. **Table 3** provides the basic data for three regions. **Table 4** provides the names of the provinces and their capital city. Four cities are so-called city provinces. The differences in development level between the provinces are big. Inequality exists in China between the urban and rural areas, between the Eastern and Western provinces and between the workers in the industrial sector and the farmers. China's western provinces are less developed than its eastern provinces. China's increasing Gini coefficient is an indicator of the personnel income distribution. It increased from 41.5 in 1995 [7] to 49.6 in 2006

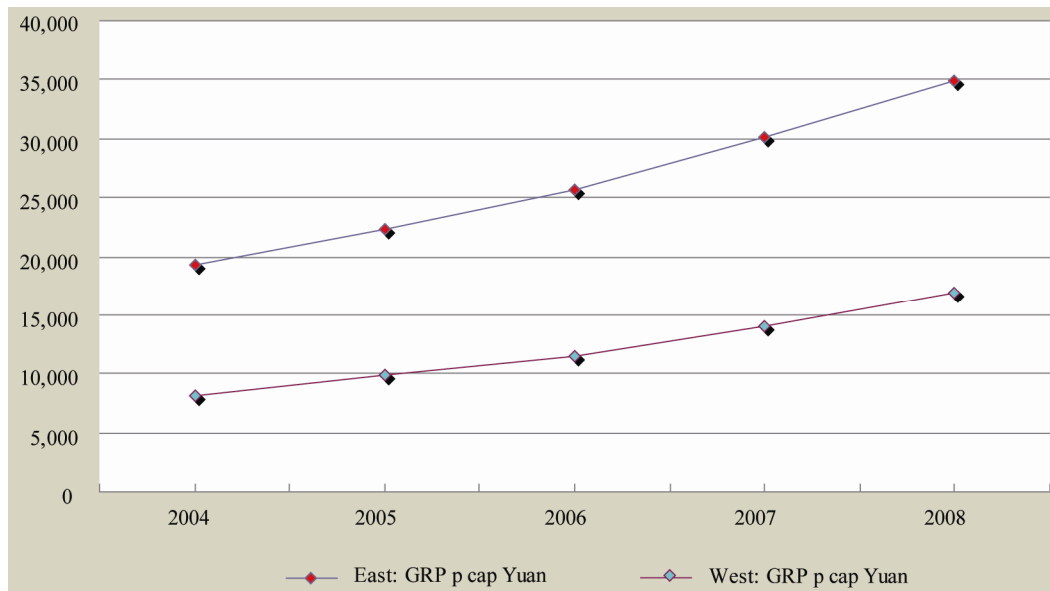
(Financial Times, 27-12-2006). Also differences in wages, investments and per capita production illustrate the inequality.

The western provinces are less developed than the eastern provinces. The increasing inequality is a potential source of dissatisfaction and the government would like to develop the western provinces. China has shown high annual rates of economic growth since Deng Xiaoping started the economic reforms in 1978 with liberalizing agriculture. However, the income distribution has become very unequal [5], which can also be noticed from **Figure 1** comparing the per capita Gross Regional Product (GRP) in western and eastern provinces. Both areas have grown, but the gap between them has become bigger. Increasing inequality has been noted in particular since the 1990s [8]. The reforms continued with stimulating Special Economic Zones (SEZ), located mainly in the south eastern provinces. Typically the per capita GDP in these provinces is now even higher than in the north eastern provinces where the traditional large scale

**Table 3. The three regions of China data for 2008.**

	Area		Population		GDP		Resident Consumption Level Per capita	
	Million km <sup>2</sup>	Percent	Million	Percent	Billion Yuan	Percent	Yuan	Percent
Northeast and East Coastal part	1.70	17.8	588.38	44.3	20577.52	62.9	158294	58.8
Middle and Near-Reach-West part	3.13	32.6	666.03	50.2	10812.2	33	88086	32.7
Far-Reach-West part	4.78	49.8	53.86	5.5	1332.27	4.1	22984	8.5

Source: calculated based on the provincial data available on the website of China Statistics Bureau, 2009.



**Figure 1<sup>6</sup>. Per capita Gross Regional Product in Yuan 2004 until 2008 (Source: CSP [9]).**

<sup>5</sup>The floating population in China is defined as people who are not entitled to be registered as permanent residents according to current laws and regulations. It usually implies that travelling is more difficult and these people have no access to services such as housing, education and health in the city where the migrants are working. The urban residency rules were designed after the founding of the People's Republic in 1949 and intended to restrain farmers from entering the cities and have the same status as permanent residents (China Daily, 11 March 2004).

<sup>6</sup>Figures 1 and 2 are the result of research with Paul Libaudiere (Erasmus University), based on CSP [9].

**Table 4. The basic information of three areas of China.**

Area	Province	Capital City
East Area	Liaoning	Shenyang
	Jilin	Changchun
	Heilongjiang	Haerbin
	Beijing	
	Tianjin	
	Hebei	Shijiazhuang
	Shandong	Jinan
	Shanghai	
	Jiangsu	Nanjing
	Zhejiang	Hangzhou
	Fujian	Fuzhou
	Guangdong	Guangzhou
	Hainan	Haikou
	Middle and Near-Reach-West Area	Chongqing
Sichuan		Chengdu
Hubei		Wuhan
Hunan		Changsha
Anhui		Hefei
Jiangxi		Nanchang
Shanxi		Xian
Gansu		Lanzhou
Ningxia		Yinchuan
Shanxi		Taiyuan
Henan		Zhengzhou
Yunnan		Kunming
Guizhou		Guiyang
Guangxi		Nanning
Far-Reach-West Area	Inner Mongolia	Huhehaote
	Xinjiang	Wulumuqi
	Tibet	Lasa
	Qinghai	Xining

industries were located.

Shortly half of China's 1.3 billion population will be living in urban areas and this number is expected to increase rapidly, if only because the authorities take a positive attitude towards migration and argue that the economic growth is higher in the urban than in the rural areas.<sup>7</sup> The current Chinese situation with respect to mi-

<sup>7</sup>Chinese farmers have at the average only half a hectare of land at their disposal and often this consists of several plots.

<sup>8</sup>Emigration abroad has been promoted by a number of provincial governments. Some Chinese provinces have an active migration policy suggesting people even to go abroad, in particular to Africa and Latin America. It is expected that these Chinese working abroad will send money back to their family members, who were left behind and their departure diminishes the pressure on the land [18].

gration can be summarized as 200 million Chinese people that are expected to move to the cities during the next ten years [10]<sup>8</sup>. In China most migrant workers come from poorer western provinces. They go to the more developed parts of the country, such as the Pearl and Yangtze River Deltas in the eastern part of the country. Inequalities tend to increase in times of crisis.

## 5. The Positive Effects of the Chinese Stimulus Program Package

The economy recovered more quickly than expected. After the positive effects of the stimulus packages China now needs to deal with the negative consequences of the high economic growth of 10.3% in 2010 [11] and the resulting inflation (4.6% in 2010 and 5.3% in April 2011; Financial Times, 12-5-2011). Can development be spread more equally in China? The enterprises in the developed eastern provinces have to choose between facing strikes, or paying higher salaries. They can also move their business to cities in western provinces, where the agglomeration economies are not yet the same, but many incentives are provided for labor intensive, space intensive and even polluting industries.

Urban private spending on real estate and the stock market has increased substantially since the crisis, this may lead to bubbles. Mega cities in the east see their economic growth leveling off, since they are facing congestion, environmental and governance issues. China is one of the few countries that actually wants to accelerate urbanization and hence encourages migration and emigration. It is actively promoting migration since it considers cities to have more potential than China's rural areas. In the medium term we can expect the impact of the one child policy, namely a graying of the population by 2020. A decline of the Chinese export-oriented development model is also due because of the development of the medium and smaller size cities in western China, which will generate more local demand.

The effects of the economic crisis on the Chinese economy were higher unemployment and a need to support the unemployed migrants in the eastern cities. It meant a temporary reversal of migration flows and more unemployment. China recovered very fast from the international financial crisis, because of its important stimulus program and despite stagnating FDI in 2009 and despite increasing Chinese investments abroad. Foreign direct investments declined in China in 2009 with 40 percent compared to the record of 60 billion US dollar invested in China in 2008. The expectations are that China will continue to try to attract foreign investments and enjoy the technology, the management skills and markets that will come with it.

## 6. Chinese Stimulus Program the Negative Effects

The Chinese government actively tries to promote development in the western part of the country. However, the inequalities in per capita GDP are very clear as can be seen in **Table 5** where the differences between per capita GDP between eastern and western provinces in 2008 are presented. The per capita GDP is on average more than twice as high in the eastern than in the western provinces. Differences in average wages in selected eastern and western capitals also illustrate the inequality. But even between western provinces the difference between the highest and the lowest ranking province is a factor four. The same gap can be found in the eastern provinces between for example Hainan and Shanghai.

Also the wages paid in the eastern cities are on average 1.5 to 2 times what is paid in a city like Chongqing in the west (26985 Yuan in 2008). The wage differences are an argument for entrepreneurs to go west. However, other factors, such as the lack of a skilled labor force, cost of transportation and the speed of developing the internal market are also important.

The total population of the western provinces is slightly smaller than the total population of the eastern provinces. However, according to **Table 6**, the eastern are doing better than the western provinces, in all other respects. Government expenditures are almost twice as high and in 2008 investments in the eastern provinces are 8.5 times bigger than in the western provinces. This difference is statistically significant and suggests also substantial government investments still go to the eastern rather than to the western provinces. Per capita FDI is currently 11.7 times higher in the eastern than in the western provinces. Exports are 139 times higher and even the number of patents is significantly higher in the eastern provinces.

However, the average growth of GRP is slightly higher in the western provinces in **Table 7** than in eastern provinces since 2006. This is not because of the differences in per capita FDI or total investments (ten times more in Eastern than in Western capitals), but may be

related to the fact that the western capitals are at average smaller than those of the eastern provinces and government has invested substantially in infrastructure (for example the length of highroads exceeds the eastern provinces). Also, the number of graduates in the western provinces is gradually increasing and now almost the same as in the eastern provinces (**Figure 2**).

The length of highroads is significantly higher in the western provinces. This is related to the fact that most of the city provinces (Beijing, Shanghai and Tianjin) are located in the eastern part of the country and require fewer high roads, while the western provinces tend to be big.

An increasing number of industries is going west, but what is the impact of these developments in particular on economic growth of the western provinces and cities? The growth rates of per capita GDP are indicative for the changes that have taken place between the eastern and western provinces since 2005 (**Table 7**). The table shows that cities make an important contribution to economic development and that as of 2006 the GDP of cities in the western provinces is growing faster than in the eastern provinces.

Although cities in the eastern part of the country are bigger in population terms, the western capitals are growing slightly faster in economic terms. Newspapers and Chinese bank reports suggest that many industries

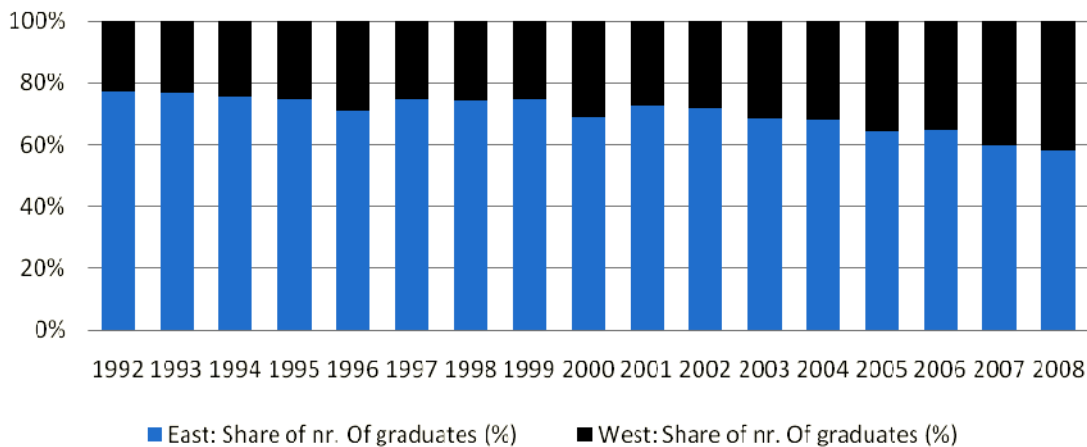
**Table 5. Per capita GDP between selected eastern and western provinces in 2008.**

Eastern provinces	Per capita GDP in renminbi	Western provinces	Per capita GDP in renminbi
Beijing	61,876	Chongqing	17,891
Heilongjiang	21,723	Sichuan	15,368
Tianjin	54,034	Shanxi	20,345
Hebei	23,164	Gansu	12,085
Fujian	30,031	Ningxia	17,784
Guangdong	37,402	Yunnan	12,547
Jiangsu	39,483	Guizhou	8,789
Shandong	32,945	Xinjiang	19,727
Shanghai	75,536	Tibet	13,795
Zhejiang	41,967	Qinghai	17,347

Source CSP [9, different years].

**Table 6. Indicators of the differences between Eastern and Western provinces in 2008.**

Variables	Eastern provinces	Western provinces	Statistical significance
			ANOVA
1. Government expenditure	7664 E10	4568 E10	0.000
2. Total investments	66,710 E10	7624 E10	0.000
3. FDI	10,035,443	856,780	0.001
4. Exports	100,080 E10	721 E10	0.002
5. Number of graduates	197,620	141,690	0.171 Not significant
6. Number of patents	20,547	3661	0.002
7. Length highroads (km)	54,253	70,293	0.000



**Figure 2. Eastern versus western provinces: share of number of graduates per 1000 persons, 1992-2008.**

**Table 7. Growth of per capita GDP in eastern and western provinces.**

Year	Eastern provinces (%)	Western provinces (%)
2001	13.65	6.80
2002	10.28	8.73
2003	13.53	11.01
2004	17.38	20.51
2005	24.60	17.07
2006	13.40	15.05
2007	16.54	19.56
2008	12.87	19.46

are already moving west, given the lower wages, the investments made by the government, the positive government policies and the less strict enforcement of labor and environmental laws. In the western provinces of China, municipalities are happy to attract some investments and not being too strict on labor and environmental conditions. Hence in first instance the more labor intensive, space consuming (given the lease price of land and buildings in the eastern provinces) and polluting industries move west. Given the incentives and the development of the interior market, it may be expected that more will follow.

## 7. The Stimulus Plan's Negative Effects on Liquidity and the Financial Sector

What did the government do to mitigate the negative effects of the financial crisis? The Chinese population started to spend more in 2009. The average income in the urban areas increased about 10.5 percent in the first nine months of 2009, more than the economy in total. This did partially offset the lack of demand from the United States. Kuijs [12] points to the fact that savings and investments are high in China and only gradually will decrease in the coming 20 years. This has to do with the

graying of the population in China, which is influenced by the one child policy since the end of the 1970s. High savings are necessary because social security in China is no longer arranged collectively. Pensions are not available or very low, housing is more and more the responsibility of the individual citizen and education and health care are relatively expensive. Consequently families save up to 40 percent of their income. Private firms also save substantial amounts because it is difficult for them to obtain loans and their profit margins are thin [12]. To promote consumption the government offers all kinds of products at lower prices in the interior of the country. Purchasing power of the people also increased because of deflation in the first half of 2009. Subsequently deflation turned into inflation in July 2009 (China Daily, 28-7-2009). Other measures taken to boost consumption concerned an increase in pensions paid by the government, additional benefits for low income workers and the distribution of vouchers in certain cities (China Daily, 28-7-2009). Through a sales tax reduction people were also stimulated to buy smaller cars.

What has the government done to deal with the increasing inequality? The recently launched 12<sup>th</sup> Five year development plan intends to promote regional development and to create a more equal income distribution in China. The strategy comes from the national level and needs to be elaborated at the provincial level. **Table 8** gives the details per region. Until recently migration was officially discouraged. However, it is expected that economic growth generated by migration to cities will lead to higher economic growth, which will also solve a number of China's other problems. According to the plan rural-urban integration must be hastened and the plan suggests granting citizenship rights to migrants, which would provide basic entitlements, which are missing under the current registration (Hukou) system for migrants and mean a reversal of the policies of the past.

**Table 8. Regional development strategy in 12<sup>th</sup> five year development plan.**

Region	Strategy	Focused policies
Western	National western development strategy	Special policy support Infrastructure development Protection of environment Development of science and technology Development of industries with unique character Development of areas where minorities live
Northeastern	Rejuvenation strategy given challenges of heavy industry in region	Establishment of modern industry system Transition activities for areas with exhausted resources Improvement of investment environment
Middle	National Central Region Development Strategy	Development of competitive industries Establishment of modern industry system Establishing comprehensive national transport hub Competition & cooperation in the world economy
Eastern	National leading strategy	Transformation pattern of economic development Adjustment of economic structure Encouragement of independent innovation

## 8. A Weaker Financial Sector and Inflation

Because of the governments fiscal policy and its pressure on the banks to provide loans the total loan portfolio has increased substantially and the financial sector will end up with a number of bad loans. Money supply grew 40 percent in 2009. Bank lending ballooned at 9,600 billion Yuan in 2009 (Financial Times, 22-11-2010). The target for 2010 was 7,500 billion, but that figure had been reached almost after ten months. Some interesting newspaper articles refer to the inflationary pressures because of the importance of informal finance in China (Financial Times, 22-11-2010, 1-4 and 9-4-2011).

Some of the loans have been used for consumption or even led to speculation in the stock exchange or to buying houses. The index of the Shanghai stock exchange increased rapidly in 2009 and it was estimated that 20 percent of the loans ended up in stocks or bonds (Financial Times, 25-8-2009). Also the number of sold cars increased to 12 million in 12 months (China became the biggest market for cars in 2009, by passing the US), partially because of a tax cut for the smaller models (South China Morning Post, 31-7-2009) and an increase of the prices of real estate was observed (30 percent of the loans may have been used to buy property; Financial Times, 25-8-2009).

Recently the government has reacted to the increase of money supply by making lending slightly more difficult (International Herald Tribune, 31-7-2009), but this may also discourage investment. Without loans no jobs are created. In the past China has often provided new loans if the old ones were not repaid. However, this does not lead to the necessary restructuring of the economy to make companies internationally competitive. Securitization of loans is also a possibility to allow banks to issue new

loans. However, securitization of bad loans is inviting problems in the financial sector (J. Foley in NRC 22-10-2009). The increased liquidity can contribute to new bubbles, in particular in the stock and real estate markets, which can lead to inflation, which can lead to an increase of the rate of interest with a negative effect on investments. The government announced that wage increases of 15 percent per year in the private sector could be expected (China Daily, 20-4-2011). This would certainly fuel inflation even more.

The most important question is whether the loans will be paid back. Otherwise they will weaken the financial sector even further. Finance companies created by provincial and local governments were encouraged to take up loans for infrastructure. An estimated one third of these 'directed loans' will not be repaid. According to the Financial Times (12-8-2009) economic growth was lower in July 2009 because government controlled banks had received the instruction: "to rein in excessive lending". The volume of new loans was 77 percent lower than the month before. Reserve requirements for the banks increased another 0.5 percent (China Daily, 18-4-2011).

## 9. Developing the Internal Market and the Rate of Exchange

The problem with the rate of exchange (6.5 yuan to the dollar in April 2011; NRC 10-5-2011) is that it is fixed by the government and is at a low level compared to the dollar, to help China to build up market share in the global markets. According to Martin Wolf (Financial Times, 30-1-2009) the real problem is the internal consumption in China. He calculated that the expenditures within China have to increase ten percent to allow the



trade deficit to disappear.

According to Guo and N'Diaye [13] the Chinese export model is no longer sustainable, for a number of reasons. Guo and N'Diaye [13] state that China is already such an important producer that in certain sectors it can only step up its export by lowering prices. They consider that if a further increase of export can only be achieved through even lower prices, this economically does not make sense, because it would go at the expense of the already low wages. The alternatives are an increase in productivity, or value added or a change in the composition of exports, which is also not very likely. According to the IMF [11] China would grow out of the crisis if it would stimulate the internal market. The IMF considers this is a more realistic alternative than continuing to step up exports, even to more non conventional markets such as Africa and Latin-America where the purchasing power is relatively low. During the first three months of 2011 China imported more than it exported, but in April it had again a record surplus of 11.4 billion US\$ (Financial Times 3-5-2011). The irony is that China is now inclined to revalue the renminbi slowly because it helps to fight inflation at home (Wall Street Journal, 21-4-2011)!

The stimulus program and the increase in loans resulted in increased purchasing power stimulating the local economy, but these effects are only temporarily. Increased government spending also increases the government's debt and may crowd out investments by dynamic private companies in China, while these small ones are the ones to create employment. The internal market can only develop in a sustainable way if the government takes action to improve social security in China. More money is also needed because the environment becomes more and more important. Doing the necessary investments will lead to higher production cost however.

## 10. A Dual Development Model for Eastern and Western China?

Does the increased attention for the western provinces mean that China's development is moving west? What are the consequences for China's development model of such a trend? The party leader in the southern Guangdong province, which is part of the Pearl River Delta, suggested that China should use the crisis to become a more modern country. He argues to make the transition to a more capital and knowledge intensive economy and points to the fact that there is a shortage of skilled labor in the Guangdong province (South China Morning Post, 31-7-2009). The question is whether he is not too early with his suggestion given that every year still 20 million low skilled Chinese farmers want to move to the cities and that such a labor reserve will keep the wages low.

Some regional development in the western provinces is taking place. We showed that since 2005 the western provinces are growing slightly faster than the eastern. In the development of the western provinces and their capitals agglomeration economies play a role like they played a role in the development of the eastern provincial capitals [10]. Investments play an important role, but it is necessary to distinguish between government investments, and investments by enterprises and foreigners, which follow government investments in infrastructure the past and are attracted by incentives provided as part of the development policies for the western provinces. Space is available and provided at more favorable conditions than in the eastern cities. Similarly more labor is available and substantially cheaper.

The fact that these workers do not have to migrate means that their income is spent locally and contributes to development in the western provinces. Labor intensive technologies are available. Even in the eastern part of the country usually the core technology is up to date, but activities around it are carried out in a relatively labor intensive way. This pattern is changing because some of the eastern provinces have used the 2008 recession to change to a different development model of more capital and skill intensive technologies. This trend is reinforced because most of the mega-cities are also in the eastern part of China and suffer from diseconomies of urbanization, such as for example congestion in Beijing where 700,000 new cars have hit the road in 2010. An important part of the investments is still going into construction and a more capital intensive development of the industrial sector in the eastern provinces.

The development of the western part of China is not as quick yet as the government had hoped. However, the lower wages and the incentives provided to investors do convince more and more enterprises to move to the west. Cities which are competitive receive more of these firms. Enrollment of students in higher education is also higher in these cities, implying that the knowledge economy is also starting to play a more important role. However, social problems are also increasing and the question is whether the Chinese government can control all these developments.

Given the policies announced in the last plan and the importance of government investment for urban development in the west, it is expected that fewer migrants will go from the western part of the country to the cities in the eastern provinces, which are going for more capital intensive activities requiring more skilled labor. This may lead China to develop its internal market more and to focus less on export. This process can be reinforced by a revaluation of the currency, or a round of wage increases in eastern China, which will, however, erode

China's current competitive advantage. If Chinese workers earn more they will spend it mainly on local products. Local consumption is enhanced if migrants remain in their respective provinces, where they will be more inclined to invest, while in the eastern cities the migrants would send an important part of their income to their relatives in their home provinces, but spend the rest of the money in eastern cities, partially on imported goods. These developments lead to a dualistic development model, with a more capital intensive industrialization in the eastern and more labor intensive industrialization in the western part of China.

## 11. China Ascent as a Superpower

Economic power has moved from the Western countries to the Far East. While the whole world was suffering from the financial crisis, China continued its ascent as a superpower. There are many indicators of this ascent. The more factual ones are that China surpassed Germany as the major exporting country in 2009 and Japan as the world's second largest economy in 2010 and has the ambition to bypass the US as the biggest economy in the world. On one arbitrary day three headlines in the Financial Times give the same impression (12-4-2011): 'Burmese junta grows wary of China's ever closer embrace', 'Brazil's president will be checking on China's statist experiments' and 'Levi's Chinese jeans brand poised for US market launch'. The latter article notes that this is an example of the growing influence of emerging economies on product innovation. This happens in the clothing sector, where developments were always dominated by trends in western tastes.

Other indications of China's ascent are that China has modernized its army and in particular its navy (Financial Times 19-1-2011). Although the size of the economy is now about one third of the US economy we should realize that if the renminbi would revalue 40 percent (an estimate of its real value), the Chinese economy all of sudden becomes almost half the US economy. If the Chinese economy continues to grow at 10 percent (versus the US at 2 percent) it will also not last very long before both countries will be in the same league. The question is whether this growth can continue at the current pace?

## 12. Why the Chinese Miracle May not Last

China has recovered rapidly from the international financial crisis and the world wide recession that resulted, but there are doubts about China's recovery. Different indicators confirm positive developments, but there are also some more fundamental trends suggesting that the high

economic growth of the past can not be sustained in the future. In the first place foreign investments seem to be declining in China, while China itself invests more and more abroad<sup>9</sup>.

The development of the internal consumption in China has not been as fast as expected. There is also still a big gap between China and the western countries as far as the level of social services is concerned. Bridging this gap would require more government expenditure, but also a different kind of expenditure than the current expenditure focusing on providing infrastructure. Is the Chinese government ready to make that change?

Also urban planning in China has resulted in "dissatisfying urban sprawls featuring inadequate services and inconvenient settings, which are particularly unfavorable to the low-income families" (China Daily, 5-11-2008). The opposite way of planning would lead to a harmonious society, "narrowing the expanding gap between different social groups and getting every member of society to benefit from economic growth", but does not seem to take place.

China's substantial exports to the US lead to a huge trade deficit between the US and China, resulting in a big dollar surplus in China. These dollars were used to buy US T-bonds to allow the US to continue to import Chinese goods. However, China has a problem investing its surplus of 2850 billion US\$ (Financial Times 18-1-2011) and Sovereign wealth funds like the China Investment Corporation (CIC) have already invested 300 billion dollar abroad. The surplus also explains the wave of foreign acquisitions that is currently taking place. In the meanwhile the country has to ration electricity supply again (Financial Times 18-5-2011) and announces that export prices are set to rise (China Daily 20-4-2011).

Van Dijk [14] gives different reasons why the high economic growth may not continue for ever. Among them are congestion and environmental reasons [15]. Other factors mentioned, which could lead to a decrease of the future growth are strikes, demands for higher wages, the lack of social security for workers, unemployment, and more retired people<sup>10</sup>. Lack of freedom, for example on the web, or to travel, may also lead to more unsatisfied people and China seems to react in a very defensive way to the gulf of protests in the Middle East in 2011.

### A frequently heard argument why growth will slow

<sup>9</sup>The problem can be solved by allowing more foreign investors in China because China already plays an important role itself in other countries. Van Dijk [18] argues that China has also become more vulnerable by increasing its presence in Africa and Latin America in a very substantial way in a relatively short period.

<sup>10</sup>One of the reasons for the high current saving rate (40 percent) is that people consider they have to take care themselves for a number of things other countries have solved collectively (pensions, education, health etc.).

down is China's graying population. This will be acute by 2020 when the relative size of the population of 12 - 24 to the population of 25 - 60 will have changed from 60 (1950) to 30 percent. The dependency ration of population ages 0 - 14 and 65+ to the population between 15 and 64 will than be as high as 65 percent [16].

Finally, not all the positive figures published by the Chinese authorities are accepted by the experts (Financial Times, 25-8-2009). The real growth of the internal consumption could be lower and not be enough to compensate for the decline in exports. If structural factors in the labor and capital markets continue this could lead to a next crisis (Financial Times 25-8-2009). The rebound could be temporarily and not lead to the same levels of growth China was used to in the 1980s and 1990s. Also China's recovery could not be V, but rather W shaped, or what is called a double dip recession.

Other reasons mentioned in the press why China may face problems are the number of students who can not find jobs. In particular 6.1 million young people who finish tertiary education each year will find it difficult to find jobs (Financial Times, 25-8-2009). This is also the group the authorities fear most for starting protests (Wall Street Journal, 23-12-2008). In terms of the Financial Times (22-12-2008) "Beijing prioritizes employment for graduates to head off unrest".

Recently Park and Shin (Financial Times, 15-4-2011) argued that the sustainable rate of Chinese economic growth is set to decline by up to 2 percent points around 2015. They calculated that for developing countries like China the slowdown generally came when per capita income was in the US\$ 13,000 to 18,000 range (with 15,058 as the median). The argument used is that the easy and fastest phase of growth lasts as long as unskilled worker can be hooked into a rudimentary industrial economy. However, the next phase implies a low growth in industrial productivity and an increase of the service sector. Also Hung [17] noted that: "in China the decentralization of regulatory authority of the state accelerates overinvestment among local economic agents and hence more competition, which results in a source of potential instability".

Nouriel Roubini (quoted in the Financial Times 18-1-2011) says that the problem lies in the Chinese government's attempt to keep the economy going through a huge increase in fixed investment. However, "no country can be productive enough to reinvest 50 percent of GDP in new capital stock without eventually facing immense overcapacity and a staggering non-performing loan problem".

### 13. Conclusions

The developments since 2000 show that China is becoming more and more like western economies. It suf-

fered from the global economic crisis, it faces demand for higher wages in the eastern provinces and its internal market is starting to become more important, meaning that the export model may no longer be sustainable. Guo and N'Diaye [13] doubt that China's export model can survive these economic developments. More expenditures will be needed in the near future for social security and to stop the deterioration of the environment. All these factors have a negative impact on China's export growth model and will contribute to the development of the internal market with its consequences for migration.

How has China reacted to the financial crisis of 2008? The Chinese stimulus program had positive and negative effects. The economy recovered quickly, but the stimulus plan has had also negative effects on the economy. It stimulated liquidity by increasing money supply and weakened the financial sector in particular because of the 'directed' loans to infrastructure. So many loans had an effect on liquidity in general and on the reputation of the financial sector in particular. Local consumption has not yet grown fast enough to replace the role of exports. A weakening of the financial sector took place, because the government stimulus program was financed partially by the banks which were forced to finance development projects of provincial and municipal special purpose vehicles, of which 30 percent is estimated not to be able to serve the debt.

We conclude that a dualistic development model is emerging: growth is accelerating in the western provinces and somewhat declining in the eastern provinces, in particular in the mega cities. Development of the western provinces also means the development of a new market and less dependence on export. If workers come from the western provinces they will also spend more money in that region, contributing to the economic growth of the western provinces [3].

Migration is the linchpin of China's development model. Recently migration is considered a more positive phenomenon, despite all the social problems associated with it, such as the reservation, or Hukou system, which makes migrants second class citizens in cities with no rights to government housing, health care or education for their children, which has given rise to the increased number of informal education and training institutes<sup>11</sup>. Migration is the result of a certain development model. The economic crisis of 2008 and 2009 showed that migration flows can also be reversed and that the eastern provinces tend to go for more capital and skill intensive

<sup>11</sup>The mayors of the major Chinese cities are aware that something needed to happen. Under the head 'Mayors' Promise to Help Their Residents' the China Daily (9 March 2004) carried a story about the two major Chinese cities, Beijing and Shanghai, which revealed the circumstances under which many migrants and small entrepreneurs live.

development with major consequences for migration. Migration issues in China are extremely important since migrants contributed to the high economic growth figures of the country since 1978. The Chinese government has an active migration policy within China and even promotes migration abroad. For regional development it is important where income is being spent. This is in the eastern provinces if the workers move there to find employment, but it will be spent in the western provinces if more economic activities are located there.

Some of the resulting issues, such as a dual development model (for the eastern and western part of China) and the development of the internal market were analyzed. The combined effects of more capital intensive development in the eastern part of the country and the greater use of more expensive skilled labor means that the east is following a different development path, triggered off by the last economic crisis. The current model of bi-polar development, with capital intensive development in the eastern and more labor intensive activities in the western provinces has important consequences for the flows of migrants and the future of China as an exporting nation, but developing the internal market may in the end be more sustainable. Increasing local household consumption would probably be a more sustainable option for China's economic growth than continuing its efforts to expand exports. However, such a development would also require a revaluation of the renminbi, which is politically very sensitive.

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