Reform, Growth and Inequality in China

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1. Introduction

In 1978 China had a centrally planned economy, low productivity, widespread poverty, and very low inequality. Such inequality as then existed was regional in character, reflecting the lack of factor mobility among regions. The last three decades has witnessed three great and closely related events: a gradualist transition from central planning towards markets, a remarkable rate of economic growth, and a dramatic rise in economic inequality.

Of course, it is not surprising that inequality rose from its initial low level, as the economy was marketised and as egalitarianism ceased to be a central plank of economic policy. But China now has an unequal society – not rivalling the extreme inequality found in (say) Brazil or South Africa, but nevertheless worse than or on a par with other parts of developing Asia. For instance, a study by the Asian Development Bank (2007: figure 1) finds China’s inequality to the joint highest (with Nepal) among the 21 Asian countries that are compared.

There is a vast literature, both theoretical and empirical, on the relationships between economic development and economic inequality. Kuznets (1955) postulated an inverted U-shaped relationship: as mean income grows, so the inequality of income per capita first rises, eventually peaks, and then declines. The main theoretical reasons for expecting an initial rise are the growth in the importance of the modern, or urban, sector of the economy, with its higher income and greater inequality, and the emergence of inequality based on possession of financial, physical and human capital. The main reasons for expecting an eventual decline are that the low-income rural sector becomes a minority, that market scarcity drives up the returns to relatively unskilled labour, and that the socio-political groups that emerge with economic development acquire the political power to press for redistribution and the creation of a welfare state. The cross-country evidence for the inverted U-shaped relationship is actually very weak (Anand and Kanbur, 1993a, 1993b), and Kanbur (1997) has argued for country case studies as a better way of understanding the complex relationships between economic development and economic inequality.
China offers an excellent case study. However, the fact that economic reform and economic growth have gone hand in hand means that it is difficult to distinguish their effects on inequality. China’s experience cannot, therefore, serve as a reliable guide for other poor countries, except perhaps those countries which are both poor and also undergoing transition to a market economy.

There are many dimensions of inequality besides household income per capita. Other contributors to economic welfare include education, health care, housing, social security, subjective well-being, and what Sen (1984) has called people’s ‘capabilities’ to be and to do things of intrinsic worth. In order to make this summary paper manageable, I concentrate here on income inequality.

The five main questions I want to address are:

1. How much has inequality risen?
2. What is its relation to poverty alleviation?
3. What are the main dimensions of rising inequality?
4. Was it inevitable that inequality should rise so much?
5. Does it matter that inequality has risen?

2. How much has inequality risen?

The annual national household income and expenditure survey conducted by the National Bureau of Statistics is not available to researchers at disaggregated household and individual level. Measures of income inequality such as the Gini coefficient, when based on official statistics, therefore have to be based on province-level or percentile data. However, there is another source: a national household survey designed and conducted by the Institute of Economics, CASS, in conjunction with foreign scholars including myself, with research hypotheses in mind. This has been conducted every seven years: in 1988, 1995 and 2002. I draw heavily on the results of research based on these sources.

Because of the sharp administrative and economic divide between urban and rural China, and the need for different survey questionnaires, Table 1 presents three Gini coefficients for each year, corresponding to urban, rural and total households. In 1988 the urban Gini was low by international standards (24%), the rural Gini was higher (33%), reflecting regional income disparities, and the national Gini was higher than either (40%), reflecting
the high ratio of urban to rural income per capita. Over the seven years 1988 –95, all three Gini coefficients rose; the national Gini was 45% or 47% in 1995. We show two estimates of the Ginis for 1995 and 2002, from the same data sources. The normally small differences between them do not have a ready explanation and serve as a warning against being over-precise. (Possibly it arises because the first set of results contains only the provinces that were included in all three surveys whereas the second set of results apparently uses all available provinces). However, the trend was not continued over the next seven years. In 2002 the urban Gini (31 or 32%) was two percentage points lower than in 1995, the rural Gini (37%) was one percentage point higher or four points lower, and the national Gini remained constant, at 45% or at 47%.

Table 1
CASS surveys: Gini coefficients of disposable income per capita, urban, rural and national households, China, 1988, 1995 and 2002 (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>24</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>1995 (Gustafsson)</td>
<td>34</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>1995 (Khan and Riskin)</td>
<td>33</td>
<td>42</td>
<td>45</td>
</tr>
<tr>
<td>2002 (Gustafsson)</td>
<td></td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>2002 (Khan and Riskin)</td>
<td>31</td>
<td>38</td>
<td>45</td>
</tr>
</tbody>
</table>


However, the finding of constancy in the Gini after 1995 is open to question. Ravallion and Chen (2007), of the World Bank, having partial access to the NBS micro-level data, show the Gini continuing to rise in the years 1995-2001 (Table 2). This is what might be expected on the basis of casual observation. Over those years, all the Gini coefficients increased, by 4 percentage points in the urban case, 2 percentage points in the rural case, and 3 percentage points in the national case; their estimate of the national Gini in 2001 was 45%.
Table 2

*NBS surveys: Gini coefficients for urban, rural and total households, China, 1988, 1995 and 2001 (per cent)*

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>21</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>1995</td>
<td>28</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>2001</td>
<td>32</td>
<td>36</td>
<td>45</td>
</tr>
</tbody>
</table>


Table 3

*Income by household income quintile, urban China, 1995, 2000, 2005: percentage of total; five-year percentage increase in income per capita and in Gini coefficient*

<table>
<thead>
<tr>
<th>Quintile</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Gini (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage share:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>11.1</td>
<td>15.2</td>
<td>18.5</td>
<td>22.6</td>
<td>32.6</td>
<td>20</td>
</tr>
<tr>
<td>2000</td>
<td>9.7</td>
<td>14.2</td>
<td>18.1</td>
<td>23.0</td>
<td>35.0</td>
<td>24</td>
</tr>
<tr>
<td>2005</td>
<td>7.2</td>
<td>12.1</td>
<td>16.6</td>
<td>22.7</td>
<td>41.4</td>
<td>32</td>
</tr>
<tr>
<td>Percentage increase:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td>42</td>
<td>52</td>
<td>59</td>
<td>66</td>
<td>74</td>
<td>20</td>
</tr>
<tr>
<td>2000-2005</td>
<td>28</td>
<td>45</td>
<td>56</td>
<td>61</td>
<td>102</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: NBS (annual), various issues.

Notes: The ranking of households into income quintiles appears to be based on household income and not household income per capita. As household size falls monotonically with quintile rank, we obtain income shares by multiplying income per capita in each quintile by household size. The percentage increases in income per capita are expressed in nominal terms. The Gini coefficient, being calculated from quintile shares, is liable to be inaccurate but its trend is less likely to be biased.
The annual Statistical Yearbook of the NBS provides information on income shares of household income quintiles in urban China, from which it is possible to explore whether inequality (as measured by the NBS surveys) is continuing to rise in the 2000s. Table 3 shows that it has done so. The share of the first three quintiles falls monotonically over the decade 1995-2005, and that of the highest quintile grows sharply. Similarly, there is a monotonic rise in the (necessarily approximate) Gini coefficient. The five-year percentage increases in income per capita rise monotonically across the quintiles. There is no indication that inequality has stopped rising.

It is possible to obtain equivalent information in rural China for household income quintiles, households being ranked by income per capita, but it requires us to infer quintile income by applying assumptions to the frequency distribution of incomes. Table 4 shows that the income shares of the quintiles were stable over the years between 1995 and 2005, and that the distribution worsened, and the Gini coefficient rose, between 2000 and 2005. Whereas Ravallion and Chen (2007) calculated the rural Gini to rise over the period 1995-2001, and Gustafsson et al. (2007) found it to be stable but Khan and Riskin (2007) found it to fall over the period 1995-2002, Table 4 suggests that it barely changed in the late 1990s and rose in the early 2000s.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Gini (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage share:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>7.4</td>
<td>12.2</td>
<td>16.7</td>
<td>23.3</td>
<td>40.4</td>
<td>31</td>
</tr>
<tr>
<td>2000</td>
<td>7.0</td>
<td>12.4</td>
<td>17.6</td>
<td>23.8</td>
<td>39.1</td>
<td>30</td>
</tr>
<tr>
<td>2005</td>
<td>6.0</td>
<td>11.4</td>
<td>16.1</td>
<td>22.6</td>
<td>43.8</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: NBS Statistical Yearbook (annual, various issues.

Notes: The household income quintiles are ranked by income per capita and their income shares are derived from frequency distributions of income per capita by making various assumptions about mean income within frequency bands. The Gini coefficient, being based on quintile shares, is liable to be inaccurate.
Whether income inequality has recently stopped rising in China is clearly an important question. Both fact and feeling are relevant. The public perception of urban inequality is that it continued to rise. Respondents in the 2002 urban survey were asked how inequality had changed in their city over the previous five years. Offered a choice of five answers, over 90% reported that it had widened, 48% saying ‘slightly’ and 43% ‘notably’ (Gustafsson et al., 2007: 80).

Why do the two data sources produce different answers? The main reason is that they have different concepts of income. The NBS definition excludes the imputed value of owner-occupied housing and undercounts subsidies, whereas the CASS definition includes housing-related income components and more fully captures subsidies. These components of income disproportionately accrue to urban households, which are relatively rich. This explains why CASS-based estimates of the national and urban Gini coefficients tend to be higher than NBS-based estimates. Moreover, the importance of these income components has declined in recent years. This explains why the CASS-based Gini did not rise between 1995 and 2002. A recalculation of the CASS data using the NBS definition does indeed produce an increase in the Gini between 1995 and 2002 of 1.6 percentage points; and a value in 2002 of 45% - equal to the CASS-based estimate for 2001 (Gustafsson, Li and Sicular, 2007: ).

The withdrawal of subsidies has a misleading implication. The most important urban subsidy, the housing subsidy, was merely capitalised: the housing subsidy was reduced after 1995 because urban houses were sold to their occupants at prices well below the prices that would have prevailed had there been a housing market. Zhao and Ding (2007: tables 5.5, 5.7 and 5.8) show that, in 2002, the ratio of current market price to purchase price of houses averaged over 7 to 1, and that the net value of housing represented 64% of total wealth and contributed 67% to the inequality of net wealth per capita (the Gini coefficient being 47.5%) in urban China.

3. **How does the rise in inequality relate to poverty?**

In the twenty years between 1981 and 2001 real household income per person increased on average by 5.8% per annum in urban China, 5.4% in rural China, and (with reweighting) 6.5% overall (Ravallion and Chen, 2007: table 1). On the one hand, this rapid growth of incomes had the power to reduce poverty dramatically. On the other
hand, the rising inequality tended to increase poverty. There were two counteracting forces, the rise in mean income and the rise in dispersion of income around the mean. In fact, the former proved much more powerful.

Table 5


<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC</td>
<td>PG</td>
<td>HC</td>
</tr>
<tr>
<td>1981</td>
<td>6.0</td>
<td>1.0</td>
<td>64.7</td>
</tr>
<tr>
<td>1988</td>
<td>2.1</td>
<td>0.5</td>
<td>23.2</td>
</tr>
<tr>
<td>1995</td>
<td>0.9</td>
<td>0.2</td>
<td>20.4</td>
</tr>
<tr>
<td>2001</td>
<td>0.5</td>
<td>0.2</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Source: Ravallion and Chen (2007: tables 2, 3, 4).

Note: The headcount measure of poverty (HC) is defined as the percentage of households that fall below the officially-set poverty line, and indicates the relative number of poor people. The poverty gap measure (PG) is defined as the ratio of income needed to get all poor people up to the poverty line to income as a whole, and provides an indication of the relative resources required to eradicate poverty. The poverty line is officially set at 850 yuan per person per year in 2002 prices for rural China, and at 1,200 yuan for urban China.

Table 5, taken from Ravallion and Chen (2007), shows poverty (as defined by government) declining sharply over the years, whether we use the headcount measure (HC) or the poverty gap index (PG). The great fall in rural poverty occurred in the early period of decollectivisation and rural reform, from 1978 to 1985. However, rural poverty incidence and intensity continued to fall throughout, despite rising inequality. Urban poverty has always been low, reflecting the protected and privileged status of urban-dwellers. However, research based on a 1999 CASS urban household survey that examined the effects of the massive redundancy programme in the state sector, commencing in the mid-1990s, shows a rise in urban poverty from 1995 to 1999, associated particularly with unemployment, which the official statistics of Table 5 do not pick up (Appleton et al, 2002).
4. What are the main dimensions of rising inequality?

There are several dimensions of rising inequality, and to measure their contributions requires various forms of decomposition analysis. Here, however, I concentrate on five important ones.

4.1 The urban–rural divide.

This was the title of the book which Lina Song and I published (Knight and Song, 1999). There has been a very large ratio of urban to rural income per capita throughout the Communist period. It narrowed during the period of decollectivisation and rural reform 1978-85, but since urban economic reform commenced in the mid-1980s the ratio has grown and is greater today (at 3.20:1) than it has ever been (Table 6, which shows both the NBS and CASS results). The high ratio was understandable when urban and rural China were compartmentalised, but it has survived and even grown as the “invisible Great Wall” which separated rural and urban China has been partly dismantled and marketisation has occurred.

<table>
<thead>
<tr>
<th>Year</th>
<th>NBS</th>
<th>CASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>217</td>
<td>269</td>
</tr>
<tr>
<td>1995</td>
<td>271</td>
<td>308</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>311</td>
<td>313</td>
</tr>
<tr>
<td>2005</td>
<td>320</td>
<td></td>
</tr>
</tbody>
</table>


The ratio of urban to rural disposable income per capita rose consistently in the CASS data as well: from 2.69:1 in 1988 to 3.08:1 in 1995 and to 3.13:1 in 2002. The CASS ratio is higher because the definition of income used is broader, but the difference narrows over time with the withdrawal of many subsidies. The upward trend has helped to increase the contribution
that the urban-rural income ratio makes to national income inequality. The contribution rose from 37% in 1988 to 41% in 1995 and to a remarkable 46% in 2002, far higher than for other developing countries in which similar decompositions have been conducted (Gustafsson et al., 2007, table 1.2). Nearly half of China’s income inequality would vanish if mean income per capita in rural and urban China were equal.

The size of the rural-urban income disparity might be exaggerated if the cost of living is higher in urban areas. For instance, Ravallion and Chen (2007: table 1) report that the urban cost of living was 19% higher than the rural in 1981, and that this rose to 40% in 2001. However, using the 2002 data set, Sicular et al. (2005) show that the rural-urban contribution to national inequality is not greatly reduced (to 27%) when incomes are corrected for spatial price differences.

How is the rural-urban divide to be explained? During the planning period the Communist Party built an institutional framework which divided China into two compartments, separate in terms of administration, financing and resources. The policy of ‘price scissors’ kept down the price of food in relation to manufactures. In that way the peasants paid indirectly for urban industrialisation. Part of the investable surplus was diverted to enable urban workers to enjoy a higher standard of living than their rural counterparts. Worker discontent, low morale, and threat to political stability are all aspects of the power – latent rather than overt in the case of China – which residentially concentrated, interacting workers appear to possess.

As the economy became more marketised, why were the returns to factors not equalised across space? Why did the rural-urban income gap not get competed away? The answer lies in the government control of migration. Migrant workers were permitted to meet the growing needs of the urban economy but urban workers continued to receive preference – in employment, wages, housing, social security, etc – while migrants were treated as second class citizens. The real wages of urban hukou residents have increased rapidly over the last two decades of urban economic reform, being shielded from the labour market competition of rural labour.

Will the rural-urban divide be eroded in future? There are reasons to expect a gradual erosion. First, there is no longer any need to extract an investable surplus from the agricultural sector. Second, the voice of rural people may be enhanced by the greater awareness of their relative
position that better education, greater mobility, and improved communications can foster. Third, the increased marketisation of the economy may itself reduce the degree of urban bias in government policies insofar as it accords greater weight to market-based allocation of resources and less weight to location-based allocation. However, perhaps of greatest importance for the future is the evolving policy on rural-urban migration and the possible emergence of labour shortages, which we examine below.

4.2 Urban labour market reform.
Under central planning the work unit (danwei) serving as a mini welfare state, providing lifetime employment, housing, pensions, and medical care to its members, with workers being allocated to work units bureaucratically and wages being determined administratively. The wage structure was highly egalitarian. Movement from one work unit to another was extremely rare, and rural-urban migration was very limited. The slow evolutionary movement towards the formation of a labour market is analysed and explained in Knight and Song (2005). The book is based mainly on a series of sample surveys, including the 1988, 1995 and 2002 CASS surveys referred to above.

Table 7
Measures of central tendency and dispersion of the wage per worker at constant prices, urban China, 1988, 1995, and 2002

<table>
<thead>
<tr>
<th></th>
<th>Annual wage</th>
<th>Hourly wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>152</td>
<td>168</td>
</tr>
<tr>
<td>Median</td>
<td>148</td>
<td>158</td>
</tr>
<tr>
<td>10th percentile</td>
<td>106</td>
<td>137</td>
</tr>
<tr>
<td>90th percentile</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>134</td>
<td>114</td>
</tr>
</tbody>
</table>

Source: Knight and Song (2007: table 9.1).
The 1988 survey, conducted near the start of the urban reform process, reflected the administered and egalitarian labour system of the time. The Gini coefficient of urban wages rose continuously as reform has progressed. It rose from the low value of 23% in 1988 to 32% in 1995 (Knight and Song, 2007). Table 7 shows the percentage changes from one survey to the next. Whereas the median real wage rose by 6% per annum over this period, the corresponding percentages for the tenth and ninetieth percentiles were 1 and 8% respectively. Wage inequality continued to grow over the period 1995-2002: the Gini coefficient increased by an additional 5 percentage points, to 37%. Between those years the hourly real wage rose by 7% per annum at the median, 5% per annum at the 10th percentile, and 8% per annum at the 90th percentile. Given extreme disequilibrium in the urban labour market in 1988, this rise in wage inequality probably represented a move towards the market equilibrium rather than a movement of the market equilibrium.

The wage premium over primary school of a college degree was 9% in 1988, 39% in 1995, and 88% in 2002; for completion of secondary school the corresponding figures were 4, 17 and 42% respectively. A very similar story can be told about occupation-specific skills. We argue that some of the widening wage structure represents rewards for productivity and incentives for efficiency. Thus, for instance, the rising returns to education, the greater premia in skill-based occupations, and the more bowed inverse-U-shaped wage-experience profile may well represent the stirring of market forces rewarding productivity.

On the other hand, there is evidence of greater wage discrimination (against women and in favour of Communist Party members) and also of considerable wage segmentation, which is difficult to justify in terms either of efficiency or of equity. The segmentation takes three main forms: segmentation by province, segmentation by type of ownership (with foreign firms paying most, then state enterprises, and local private firms paying least), and segmentation by profitability of enterprise. This last we explain in terms of the danwei sharing profits with its urban employees (Knight and Li, 2005).

A decomposition of the growth of wage inequality between 1988 and 1995 showed that greater wage segmentation by province made the greatest contribution to that growth. An equivalent decomposition for the next seven years found that segmentation by province, although still important, made a negative contribution to the growth of wage inequality,
although another form of segmentation – by ownership type – did make a positive contribution (Knight and Song, 2007, table 9.5).

Labour mobility among urban hukou residents was still very low in 1999: 78% were still in their first job, 16% were only in their second, and the average duration of the first job (including incomplete tenure) was 21 years. (Knight and Yueh, 2004: 643). We conclude that China has a long way to go before it has a well-functioning labour market.

In summary, there is a good deal of support for the hypothesis that the rewards for productive characteristics rose during this period of growing labour market competition. However, the evidence also suggests that the labour market became more segmented - across firms, regions and probably also between urban and rural hukou workers. Both trends have contributed to rising inequality in the urban labour market.

4.3 Regional divergence.

Two counteracting forces influence the degree of spatial income inequality. Processes of cumulative causation can create growth poles and so increase spatial inequality, whereas processes involving spill-overs and spread effects can reduce it. The former is likely to hold sway in the initial stages of development but will eventually give way to the latter, as competitive advantages are eroded by rising costs.

Regional inequality in China has attracted a good deal of research, using conventional tests of absolute or conditional convergence or divergence. The results have been rather mixed, depending on the data set, the dependent variable, the unit of observation, and the time period. There is much evidence of absolute divergence in the period up to 1995. Some scholars have found conditional convergence – a prediction of economic theory – but this is rather academic. Some of the variables being conditioned are endogenous, and economic welfare is anyway dependent on absolute trends.

Consider first the urban economy. There is evidence of powerful absolute divergence in urban income per capita and in urban wages among provinces and among cities over the period 1988-1995 (Knight, Zhao and Li, 2002). This is partly the result of regional comparative advantage, but it also reflects weak government regional equalisation policy, imperfect capital markets, and continued restrictions on the mobility of labour.
coastal provinces gained not only from their advantageous location but also from initial preferential policies on FDI and exports and from the growth of tax revenues as their development proceeded. There is some indication that there have been elements of spatial convergence or at least stability since 1995. The same exercise is not available for the 1995-2002 period, but Gustafsson et al. (2007, table 2.9) found that the percentage of inequality in urban China that is due to between-province inequality fell from 26% in 1995 to 19% in 2002. The main gain came from Eastern China, where the more developed regional economy was becoming more spatially integrated.

Turning to the rural economy, we start with a microcosm of rural society, the village. A small survey of seven villages in two counties in Hebei province raised a fascinating question: how can villages which are so close together geographically be so far apart economically? Knight and Li (1997) developed an answer in terms of factor immobility and processes of cumulative causation. People cannot move freely among villages: each village is self-contained. Insiders have property rights, broadly interpreted, to village resources, and preclude others from sharing those rights. Institutional and informational problems segment capital markets, making the village itself the main source of funds for investment. Informational imperfections limit business and technical skill acquisition from outside. The village cannot rely much on the receipt of external public funds.

It is possible for a minority of villages to develop on the basis of fertile land that permits a prosperous agriculture, but the majority must rely on non-agricultural sources of development. One possibility is migration, but the opportunities are often limited. They can be expanded if the village can build up a social network of migrant contacts, which reduce informational and transaction costs. In that way migration from the village breeds more migration. The other possibility is the development of village industry. Here the important thing is to overcome the entrepreneurial and capital constraints. A good natural resource base helps. However, the development of village industry is very much a process that builds on itself through the generation of profits for reinvestment and of new skills via learning by doing. Funds for infrastructure investment depend on village taxable capacity, which in turn depends on the extent of collectively-owned village industry. Path-dependent processes thus operate to propel some village economies forward and to hold some back.
The survey was conducted more than a decade ago, and the local economy may well have changed since then. The further growth of the more developed villages may have been retarded by shortages of labour and land and rising costs, and the less developed villages may have benefited from these positive feedbacks. With the rapid growth of urban China, the greater opportunities for rural-urban migration may also have assisted the poorer villages to kick-start the development process.

Evidence from the 1995 CASS survey shows the importance of non-farm employment for rural household incomes and for rural income inequality. Wages accounted for 21% of rural income inequality in 1988 (contributing 7 percentage points to the Gini) and for 44% (contributing 19 percentage points) in 1995 (Knight and Song, 2001: table 4.6). Wages rose from being 11% to being 26% of rural incomes over the seven years. The contribution of wages to the rise in the Gini actually exceeded the total rise. It is clear that access to individual labour income was then the key to higher income for the household.

The Gini coefficient of rural incomes rose by only one percentage point between 1995 and 2002, or it fell by four percentage points (Table 2). Why the stagnation or reversal? Over that period the share of wages in rural income rose again, to 30%. However, the contribution of wages to rural inequality fell slightly, from 40% to 36% of the total (Khan and Riskin, 2007: table 3.3). Thus, wages became less disequalising. The authors suggest that this is because the growth of wage employment reduced spatial, especially province, inequality of access to wage employment, and regard it as an important reason why the rural Gini stopped rising or started falling. It appears that spill-over effects were becoming more important.

4.4 Rural-urban migration.

Whereas the main absorber of the growing rural labour force in the 1980s was rural industry, since 1990 it has been rural-urban migration. The control of permanent migration through the hukou residence registration system means that much of this is temporary migration, with workers returning to their rural homesteads. It is very difficult to measure the number of rural migrants working in the urban areas but the 2000 population census suggests over 80 million.
This migration has differing effects on income inequality. The average income per capita of rural-urban migrant households is higher—nearly double—that of rural households, but about 35% lower than that of urban households (Gustafsson et al., 2007: 45). With the migrants being at an economic disadvantage and suffering official discrimination in the cities, the presence of migrant households raises urban inequality—provided, of course, that they are included in the urban household surveys. The 2002 CASS survey is the first national survey to permit estimation of urban inequality with migrants both excluded (the usual practice) and included. Khan and Riskin (2007, tables 3.6, 3.7, 3.10) estimate the urban Gini coefficient for household income per capita to be 32% when rural-urban migrant households are excluded and 34% when they are included; migrant households themselves have a Gini of 38%.

The effect of remittances on rural incomes should reduce the urban-rural income disparity. Within rural areas, the effect on inequality depends on who migrates. The really poor may not have the education, or the funds, or the contacts, to migrate. However, such studies as have been made of this issue suggest that, in the Chinese case, migration has an equalising effect on rural income distribution (for instance, Knight and Song, 1999, ch.9).

The Lewis model (Lewis 1954) provides a helpful theoretical framework for considering whether the increased rural-urban migration that accompanies economic development will eventually generate market forces that will raise labour incomes generally and so reduce income inequality. Lewis distinguished two stages in the development process: the labour-surplus stage, in which rural labour is abundant and available to the urban sector with an elastic supply curve, and the labour-scarcity stage, in which the rural labour supply is upward-sloping. When the turning point is reached, both the market-determined urban wage and the rural incomes, reflecting the rural supply price, begin to rise, and relatively unskilled labour incomes grow throughout the economy. If it is the case that prior to the Lewis turning point the labour market is segmented, with urban wages being above the level that would be set by market forces, when rural labour decreases relative to the other rural factors of production, labour incomes will be pulled up and the urban-rural income gap will begin to close.

Consider the application of the model to China. While China remains in the labour-surplus stage, we know that there is a considerable income gap between rural and urban
people. However, migration has increased rapidly since 2000. The number of people in rural China began to fall in the mid-1990s. Cai et al. (2007), using the Ministry of Agriculture’s household panel survey, estimate the number of rural workers in the urban labour market to be 78 million in 2000, when they accounted for 37% of the urban labour force, but no less than 132 million in 2006, accounting for 47% of the urban labour force. These authors conclude from this trend and evidence of rising wages in the coastal areas which employ many migrants that China is now close to the turning point. However, Meng and Bai (2007) provide evidence inconsistent with this conclusion. Because of the vast underemployment of labour in China’s interior provinces, rising migrant wages may well be local and temporary on account of labour immobility rather than general and permanent (Knight, 2007). Nevertheless, the continued rapid development of the urban economy will at some time in the future unleash powerful market forces that will raise rural incomes, and labour incomes, generally, and thus reduce national income inequality.

4.5 Entrepreneurship, rent-seeking and corruption.
A rich entrepreneurial class has emerged remarkably rapidly in China - there were large supernormal profits to be earned. The combination of semi-marketised economy, weak legal system and ill-defined or insecure property rights provides great scope for corruption, cronyism, rent-seeking, and appropriation of state assets. Corruption is a major concern of Chinese citizens as reported in public opinion surveys, especially where people are directly affected, such as in the provision of health services or the inadequately compensated loss of land. However, not all income derived from rent-seeking or corruption is detectable in the household surveys.

Both the NBS and CASS surveys may understate incomes at the top of the income distribution. One reason is the tendency for rich households to avoid inclusion in the NBS samples, either because of their higher opportunity cost or because they have more things to hide. The other is the tendency for rich households, if they are included, to under-report their incomes.

An ingenious method has been devised to measure the latter effect (Wang, 2007). The argument is that people have an incentive not to report ‘grey income’, i.e. illegal, corrupt, or dubious income, often reflecting the rents accruing to people with power over resource allocation in a semi-marketised economy. The hypothesis is that households with high
legitimate income have greater opportunities to obtain grey income. To test this hypothesis, professional interviewers were employed to interview 2,000 households in the normal way in several cities in 2005. The methodological trick was to get them to select only households whom they knew, either as relatives or friends, in the expectation that such people would be more honest in their answers to interviewers who were close to them.

Wang also had access to the corresponding income and expenditure information in the 2005 NBS urban household survey. The latter sample was divided into seven bands of the proportion of income spent on food (corresponding to segments of the Engel curve) and the mean income of households in each band was calculated. The expected monotonic inverse relationship between the proportion of income spent on food and mean income per capita was found across the bands. Wang then estimated the mean income per capita for each band in his own survey. The ratio of income per capita in the small survey to that in the NBS survey rose monotonically, from 1.1 in the lowest income group to 1.7 in the median group, to 2.0 in the second-highest, and to 4.9 in the highest. It is in the highest income group in particular that under-reporting occurs. Income inequality among urban households is likely to be underestimated for this reason.

5. **Was it inevitable that inequality should rise so much?**

Some of the rise in inequality was inevitable as the central planning system was dissolved and marketisation occurred. However, some of the rise was due to the government’s policy stance. As a reaction to the egalitarianism of the past, wherever there was a trade-off, efficiency considerations took priority over equity considerations. Government long term strategy is well summed up in the words of a high official, Du Runsheng (1989: 192) “prosperity to few, then to many, then to all”.

I give three examples of how government chooses to trade equity against equity. One is regional policy. The most efficient location for most foreign direct investment is on the eastern seaboard. However, for a long time, FDI was required to locate there and prohibited from locating elsewhere. This gave the initially favoured areas a head-start. Under central planning there was a substantial progressive provincial tax and transfer
system that redistributed revenue from the richer to the poorer provinces. This redistribution was much weakened under economic reform, as each province relied increasingly on its own so-called extra-budgetary revenue and expenditure (Knight and Li, 1999). There was a reform of the fiscal system in 1994, intended to strengthen central government control of tax revenues. Nevertheless, public resources continued to be closely related to the level of local economic development. Richer areas have more revenues and are better able to provide public services and invest in local infrastructure. This worsens the spatial distribution of income. At the local level, villages, townships and counties are expected to pull themselves up by their own bootstraps. This degree of fiscal decentralisation contributes to spatial inequality, and can produce poverty traps, for instance with regard to the quantity and quality of primary and secondary education (Knight, Li and Deng, 2007). Spatial inequalities could be reduced if national and provincial governments were to adopt less decentralised and more equalising fiscal arrangements. In this case, apparent efficiency is preferred to equity, but the playing field may not be sufficiently level to ensure efficiency.

A second example is the powerful urban bias which is apparent in much government policy, and which sustains and promotes the rural-urban divide. Urban bias exists in China, in two senses. First, government allocates fewer resources to the rural sector than it would if it were concerned only with improving economic efficiency, as determined by shadow prices. Second, rural-dwellers receive less priority than they would if the government social welfare function made no distinction between rural and urban residence per se, and placed a greater value on additional income, the poorer the person. Underlying urban bias is the greater potential threat to political stability and government survival that urban people constitute.

Being separately administered, the rural areas are at a great fiscal disadvantage: they are largely expected to pull themselves up by their own bootstraps. Agriculture has received little policy support, and rural industry – the great success of the early reform period – has grown relatively slowly in recent years as it has lost out to urban industry. This suggests that a low implicit weight is implicitly attached to the welfare of rural people in the government’s social welfare. It is also partly the result of both fiscal and financial market arrangements. The high degree of fiscal decentralisation within the rural economy makes it difficult for poor rural people and communities to better themselves. The deliberately
repressed financial system, which rations credit and allocates it mainly to large state-controlled firms and does so inefficiently, imposes very tight credit rationing on rural people (Riedel et al., 2007: ch.4). Rural investment is therefore probably sub-optimal even if judged solely by the criterion of efficiency. In this case, the urban bias policy may harm both efficiency and equity.

The third example is the large scale redundancy programme in the state sector that was introduced in the mid-1990s. This was forced on government by the declining profits and rising losses of state enterprises, as a result of growing competition, which threatened economic growth and state revenues. It did not herald the end of urban bias. Indeed, the urban workers who retained their jobs enjoyed wage increase of some 8% per annum throughout the period of the redundancy programme. The redundant workers – more than 40 million of them – received little support and were thrown on the very tough residual labour market. There is a more general point, that the losers from economic reform have been neglected - as the social security previously provided by the danwei was tardily and inadequately replaced by more centralised systems. In this case, efficiency was achieved but without accompanying equity.

6. Does it matter that inequality has risen?

Then Chinese economy is currently in a virtuous circle of high business and investor confidence, high investment, dynamic exports, and resultant rapid economic growth, which in turn justifies and sustains that confidence. That raises the question: could there be a shock to the economy which could destroy that virtuous circle? Here I limit myself to the threats that emanate from rising inequalities.

One threat is political instability. There are inevitably political tensions surrounding economic reform. They derive from the uneven benefits of economic growth, and from the pressures for a different distribution of those benefits. The regional inequalities, the rising urban–rural inequality and the policies of urban bias, the rising inequality of pay, the emergence of a wealthy entrepreneurial class, the public perception of rampant rent-seeking activities and of corruption, the losers from state enterprise reform, the urban
tensions exacerbated by the flood of rural-urban migrants, the associated crime, the loss of social protection previously provided by the *danwei*, the rise in *anomie* among urban people confronted by new insecurities, the weak system for managing industrial relations, are all potential sources of discontent. There is of course an authoritarian, one-party, repressive political system to keep the lid on discontent. But this system does not have the flexibility to deal with discontent and disorder except by means of rapid economic improvement or political repression. Things could boil over at some point.

It is fairly clear that government priorities are changing. When we began our income distribution research programme in the late 1980s, government showed very little interest in it. Now my Chinese research colleagues are much in demand in government circles. The new leadership has begun to talk about “the harmonious society”, and some recent policy decisions like the western development programme and the abolition of the agricultural tax augur well. As against this, new interest groups are forming, which are likely to keep the economy on its inegalitarian course or weaken a policy response to discontent. For instance, even capitalists are now invited to join the Communist Party, and their influence on policy is probably growing. It may, therefore, take a long time before the second stage of the Lewis model takes over and market forces step in to reduce inequality substantially.

7. Conclusion

In the early stages of economic reform, it was predictable that income inequality in China would grow rapidly, and indeed it did. The evidence for the last ten years, since 1995, is more ambiguous. The CASS survey suggested that income inequality, already high, did not rise further, whereas the NBS data implied that inequality continued to grow. The difference may be due to the choice of income definition. Neither source provides a sure guide to the future of inequality in China.

Whether inequality rises or falls will depend on the balance of countervailing forces. It is clear that among the forces raising inequality in recent years are the growing importance of the rural-urban income disparity and the growth of urban wage inequality, itself to be explained both by greater rewards for human capital and by continuing labour market
segmentation. Among the forces reducing inequality are spread-effects: the diffusion of non-farm wage employment in rural areas and some convergence in household income per capita among provinces, especially among those in the eastern region. The relative importance of such economic relationships will determine future inequality, but they in turn will depend at least partly on government objectives and policies.

References


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