

Rebalancing China's economic structure **14**

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Introduction

Chinese Premier, Wen Jiabao, warned in early 2010 that 'the Chinese economy is still imbalanced, inharmonic and unsustainable'. This is not the first time that Premier Wen has expressed concerns about growth quality. He first raised the issue when he took office in 2003 and repeated the warning when the economy showed signs of overheating in 2007. It is probably fair to rank transformation of the growth model as one of the top policy priorities under Wen's government.

Indeed, despite its continuous success maintaining strong growth, the Chinese economy has exhibited worsening structural imbalances in recent years. Some of the growth quality problems highlighted by Premier Wen and other policymakers include the very high investment share of gross domestic product (GDP), the very large current account surplus, inefficient resource use, unequal income distribution, serious pollution and corruption among local government officials. If these problems persist, China's strong economic growth will probably not be sustainable.

The government has undertaken a range of policy measures to adjust China's economic structure during the past seven years. For instance, it has provided large subsidies to agriculture to boost rural income and it has tightened controls over investment projects to reduce overcapacity in certain industries. It has adjusted export tax rebates and revalued the currency in order to slow export growth and narrow current account surpluses. It has required all provinces to lower the energy intensity of GDP by 20 per cent during the eleventh Five-Year Plan to improve energy efficiency and curb pollution. And it has even adopted a new strategy to respond to global climate change.

All these policy efforts, however, have failed to reverse the overall trend of a worsening economic structure. Between 2003 and 2008, the investment share of GDP increased while the consumption share fell, the current account surplus became larger, income distribution became more unequal and pollution probably

became more serious. These do not imply that all policy efforts were ineffective; but deteriorating problems of imbalance certainly raise an important question about what more needs to be done to alleviate the growing risks.

In this chapter, we take a close look at the evolution of structural imbalances in China and their possible remedies. We argue that most of the policy measures implemented so far have addressed the symptoms, but not the root cause. For instance, the over-investment problem was probably caused by the expected high returns to investment. Therefore, unless the incentive structure is corrected, administrative measures controlling investment projects are unlikely to be effective. Marx once said that if the profit rate was above 100 per cent, capitalists would be willing to risk their lives. In this sense, Chinese entrepreneurs are no less likely than others to prove him right.

We further propose that the fundamental cause of structural imbalance lies in the unique pattern of market liberalisation during the reform period: complete liberalisation of product markets but with distortions remaining in factor markets. Such a reform approach generally represses prices for labour, land, capital, resources and the environment. These distortions have the effect of subsidy equivalents for producers, exporters and investors. This is probably why growth has been so strong in China, but exports and investment have been even stronger. If our analysis is right, correction of the structural imbalance problems in China is dependent on the liberalisation of factor markets.

The remainder of this chapter is organised as follows. The next section summarises the major manifestations of China's structural imbalances and then reviews what the government has done to alleviate these imbalances in the past five years. The next section discusses the asymmetric liberalisation of product and factor markets. Subsequently, the effects of factor-market distortion on the structural imbalance problem are presented, before some final conclusions are drawn.

China's growing imbalance problems

Structural imbalance is a broad and subjective concept, although international experience provides some useful references. We focus our discussion on imbalance problems in three broad areas: shares of investment and consumption in GDP; income distribution among households; income distribution across households, the corporate sector and the government; and current account imbalances.

Over-dependence on investment

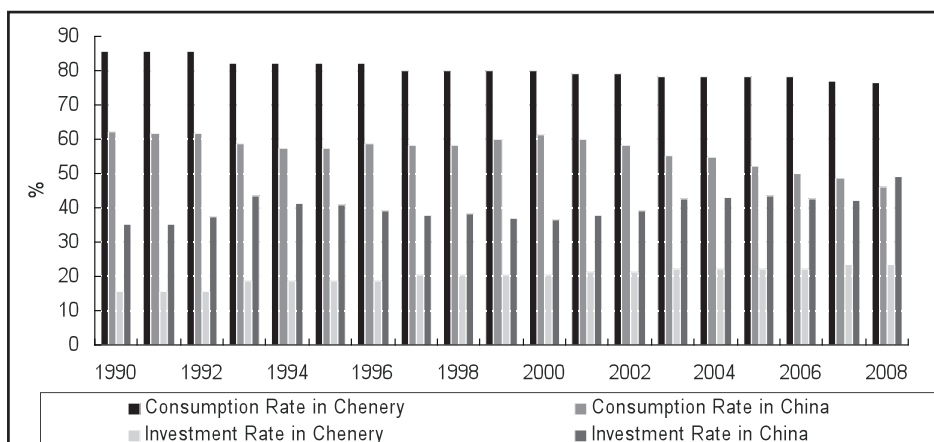
One of the most widely identified imbalance problems is the rising share of investment in GDP, which rose from 38.2 per cent in 1978 to 49.3 per cent in 2008. In contrast, the consumption rate decreased from 62.1 per cent to 46.1 per cent during the same period. In 2008, household consumption accounted for only about 36 per cent of GDP. This share is extraordinarily low compared with most developing and industrialised countries.

A high and rising investment share in itself might not be a problem, as investment is a necessary driver of economic growth. A very high investment share, however, increases the risk of excess capacity and low returns. East Asian economies traditionally have very high investment shares, especially during periods of economic take-off. China's current investment share is, however, high even compared with its East Asian neighbours. During the past several decades, only three economies experienced above-40 per cent investment shares. The first was Singapore in the early 1980s—but its share collapsed in the mid 1980s when structural adjustment was forced on the country. The other two were Malaysia and Thailand in the 1990s. Unfortunately, financial crisis quickly followed in both countries. These previous incidents highlight the potential risks for the Chinese economy should its investment share remain at extraordinarily high levels.

We are not certain that there is an optimal range for the investment share, since it probably varies according to individual economies' particular conditions. Chenery and Syrquin (1975), however, examined the empirical relationship between a country's consumption rate and its per capita national income using data from 101 countries. Applying the empirical relationship implied by their study—known as the Chenery Standard—we find that China's investment share of GDP is roughly 20 percentage points higher than the benchmark, while its consumption rate is about 20 percentage points lower (Figure 14.1).

Sources: National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing; Chenery, H. and Syrquin, M. 1975, 'Patterns of development, 1950–1970', Oxford University Press, UK; He, G. 2009, A study on the unbalance between investment and consumption and its impact on China's economic growth, Doctoral dissertation, Huazhong University of Science and Technology.

Figure 14.1 Comparison of the investment rate and consumption rate between China and the Chenery Standard, 1990–2008



Sources: National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing; Chenery, H. and Syrquin, M. 1975, 'Patterns of development, 1950–1970', Oxford University Press, UK; He, G. 2009, A study on the unbalance between investment and consumption and its impact on China's economic growth, Doctoral dissertation, Huazhong University of Science and Technology.

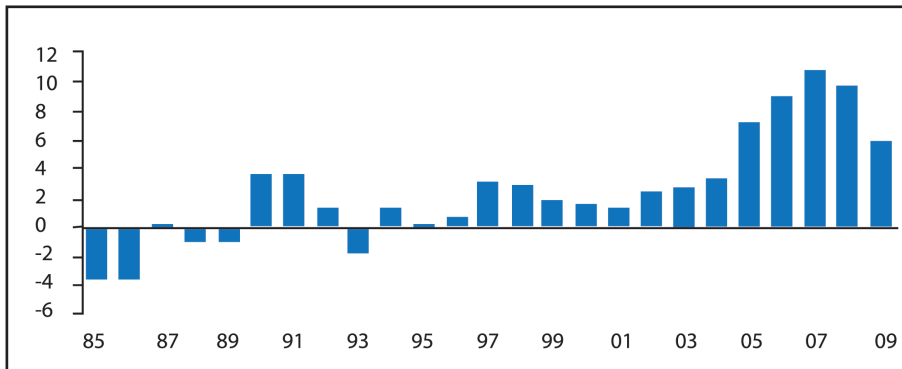
Current account surpluses

The rapid growth of China's current account surplus is a relatively recent phenomenon. The sharpest rise in the current account surplus occurred after 2004. Within three years, the surplus jumped from 3.5 per cent of GDP, in 2004, to the highest in history at 10.8 per cent in 2007. The soaring trend moderated in 2008 and 2009 as a result of seriously dampened external demand affected by the current global financial crisis (Figure 14.2). The surplus shrank further to 3.5 per cent of GDP due to much faster growth of imports than of exports. This further downward shift could, however, prove to be temporary in the absence of more decisive policies for structural adjustment.

By definition, the current account surplus is equivalent to the excess of a country's savings over its investment. A persistent current account surplus means that China, as a low-income economy, has been exporting capital to other countries through financial intermediaries. This is obviously odd since China still has many areas where investment is badly needed. More importantly, most of the current account surplus ends up as foreign exchange reserves. Returns to such investment, such as US Treasury bonds, are relatively low. If the central bank pays a higher rate for domestic bills than the holding of foreign exchange reserves could imply a net loss. This still does not take into account exchange rate risk.

The current account surplus has recently been closely tied to the renminbi (RMB) exchange rate policy debate. American politicians have repeatedly argued that the RMB is substantially undervalued and that China takes jobs away from the United States. China's current account surpluses are often used to provide 'hard evidence' to support this argument. Large current account surpluses also cause economic problems domestically. In addition to exporting capital to rich countries, the surpluses indicate the degree to which Chinese growth is dependent on external demand. This was precisely why Chinese growth was seriously affected by the US sub-prime crisis nearly two years ago.

Figure 14.2 China's current account balances, 1986–2009 (per cent of GDP)



Source: CEIC Data Company.

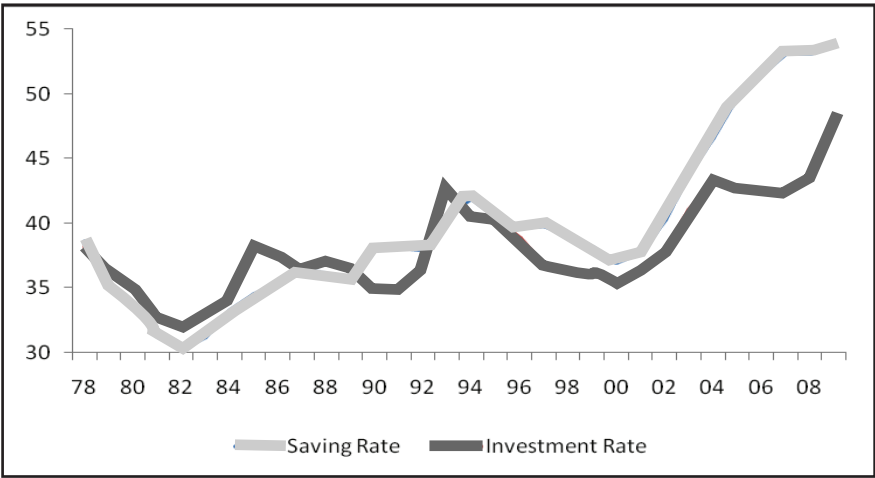
It is important to note that the increase in net savings in China in recent years was the result of a faster rise in the saving rate, not a decline in the investment rate. In fact, as already noted, the investment rate rose by nearly 10 percentage points during the past decade (Figure 14.3). Since the investment rate is already at such a high level, it is reasonable to expect that any efforts to deal with the large current account surplus will have to try to reduce the saving rate.

Income inequality

As the most important result of economic reform, household income has increased dramatically during the past three decades. Rapid income growth has lifted hundreds of millions of people out of poverty and the living standards of rural and urban residents have improved significantly. Income distribution has, however, also deteriorated sharply. This change was understandable initially since the 'very equal' income distribution pattern in the pre-reform period did not provide any incentives for hard work. Over time, however, income inequality has become a major political as well as economic concern.

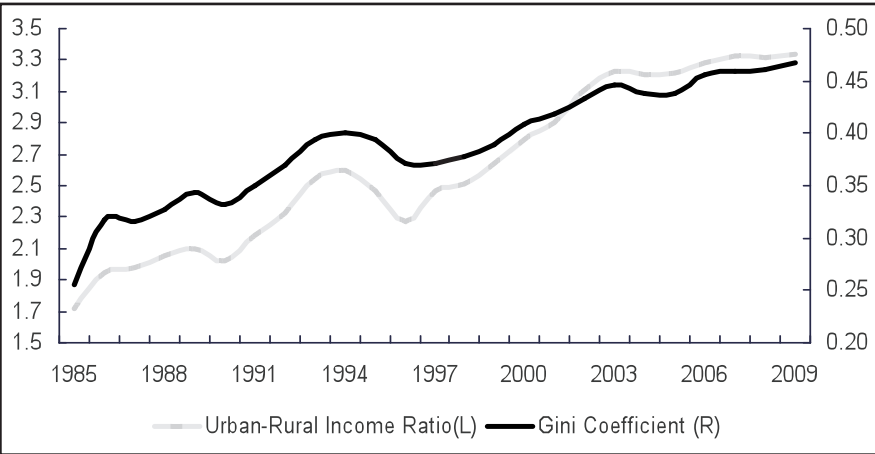
Perhaps the most striking measure of income inequality is the Gini coefficient among households, which rose from 0.25 in 1985 to 0.47 in 2008 (Figure 14.4). The latest reading of the coefficient is among the highest in the world and probably indicates high risks of social and economic instability.

Figure 14.3 China's saving and investment rate, 1978–2009 (per cent of GDP)



Source: CEIC Data Company.

Figure 14.4 Gini coefficient among households and the urban–rural income gap



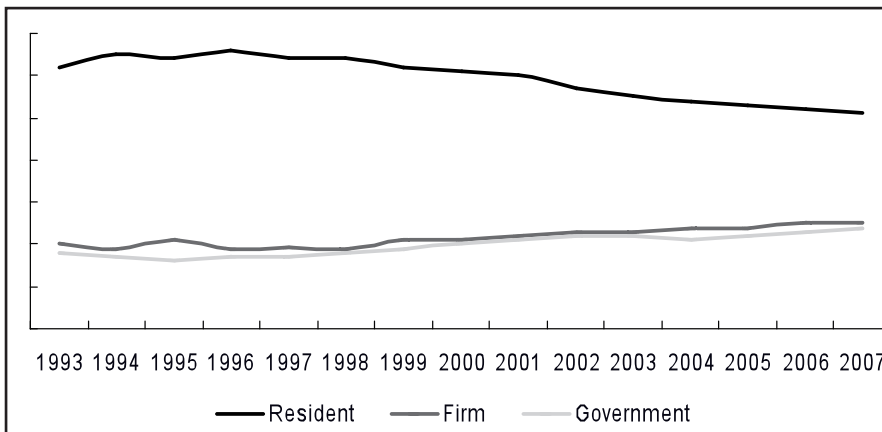
Source: National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing.

A related problem is the widening gap between rural and urban income. At the beginning of the 1980s, the rural–urban income gap in fact narrowed, since agricultural income was boosted by the implementation of the household responsibility system in the countryside while urban reforms were slow to gather

momentum. Over time, however, the gap has widened sharply. In 1981, urban income was on average about two times that of rural income. In 2005, this ratio rose to 3.2. On the surface, this trend appears to contradict the increasing trend of rural–urban migration. In reality, it is probably the result of institutional restrictions on migration and faster productivity growth in the urban economy.

From the perspective of macroeconomic imbalance, one of the most important indicators is the distribution of national income among households, the corporate sector and the government. Between 1995 and 2007, the shares of the corporate sector and the government in total national income increased steadily. As a result, the income share of households decreased from 68 per cent to 50 per cent (Figure 14.5). This trend could be important for explaining the declining share of consumption in GDP.

Figure 14.5 Proportion of residential, firms' and government income in primary distribution and the urban–rural income gap



Sources: Bai, C.-E and Qian, Z. 2009, 'Factor income share in China: stories behind statistics', *Economic Research Journal* [*Jing Ji Yan Jiu*], vol. 3; National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing.

Policy efforts to rebalance the economy

Between 2003 and 2010, the Chinese economy experienced almost two full cycles. Economic momentum accelerated in the years after China's accession to the World Trade Organisation (WTO) in late 2001. In 2004, the economy started to show signs of overheating, with the consumer price index (CPI) exceeding the 5 per cent benchmark in July and August of that year, although it cooled off quickly as the government adopted various tightening measures. In 2007, the economy entered another cycle of overheating, with the increase in the CPI

reaching 8.7 per cent in early 2008. This momentum was, however, reversed abruptly by the global financial crisis from mid 2008. Again, in early 2010, the economy began to show initial signs of overheating.

While the priorities of macroeconomic policies shift over time, one consistent policy theme throughout this period has been the transformation of the growth model. The Chinese government has become increasingly uncomfortable with the growing imbalance problems. Premier Wen and his government take the improvement of the quality of growth as a top policy priority, and during the past seven years they have adopted various measures to achieve this objective, including administrative controls, monetary instruments and fiscal tools (see Appendix 14 for detailed policy measures during the past six years).

Industrial policy has played an important role in the government's efforts to transform the growth model. The idea is to promote high-tech, high value-added and environmentally friendly industries. This has been done in various ways, with the most important tools including fiscal subsidies and administrative controls. The National Development and Reform Commission (NDRC) is the coordinating authority for industrial policy. At the beginning of every year, it sets out plans for investment for the coming year. It also identifies the industries where excess capacity risks are high.

Perhaps the most powerful policy tool of the NDRC is its approval and termination authority. For instance, in 2004–05, the NDRC closed a large steel plant in Jiangsu Province called 'Tie Ben' and terminated another 70 600 investment projects in an effort to cool the economy. Since 2007, when the economy showed initial signs of overheating, the NDRC has been granted the authority to approve any investment projects larger than RMB50 million.

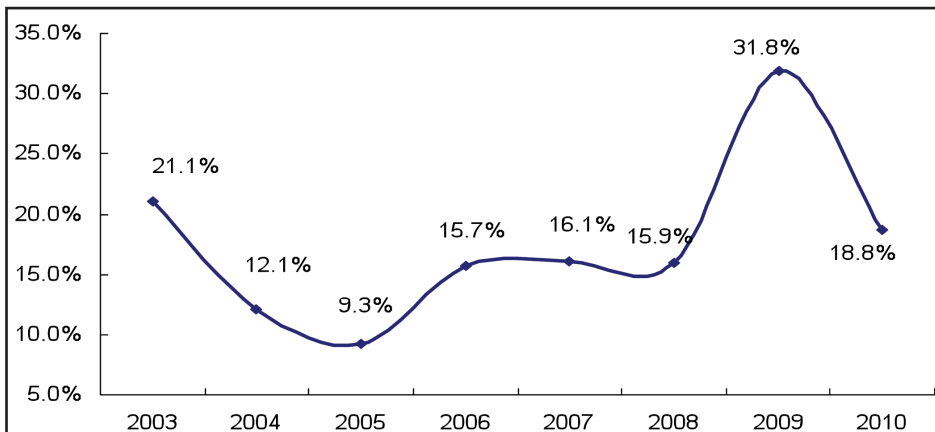
In addition to its responsibilities for managing the overall size of investment, the NDRC is responsible for optimising the industrial structure. It regularly publishes lists of industries with high overcapacity risk and promotes investment in other industries. In 2009, for instance, the NDRC stopped approving new projects in certain industries, including the hydropower development project on the Jinsha River and steel industry projects in Shandong Province. The NDRC also raised the capital requirement in 2005 for investment projects in iron and steel, cement, aluminium and real estate and again in 2009 for energy-intensive industries.

The government has also made efforts to promote industrial upgrading, such as localising the production of large nuclear power equipment in 2006, revitalising the equipment manufacturing industry in 2007, restructuring the

telecommunications and airline industries in 2008 and subsidising sales of electronics, motorbikes, cars and agricultural machinery in the countryside in 2009.

Credit expansion is often an important policy instrument for the authorities to regulate macroeconomic conditions, with the scale of loans fluctuating according to economic performance. For instance, as part of the effort controlling economic overheating, the People's Bank of China (PBOC) reduced loan growth from 21.1 per cent in 2003 to 9.3 per cent in 2005 (Figure 14.6). As the global financial crisis hit the Chinese economy, however, the PBOC significantly boosted credit expansion in order to support growth, raising loan growth from 15.9 per cent in 2008 to 31.8 per cent in 2009. Indeed, the new loans extended in 2009—RMB9.6 trillion—doubled the annual target for that year.

Figure 14.6 China's annual increased loan, 2004–10



Note: The data for 2010 are the official targets.

Source: National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing.

The authorities frequently change their credit policies. For instance, the State Council published 'Regulations on strengthening control of investment in fixed assets and newly started projects' in June 2006. This policy required the commercial banks to tighten controls over loan extensions for investment projects. Meanwhile, financing demands from strategic emerging industries, small enterprises, trade and residential consumption are the highest priorities. Beside these areas, loan demands from newly started projects, heavy polluters, heavy energy consumption and resource-related industries, industries with excess capacity and real estate investment have been listed within the scope of strict control.

In addition to credit policy, the PBOC raises or lowers the reserve requirement ratio and base interest rates to adjust the monetary policy environment. In the wake of the global financial crisis, the PBOC lowered the reserve requirement four times to ease liquidity conditions. This was an important factor behind the extraordinary loan growth during that period. On the other hand, between 2004 and mid 2008, the PBOC continuously raised the reserve requirement ratio—from 7 per cent in early 2004 to 17.5 per cent in the first half of 2008.

Unlike other central banks around the world, the PBOC does not target a particular market interest rate. Instead, it directly adjusts the benchmark interest rates, such as one-year base lending and deposit rates. Commercial banks are allowed to float the rates as long as they observe floors for lending rates and ceilings for deposit rates. Adjustments of interest rates, though, are often less frequent, reflecting the policymakers' greater confidence in quantitative measures.

The government has also adopted a number of other policies to reduce the imbalance problems. For instance, to boost consumption, the authorities increased spending on social welfare systems, including medical insurance for rural residents and social security funds in the urban areas. The logic is that development of the social welfare systems can probably reduce the household saving rate and therefore increase total consumption. The Ministry of Finance (MOF) raised the minimum thresholds for personal income taxes and also abolished agricultural taxes.

To narrow external account surpluses, the MOF has frequently lowered export tax rebates to discourage exports. The PBOC also allowed the RMB to appreciate gradually for three years between 2005 and 2008.

In recent years, policymakers began new initiatives to develop a resource-saving and environmentally friendly society. They started 178 energy-saving, water-saving and resource-efficient projects. They required all provinces to reduce energy intensity annually by 4 per cent and the discharge of major pollutants by 2 per cent in 2006. In 2009, the government published a new policy on 'China's responses to climate change: policy and action', announcing an explicit target of reducing the carbon intensity of GDP by 40–45 per cent by 2020.

Asymmetrical market liberalisation

Despite the government's deep concerns and its continuous efforts, the imbalance problems have worsened steadily in recent years. This is indeed puzzling. Theoretically, there could be only two possibilities: the wrong policies, or the right policies, but not implemented aggressively enough. In our view, most of the policy measures implemented so far have not directly addressed the incentive

structure that caused the imbalance problems—a peculiar incentive structure that is associated with China's unique asymmetrical market liberalisation approach. This approach has caused serious distortions in most factor markets.

Product-market liberalisation

The most fundamental change during the reform period has been the introduction of free markets. In retrospect, the introduction of the market system includes at least three dimensions: 1) creating autonomy and incentives at the micro level; 2) liberalising restrictions in markets; and 3) building the institutional infrastructure necessary for a market economy (Huang forthcoming). Of these, the liberalisation of markets is essential, including the reintroduction of market-determined prices and the liberalisation of trade in goods and services.

For the sake of progressive reform, the initial dual-track price system represented the coexistence of state prices alongside market prices. One price was set by the State for planned activities and the other was determined by demand and supply in free markets. The dual-track system served an important purpose in the reforms: allowing free markets to allocate resources without seriously affecting the groups with vested interests. This dual-track price system was applied mainly to grain and production goods as well as capital goods such as foreign exchange and stock.

Price liberalisation started in the agricultural sector. State purchase prices were raised from the end of the 1970s and free markets for agricultural surpluses were also reopened in urban and rural areas. In 1984, the mandatory state purchase of grain was converted to a contract system, parties to which were farmers and the State. The mandatory nature was not phased out, however, until 1992.

The liberalisation of non-agricultural prices started with consumer goods and was then extended to industrial materials. The coupon system, which was used to allocate consumer goods during the central planning system, was phased out completely in the early 1990s. Free markets for most consumer goods came into existence during the 1980s. By the late 1990s, transactions of almost all consumer goods were completely liberalised with prices freely determined by the market mechanism.

Distortions of factor markets

Compared with product markets, factor markets have not yet been liberalised completely. From the production function, there are four major sources of output: labour, capital, natural resources and technology. Given technology, prices for the other three factors are distorted.

Labour

Abundant and cheap labour is known as a key factor behind China's success in labour-intensive manufacturing exports. Because of the segmentation of rural and urban labour markets, however, as well as the underdevelopment of social welfare systems, labour costs in China are distorted.

The main source of labour-market segmentation is the Household Registration System, which differentiates agricultural and non-agricultural registered permanent residence, resulting in the formation of a separated structure of town and country. During the pre-reform period, no labour mobility was permitted between agricultural and non-agricultural residences, unless there was special approval by the government. This restriction has been loosened in recent years with the growth of the non-state sector, evidenced by the large number of migrant workers roaming the cities. At the end of 2009, there were about 150 million migrant workers across the country.

Although restrictions on rural–urban migration have been loosened, the location of an individual's household registration makes a significant difference in terms of payment and other social welfare benefits; even when migrant workers have been working in cities for years, they are normally not entitled to pensions, medical care and housing subsidies, and their children cannot attend local public schools. In short, it is very difficult for them to settle down. For this reason, migrant workers' pay is sometimes only half the pay of urban residents, even if they do the same job.

Scepticism about distorted wage costs derives from the argument that labour should be cheap given China's massive surplus labour in the countryside. This is not necessarily so. If urban employers made social welfare contributions for their migrant workers, their payrolls could rise by about 35–40 per cent, which includes contributions to pensions (20 per cent of payroll), medical insurance (6 per cent), unemployment benefits (2 per cent), work injury insurance (1 per cent), maternity benefits (0.8 per cent) and housing entitlements (5–10 per cent).¹ If social welfare policies were implemented properly and the Household Registration System was abolished, migrant workers would be likely to receive significantly higher compensation.

Capital

Distortions in capital markets exist in two respects. Domestically, the financial system remains repressed, as evidenced by highly regulated interest rates and state influences on credit allocation, and externally, the currency has been undervalued.

¹ These estimates for a typical year were provided to the author by Zhai Fan, a former official of China's Ministry of Finance, in 2002.

Generally, market-oriented interest rates have been introduced in the wholesale market. The China inter-bank offered rate (CHIBOR) was formed in 1996 and the inter-bank market was liberalised accordingly; the loan rates and deposit rates for foreign currency were liberalised in 2000 and 2004, respectively. Worried about possible vicious competition among banks, however, the PBOC still controls RMB deposit and loan interest rates by setting an upper limit for deposit rates and a lower limit for loan rates, based on the announced benchmark rates.

Under such regulation, interest rates are depressed, as in many other developing countries. From 1990 to 2008, the average loan and deposit interest rates were 7.63 per cent and 5.26 per cent, respectively. The average loan and deposit interest rates were only 5.85 per cent and 2.45 per cent between 2000 and 2008. These seem low for a developing country with great opportunities for productive investment. The interest rate has become increasingly distorted since 2000.

Underestimation of the domestic cost of capital is underscored by the existence of financial repression (Wang 2010). A World Bank study suggests that financial liberalisation in emerging market economies often raises domestic interest rates by a couple of percentage points (Caprio et al. 1994). This could be interpreted as financial repression reducing interest rates by a couple of percentage points.

As for the exchange rate, when reforms began, the official RMB exchange rate against the US dollar was 1.5, which was probably overvalued. In subsequent years, the authorities frequently devalued the currency in order to promote exports. At the beginning of 1994, the PBOC unified the official and swap market exchange rates at 8.7, substantially devaluing the official rate from 5.3. The exchange rate strengthened slowly to 8.27 at the end of 1997. In response to the East Asian financial crisis, the PBOC adopted a conventional peg by fixing the exchange rate at 8.27.

On 21 July 2005, the PBOC appreciated the currency by 2.1 per cent and adopted a managed float with reference to a basket of currencies. The RMB showed slow but steady appreciation against the US dollar, reaching 6.84 at the end of 2008. With the exception of brief periods when the currency experienced mild depreciation pressure, the PBOC has generally resisted pressures to appreciate faster. Today, most economists believe that the RMB remains undervalued, although they disagree on the degree of undervaluation (Goldstein and Lardy 2008), with the normal range of the undervaluation estimated to lie between 5 and 50 per cent (Clive and Williamson 2008).

Natural resources

Natural resources such as land, energy and the environment are important production factors, but their prices are also distorted. In China, land is owned by the State in the cities and by the collectives in the countryside. The Land

Administration Law, promulgated in 1999, classifies land into agricultural, development and unutilised land. Land transfer for non-agricultural uses has to be approved by the government.

In the past, local authorities decided land fees. To attract more investment, they often provided concessions on land-use fees. In recent years, however, the government has turned to more market-oriented land transfer mechanisms, such as auctions and negotiations. This practice, however, applies mainly to property development. There is no market mechanism for determining land prices for industrial use and it is still common for the government to apply land-use fees, the average of which is only about 16 per cent of the costs through auction (Huang and Tao 2010). Manufacturers, therefore, receive implicit subsidies on land inputs.

Institutional distortions in domestic energy markets are widespread, although the magnitude of cost distortions has varied over the years. Of the different types of energy products, coal prices are the closest to market prices. Electricity tariffs are different for agricultural, industrial and residential uses and are set by the NDRC, although the authorities sometimes hold public hearings to improve the quality of decisionmaking. Electricity prices have been under upward pressure in recent years, as the costs of oil and coal have risen significantly.

The most visible and sometimes most volatile distortions are in oil products. In 1998, in an important step towards oil price liberalisation, the State Council announced a formula linking domestic prices to the weighted average of prices in New York, Singapore and Rotterdam. The NDRC would adjust domestic prices, with a couple of months' delay, if the international weighted average moved by more than 8 per cent. In 2000, the NDRC raised oil prices seven times in order to bring domestic prices closer to international levels. When international prices moved sharply upwards, however, the NDRC was reluctant to follow for fear of disrupting domestic economic growth. For instance, when international crude prices reached their recent peak in 2008—at close to US\$150 a barrel—domestic prices remained at about US\$80 a barrel.

The environment is not regarded as a conventional production factor; however, compensation for pollution should be counted as an integral part of production costs. While China has introduced a series of environmental laws and regulations, the problem is the big gap between the intent of these policies and their implementation, as the various levels of government continue to give priority to economic growth.

According to a joint study by the National Bureau of Statistics (NBS) and the State Agency for Environmental Protection (SAEP), an incomplete count of the costs of environmental damage amounted to about 3.05 per cent of GDP in

2004. Since producers do not always fully compensate for their damage to the environment, this reduces short-term production costs at the expense of long-term development.

Crude estimation of factor cost distortions

What is the magnitude of these distortions? Huang (forthcoming) made his first attempts to measure factor-market distortions and found that they amounted to RMB2.1 trillion in 2008—or about 7 per cent of GDP. His estimation, however, was made for only one year. In a follow-up study, Huang and Tao (2010) refined some of the methods and extended the estimation to include nine years from 2000 to 2008 (Table 14.1).

The task of estimating these distortions is quite difficult, as in most cases there is no information about undistorted equilibrium factor prices. The purpose of the estimation, however, is not to provide accurate estimates, but rather to get some idea of the possible magnitude of the distortions and, more importantly, changes in their impact over time.

Despite potential problems, the estimation results reveal some important patterns. First, labour-market distortions have in fact grown in recent years, despite loosening policy controls and increasing rural–urban migration. This is a result both of the rising number of migrant workers and persistent, widening income gaps between migrant workers and urban workers. Indeed the statistics suggest that while labour demand has increased in recent years, migrant workers' pay has not kept pace with that of urban workers, especially when social welfare benefit contributions are taken into account.

Table 14.1 Estimated cost distortions in China, 2000–08 (per cent of GDP)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Labour	0.1	0.2	0.8	1	2	2.4	2.7	3.2	3.6
Capital	4.1	3.9	3.9	3.8	3.1	3	3.1	3.6	3.4
Natural resources	4.3	4	3.7	4.4	4.5	6	6.4	5.2	3.6
Total	8.5	8.1	8.4	9.2	9.5	11.4	12.2	12	10.6

Source: Huang and Tao (2010), page 18.

Second, of all the distortions, capital-market distortions are by far the most important,² contributing about 40 per cent of total cost distortions on average.

² Natural resource distortions include land distortion, energy distortion and environmental distortion. Compared with the three elements, as well as labour distortion, capital-market distortions are the largest.

This helps to explain the persistent problem of over-investment in China and also the rapid development of capital-intensive industries despite continued job-market pressures.

Third, natural resource distortions have fluctuated widely over the years, reflecting volatilities in components, energy—especially international oil prices—and the varying responses of the Chinese authorities to these changes. China has already adopted a price mechanism that closely tracks changes in international energy prices, but the authorities hold down domestic prices when international prices surge rapidly. Therefore, energy cost distortions are sometimes asymmetrical. When international prices are low, there is little distortion. When international prices are high, distortions increase rapidly.

Finally, the aggregate estimates of cost distortions show significant increases since 2004—consistent with the observation that structural imbalances have worsened during this period. The trends of continuous liberalisation and recent increases in the total impact of cost distortions are not necessarily contradictory. These trends could arise because of a slower rise in distorted prices than undistorted prices, despite loosening controls overall. They could also arise because the quantity of factors has grown rapidly even though unit distortions have declined. The moderation of the impact of total distortions since 2006, however, suggests that the worst of the imbalance problems are already behind us.

Structural imbalances: consequences of factor-market distortions

We do not intend to analyse the various structural imbalance phenomena one by one, since they in fact share the same root cause: asymmetrical market liberalisation leads to structural problems.

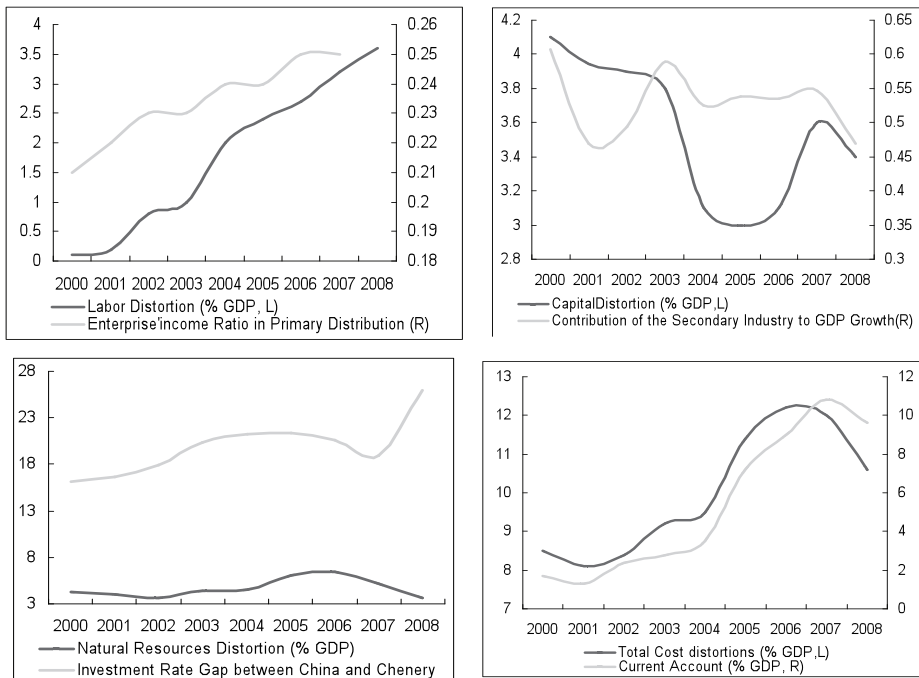
In fact, some economists have also realised the distortions on some production factors: Wang Xiaolu regards the lack of social security to be responsible for relatively low incomes, and hence, the low consumption of the labour force, Zhang Xiang blames the weakness in financial system reform for the economic structural imbalances, while Xu Xiaonian blames the strict controls on the service sector.

We, however, think it is not a problem that can be traced to a single market or factor. More importantly, there are distortions in all factor markets and such

distortion is in fact a production subsidy: labour is cheap; capital is cheap; land is cheap; energy is cheap; producers have further enjoyed tax exemptions; and there has been no real charge for pollution.

Such a production subsidy improves the international competitiveness of China's products and promotes exports, resulting in trade surpluses. Close to 70 per cent of Chinese GDP is externally oriented (exports plus imports), compared with 20–30 per cent for the United States and Japan. In fact, our factor-cost distortion estimates provide a reasonably good fit with the current account balance during the past nine years (Figure 14.7, bottom right).

Figure 14.7 Estimated cost distortion and structural imbalances



Sources: National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing; CEIC Data; and authors' estimation.

Low costs have also stimulated investment. According to the estimates, capital was by far the most important item in total cost distortions during the period analysed. Thus, it has been almost impossible for the government to control the over-investment problem. The estimated factor-cost distortion for capital estimates shows a proper fit with the contribution of secondary industry to GDP growth (see Figure 14.7, upper right). When potential investment returns are so high, any NDRC initiatives to slow investment are bound to fail. This explains why China moved into heavy industries so quickly in the early twenty-

first century even though the government was still hoping to create more jobs. Perhaps it is also easy to understand why urban infrastructure is so advanced in a country where per capita GDP is only slightly above US\$3000.

While cost distortions have been positive for production, investment and exports—that is, they have the effect of subsidy equivalents for producers, exporters and investors—correspondingly, these distortions are equivalent to taxes on the owners of these factors, mainly households and consumers. It can be seen that the rising share of the enterprise sector's income in national income has been accompanied by rising labour-market distortions (see Figure 14.7, upper left).

Distorted incentives have significantly inflated investment and export activities. At the same time, as household income relative to GDP declined over time, consumption also weakened inevitably in relative terms. All these suggest that factor-cost distortions have been a fundamental force behind China's structural imbalances, which alongside other problems such as inefficient resource use and pollution could seriously affect China's ability to sustain its rapid growth in the future.

Conclusions

With the reform of its policies and modernisation of its economy since the late 1970s, China has quickly transformed from a large and poor economy into a globally influential economic power. Structural risks have, however, also increased significantly. Premier Wen and other senior leaders have repeatedly pointed out that the existing growth pattern is unstable, unbalanced and unsustainable.

In fact, the government has tried to address the problems of growth quality and structural imbalances—for instance, taking various steps to stimulate consumption, contain investment growth and reduce external account surpluses. Overall, however, limited progress has been made despite these policy efforts. One explanation is that China's gradualist reform approach means that changes can happen only slowly. Meanwhile, as growth has remained very strong, the government has been reluctant to do anything drastic to change the course of the economy. More importantly, the paramount value of social stability in Chinese policy thinking probably also discourages any policy change that might threaten social order.

In order to alleviate the existing structural risks, the authorities need to change their policy course. It is critical to understand that the root cause of the imbalances and inefficiency problems is factor-market distortions. Such

distortions have artificially increased profits from manufacturing production and quickly turned China into a global manufacturing centre through the supply of cheap labour, cheap capital, cheap land and cheap resources. Cost distortions have also contributed to oversized investment and exports.

Therefore, the fundamental solution to deal with the imbalance problem is to implement a comprehensive package of factor-market reforms. This essentially calls for an end to the asymmetrical approach to market liberalisation. Steady liberalisation of factor markets and the elimination of cost distortions should be the top priorities for the next stage of reform.

In fact, the Chinese government has already started its process of factor-market liberalisation.

Labour-market liberalisation is a fundamental way to stimulate consumption and such liberalisation is already in progress. The government has planned to make new breakthroughs in reforming the Household Registration System and propelling urbanisation in 2010. It also intends to extend the social welfare systems to all rural residents. The complete removal of distortions and therefore of discrimination against rural workers will, however, still take some time.

The breakthrough of capital-market liberalisation could be the introduction of market-based interest and exchange rates. The CHIBOR has been a good starting point for trying to form a market-based term structure for interest rates. The financial system, however, needs to cater better for the needs of the private sector, which will be the backbone of the Chinese economy. In addition, the exchange rate regime should at least be more flexible, even if it is still too early for an absolutely free-floating exchange rate regime.

Clearly defined landownership in the countryside could reduce distortions to land use. Collective ownership is vague, creating room for corruption and hindering the modernisation of the rural economy. In the cities, the government should at least stay out of the direct negotiation of land prices and private property development.

The market should determine energy prices. Fluctuations of energy prices cause difficulties for the economy but international experience suggests that these costs are much smaller than the costs of inefficiency caused by price distortions. From late 2009, the authorities began to make efforts in adjusting prices for fuel, gas, electricity and water. If the government needs to support particular groups for special reasons, it should use fiscal subsidies, not mess about with prices.

Other related reforms are also needed as a supplement to abolish cost distortions. The state sector needs further reforms so as to share profits with households. One way is for the State to collect more taxes from the state-owned enterprises

(SOEs) and then redistribute the gains to broader society. More thoroughly, the state sector should gradually give up much of its monopoly power or be privatised.

The complete liberalisation of factor markets and the elimination of cost distortions are likely to take years to complete. When completed, they will genuinely signal China's full transition to a market economy and will also help lock China's growth onto a more sustainable path for the long run.

Appendix 14

The Chinese government's policy to adjust the economic structure

April 2004 – June 2005

Chinese real GDP growth accelerated from 7.6 per cent in 1999 to 10 per cent in 2003. Total fixed-asset investment grew by 43 per cent during the first quarter of 2004.

1) Industrial policy

- reducing agricultural taxes for all products except tobacco
- subsidising grain farmers directly
- implementing minimum purchase prices for certain grain products
- raising capital requirements for investment projects in iron and steel,³ cement, aluminium and real estate.⁴

2) Land supply

- suspending the conversion of farmland for non-farm uses for six months
- tightening controls over land for construction purposes
- reducing a total of 4813 development zones (2.49 million hectares).

3) Project approval

- closing 'Tie-Ben' steel plant in Jiangsu Province
- nine central government groups inspecting investment projects in steel, cement, aluminium, government office buildings and training centres,

³ Raising the least capital requirement ratio from 25 per cent to 40 per cent.

⁴ Raising the least capital requirement ratio from 20 per cent to 35 per cent.

urban fast trains, golf courses, conference and exhibition centres, logistics parks, large shopping centres and development zones

- NDRC terminating 70 600 projects, with total investment of CNY17.3 trillion.

4) Loan controls

- loan growth slowing from 21.1 per cent in 2003 to 12.1 per cent in 2004.

5) Monetary policy

- raising reserve requirement by 0.5 percentage point, to 7.5 per cent, on 25 April 2004
- increasing one-year base lending rate by 0.27 percentage point to 5.58 per cent on 29 October 2004, and lending rates in other terms adjusted accordingly
- removing ceilings for lending rates.

6) Environmental protection

- government proposal to develop a resource-saving society
- starting 178 key projects for energy saving, water saving and efficient use of resources.

June 2005 – June 2006

From May 2005, the value added of industrial production began to decelerate. Year-on-year growth of industrial profits slowed by more than 20 percentage points. Loan growth also weakened substantially.

1) Industrial policy

- abolishing agricultural taxes and taxes for animal husbandry in 28 provinces in 2005 and then in the whole country in 2006
- closing a large number of companies with high energy consumption, high pollution and failing production safety requirements
- localising production of certain important products, including large nuclear power equipment and novel-type craft
- implementing restructuring measures for 11 industries including steel, coal and cement. Eliminating backward production capacity of 110 million tonnes and 1.2 million tonnes in coal and electrolytic aluminium, respectively.

2) Loan controls

- loan growth accelerating from 9.3 per cent in 2005 to 15.5 per cent in 2006.

3) Environmental protection

- central government requiring all provinces to reduce energy intensity by 4 per cent and the discharge of major pollutants by 2 per cent in 2006 (most failed in the end)
- setting up a system of targets for energy conservation and reduction of pollutant emissions
- conducting a number of circular economy pilots.

April 2006 – June 2008

Again, the economy showed signs of overheating. During the first quarter of 2006, real GDP growth reached 10.2 per cent and new loans reached CNY1.25 trillion—more than half of the annual target.

1) Industrial policy

- revitalising equipment manufacturing industries
- lowering or abolishing export tax rebates for high energy consumption, high pollutant and resource-intensive industries.

2) Project approval

- new policy-tightening controls over new investment projects and construction projects list
- raising capital requirements for certain construction projects
- central government approval required for all local government projects with investment of more than CNY50 million.

3) Loan control

- publishing ‘Regulations on strengthening control of investment in fixed assets and newly started projects’ and requiring commercial banks to tighten controls over loan extension for investment projects.

4) Monetary policy

- raising the reserve requirement three times and base lending and deposit rates twice in 2006
- raising the reserve requirement 10 times in 2007—to 14.5 per cent at the end of the year—and raising the one-year base deposit rate six times, to 7.47 per cent at the end of 2007
- raising the reserve requirement another five times—to 17.5 per cent in the first half of 2008.

5) Fiscal policy

- transitioning from proactive to neutral fiscal policy.

6) Environmental protection

- closing a large number of factories, including 11 200 coalmines, 46.6 million tonnes production capacity of iron, 37.5 million tonnes production capacity of steel and 87 million tonnes production capacity of cement
- starting 10 key energy-conservation projects
- making a breakthrough in coal-fired power plant desulphurisation project.

July 2008 – December 2009

At the beginning of 2008, the government set clear policy goals of preventing overheating and avoiding high inflation; however, the economy cooled rapidly in the second half of 2008 as the impacts of the global financial crisis hit China.

1) Industrial policy

- raising export tax rebates seven times⁵ in 2008 and 2009, especially for labour-intensive products
- restructuring telecommunications and airline industries
- closing small power generators (1669 kilowatts) and 1054 coalmines
- spending CNY45 billion to subsidise sales of electronics, motorbikes, cars and agricultural machinery in the countryside
- reducing 50 per cent of purchase tax on small cars and supporting self-occupation of housing consumption
- planning for revitalisation of 10 industries, closing 26 megawatt small power generators, 16.9 million tonnes of steel production capacity, 74.2 million tonnes of cement production capacity, and so on
- allocating CNY20 billion to promote 4441 technological transformation projects
- introducing new capital requirements for fixed-asset investment projects, which raised 5 percentage points for energy-intensive industries.

2) Project approval

- Ministry of Environmental Protection stopped approving a number of new projects⁶ on 11 June 2009 in order to preserve the environment.

5 1 August 2008; 1 November 2008; 1 December 2008; 1 January 2009; 1 February 2009; 1 April 2009; 1 June 2009.

6 Including a hydropower development project on the Jinsha River, construction projects of the Huanneng and Huadian Group and steel industry projects in Shandong Province.

3) Loan controls

- loosening controls over new loans from August 2008, with the total of new loans reaching CNY9.6 trillion in 2009—almost doubling the annual target.

4) Monetary policy

- lowering reserve requirements four times and reducing the base lending rates five times in 2008.

5) Fiscal policy

- announcing CNY4 trillion fiscal stimulus package in October 2008; spending on investment, consumption, imports and exports, real estate and stock markets
- public investment reaching CNY923 billion in 2009—an increase of CNY504 billion from a year earlier.

6) Environmental protection

- continuing efforts on energy saving and ecological protection, with a total of CNY42.3 billion spent by the central government in 2008
- allocating a budget to support 2983 energy-saving and circular economy projects
- releasing ‘China’s responses to climate change: policy and action’
- announcing explicitly the targets⁷ and policy measures to cap greenhousegas emissions by 2020.

References

- Bai, C.-E and Qian, Z. 2009, ‘Factor income share in China: stories behind statistics’, *Economic Research Journal* [*Jing Ji Yan Jiu*], vol. 3.
- Caprio, G. jr, Atiyas, I. and Hanson, J. A. 1994, *Financial Reform: Theory and practice*, Cambridge University Press, New York and Melbourne.
- CEIC Data Company, New York. Data downloaded from www.ceicdata.com.
- Chenery, H. and Syrquin, M. 1975, ‘Patterns of development, 1950–1970’, Oxford University Press, UK.

⁷ Reduce by 40–45 per cent from that of 2005.

- Clive, William R. and John Williams, 2008, "Estimates of the Equilibrium Exchange Rate of Renminbi: Is There a Consensus and If Not, Why Not?", in Morris Goldstein and Nick Lardy (eds.), *Debating China's Exchange Rate Policy*, Peterson Institute of International.
- Goldstein, M. and Lardy, N. (eds) 2008, *Debating China's Exchange Rate Policy*, Peterson Institute for International Economics, Washington, DC.
- He, G. 2009, A study on the unbalance between investment and consumption and its impact on China's economic growth, Doctoral dissertation, Huazhong University of Science and Technology.
- Huang, Y. (forthcoming), 'China's great ascendancy and structural risks: consequences of asymmetric market liberalization', *Asian-Pacific Economic Literature*.
- Huang, Yiping and Tao Kunyu, 2010, "Causes and Remedies of China's External Imbalances", Working Paper Series No. 2010002, Beijing: China Center for Economic Research, Peking University.
- National Bureau of Statistics (NBS) various years, *China Statistical Yearbook*, China Statistics Press, Beijing.
- Wang, X. 2010, An index of financial repression for China, Unpublished note, China Center for Economic Research, Peking University, Beijing. Wing Thye Woo.