

The re-emergence of China

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1 Introduction: China in historical perspective

China is one of the world's oldest civilizations. Nearly five thousand years of continuous civilization initiated by the Yellow Emperor (Huang di), nearly four thousand years of dynastic rule and over two thousand years of imperial rule saw the reproduction of Chinese social, political and cultural characteristics. Traditionally China comprised an ocean of local rural communities centred on patriarchal families, a regulated commodity-producing (market) economy, an orderly (outside of periods of crisis) hierarchical society with a single centre of political power and a competitively appointed hierarchical administration, and collective ownership of economic assets. The existence of a strong state and of rule by public officials (*guan ben wei*) is a deep-rooted feature of a society permeated by a 2,500 year Confucian¹ and Daoist tradition in which the common good counts for more than individual aspirations. This tradition is different therefore from the western Enlightenment conception of 'single individuals in civil society' which, while leading to scientific and social progress, ended attempts to think of individuals as part of an interdependent self-changing world. A result is the existence of specific Chinese social conditions, including concepts of status and administrative grade, strong group and national loyalty, obedience to authority, a respect for commitments, *guanxi* (personal connections²) and benevolence which give rise to major differences in institutional frameworks and economic conduct. These differences are often positive but in some cases (the risk of corruption of officials) negative.

Until the eighteenth century and the start of the Industrial Revolution, China was not just a great civilization but also a world leader in science and technology. Although it had already started to lose ground to the Western world, in 1750 China still accounted for 32.8% of world manufactures. By 1860 however its share was just 19.7%, and by 1913 it was a mere

¹ Of particular importance was Confucius advocacy of an orderly hierarchical society, of the 'great harmony' and the preceding stage of moderate prosperity (*xiao kang*). Confucius insisted for example on the importance of filial piety which requires that children guarantee materially and spiritually the lives of their parents, while reminding their parents when they do something wrong. The concept of benevolence is related to the principle of filial piety. Essentially top-down, it requires that rulers rule by setting virtuous example, are compassionate and care for others, warranting obedience and respect (Yang, 2012). Confucius thought that the common people have the right to evaluate the performance of the government, while Mencius later argued that if the ruler behaves immorally the people have the right to replace him/her. Confucius advocated a positive application of the principle do not do unto others what you do not like done unto yourself by arguing that, if you desire rank and standing you must help others achieve rank and standing and, if you want to turn your merits to account, you must help others turn their merits to account.

² *Guanxi* is the ability to solicit the assistance of people with whom one has personal connections to secure favourable outcomes for oneself, one's family members, friends and organizations (Taormina and Gao, 2010) and the obligation to act in a reciprocal manner.

3.6% (Bairoch, volume 3, 1997: 860). In the nineteenth and early twentieth centuries neither the crisis-ridden Qing Dynasty nor the Guomindang (Nationalist Party) government that came to power in 1912 could overcome resistance to the transformation of the countryside ensconced in an deep-rooted imperial order and the obstacles to industrial modernization and accelerated urbanization.

Moreover, from 1840 to 1949 the internal drivers of China's decline were reinforced by the commercial penetration of foreign colonial powers and Japan's attempt at conquest. In more than 100 years of humiliation, China was invaded, forced to sign unequal treaties, cede sovereignty and territorial rights to 19 foreign powers and pay huge financial indemnities. Although the Qing (Manchu) Dynasty fell in 1912 and was replaced by the constitutional Republic of China, control of the country lay largely in the hands of warlords (allied to but not reined in by the Guomindang government) and foreign powers. The 1919 May Fourth Movement opened the way to the establishment of the Communist Party of China (CPC) and two civil wars (1927-50) separated by an alliance between the CPC and the Guomindang during the War of Resistance against Japan (1937-45). The outcome was victory for the CCP, the retreat of the Guomindang and the Republic of China to Taiwan and the establishment in 1949 of the People's Republic of China (PRC) on the mainland. At first the United States and other countries opposed the PRC's admission to the United Nations recognising what the PRC considers the Province of Taiwan as the representative of China. Only in 1971 was the PRC was recognized as the only lawful representative of China and Taiwan expelled.

From 1820 to 1950 China's GDP per capita actually fell from \$600 (1990 US\$) to US\$439. In 1949 the new China was the poorest country in the world, with a per capita Gross Domestic Product falling way behind India (US\$619) and Africa (US\$852) (Maddison, 2001: 264). The Conference Board (2014) total economy database placed China 81st out of 82 countries in 1950. Malawi was marginally poorer. The rest of sub-Saharan Africa was richer. Taiwan was 2.7 times richer. Hong Kong seized by Britain in the First Opium War in 1841 was 6.4 times richer. In 1978 China was ranked 72nd. In 2012 out of 124 countries it came 36th. In 2012 therefore China had joined the ranks of the upper-middle income countries of the world. With just 10% of the world's arable land and 25% of average world water resources per inhabitant China could not only successfully feed more than 20% of the world's population but had also significantly increased nutrition levels. China moreover was the world's leading commercial power, and, because of its huge population (20.1% of the world total in 2012), depending on the data source the world's largest or second largest economy.

Table 1 World population and GDP shares, 1950-2012 Source: elaborated from Conference Board, 2014

	Western Europe less Turkey	USA, Canada, Oceania	Eastern Europe	Russia	Asia	China	India	Latin America	Brazil	Middle East plus Turkey	Africa	South Africa
Population share (%)												
1950	12.4	7.2	11.6	4.1	52.4	22.2	14.6	5.9	2.2	2.3	8.2	0.6
1978	8.8	6.4	9.5	3.3	55.2	23.0	15.6	7.5	2.8	3.0	9.7	0.7
1988	7.6	5.9	8.6	3.0	55.7	22.3	16.3	7.8	3.0	3.6	10.8	0.7
2008	6.4	5.6	6.3	2.2	55.9	20.6	17.8	8.0	3.0	4.2	13.6	0.8
2012	6.2	5.6	6.0	2.1	55.6	20.1	18.0	8.0	3.0	4.3	14.3	0.7
GDP share (%, 1990 US\$ converted at Geary Khamis PPPs)												
1950	26.3	31.6	13.7		15.6	3.7	4.3	7.4	1.7	2.0	3.5	0.7
1978	24.5	25.4	13.5		20.6	3.9	3.4	8.8	3.0	3.9	3.2	0.6
1988	22.7	25.4	11.5	4.7	25.7	6.2	3.9	8.3	3.0	3.4	3.1	0.6
2008	17.5	22.0	6.8	2.6	38.9	16.4	6.7	7.5	2.5	3.9	3.4	0.5
2012	15.1	20.1	6.3	2.3	43.7	20.4	7.8	7.3	2.4	3.9	3.5	0.5

The growth of China since the establishment of the People’s Republic of China in 1949 along with the recent growth of a number of other emerging economies has finally started to reverse the trend towards widening global inequality that originated with the Industrial Revolution and the associated wave of colonial and imperial expansion. In 1820 shortly after the dawn of the industrial revolution the per capita income of the wealthiest countries was 3 times that of the poorest. By 1870 it was 7 times and by 1913 11 times higher. By 1997 the average GDP per head of one-fifth of the world’s population living in the richest countries was 74 times that of the one-fifth in the poorest, up from 60 in 1990 and 30 in 1960 (UNDP, 1999:3). This divergence in inter-country GDP per capita lasted until about 2000. Measured using weights for the population of each country, however, inequality diminished a little from 1950 to 1990 and then quite rapidly, due to the relatively faster growth of relatively poor and populous countries especially China and India. More strikingly, since 2002 the relatively rapid growth of these countries saw global inequality decline for the first time since the Industrial Revolution (Milanovic 2013). Overall the share of China in world GDP increased from 3.7% in 1950 to 20.4% in 2012. At the same time the economic weight of Western Europe, North America, Australia and New Zealand declined from nearly 58% to just over 35% (Table 1).

Table 2 Trends in global poverty. Source: elaborated from (Chen and Ravallion 2010)

	1981	2005	Change	1981	2005	Change
	<PPS \$1 per day, millions			<PPS1.25 per day, millions		
World	1515	876	-639	1896.2	1376.7	-519.5
East Asia and Pacific	927.1	175.6	-751.5	1071.5	316.2	-755.3
of which China	730	106.1	-623.9	835.1	207.7	-627.4
World excluding China	785	769.9	-15.1	1061.1	1169	107.9
	<PPS2\$ per day, millions			<PPS2.5\$ per day, millions		
World	2535.1	2561.5	26.4	2731.6	3084.7	353.1
East Asia and Pacific	1277.7	728.7	-549	1315.8	955.2	-360.6
of which China	972.1	473.7	-498.4	987.5	645.6	-341.9
World excluding China	1563	2087.8	524.8	1744.1	2439.1	695

China's rise has also seen a dramatic decline in global poverty (Table 2). In 1981 to 2005 almost the whole of the decline in \$1 per day poverty occurred in China. In the world excluding East Asia and the Pacific of which China is a part, it increased. Without a decline in China of 627.4 million, \$1.25 per day poverty would have increased. \$2 and \$2.5 poverty increased but diminished in China, as in China rapid economic growth lifted all boats, although at different speeds increasing social inequality.

The re-emergence of China as an economic power is also associated with an increased role on the global stage. Until the nineteenth century Imperial China occupied a central position in, and was the centre of, networks of diplomatic, trade and investment relationships. Designed to stabilize or pacify China's external environment and borders (*waiwen*), and maintain domestic stability and prosperity (*neiwen*), Imperial China adopted a tributary system, in which China chose not to dominate neighbouring countries but made concessions to manage a mutually acceptable relationship. The tributary system was one of mutual recognition involving a combination of symbolic deference and practical autonomy. It was therefore not a relationship of sovereign equality as vassal states had to accept as paramount the cultural superiority and ultimate political authority of the Emperor yet the centre did not interfere in the internal affairs of vassal states and generally gave more favours to the periphery than it received, getting respect for its generosity. In the modern world a tributary system is inconceivable. And yet some traditional Chinese values may shape China's external relations. In its first thirty years the new China adopted a policy of isolation. Since 1979, however, in a world of sovereign states and intense globalized interaction in which China's strategic significance is rapidly increasing, it has continued to stress non-interference, has emphasized mutual benefit (*win-win*) and has sought to make friends rather than allies, recognizing 'the limits of preponderant capacity and the necessity of mutually reassuring asymmetric relationships' (Womack, 2012: 54). In Chinese the four-character idiom *Hé ér bù tóng* meaning 'Together (harmonious) but not the same' is an important traditional value. In a speech at Davos in 2014 the Chinese Prime Minister, Li Keqiang, said

‘In a world of diverse civilizations, we should all seek to live in harmony. Cultural diversity ... is a most precious treasure ... And human society is like a garden where all human civilizations blossom. Different cultures and religions need to respect and live in harmony with each other. While maintaining the natural close ties among those with whom we see eye to eye, we also need to respect those with whom we disagree. Like the vast ocean admitting all rivers that run into it, members of the international community need to work together to expand common ground while accepting differences, and seek win-win progress through inclusive cooperation and mutual learning.’

This remarkable transformation of China from country that was the world’s poorest and that suffered from domination by foreign powers to its largest economy and an increasingly important actor on the global stage has involved the joint transformation of economic structures and public institutions. In the years before 1949 China was a country with many systems: an economic system of new (socialist) democracy in liberated areas; colonial and semi-colonial, feudal and semi-feudal social systems in the regions controlled by the Nationalists and Japanese imperialists; a serf system in Tibet; primitive commune systems many minority areas in Southwest China; and colonial capitalist systems in Hong Kong and Macao (Yu Guangyuan, 2005). Up to 1978 these socio-economic transformations were driven by alternating political campaigns³ and phases of economic and political re-adjustment. Shortly after the establishment of the new China the new government sought to establish a single unified nationwide socialist system (a unified one-model system comprising a socialist state, socialised industrial enterprises and rural craft industries and communes). In 1953-57 the First Five Year Plan was implemented. 1958-60 saw the ill-fated Great Leap Forward and famine. A phase of re-adjustment from 1961-65 was followed in 1966-70 by the Cultural Revolution and a new phase of adjustment in 1971-75 combining elements of the Cultural Revolution and a planned economy. After the fall of the Gang of Four in 1975-76, a new phase of readjustment of China’s development strategy in 1977-78 was designed to promote planned economic modernization. These two years opened the way to a major turning point. Under the influence of Deng Xiaoping, the Third Plenary Session of the Eleventh Central Committee of the CPC in 1978 confirmed the decision to embark on reform and opening up (Gǎigé kāifàng) enabling reform of the planned economy and the construction of a socialist market economy (one system) with, especially after the creation of four Special Economic Zones in Shenzhen, Zhuhai, Shantou, and Xiamen, several models. Subsequently, in considering the future role of Hong Kong and Macao, Deng Xiaoping put forward the idea that predominates today of one country, two systems.

China’s remarkable success is largely attributable to reform and opening-up although it was made possible by the social progress made in the first thirty years of the New China. The immediate aim of reform and opening-up was the four modernizations, originally put forward in 1963 by Zhou Enlai: modernization of agriculture, industry, national defense, and science and technology. More generally the aim was to make China a unified and modern economic power capable of catching up with and perhaps overtaking the western world, and

³ In the late 1950s for example The Three Red Banners (Sānmian hóngqí) called on the Chinese people to support the General Line for socialist construction (first put forward by Mao Zedong in 1953), the Great Leap Forward and the people's communes.

of raising the living standards of the population, while preserving social and political stability. The strategy was centred on two fundamental principles.⁴ The first was the preservation of the integrity of the country and leading role of the CPC. The method was to align bureaucratic/administrative interests with the common good, increase the income and improve the living conditions of the Chinese people, and prevent the emergence of rival centres of political power. The second was the establishment of a socialist market economy with Chinese characteristics. As a socialist market economy, China utilizes a large variety of property types, yet the market is regulated and the state retains a significant public assets. The market and the existence of particular types of property are instruments and not ends in themselves. As a system with Chinese characteristics it reflects aspects of earlier social orders including the values of traditional Daoism, Confucianism, Legalism and Buddhism, the tradition of a commodity-producing economy regulated by a hierarchically organized central state, and the importance of major collective infrastructure projects and collective ownership of economic assets.

The Chinese political order, its administrative structure and its system of governance are all also strongly influenced by Confucian ideas. The CPC is China's ruling party, but the CPC is not the Chinese government. After reform and opening up, the CPC embarked on a process of 'separating party and government', re-established the National People's Congress as the leading legislative body. A number of characteristics of the political order contributed to China's success. One is that the appointment of officials at all levels depends to a significant extent on performance. Career progress is managed by the Organization Department of the CPC Central Committee which operates a cadre responsibility system to evaluate the performance of officials and their success in implementing policy (Li Eric, 2014). Individuals are recruited into civil service, state-owned enterprise (SOE), and social organization career tracks where they start at the lowest level (ke yuan). After evaluation of their performance (through interviews with superiors, peers and subordinates, consideration of their personal conduct and public opinion surveys), the Organization department can promote them up through six increasingly senior ranks (fu ke, ke, fu chu, chu, fu ju and ju). Fu ju and ju can serve as high-level officials. In 2012, there were 900,000 fu ke and ke, 600,000 fu chu and chu, and just 40,000 fu ju and ju. After the several decades required to reach the ju level, a few can reach the Central Committee. This system is in many ways similar to the traditional Mandarin system, and, although patronage can play a part, it ensures that talented people rise to senior positions. Xi Jinping is a President of China who unusually comes from the family of a former leader yet started out as a village manager. Before he reached the Poliyburo, he went on to manage areas with more than 150 million inhabitants. Competence is one of the determinants of the legitimacy of the CPC and the government. The second is the capacity of the government and the CPC to adapt. In the Mao Zedong era, the legitimacy of the CPC rested on communist political ideals and its core emphasis on class struggle. After reform and opening up, the core concern was with economic development. A capacity to

⁴ The path comprises: (1) the leadership of CPC; (2) the Four Cardinal Principles, and the policy of reform and opening-up; (3) the central task of economic development and promoting the socialist market economy; (4) socialist democracy, culture and a harmonious society, as well as ecological progress; and (5) well-rounded development of the people and prosperity for all over time (inclusive development). The Four Cardinal Principles are: adhere to the socialist road; the people's democratic dictatorship; the leadership of the CPC; and Marxism-Leninism and Mao Zedong Thought (Liu, 2015).

deliver sustained economic growth, responsiveness and a capacity to adapt and reform itself to deal with problems (such as corruption, inequality and the environment) is in contemporary China the root cause of the authoritarian resilience and legitimacy of the CPC and the government (Liu, 2015). At the same time this evolving system of governance plays a major role in explaining Chinese development.

As already mentioned, China's reform and opening-up involved successive transformations of economic and public institutions and policies. These transformations were designed to move the country forward economically, while dealing with the contradictions generated by earlier phases of development. Aided by the combination of the continuity of party political leadership and the capacity of the CPC to self-adapt, the transformation process has been long-term and strategic, gradual ('the way to cross a river is step by step feeling for the stones as you go', said Deng Xiaoping), experimental, pragmatic ('I don't care if it is a black cat or a white cat, if it catches mice, it is a good cat', he also said) and non-teleological (as it has no defined end-point).

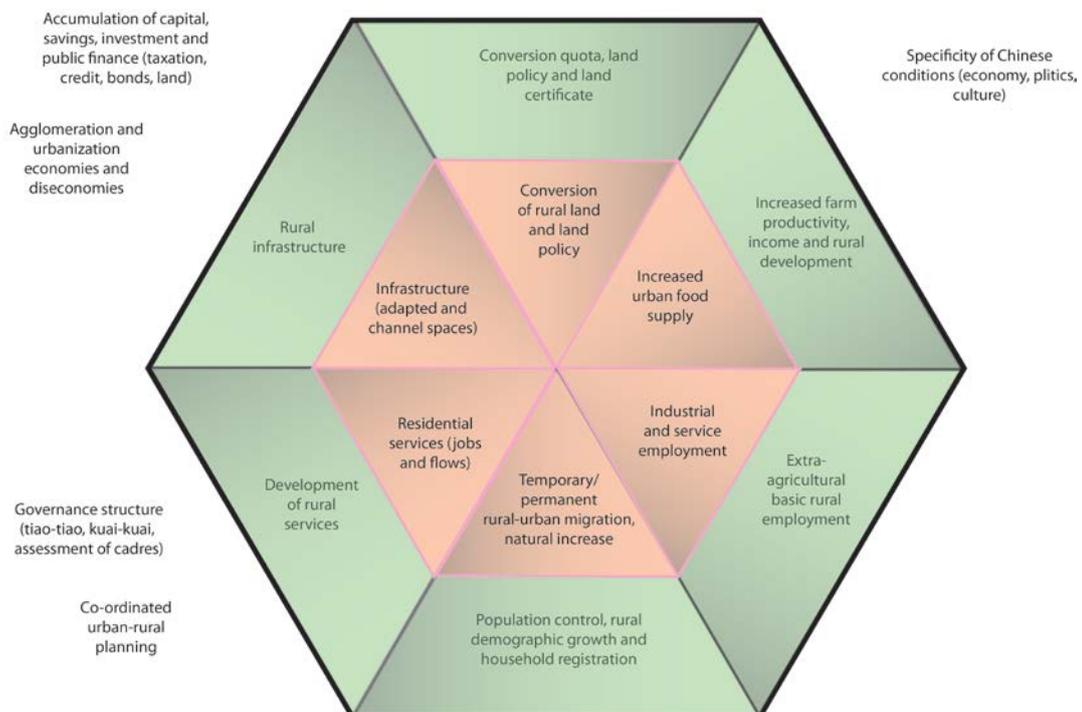
Consequently, China's transition differs radically in its method and in its desired though unspecified outcome from the rapid transition driven by western advice that led to dramatic economic decline in many parts of central and Eastern Europe (Dunford 2005). As Lau et al. (2000) demonstrate, China's 'dual-track' approach to market reform is a mechanism for implementing reform that is Pareto-improving. A Pareto improvement is one that makes at least one person better-off without making anyone worse-off. Chinese reform creates net gains in welfare without creating losers, although gains are very unequal. In the view of Lau et.al, the continued enforcement of the existing plan and of existing conditions, while at the same time introducing partial yet progressive market liberalization, is a method for making implicit lump sum transfers to compensate potential losers leaving them at least as well-off as before the change.

China describes itself as a socialist market economy with Chinese characteristics. In China today market mechanisms govern the production and sale of non-collective goods and services. Markets are however closely regulated, although with different degrees of effectiveness. The Chinese economic and social system is an articulation of a number of modes of production and a variety of types of property. In China, there is no private ownership of land: land is owned either by the state or by rural collectives. Ever since the adoption of the Household Contract Responsibility System (HCRS), agricultural organization is centred on small, mainly commodity-producing family farms. These small-scale producers are organized into vertically integrated agricultural operations guided by 'dragon-head' enterprises, cooperatives (and more recently specialized farmer's cooperatives) or wholesale markets. The Household Registration System (hù jí guǎn lǐ zhì dù) (HRS) divides the population into agricultural and non-agricultural households classifies Chinese citizens according to two considerations: (1) their place of residence; and (2) their socio-economic eligibility distinguishing agricultural (rural) and non-agricultural (urban) citizens. The financial system rests firmly on the banks and in particular four main publicly owned banks (Industrial and Commercial Bank of China, Bank of China, China Construction Bank and Agricultural Bank of China) which account for 80% of deposits. As a result government directives have a major influence on the distribution of credit. Credits go mainly to finance state-owned

enterprises (SOEs) and to local authorities and urban property development. In addition many of the most important industrial enterprises are state-owned. In 2010 SOEs accounted for 20.8% of industrial assets and 12.1% of gross industrial output. Collective and co-operative arrangements exist. And in a world in which the management of capitalist enterprises is delegated to managers and the aim is to maximise shareholder value (the profit after the payment of interest paid to shareholders) many of the small private enterprises in China are closer to family-run and artisanal than to capitalist modes of production. The development of a large domestic and foreign capitalist sector is of course encouraged to help drive economic growth, yet it is a component of a mixed, socialist market economy in which the public sector in some senses predominates, in which a powerful system of planning persists and in which the state remains strong.

The fact that the Chinese government has significant economic assets is a fundamental difference from western capitalism. The existence of significant state assets gives the Chinese government a capacity to act that the state in western countries lacks. As Meade (1964: 62) argued, it is advantageous if the state owns public assets and can use these assets efficiently to earn revenue, as it reduces reliance on taxation and public debt. Meade defined $(K^s - D)/K$ as the difference between the value of public assets, K^s , and the value of national debt owed by the state and other public authorities to the private and household sectors, D , as a share of community real wealth, K , and argued that increasing $(K^s - D)/K$ would be positive for society especially if the property that remained in private hands was more equally distributed (see also Cui, 2011).

Figure 1 Growth and rural-urban transition in China

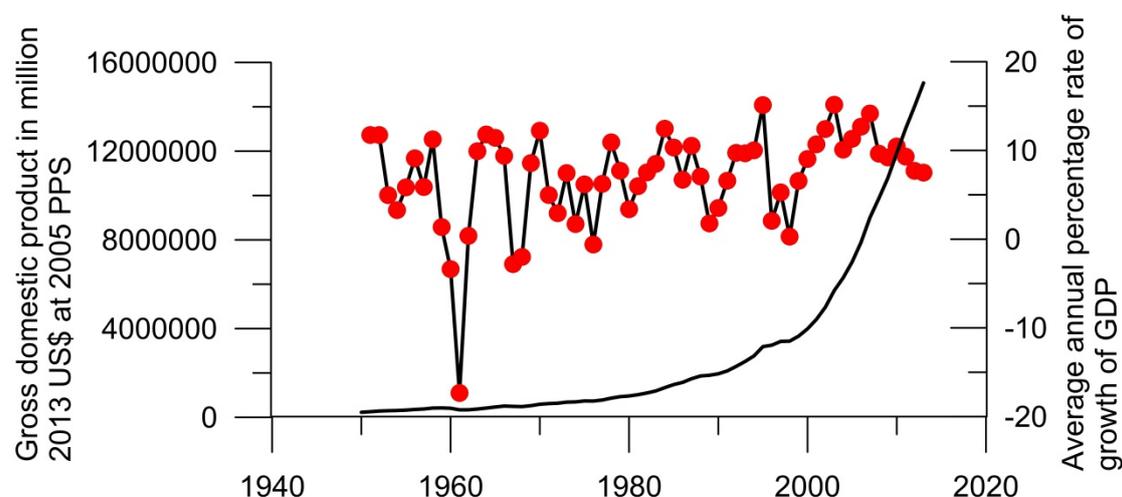


These economic, political and cultural differences make China's economic and social order and its development strategy 'sui generis' and require the use of specific rather than universal analytical categories. The aim of this chapter is to outline China's economic progress and its drivers. Conceptually the argument emphasises the importance of the relationships between the industrialization and urbanization of a predominantly rural society on the one hand and the evolution of Chinese institutions on the other as drivers of China's economic development (Figure 1). The agglomeration of economic activities drives productivity, growth and innovation. Agglomeration involves a series of interconnected transformations of urban-rural relations: growth of urban industrial and service employment and residential services; the rural-urban transfer of a part of the population; investment in urban infrastructure; and the transformation of agriculture to meet the food needs of the growing urban population with a smaller farm workforce. These mechanisms have worked their way out in ways that are specific to the Chinese case through successive phases of reform and opening-up with which this chapter will deal, while the chapter will conclude with some thoughts relating to the next phase of Chinese development.

2 China's economic growth, resources and population

From 1949 to 1978 GDP increased on average at 4.9% per year (Figure 2), but there were sharp fluctuations, with declines from 1960 to 1961 as a result of the three years of natural disasters and famine (1959-61) that quickly followed the start of the Great Leap Forward and again in 1967 and 1968 after the start, in 1966, of the Cultural Revolution. The Korean War (1950-53) and the 1960 Sino-Soviet split also disrupted China's development. In these years as a whole, however, China mobilized labour, increased agricultural productivity and established modern industries. After an initial phase of economic recovery and land reform, in 1953 China embarked on a strategy of socialization and industrialization involving the establishment of domestically oriented and capital-intensive state-owned industrial enterprises, danwei-provided welfare services, a collectivised agriculture and a system of central economic planning on the Soviet model. Initially industrial development was concentrated in Northeastern China. With the start of geo-military Third Front Movement (Sānxiàn jiànshè) in 1964 strategic industries were established in areas, that were sometimes in remote and inaccessible, distant from the intensifying conflicts with the United States in Vietnam and with the Soviet Union in Northwestern and Southwestern China. All these measures helped overcome the immobility of a countryside that had hindered earlier attempts to modernise China.

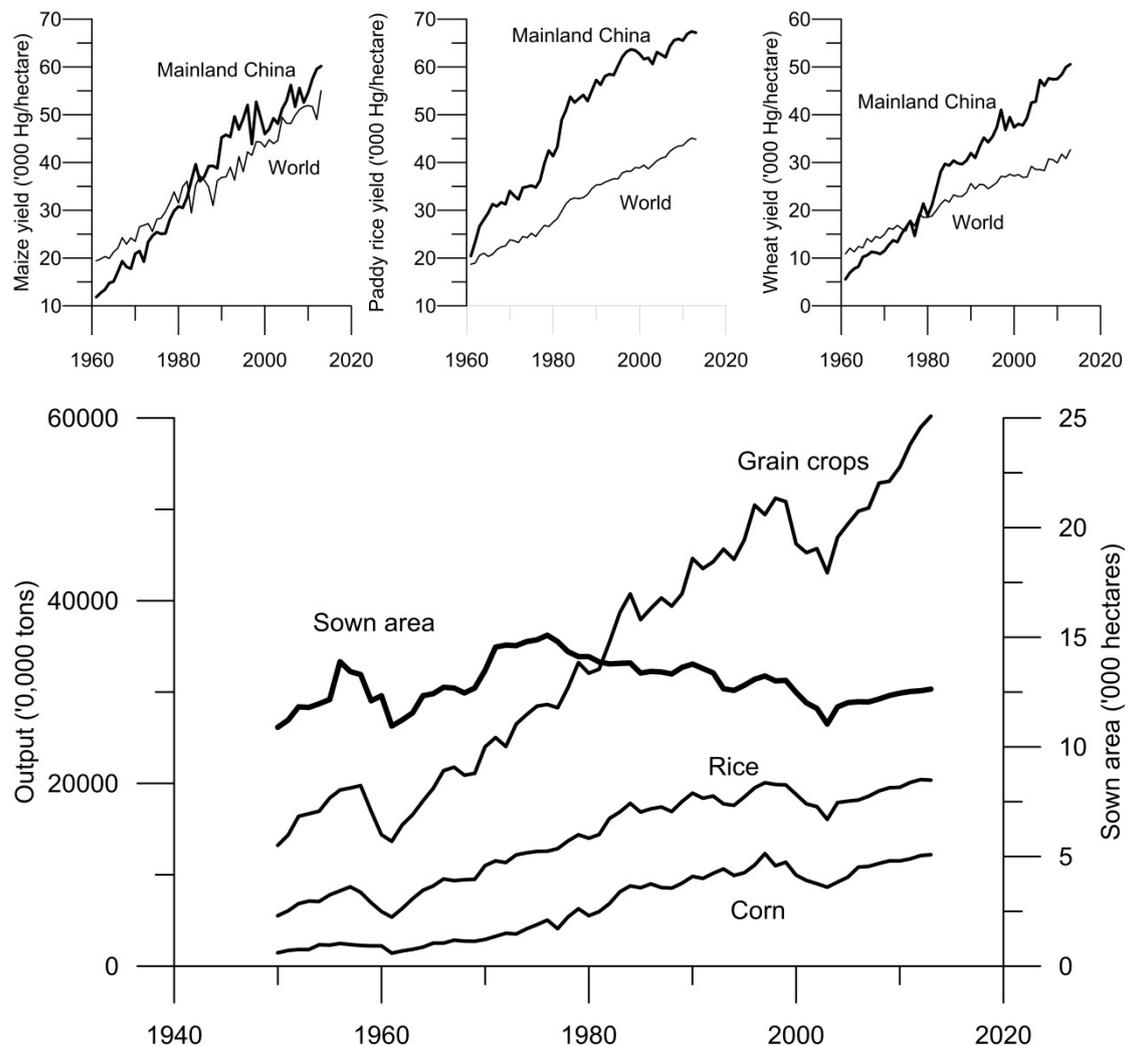
Figure 2 China's GDP and GDP growth, 1950-2013. Source: elaborated from Conference Board, 2014



The events of this 'socialist' period played an important role in laying the foundations for the first phase of reform and opening-up and for later sustained growth. Most important was the re-establishment of a unified and strong state. Also vitally important however was the transformation of the countryside. Notwithstanding the changes of direction, rural restructuring overcame the immobility of the countryside that had impeded earlier attempts at modernization. Through central planning and measures that restricted the prices paid to farmers, it lifted the constraints on industrialization posed by low farm productivity and the inability of the countryside to provide food surpluses and release labour (Figure 1). At the same time rural labour played an important role in constructing rural infrastructure and establishing rural industries. In China however food supply remained a problem at least until the 'green revolution' of the 1970s. Agricultural progress did however occur as a result of the aggressive land reform of the 1950s, while the 'green revolution' was a result of the earlier establishment of agricultural research and agricultural extension services that saw the development of new high-yielding seed varieties, along with the use of chemical fertilisers, pesticides and improved irrigation facilities. China's ability to deal with this problem of food security and subsequently significantly to raise nutrition standards was also a result of the fact that Chinese agriculture is organised to meet the food requirements of the Chinese population (rather than for example to produce cash crops for export on capital-intensive plantations that create insufficient employment and to rely on imports to meet domestic needs as occurred in many countries colonised by western powers). This strategy had two aspects. The first was emphasis on planting structures that concentrated on grain and other staple food crops. The second was the use of intensive high-input high-output cultivation methods by peasant households to ensure high yields per hectare. In China there is a long tradition of successful continuous cropping, multiple cropping, inter-cropping, relay inter-cropping and sequential inter-cropping (crop rotation) which with high labour inputs and where possible irrigation secured high yields up to the 1970s. After the 'green revolution' modern technologies including the use of fertilisers and pesticides, improved seeds and machinery have played a more important role. Moreover, in China the diffusion of agricultural production strategies and policies was aided by the existence of a

comprehensive agricultural research and administrative system and extension services that stretch down to the villages and individual households. At the same time the existence of a hierarchical HRS and land tenure system assisted with the adjustment of policies as and until they are accepted by the majority of farmers and the mobilization of the rural population. As a result of these technical and institutional factors the yields of the main staple crop yields have risen strongly in the years since the Great Famine (Figure 3) and are far ahead of those recorded in for example Africa, explaining in part differences in poverty reduction, although in recent years excessive fertilizer and pesticide application have contributed to environmental problems including desertification, river eutrophication, soil degradation and greenhouse gas emissions (Li Xiaoyun et al., 2013).

Figure 3 Output, sown area (which allows for multiple cropping) and crop yield for main staple foods in mainland China and the world, 1960-2013. Source: elaborated from NBS, 2015 and FAOSTAT, <http://faostat.fao.org/>



The problem of food supply was in large part a reflection of the relationship between people and resources in China. Although China has always accounted for a large share of the world's population, it has a relatively small share of critical natural resources (Table 3). In 2010 China, with 20% of the world's population, had just 8% of its cultivated land, 5% of its water

resources and 3% of its forest stock. The protection of farmland and of natural resources are therefore vital national issues,⁵ while in Chinese agriculture the intensive use of land and high yields per hectare are important.

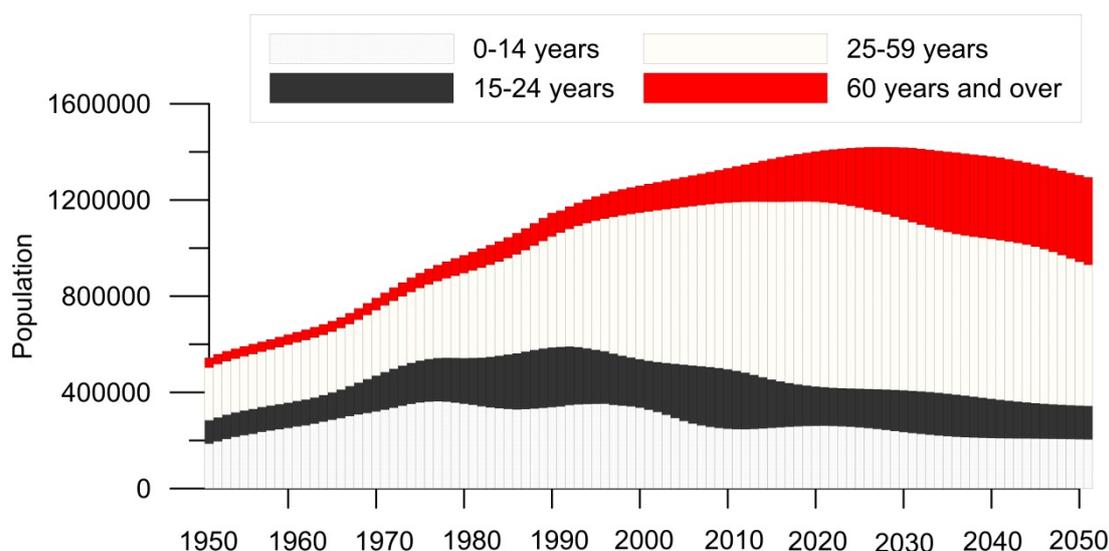
Table 3 China's share of world farmland, water and forest resources. Source: elaborated from NCBS, 2011.

	China total	China as % of world total			
	2010	2010	2005	2000	1990
Population (including Hong Kong and Macao)	1348932	20	20	21	22
Cultivated land (10 ³ hectares)	124320	8	8	9	9
Actual total renewable water resources (10 ⁹ m ³ /yr)	2840	5	5	5	5
Forest area (10 ⁶ hectares)	206861	5	5	4	4
Forest stock (10 ⁶ m ³)	14684	3			

The other important foundations laid in the 'socialist' period relate to the size and quality of the population. The equitable distribution of the means of production and shelter and the low cost and equitable distribution of health and education resources saw life expectancy soar from 42.2 for men and 45.6 years for women in 1950 to 66.4 and 69.4 respectively in 1982. From 1952 to 1978 the share of the population that was illiterate declined from 80% to 16.4%. As a result, there was a huge increase in population from 552 million in 1952 to 1,017 million in 1982 (Figure 4). When the children of the 1950s reached adulthood, the share of young people of working age also soared, endowing late-1970s China with a huge, youthful and educated population.

⁵ To ensure food security, although ecological security and social stability are other considerations, the central government has made 1.8 billion mu a 'red line' (in the National Land Outline Use Master Plans for 1997-2010 and 2006-2020) beneath which China's cultivated land area cannot fall. The conversion of cultivated land into construction land and the total amount of construction land are subject to very strict regulation and control via overall land use plans and the 2004 Annual Land Use Quota regulation, with control norms for the total amount of land for construction and the amount of reserved cultivated land.

Figure 4 Population growth in China, 1950-2050. Source: Source: United Nations, 2011.



3 The first stage of reform and opening-up

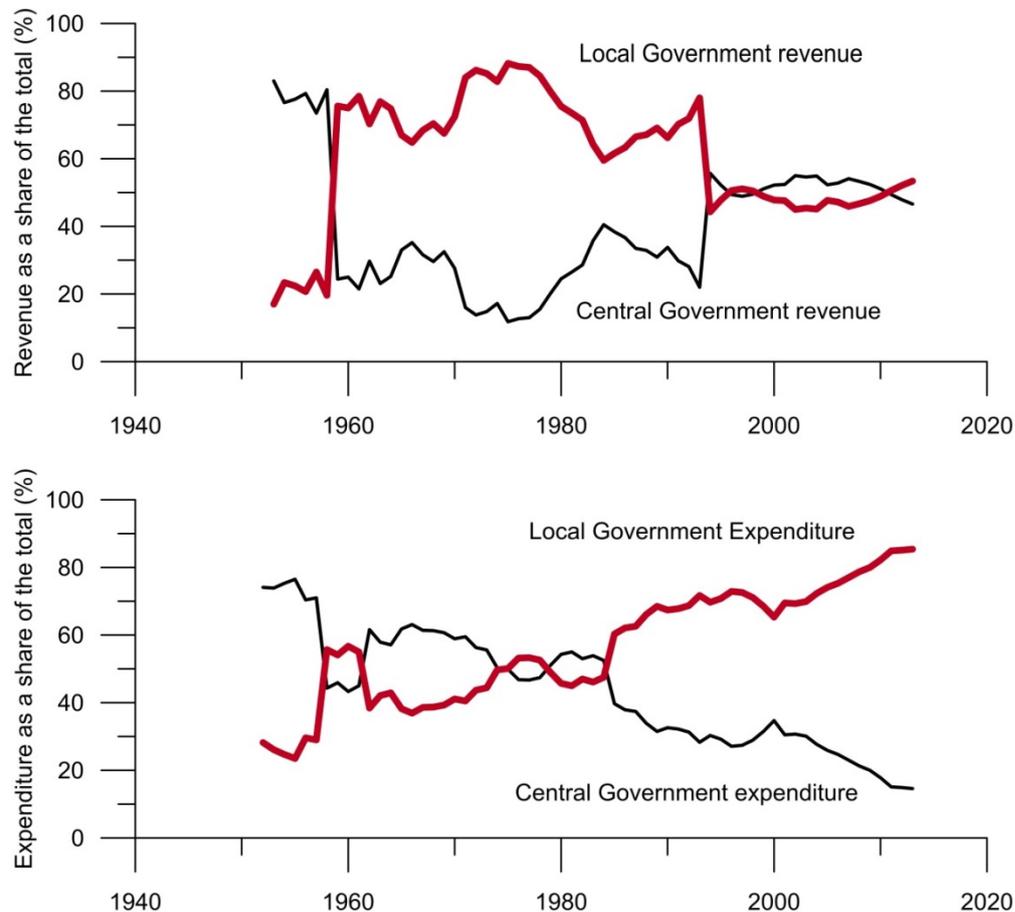
The first stage of reform extended from 1978 to 1993 and involved the development of management autonomy and the gradual reform of prices, but ended with an inflationary crisis and social unrest at the end of the 1980s, a recession and in 1993 a renewal of inflation. Management reform was introduced first in the countryside, where the planning system was weakest: in 1979 the purchase price of grain output increased by 20%, and in 1981 the Household Contract Responsibility System (HCRS) was introduced under which households were allowed to contract land, machinery and facilities from rural collective organizations. In 1983 peasants use rights to contracted land were set at 15 years, in 1993 contracts were extended for another 30 years, and in 2003 a Rural Land Contract Law was passed specifying contracts' length for arable (30 years), grass (30–50 years) and forest land (30–70 years). Households were permitted to make decisions subject to the contract, and could sell any surplus over collective and national quotas, which themselves were reduced. This system involved a dual system of prices: prices determined by the plan at which quotas were sold to the state, and market prices for surplus output. Along with reduced farm input and equipment prices, these changes resulted in strong increases in farm output (33% in 1978–84) and income.

Alongside the HCRS, in small towns, Township and Village Enterprises (TVEs), as former Commune and Brigade-run Enterprises (CBEs) were called since 1984, increased rapidly in number and absorbed surplus rural labour. The growth of TVEs was however also only possible because of pre-reform conditions: in China the Maoist emphasis on local self-sufficiency resulted in substantial provincial and local decentralisation and specialisation. Before the market reforms 78% of Chinese industrial enterprises were small-scale, labour-intensive collectives controlled by local governments (Nee, 1992). Multi-level decision making and the early establishment of CBE-SOE relationships also contributed to the subsequent expansion of subcontract relationships. In 1979 the central government provided a number of incentives to CBEs: no tax for three years on new enterprises; the

opening-up of markets connected with agriculture (fertilisers, equipment and so on) and of consumer good sectors (food, textiles and clothing); and the opening-up of local product markets. The subsequent rapid growth of TVEs increased the demand for industrial goods and market output, increased the opportunities for realising scale economies, increased competition and reduced the significance of the planned sector. In 1996 TVEs employed 135.1 million people.

Until 1980 most taxes and profits were collected by local governments (Figure 5), and remitted to the Central government which transferred a part back to cover approved expenditures. In 1980 a revenue-sharing system was adopted in which governments each started to 'eat' in separate kitchens. Called a Contract Responsibility System it identified central revenues, local revenues and shared revenues. The resulting degree of fiscal decentralisation enabled local governments to keep local revenues and to retain a share of shared tax revenue over and above a fixed central government quota. Modified in 1985 and 1988 this system encouraged local officials initially in coastal areas to promote local economic development. From 1979 to 1993, the ratio of total budgetary revenue to GDP declined from 31% to 12.2%. The Central government's share after revenue-sharing also declined from 46.7% (measured by expenditure) 22%.

Figure 5 Distribution of tax revenue and expenditure in China, 1950-2013. Source: elaborated from NBS, 2015.



In 1984 after the success of rural reform and experimentation with greater management autonomy of SOEs in Sichuan, the management of urban enterprises was devolved to managers. After meeting plan obligations in volume terms, enterprises were allowed to sell additional output at market prices for profit. As a result of a fiscal reform enterprises also paid a tax on profits instead of remitting all profits to the state (though prices moved against industrial activities, and competition increased). In 1979 and 1984 the banking system was also reformed first with the establishment of three banks alongside the People's Bank of China (PBOC) to provide credit for agriculture, construction and commerce (Agricultural Bank of China, China Construction Bank and Bank of China) and then with the conversion of PBOC into a central bank and the transfer of its credit operations to the new Industrial and Commercial Bank of China.

At first industrial output increased with the growth of TVEs. As a result of the SOE reforms, urban wages and incomes also increased, but productivity did not. Many enterprises therefore made losses and debts increased. The loans that banks were pressed to provide to enable enterprises to survive saddled them with non-performing loans. As everyone worked for the state, income growth was relatively general and equal. In 1985 the government abolished the state monopoly of purchasing and marketing grain. Grain was sold, however, (grain rationing was not abolished until 1993) for less than the purchase price. Food subsidies, deriving from differences between increasing purchase prices and sale prices kept down to limit inflation and provide cheap food in urban areas, and subsidies to SOEs increased government expenditures, while the weak performance of many enterprises on which government revenue depended led to an acute need for new sources of government revenue. The situation was exacerbated by a decline in the central government's share of fiscal revenue. The combination of greater demand relative to output, more credit provided to SOEs and increases in liquidity increased inflation. In 1988 inflation reached 18%. Consumer prices rose from an index of 100 in 1978 to 131.1 in 1985, 216.4 in 1990 and 396.9 in 1995 (NCBS, 2013). In these conditions resentment at the erosion of the economic security afforded to the urban population increased, and was the main driver of the 1989 political crisis.

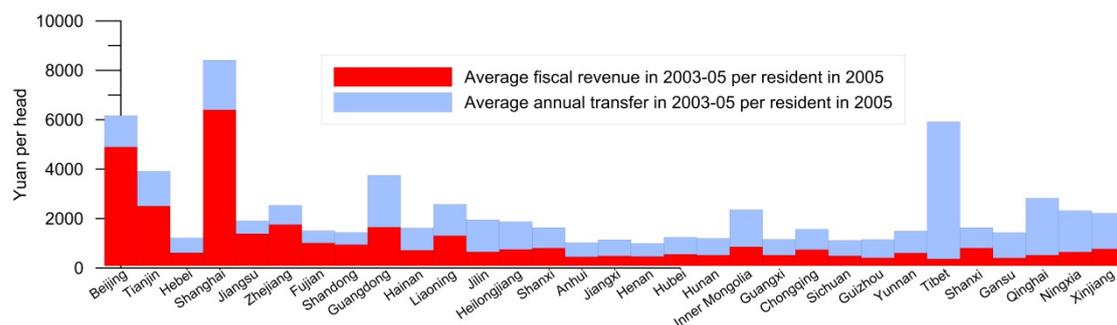
1.4 The second phase of reform and opening-up

This crisis led to a series of measures to address some of the tensions (grants to SOEs in difficulty, greater control over TVEs and stricter control of rural-urban migration) and a process of deliberation that opened the way to a second stage of reform from 1994 to 2008. In 1992 the 14th Congress of the CPC adopted the 'socialist market economy model', corporate management methods and a Corporate Law that established limited liability and shareholding companies. After Deng Xiaoping's Southern Journey, greater openness resulted in a strong increase in foreign direct investment (FDI) (Section 5), which brought new technologies and management practices to China and provided private firms with investment opportunities and access to credit, increasing private sector growth from 10% of industrial enterprises in 1990 to 32% in 1996.

One of the first major steps was fiscal reform, designed to increase the fiscal capacity of the central state. This reform involved two changes which saw a decline in the extent to which

China was an 'owner-state', which generates fiscal revenues mainly from profits of state-owned enterprises and a movement in the direction of a 'tax state and in the direction of a 'rent state' in that since 2000 sub-national governments have drawn significantly on land finance generating extra-budget revenues from leasing lands to developers (Ma, 2011). More specifically, the first was a switch to a reliance on tax (Value Added Tax, taxes on luxuries, taxes on enterprises, but until 2008 with favourable rates for foreign firms, and income tax) rather than the income of SOEs. The second was the adoption of a new tax sharing system. In addition a fiscal administration was established. As a result Central government financial revenue increased from 22% in 1993 to 56.7% in 1994 and 46.6% in 2013. Government fiscal revenue increased from 12.2% of GDP in 1993 to 22% in 2013. The responsibility for spending money was not adjusted. The Central government share of revenue significantly exceeded its share of expenditure (30.3% in 1994 declining from 2004 to 14.6% in 2013). In the case of local government the gap between revenue and expenditure was covered in via transfers (Figure 6). Governments also draw on extra-budgetary income from land in particular to finance extra-budgetary expenditures or to supplement their fiscal budget. As is clear from Figure 6 however the fiscal resources at the disposition of sub-national government varies widely.

Figure 5 Fiscal transfers and provincial government revenue, 2006. Source: elaborated from NBS, 2015.



The fact that SOEs were making losses and had welfare obligations raised their costs and reduced their competitiveness. The state needed to protect its financial position. These factors were among the reasons for the Corporate Law reform that made enterprises into public companies. From 1993 to 1997 the government proceeded with further reforms that ended the iron rice bowl, allowed bankruptcies, permitted redundancies and, with the 1997 adoption of the principle of holding onto large enterprises and letting small ones go (zhua da fang xiao), allowed privatization. SOEs incurring losses or insufficient returns had three years to resolve their difficulties (san nian tuo kun). After three years 53,000 small SOEs could find their own way either closing or privatizing, while the government held on to larger enterprises. The government decided, first, either to sell to managers and workers, or to managers, or to close unprofitable firms in non-strategic sectors (not related to national security, natural monopolies, essential public services, and high technology). As this process was in the hands of local governments, many officials enriched themselves. Second, the government decided to allow redundancies. In the period up to 2004, more than 37 million workers were laid off. From 1997 to 2004, SOE employment declined from 107.7 million to 43.4 million (Aglietta and Bai, 2012: 151–2). Change occurred however without serious

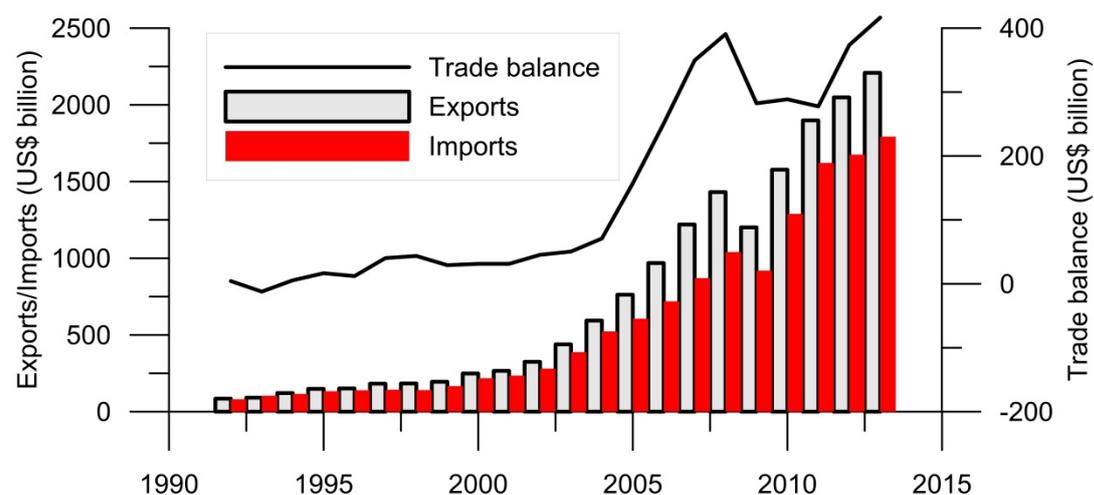
conflict because of the speed of economic growth and the creation of alternative employment, the generosity of the Xia Gang programme (workers laid off received three years' pay, pensions, health insurance and local government social security), the 1994 housing reform that sold public housing at favourable prices to their occupants and the support to laid-off workers provided by friends and extended family networks.

As mentioned earlier, however, the state retained a very significant economic role. The state had its own resources that it used to invest after the Asian crisis from 1998 to 2003 and after the world Western financial crisis in 2007–8. These investments encouraged close relationships between enterprises and the state. The financial system depends on banks under the control of the state that mainly fund SOEs, finance house purchases and fund local government-related urban development corporations. The Chinese government could therefore raise effective demand without a system of administrative planning.

5 Opening-up and globalization

Alongside internal reform, China embarked on the opening-up of its formerly closed economy to the rest of the world. In 30 years, China transformed itself into a great commercial power. In 1978 exports and imports accounted for 4.6 and 5.1% of GDP. In 2007 they accounted for an extraordinary 35.7 and 29.1%, declining to 23.3% and 20.6% in 2013.

Figure 6 Mainland China's trade, 1992-2013. Source, WITS, 2015



Opening-up was made possible by a change in the international climate. The end of the Vietnam War in 1973 and the establishment in 1979 of diplomatic relations with the United States reduced international tensions. In 1979 several exchange rate measures were introduced, including the establishment of a short-lived dual exchange rate system, to encourage Chinese exports. In the same year joint ventures were permitted to encourage inward investment in certain sectors in which Chinese enterprises were not present. In the 1980s Special Economic Zones (SEZs) were established in Shenzhen, Zhuhai and Shantou in Guangdong Province and Xiamen in Fujian Province.

The establishment of these zones involved assignment by the state of distinctive regimes of governance and regulation within the territory of a sovereign state.⁶ In these zones a range of exceptional and preferential policies were implemented to act as an economic bridge across political borders and a political window. The first four were all located next to places with strong relationships with Chinese communities (Shantou) and in several cases were designed to integrate economically disarticulated political entities as part of a path to eventual political integration (Shenzhen and Hong Kong, Zhuhai and Macao, Xiamen and Taiwan).

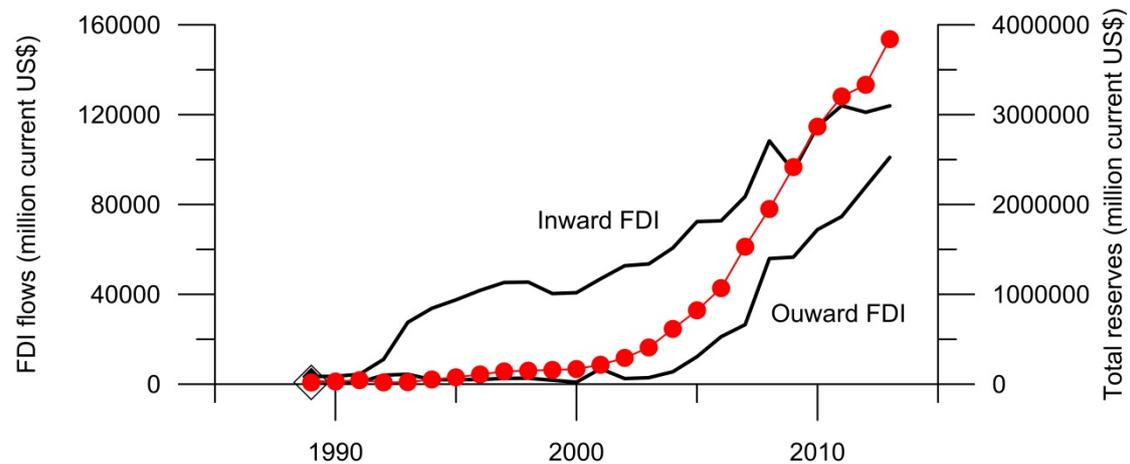
In 1988 Hainan Province was designated a SEZ. In 1984 14 Open Coastal Cities (OCCs) were opened to foreign investment. In subsequent years, coastal SEZs were expanded. In 1985 three Coastal Economic Development Areas (CEDAs) were established in the Changjiang (Yangtze River) Delta, Zhujiang (Pearl) Delta and the delta area that covers Xiamen, Zhangzhou and Quanzhou in southern Fujian. In 1988 two new CEDAs were created in the Liaoning and Shandong Peninsulas. In the years up to 1991 these open coastal economic zones were transformed into an open coastal belt comprising 289 cities and counties, covering an area of 320,000 km², with 200 million people. In 1993 the first state-level New Area was established in Pudong in Shanghai. In the 1990s a number of border cities and the capital cities of inland provinces and autonomous regions were opened up. Fifteen Free Trade Zones were established, as were 32 state-level Economic and Technological Development Zones, and 53 New and High-tech Industrial Development Zones in large and medium-sized cities. In 2006, a second state-level New Area was established in Tianjin (Binhai New Area). In 2010 and 2012 others were added in western China in Chongqing (Liangjiang New Area), Lanzhou, Xi'an and Guiyang. The aim was to attract foreign investment, earn foreign currency, import technology and management expertise, open up commercial channels to markets for Chinese produced goods and services and diffuse development. In these zones, contracts were handled by the local government. Competition between local governments was fierce, with preferential policies offering land cost, energy cost and fiscal advantages to investors.

The designation of special zones was associated with a dual-track approach. On the one hand, the government encouraged contracts between foreign direct investors and Chinese subcontractors or joint venture partners in the processing trade, reducing China's exchange rate for money earned from exports from SEZs to make export processing attractive and competitive. Beginning in 1978 TVEs in labour-intensive sectors such as textiles, clothing and toys in the Pearl River Delta acted as Hong Kong subcontractors, while TVEs in Fujian worked with Taiwan. On the other, the government ensured that ordinary trade was relatively protected, and maintained numerous capital controls. Currency convertibility was confined to banks and SOEs involved in international operations and current account holders. This

⁶ As Cameron and Palan (2004) point out it involves of de-regulation as a new means of re-regulation of economic flows as with Economic Development Zones make 'domestic' and 'international' economies are discrete spaces with the former subject to revised national control, and part of a regime of variegated sovereignty and variegated articulation with global flows.

decision was important: by choosing not to open up completely, China ensured that domestic industries serving the domestic market were not destroyed by foreign competition.

Figure 7 China, FDI and reserves. Source: elaborated from APEC, 2015



At first, in the 1980s, FDI increased slowly, but from 1992 to 1998 it increased strongly (Figure 7) in part because of reforms that followed Deng Xiaoping's Southern Journey in the spring of 1992, which confirmed the progress of the SEZs. The flow of FDI to China was greater than for any other emerging country, and second only to the USA. In 1999 and 2000 FDI declined due to the Asian and Russian crises. In 2001 China entered joined the World Trade Organization (WTO), leading to a powerful new wave up to 2008. These investments transformed the economies of the provinces/municipalities (Guangdong, Fujian, Shanghai, Jiangsu, and Beijing) in which they were concentrated, making China a cornerstone of the international division of labour, increasing productivity and helping reduce inflation.

In the 1990s China upgraded strongly, entering new technology industries (Li et al., 2011). From 1996 to 2012 trade surpluses increased for automatic data processing machines increased from \$3.5 billion to \$185.9 billion, for transmission apparatus for radio-telephone from a deficit of \$0.6 billion to a surplus of \$93.8 billion, for electrical apparatus for line telephony from \$1.2 billion to \$75 billion, and for electronic integrated circuits from \$0.5 billion to \$56.5 billion (WITS, 2014).

In the mid-2000s trade growth accelerated and China's foreign trade surplus (Figure 6) and foreign reserves (Figure 7) increased dramatically in spite of an upward movement in the exchange rate. The first reason was the growth in (credit-driven) international demand from developed countries. The second was import substitution by Chinese companies in sectors such as steel and machinery. Exports increased sharply from 27% of GDP in 2003 to 37% in 2007 and the trade surplus increased from 2% to 8%.

6 Towards a third phase of reform and a new model of sustainable development

This export-oriented model of development of the second phase of reform and opening-up created new contradictions. In 2008, the Western financial crisis led to a sharp drop in

external demand. Exports declined, many industries were left with excess capacity, many workers in east coast industries were laid off and growth slowed down. Only a strong government fiscal stimulus plan adopted in November 2008 enabled growth to recover, although it was also evident that China could no longer rely on export-led growth, in part due to the secular slowdown in Western growth dating from the 1970s and the fact that Western countries will take a long time to recover from the latest growth phase of slightly faster growth, since it rested on property speculation, credit-financed over-consumption.

Moreover, China still relies heavily on exports of cheap standardised mass products. Much of the value is added outside of China. Moreover, many of these products are made by foreign companies located in China (including some 80% of electronics sector output), and do not reflect the innovation capacity of Chinese companies. As early as 2006 the Chinese government had concluded that foreign equipment purchases and foreign investment flows had not brought the core technologies required to revive the Chinese nation and make China a technology powerhouse by 2020 (Yang, 2014). The State Council (2006) 'Guidelines for the Implementation of the National Medium- and Long-term Programme for Science and Technology Development (2006-2020) proposed a new strategy of indigenous (zizhu) innovation in which imported technologies would be enhanced through co-innovation and re-innovation based on the assimilation of imported technologies. The aim is to increase indigenous R&D efforts and encourage domestic enterprises to have more strategic control and independence in their technological interactions with foreign parties whether in export-oriented production networks of TNCs located in China involving limited R&D or through state-initiated coupling of domestic and leading global TNCs. In 2009 after the financial crisis this strategy assumed greater importance. R&D funding in China reached a historically high level of 1.7% of GDP in 2009, surging from 0.8% in 2001. In 2010 the central government selected seven strategic emerging industries (SEIs) as ones to achieve rapid technological breakthroughs: energy saving and environmental protection; new information technology; biology; advanced equipment manufacturing; new energy; advanced materials; and new-energy vehicles (Table 2). The aim is to move away from low value-added, labour- and energy-intensive and polluting industries to knowledge and technology-intensive industries and from production to innovation.

Adapting existing technologies and driving down costs has enabled a substantial number of innovative and highly competitive companies to emerge. In the wave of growth up to 2008 however a significant share of investment by major domestic industrial concerns was in capital- and machine-intensive industries in sectors related to the industries with significant net exports, infrastructure provision and property development. These industries are capital-, energy- and pollution-intensive and do not pay the social and environmental costs of their activities; in some cases they have substantial excess capacity, which the government has sought to address in part by moving industrial plants to other emerging economies with expanding markets for these products. A consequence is serious environmental degradation that has started to be addressed in the new millennium.

Domestic industries are also associated with high rates of investment which reflect very high savings rates and a relatively low share of consumption in final demand. And yet China has recorded the fastest rates of total (including government consumption that includes health

and education) and household consumption in the world for countries for which there is data whether these countries are small or large. In 1978-2013, consumption increased on average at 8.3% per year, and household consumption at 7.5%, driving increased living standards (Table 4).

Table 4 Consumption growth rates in the BRICS and high performing economies, 1978-2013.

Source: elaborated from World Bank World Development Indicators, 2015.

	Annual average total consumption growth (2005 US\$, %)				Annual average household consumption growth (2005 US\$, %)		
	1978-2013	1990-2013	Rank (1978-2013)		1978-2013	1990-2013	Rank (1978-2013)
China	8.3	8.2	1	China	7.5	7.8	1
Botswana	6.3	4.9	2	Botswana	6.1	5.7	2
Indonesia	5.9	4.9	3	Malaysia	5.9	6.0	3
Singapore	5.8	4.8	4	Indonesia	5.7	4.9	4
Malaysia	5.7	5.8	5	Singapore	5.3	4.8	5
India	5.4	5.8	6	India	5.1	5.7	6
Russian Federation		4.0		Russian Federation		3.9	
Brazil	2.8	3.1	39	South Africa	3.2	3.1	28
United States	2.6	2.4	40	Brazil	3.1	3.5	29
South Africa	2.6	2.6	42	United States	2.8	2.7	39

Gross capital formation has consistently accounted for a very large share of GDP (Table 5), standing at 37.8% of GDP in 1978, 48.3% in 2011 and 48.8% in 2012. The high rates after the western financial crisis are due in part to the impact of the fiscal stimulus on infrastructure investment. Consistently high rates reflect the speed of industrialization and urbanization. A high investment rate does not in itself indicate an over-emphasis on investment at the expense of consumption. In 2010 capital per head in China was just 8% of that of the United States, and 17% of that of South Korea (Qu and Sun, 2012). At 93.3 trillion Yuan the capital stock/GDP ratio stood at just 2.31. As a large share of the population is still rural, high rates of investment per capita are and will be required to raise productivity and per capita income.

Table 5 Gross capital formation as a share of GDP (%). Source: World Bank, World development indicators, 2015

	China	India	Russian Federation	South Africa	Euro area	United States	Brazil	World
1978-1987	35.9	21.4		24.5	22.5	23.8	20.6	24.6
1988-1997	39.2	23.6	25.8	17.4	21.5	21.4	20.4	23.8
1998-2007	39.4	29.2	19.8	17.4	21.3	22.6	17.0	23.0
2008	44.0	35.5	25.5	22.7	22.1	20.8	20.7	23.5
2009	48.2	36.3	18.9	19.5	18.8	17.5	17.8	20.8
2010	48.2	36.5	22.6	19.2	19.1	18.4	20.2	21.6
2011	48.3	36.4	25.5	19.5	19.6	18.4	19.7	21.8
2012	48.8	34.7	26.0	19.4	18.4	19.0	17.6	21.7

Table 6 GDP, employee compensation and profitability, 1998–2012 Employee compensation, profitability and household consumption as a share of GDP (%), 1998-2013. Source: NBS, 2014

Year	Compensation of employees	Depreciation of fixed assets	Net taxes on production	Operating surplus	Household consumption expenditure
1988					51.1
1993	49.5	11.7	14.0	24.7	44.4
1994	50.6	12.0	13.8	23.5	43.5
1995	51.8	12.2	13.0	23.0	44.9
1996	51.8	12.9	12.7	22.7	45.8
1997	51.6	13.4	13.3	21.7	45.2
1998	51.5	14.0	13.5	20.9	45.3
1999	50.7	14.6	13.8	20.9	46.0
2000	49.6	15.1	14.3	21.0	46.4
2001	49.1	15.4	14.1	21.3	45.3
2002	48.8	15.4	14.0	21.8	44.0
2003	47.2	15.6	14.1	23.0	42.2
2004	43.0	14.2	14.3	28.5	40.5
2005	43.6	14.9	14.0	27.5	38.9
2006	43.2	14.5	14.2	28.1	37.1
2007	42.9	13.9	14.8	28.5	36.1
2008	46.5	13.5	14.8	25.3	35.3
2009	46.6	13.5	15.2	24.7	35.4
2010	45.0	12.9	15.2	26.9	34.9
2011	44.9	12.9	15.6	26.5	35.7
2012	45.6	12.9	15.9	25.7	36.0
2013	45.9	12.6	15.9	25.7	36.2

The availability of cheap capital and high investment rates resulted in an enormous expansion of manufacturing industries. Industrial growth drew large numbers of young and relatively unskilled migrant workers to eastern coastal cities. Investment increased productivity faster than wages, raising profitability and contributing to a reduction in the share of employee compensation from 51.8% of GDP in 1996 to 42.9% in 2007, of household

consumption from 45.8% to 36.1% (Table 6). As the share of wages and household income as a percentage of GDP was low, excess capacity was absorbed by exports.

From 2000 to 2007 migrant worker wages increased just 5% per year (2% in real terms) compared with 16% for workers in SOEs and 14% on average, while profits increased strongly as did the operating surplus (corresponding to gross profits). The decline in the wage share derived from the infinitely elastic supply of rural labour and also from the fact that a large share of the workforce had no employment contract. Towards the end of the decade, the decline in the wage share ended. Changes in demography, and the associated reduction in the relative size of the potential rural migrant workforce (Figure 6) played a significant part. In 2010 there were 260 million young rural migrant workers. The number of people under 15 peaked however in 1995, the number of 15–25-year-olds peaked in 1990, while the number of 25–60-year-olds is expected to peak in 2020. At the same time dependency rates are increasing (Figure 4). In 2009 in eastern regions the migrant population declined by 8.9% with many preferring to work nearer to their homes in the Centre and West. This change in the labour market was related to China's arrival at a Lewis turning-point at which the demand for labour exceeds supply at subsistence wages and demand for agricultural goods in cities drives up food prices, increases investment in agriculture and raises farm productivity and income. The new situation increased the negotiating power of workers, exerting pressure on the government to raise the minimum wage and increase social transfers. As a result enterprises on the east coast must either upgrade or relocate to areas where wages are lower outside of China or in central and Western China to which many labour-intensive enterprises were relocated. At the same time the increase in wages increased household consumption contributing to the expansion of the domestic market.

As a result of the trends up to 2008, disparities in income between the rural and urban populations, between the propertied urban middle class and the rest of the population and between owners and non-owners increased. According to the World Bank (2014), the Gini coefficient has risen dramatically from 29.1 in 1981, to 29.9 in 1987, 35.7 in 1996 and to 42.6 in 2008. In a country such as China, however, this indicator should be used with caution as income and consumption expenditure-related indicators overlook the fact that a good part of the rural population has access to significant non-market resources. Access to public services also differs however possibly amplifying disparities. Although the incomes of most sections of the population have increased, the growth in inequality is a major source of discontent, a threat to social stability and a constraint on domestic growth. On the one hand, the propensity to consume decreases as income increases. Consumption cannot therefore drive growth, if income inequality continues to increase. On the other, China's floating population and rural population afford a massive potential market, especially if their incomes increase relatively quickly compared with more affluent sections of the population.

This situation has already started to change in part due to the arrival at a Lewis turning point but also as a result of government action. The 2004 Number 1 Document of the CPC Central Committee dealing with agriculture, rural areas and farmers introduced the 'two reductions (in agricultural taxes) and three subsidies' that had a significant impact on rural incomes.

A further problem arising in this era derived from the fact that local authorities that are responsible for 70% of expenditures sought to increase their revenue by purchasing land use rights at agricultural values and selling them at commercial values to property developers. In development zones local authorities could also gain from land value appreciation, although, in many cases, to attract industries and earn tax revenue, industrial land use rights are sold at less than their market value. In China, therefore, local authorities earned substantial revenue from land appreciation and from the tax revenue generated by new economic activities. As Henry George argued, the taxation of development gains is warranted, as the appreciation in the value of land does not usually stem from the activities of the owner. In China, however, farmers were, in the past, paid relatively little for their land, and the quest for revenue encouraged an over-accumulation of industrial land. As of 2012, land expropriation fees cannot exceed 30 times the average annual output value of farmland in the three preceding years, making the maximum about 60,000 Yuan per mu. In addition farmers get a resettlement fee and compensation for ground structures and young crops. After the construction of infrastructure, use rights can be sold to a developer for 6 million Yuan per mu. This gap is a major source of grievance and of mass incidents, and has led to proposals for revised requisition compensation arrangements that are expected to entail a tenfold increase in this maximum, with a part going to the farmer and a part taxed to pay for local collective services (Xinhuanet, 2012).

The availability of credit and an associated with increased indebtedness were also drivers of the high rate of investment (and of rapid house price inflation). According to the National Audit Office, at the end of June 2013 governments at various levels were liable for a total direct debt of 20.7 trillion Yuan compared with 1.63 trillion Yuan at the end of 2012. In China, local governments are not legally allowed to borrow funds on their own. As fiscal revenue is insufficient, local authorities rely therefore on land finance and also on back-door approaches for funding that involve SOEs and local government financing vehicles. At present government debt is beneath internationally recognized warning lines, and estimates of the likely scale of potential under-performing loans suggest that they are manageable. The problem of local authority finance is currently being addressed by the central government, as is the question of regulatory control over shadow banking. Most importantly, however, international concern that China is at risk from a speculative bubble and that the high rate of investment carries excessive risks is counterbalanced by a simple fact: China is a creditor country and not a debtor country (Bagnai and Ospina, 2010). These credits are not just an instrument that China can use to protect its economy, secure materials and supplies and acquire technologies, but they also afford significant protection against financial risks.

The quest for GDP growth has also given rise to major ecological problems. China's growth is energy-intensive, because of the industrial mix exacerbated by the fact that fossil fuels account for 70% of energy needs, and the rapid growth of car ownership, exacerbated by the use of high-emission vehicles and poor fuel quality. And yet per capita emissions are not high compared with those of developed countries. The size of the population is however so large that China's carbon footprint is huge, and has to be reduced significantly, not least to reduce its serious domestic repercussions. The scarcity of water is a second major problem. China has just 7–8% of world freshwater reserves (Table 3). The per capita demand for water is rising with large shares (85%) for agriculture and industry, while per capita water

resources are falling. Geographically, limited precipitation and desertification in northern China have coincided with typhoons and floods in southern China. The response of the government is the construction of three canals to transport 44.8 billion m³ of water annually from the south to the north: an eastern route through the Grand Canal; a central route from the upper reaches of the Han River; and a western one from three tributaries of the Yangtze River to north-west China. Air pollution, soil pollution and water pollution are also serious problems, as are a range of ecosystem changes.

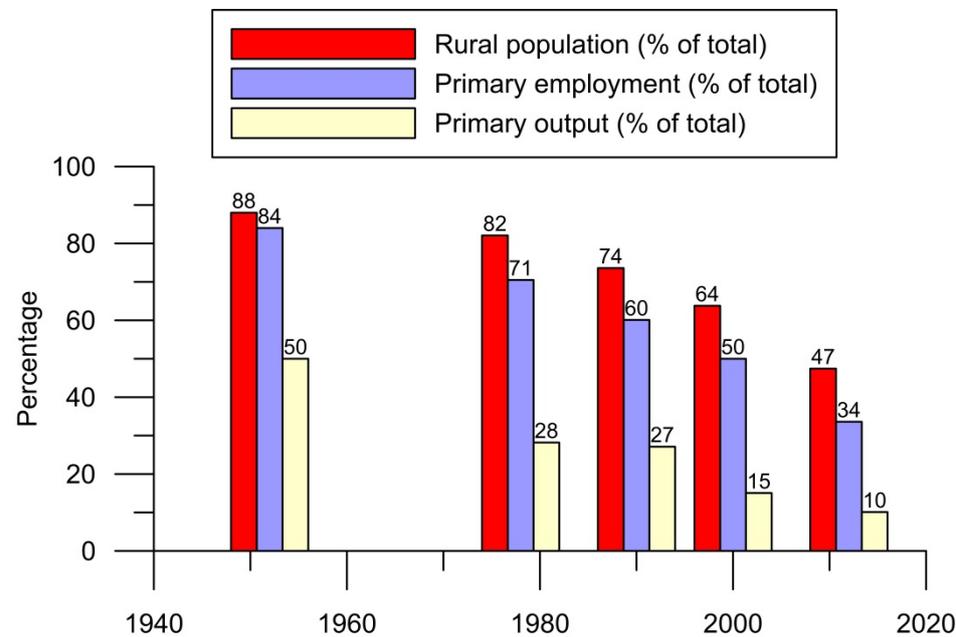
On March 5th 2014 Premier Li Keqiang announced that 'we will declare war against pollution and fight it with the same determination we battled poverty'. In his government report he declared, 'We will fully implement the plan for preventing and controlling air pollution, with the focus on mega cities and regions with frequent occurrence of smog. We will start by reducing PM10 and PM2.5 emissions, and focus on the following key areas: improving the industrial structure, raising energy efficiency, reducing vehicle exhaust emissions, and preventing and monitoring wind-borne dust. . . . We will implement the Clean Water Action Plan, strengthen the protection of sources of drinking water, prevent and control water pollution in key river basins, and carry out land restoration. We will control non-point agricultural source pollution. [. . .] We will change the way energy is produced and consumed. [. . .] We will move forward with ecological protection and development. We will continue to carry out the project to convert marginal farmland back to forests and grassland, with this year's target being 333,300 hectares. We will implement major ecological projects to return grazing land to grassland, protect natural forests, prevent and control sandstorms, conserve water and soil, prevent and reverse the expansion of stony deserts, and recover wetlands. We will strengthen ecological conservation at the sources of the Yangtze, Yellow and Lancang rivers. We will implement the functional zoning system and give impetus to the establishment of trans-regional and cross-watershed mechanisms to compensate for ecological damage' (Xinhuanet, 2014).

These economic, social and environmental problems are at the root of the quest for a new and sustainable model of development. The aim of this model is to raise living standards so that China can reach a state of moderate prosperity (xiao kang) with an income per head approaching that of developed countries. The emphasis is however not on GDP growth but on increases in economic, human and natural wealth and in economic, human and social capital. This quest was reflected in the adoption by the Sixth Plenum of the Sixteenth Central Committee of the CPC of a resolution to establish by 2020 a 'harmonious society' (centred on rule by law, justice and equality, an absence of corruption and harmonious people-nature relationships). It was also reflected in the 11th (2006–10) and 12th (2010–14) Five-year National Economic and Social Development Plans (FYPs). And it is reflected in the adoption of a 'new normal' rate of GDP growth of around 7% per year.

A country the size of China must first and foremost find the drivers of its economic development in the integration and expansion of its domestic market. Infrastructure provision plays an important role. In less than ten years China constructed a new high-speed rail network is already nearly 10,000 kilometres long. Domestic-oriented growth also implies a change in the distribution of income, under which the income of low-income groups

increases the fastest, and in which wages rise, as has already started to occur especially in some coastal zones.

Figure 7 Evolution of the rural population and primary sector employment and output, 1952–2012



In the years ahead, urbanization will play a fundamental role in the transformation of China’s social model and its future economic growth. In China in 2012 47.4% of the population was rural, down from 82.1% in 1978, and 33.64% were farmers (or other primary sector workers), although agriculture (and other primary sectors) accounted for just 10.1% of GDP, helping explain low rural incomes (Figure 7). According to China’s National New-type Urbanization Plan (2014-2020) issued by the Central Committee of the Communist Party of China and the State Council, at the end of 2013 permanent urban residents reached 53.7% of the population. The registered urban population (with a non-agricultural Hukou) was however just 35.7% of the total. By 2020 permanent urban residents are expected to reach 60% and those with a non-agricultural Hukou 45% (Sina.com.cn, 2014), adding some 112 million to the permanent urban population and some 76,000 to those with a non-agricultural Hukou, If by 2030 the permanent resident population were to reach 75%, the permanent urban population will increase by some by some 330 million people (United Nations Population Division, 2011 and Author’s calculations).

Increased urbanization implies: an increase in purchasing power (as urban incomes are far higher than rural incomes); massive investments in new infrastructure and in housing and commercial and industrial property, requiring a high rate of investment; significant increases in urban employment and urban services; increased social protection (health, pensions and social security) and reduced cautionary savings (Figure 1). This process will involve Hukou reform and the integration of rural-urban migrants into urban life. As the number of farmers diminishes, this process will also involve the transformation of the countryside to increase rural productivity and feed the expanding urban population. These measures must be carefully planned: rural property rights play a vital role in providing rural welfare and

security, while land is an important source of government revenue. The aim of rural reform in China is to permit some concentration of land use rights without leading to social polarisation in rural areas, and the development of urban slums.

The urbanization of such a large number of people and the high potential costs in terms of pollution and the use of more natural resources require not just the creation of a network of sustainable cities. China's growth, and indeed that of other emerging economies, requires the development of a new sustainable mode of consumption and way of life that can drive innovations that respect the environment, decouple increases in income and increased energy consumption and drive down costs to provide affordable goods and services to large numbers of people. The challenge is to develop compact, high-density and high-rise cities that rely overwhelmingly on public transport, cycles and electrical vehicles and are connected by high-speed rail, avoiding the problems of urban sprawl, wasteful and inefficient use of land, congestion, inadequate sewage and waste management systems, and air, soil and water pollution. An effort of this kind requires a government that is politically stable and takes a long-term strategic view, powerful institutions and a participative society.

The reorientation of growth towards domestic demand will also involve more equalised spatial development. Already since 1986 the gap between the coast and the rest of the country has started to narrow, with central and western provinces recording above-average rates of growth. Since 2000 these areas have benefitted from major infrastructure investments in the context of policies for western, central and north-eastern development and the fiscal stimulus programme. With a relatively large rural population, these areas have an advantage in terms of labour supply and wages that are a stimulus to the transfer of labour-intensive industries from the east coast. The provinces in Central China are moreover important grain producing areas, increasingly important transport nodes connecting the east coast and western China and have the advantage of large populations giving them considerable potential for modern agricultural and urban development.

The reorientation of growth also involves China's international relations. After China joined the WTO, the geography of China's foreign trade changed significantly with respect to Asia (excepting Japan), Latin America and Africa as markets and as sources of imports (Table 7). Changes in the international environment and increases in wages suggest that labour-intensive industries will move towards low-wage countries, forcing export sectors to upgrade, relocate in central and western China or serve the domestic market.

Table 7 China's exports plus imports by area as a share of the total (%). Source: elaborated from WITS, 2015

Exports plus imports	1992	1996	2000	2004	2008	2013
Japan, Korea, Taiwan	18.8	27.8	25.3	23.2	18.4	14.8
North America	12.1	16.2	17.4	16.6	14.9	14.4
Western Europe	12	14.4	15.6	15.8	16.5	14.3
ASEAN Free Trade Zone	5.5	7.3	8.5	9.5	9.4	11.1
CIS and Mongolia	4.1	2.9	2.3	2.8	4.1	4
Middle East and North Africa	2.1	2.5	4.1	4.2	6.9	7.6
Latin America, Caribbean and Atlantic	1.8	2.3	2.7	3.6	5.8	6.5
Australia, NZ, Pacific	1.7	2.1	2.1	2.2	2.7	3.8
South Asia	0.8	1.1	1.2	1.8	2.7	2.4
Sub-Saharan Africa	0.7	1.1	1.8	2.1	3.5	4.3
Eastern and SE Europe	0.4	0.5	0.7	1	1.5	1.4

Moreover, from 2004 to 2013, China's outward investment has increased dramatically (Figure 7) as Chinese companies walked out ('zou chuqu') either by means of acquisitions or organic growth. This change reflects an increase in the competitiveness of Chinese enterprises as a result of the country's strategic use of the global significance of the domestic market to acquire technological and managerial competences (demand wedge), and of Chinese company strategies that offer high technology, customisation and variety, and niche products at low prices (Zeng and Williamson, 2007).

At the same time the Chinese government is embarking on ambitious projects of regional economic and political integration. These projects include a China-ASEAN community of common destiny, a new Asian infrastructure investment bank, a new 21st century Maritime Silk Road, and a land-based New Silk Road Economic Belt. Starting in Xi'an in western China, it stretches through Lanzhou, Urumqi and Khorgas near the border with Kazakhstan before running from Central Asia to northern Iran, Iraq, Syria, and Turkey, whence it crosses the Bosphorus Strait and heads northwest through Bulgaria, Romania, the Czech Republic and Duisburg in Germany to Rotterdam in the Netherlands. From Rotterdam it runs to Venice in Italy meeting up with the equally ambitious Maritime Silk Road. Advanced as 'win-win' these projects involve major infrastructure investments (especially railways and ports) along the routes, technological and financial assistance, and a trade network drawing on comparative strengths and synergies in which goods are more abundant and trade is more high-end. The enlargement of the Shanghai Co-operation Organization and the establishment by the BRICS (Brazil, Russia, India, China and South Africa) of a New Development Bank (NDB), to foster greater financial and development cooperation among the five emerging markets are other ambitious regional and international integration and development projects.

7 Conclusions

In just over 30 years of reform and opening-up China has made remarkable economic progress and secured a major reduction in poverty, although this progress was made possible by some of the changes that occurred during the first 320 years of the new China. The process has involved a series of stages designed to address the problems and

contradictions that emerged out of earlier stages. Today China faces new challenges that require the establishment of a new model of consumption and a new model of sustainable growth that is less capital and energy intensive, that includes a new contract to reduce social and territorial inequalities and to provide universal health coverage and that addresses the question of environmental sustainability. At the centre of these domestic challenges is the development of a new model of sustainable urbanization, while on the global scene China is re-emerging as a global actor, is actively developing new sets of international relationships and is seeking its place in a new multi-polar and probably more equal world (Dunford and Yeung, 2011).

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