

Consumption and Living Standards in China, 1978–83

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Marxist economists and socialist planners share the view that the major objective of socialist economic development is to meet the needs of mass consumption. During the debates that followed the death of Mao Zedong in 1976 there was a searching examination of the extent to which development policy in the previous two or more decades had succeeded in raising living standards. A central premise of the policies of reform and Readjustment that emerged by the late 1970s from this debate was that consumption growth since the 1950s had been too slow. What was the evidence to support this contention? In what ways has policy since 1978 sought to redirect economic growth towards increased levels of consumption? Have these policies been successful and to what extent are they likely to continue to raise living standards?

Consumption Trends Prior to 1978

Before 1980 there was very little evidence on which to base estimates of long-run trends in consumption. Western economists had reached a general consensus on the rates of growth of national income between the mid 1950s and the mid 1970s,¹ but there was little consensus concerning the degree to which growth of output had been reflected in gains in consumption. There were too many uncertainties regarding the magnitude of capital formation to be able to estimate accurately changes in the consumption share of national income and data on the output of consumer goods, and their prices were too incomplete to estimate consumption from commodity output data. More recently the flow of data has improved, facilitating a somewhat more accurate assessment.

Broadly speaking, the new data support the contention that gains in personal consumption between 1957 and the late 1970s were remarkably small for an economy in which per capita output, measured in constant prices, had doubled. Between the end of the First Plan and 1977 per capita output grew at 3.4 per cent per annum (in real terms) while consumption—on the broadest possible measure, including personal and collective consumption—grew at only 1.3 per cent annually (in real terms).² In large measure the disparity in the growth rates reflects the rising share of national output allocated to investment. On the Chinese net material product concept (which omits depreciation and certain non-material services such as passenger transport) accumulation rose from 24.9 to 36.5 per cent of output between 1957 and 1978.³ On the more familiar western national income accounting methodology, the ratio of

1. Alexander Eckstein (ed.), *Quantitative Measures of China's Economic Output* (Ann Arbor, Michigan: University of Michigan Press, 1980).

2. International Bank for Reconstruction and Development, *China: Socialist Economic Development*, Vol. 1: *The Economy, Statistical System, and Basic Data* (Washington, D.C.: International Bank for Reconstruction and Development, 1983), p. 82.

3. *TJNJ* 1983, p. 25.

gross investment to gross domestic product rose from 23 per cent in 1957 to 31 per cent by 1978.⁴

The slow growth of consumption is borne out by data shown in Table 1 on the consumption of specific goods that traditionally have absorbed a large share of expenditures. Consumption of foodgrains, the source of 80–90 per cent of all calorific intake, declined by 3·2 per cent between 1957 and 1978. That decline does not reflect a shift to higher quality foods that is usually associated with rising incomes but rather a worsening in the distribution of income and a 5·9 reduction in average cereal consumption by the peasantry.⁵ Consumption of edible vegetable oils on average declined by fully a third, largely due to stagnant production in the face of increased population. Although there were modest increases in the consumption of sugar, fruit and meat, these were probably insufficient to offset the sharp decline in the consumption of edible vegetable oils and soybean products and the slight decline in cereal consumption. Thus average per capita food intake by 1978 was probably below the 2,000–2,100 calories per day level of 1957. Average consumption of another important consumer good, cotton cloth, also fell between 1957 and 1978, although this was offset by rising use of synthetic fibre materials.

Table 1: Per Capita Consumption of Major Consumer Goods, 1957, 1978 and 1981–83

	1957	1978	1981	1982	1983
Grain (kilograms)*	203·0	195·5	219·2	225·5	232·3
Vegetable oils (kilograms)	2·4	1·6	2·9	3·5	4·1
Pork (kilograms)	5·1	7·7	11·1	11·8	12·4
Cloth, cotton and synthetics (feet)	19·5	24·1	30·9	30·0	31·0
Of which : cotton	19·5	19·1	n.a.	n.a.	n.a.

Notes:

- * Measured in terms of trade grain.
- n.a. Indicates not available.

Sources:

Nicholas R. Lardy, *Agriculture in China's Modern Economic Development* (Cambridge: Cambridge University Press, 1983), pp. 150, 158.

Ma Hong and Sun Shangqing, *Zhongguo jingji jigou wenti yanjiu (Research on Problems Relating to China's Economic Structure)*, 2 Vols (Beijing, 1981), Vol. 2, p. 593.

TJNJ 1983, p. 483.

TJZY 1984, p. 91.

Trends in consumption prior to 1978 may also be judged on the basis of Chinese data on personal incomes. The most commonly used data are the wages of workers and employees and per capita income of members of

4. International Bank for Reconstruction and Development, *China: Socialist Economic Development*, Vol. 1: *The Economy, Statistical System, and Basic Data*, p. 78.

5. Lardy, *Agriculture in China's Modern Economic Development*, p. 158.

collective agriculture, shown in Table 2. While households with an employee and peasants engaged in collective agriculture together comprise 95 per cent of China's population, the official wage and peasant income data can be quite misleading, for at least four reasons. First, these data (with rare exceptions) are reported in current prices, whereas any assessment of change over time must take into account changes in the level of prices. Secondly, these data are frequently estimated on the basis of survey data in which the samples have been drawn on an unspecified but non-random basis, leading to estimates that sometimes vary substantially from the known underlying mean values. Thirdly, welfare judgments are most usefully made in per capita terms whereas the non-agricultural wage data are reported on a per worker basis. Because the number of workers per household has increased substantially over time these wage data understate changes in per capita income. Finally, the official income data do not take into account collectively provided consumption goods. In China that omission includes not just the usual range of government-provided health, education and welfare services, but also the value of a broad range of consumer goods that are sold to eligible members of the population at highly subsidized prices. These subsidies are unusually

Table 2: **Personal Income in Yuan 1957–83** (selected years, current prices)

Year	<i>Per Worker and Employee</i>		<i>Per Commune Member</i>		
	<i>State</i>	<i>Including</i>	<i>Collective Income</i>		<i>Total income[†]</i>
	<i>Enterprises</i>	<i>Urban</i>	<i>National</i>	<i>Survey</i>	<i>Survey</i>
	<i>Only</i>	<i>Collective</i>	<i>Average*</i>	<i>Data</i>	<i>Data</i>
	(1)	(2)	(3)	(4)	(5)
1957	637	n.a.	40.5	43.40	72.95
1978	644	614	74.7	88.53	133.57
1979	705	668	84.2	101.97	160.17
1980	803	762	85.9	108.37	191.33
1981	812	772	97.9	116.20	223.44
1982	836	798	n.a.	142.84	270.11
1983	865	826	n.a.	169.47	309.8

Notes:

n.a. Indicates not available.

* Not compiled after 1981.

[†] Includes, in addition to collective income, "income from family sideline production" and "other income." The latter includes remittances (in cash and the value of in-kind remittances) to members of the collective from household members working outside the collective, subsidy payments to army men retired in the countryside and compensation for work in state sponsored projects.

Sources:

TJNJ 1981, p. 426; TJNJ 1983, pp. 485, 487, 499; "Communiqué on fulfilment of China's 1983 national economic plan," *Beijing Review*, No. 20 (1984), pp. X-XI. NYNJ 1980, p. 41; NYNJ 1981, p. 68. Ministry of Agriculture Commune Management Bureau, "Poor counties in China 1977–79," *Xinhua yuebao (New China Monthly)*, No. 2 (1981), p. 117. Zhu Rong, "Speech at the third national agriculture cost calculation training class," *Gongshe caiwu (Commune Finance)*, No. 8 (1982), p. 2. TJZY 1984, pp. 92, 97.

large, even by the standards of other socialist countries. Each of the problems mentioned above has important implications not only for assessing changes over time in average levels of consumption but also for analysing the distribution of incremental consumption gains among segments of the population. Moreover, each is an important element in assessing changes in consumption not only between 1957 and 1978, but also since the institution of the policies of the Readjustment after 1978.

The potentially misleading character of official data measured in current prices is demonstrated most dramatically in the case of peasant income. Between 1957 and 1978 both income derived from collective sources and total income, which includes the value of private sideline production by households as well as the value of transfer payments to peasants, grew by more than 80 per cent, almost 3 per cent per annum. But the reported increase, shown in columns (3), (4) and (5) of Table 2, reflects primarily rising prices rather than rising real farm income. Collective income consists predominantly of collective farm output distributed to peasant households, the great bulk of which is grain that is directly consumed within the household and never enters the market-place. But distributed grain has been valued at its official purchase price, which increased 60 per cent between 1957 and 1978.⁶ Measured in terms of constant prices per capita distributed collective income rose less than a third. Not enough is known about the method of measuring the value of household sideline production, the other major component of total farm income, to be able to judge the extent to which it suffers from a similar upward bias.⁷ Despite the obvious severity of the upward bias introduced by measuring income in kind in sharply rising prices, Chinese sources frequently analyse income trends without correcting the flawed underlying data.⁸

Another problem arises in income figures derived from survey data that vary widely from data purporting to represent the national average for the same concept. Columns (3) and (4) of Table 2 illustrate this problem. Survey data consistently reveal a value for per capita income derived from collective sources that is about 20 per cent greater than the national average. In part this discrepancy may arise from biased sampling procedures that result in over-estimating income or underestimating the number of dependants per rural household.⁹ But the disparity may arise

6. *NYNJ* 1980, p. 380.

7. The main uncertainty is how completely the methodology takes into account the costs of inputs that peasants purchase, mostly on private markets.

8. See for example a page 1 news article in *Guangming ribao* (*Guangming Daily*) on 7 February 1981 citing State Statistical Bureau (SSB) data giving total peasant income as 73 *yuan* in 1956 and 113 *yuan* in 1976 (years not shown in column (5) of Table 2 but part of the same series) or an increase of 2 *yuan* per year. Similarly misleading statements have been made by China's highest leaders. For example Zhao Ziyang, the premier of the State Council, in his "Report on the Sixth Five-Year Plan" delivered at the Fifth Session of the Fifth National People's Congress on 30 November 1982 (*Beijing Review*, No. 51 (1982), p. 18) claimed that peasant income had increased by an average annual rate of 4.3 per cent between 1955 and 1980 without any mention that this was measured in current prices and vastly overstated the real increase in the peasant standard of living.

9. Lee Travers, "Bias in Chinese economic statistics: the case of the typical example investigation," *The China Quarterly*, No. 91 (September 1982), pp. 478–85.

largely because the sample survey definition of income is broader than that used to derive the national average data. The sample survey data, for instance, appear to include income derived from collective units other than the unit of which the earner is a member, whereas the national average figure is based on a narrower definition.¹⁰ But until the precise basis of the data categories is revealed, analysis is difficult.

The third shortcoming of the most commonly presented income data is illustrated in column (1) of Table 2. This time series on income per worker in the state sector of the economy is sometimes used to show the stagnation of urban income between 1957 and 1978. Most often this point is made in analyses of trends in the urban–rural income gap. But the constancy of per worker income is relevant only if the labour force participation rate, that is, the share of the potential work force that is actually employed, is unchanged. Between 1957 and 1978 the female labour force participation rate increased so dramatically that the average number of dependants per worker declined from 2.3 to 1.06.¹¹ Thus per capita income in families in which members were employed in the non-farm sector rose by 60 per cent although the per worker wage was essentially unchanged. Taking the increasing participation rate into account is more than sufficient to reverse the judgment that the urban–rural income gap was reduced between 1957 and 1978. The gap widened dramatically because the increase in the number of female workers in urban households raised per capita urban income far more than the modest increase in peasant income over the same period.

Finally, analyses of trends in living standards based on incomes received are at best partial and at worst quite misleading because they do not take into account the enormous subsidies that the state pays to ensure that some commodities are available to some consumers at prices far below cost.¹² If these subsidies were available to all segments of society and were of a roughly unchanging magnitude, they could be safely ignored. In fact, subsidies of consumer goods and services have an important influence on both changes over time in the level of real consumption and the distribution of income among different groups of consumers.

The effects of subsidies on the distribution of income are particularly significant since subsidies accrue almost exclusively to members of what the Chinese refer to as the “non-agricultural population.” That group includes most of those with permanent rights to reside in urban areas and a smaller number of state employees who reside in rural areas, for example workers in transport services, retailing, financial services and so forth. While the non-agricultural population includes some non-urban workers

10. This can be inferred from the notes to the tables that present the results of the farm household surveys. See *TJNJ* 1981, p. 431 and *TJZY* 1983, p. 84.

11. SSB, “Selected economic statistics materials,” in 1981 *JJNJ*, VI, p. 25 and *TJZY* 1983, p. 81.

12. The following paragraphs are based on more detailed analysis presented in Lardy, *Agriculture in China's Modern Economic Development*, pp. 163–65, 192–200 and *Agricultural Prices in China*, World Bank Staff Working Paper, No. 606 (Washington, D.C.: International Bank for Reconstruction and Development, 1983), pp. 31–50.

it excludes those employed in urban areas as temporary workers, contract workers, or in the category “both worker and peasant.” Thus, “non-agricultural” is both broader and narrower than the category “urban.” In 1980 the non-agricultural population was 160 million.¹³

In 1978 the value of subsidies and benefits accruing to each state employee was 526 *yuan* or 82 per cent of the average wage shown in column (1) of Table 2.¹⁴ These subsidies cover a broad range of commodities and services. The most important subsidies are for rationed cereals and vegetable oils. In 1978 these subsidies amounted to 179.6 *yuan* per employee. They arise because the prices of rationed cereals have changed insignificantly since 1952 whereas purchase prices paid to peasants by the state roughly doubled. Subsidies are thus required to make up the difference between rising costs of purchase, milling and distribution on the one hand and the stable retail selling price on the other. In 1978 the losses incurred by the state on the purchase and resale of rationed cereals amounted to 0.15 *yuan* per kilogram or about 45 per cent of the average ration price. Losses per kilogram were much larger for edible vegetable oils, although their ration prices were raised by a fourth between 1952 and the late 1970s.¹⁵

The value of health, retirement, death, maternity, disability and similar benefits for which state employees are eligible totalled 115.3 *yuan* per worker in 1978. A large share of these benefits, such as those for retirement, long-term disability, maternity, death and survivor benefits, are administered through the trade union system which is financially underwritten by the state. The remainder, mostly health benefits for which

13. Li Siheng, “Points on China’s grain situation,” *Nongye jingji congkan (Agricultural Economics Digest)*, No. 4 (1981), p. 56.

14. The data in the next few paragraphs are in terms of per worker in the state sector. This may result in a slight overstatement of the average price subsidies and benefits enjoyed by members of the non-agricultural population. While all state workers are members of the non-agricultural population, not necessarily all members of the non-agricultural population are in households in which one member is a state employee. Of the 95 million workers and staff members in 1978, 75 million were employed in state-owned units and 20 million were employed in collective units. Although workers in urban collectives are all members of the non-agricultural population and thus eligible for subsidized food and health benefits, they do not receive the benefits administered through the trade union system, which operates only within state-owned enterprises. Moreover, enterprise funded welfare programmes are probably less generous in collectives. But many urban collective workers are members of households in which there is a member employed by the state, and thus would benefit directly from the subsidized housing and indirectly from other benefit programmes provided to state workers. What is unknown is the share of the non-agricultural population residing in households in which no member is employed (or retired from employment) by the state and what subsidies and benefits (in addition to those provided through the trade union system which constitute about 20 per cent of the subsidies and benefits of state employees) these individuals would not receive.

15. Losses in 1981 were 0.2 *yuan* per kilogram of rationed cereals, and 1.6 *yuan* per kilogram of rationed vegetable oils. Yang Shengming, “Income, commodity prices, and living standards,” *Renmin ribao (People’s Daily)*, 16 April 1982, p. 5. I estimate losses as 0.15 *yuan* per kilogram in 1978 on the basis of changes in the average procurement price for cereals and the assumption that processing and distribution costs were unchanged. The average ration price of rice and wheat flour is 0.337 *yuan* per kilogram. Wang Zhenzhi and Wei Yunlang, “The changing situation concerning the scissors price differential in the exchange of industrial and agricultural products,” *Jingji yanjiu ziliao (Economic Research Materials)*, No. 15 (1980), p. 47. This has a table with retail prices of selected consumer goods, including several rationed commodities, for selected years 1952–77.

the work unit contracts with a hospital for the provision of services, are underwritten indirectly by the state through the budget of the employing unit.

Welfare benefits provided to state employees cost the state an additional 119.5 *yuan* per worker in 1978 with approximately two-thirds provided directly by the state and a third through the work unit. Since state employees receive high incomes and are not eligible for need-based welfare benefits, these expenditures seem extraordinarily high.¹⁶ Presumably they include the costs of providing childcare facilities in work units, worker recreation facilities and the like. They may also be the source of funds for highly sought after subsidiary foods and other scarce consumer goods that are frequently distributed gratis by state work units to their employees.

Housing subsidies are a fourth major supplement to the real incomes of almost all urban residents. The rents paid by state workers are less than 2 per cent of income and cover less than 25 per cent of the costs to the state of providing housing.¹⁷ Costs are defined to include outlays for management, maintenance and amortization. But since the last item is calculated on the basis of a 50-year life it understates the true economic costs (particularly the cost of capital) and thus the value of housing subsidies. On average these subsidies, as calculated by the Chinese, amounted to 85.3 *yuan* per state employee in 1978.

State employees are also eligible for three other little known subsidy programmes. If they live some distance from their work place, reportedly the criterion of more than three bus stops is common, they are eligible for subsidies to meet their commuting costs. These subsidies averaged 6.3 *yuan* per worker in 1978. There is also a special subsidy to meet the direct costs of visiting annually a spouse assigned to a work unit in a distant city and to travel to one's native place on the occasion of the death of a parent. Like the commuting subsidy, only a small number of workers would be eligible for such programmes in any given year, but on average the value of these travel subsidies (which excludes the costs of the additional paid vacations to which these individuals simultaneously are entitled) is 10 *yuan*. Finally, coal for home heating and cooking is sold to state employees at a subsidized rate, the cost of which was 10.1 *yuan* per worker in 1978.

The subsidy programmes discussed above have substantial effects both on changes over time in the levels of real consumption and on the distribution of real income among different components of Chinese society. They add considerably to the disparities in real income between commune members and state employees. Commune members receive few if any state subsidies. Only a small share of the peasantry is eligible for subsidized staple foods. Peasant housing is privately owned and its costs are borne from peasant incomes. Commune members are not eligible for

16. The usual translation of *fuli* as "welfare" is misleading since in Chinese practice welfare expenditures are invariably exclusive of the need-based programmes that the word welfare commonly connotes in the west, at least in the United States. Need-based welfare programmes in China, most of which are of a short-term nature, are financed with "relief funds" (*jiuji fei*).

17. *TJNJ* 1981, p. 439.

the retirement, survivor, disability, maternity and other benefits administered with funds either directly by the state or through the labour insurance system. The costs for those modest health and welfare programmes that do exist in rural areas are borne largely through the retained earnings of collective units and extremely modest state budgetary funds allocated for rural relief. Retained earnings for financing such programmes for the 803 million people who were members of communes in 1978 amounted to 1,814 million *yuan* or a little over 2 *yuan* per capita.¹⁸ State budgetary outlays for rural relief for 1978 were 690 million *yuan*, a little less than 1 *yuan* per commune member.¹⁹

Astonishingly, almost all discussions in China about the differences in income levels of state employees and peasants totally ignore subsidy programmes. Calculations of the ratio of worker to peasant income levels are based on the income concepts shown in Table 2, without reference to the subsidy programmes which improve the living standards of workers and employees in ways described above. The misleading nature of these analyses is all the more astounding since the income concept for the rural population carefully takes into account the monetary value of in-kind consumption while studiously ignoring state price subsidies of the consumption of urban residents.

Inter-temporal trends in real income levels are also affected by the subsidy programmes discussed above since over time the value of subsidies accruing to workers has increased more rapidly than nominal wages. Food subsidies, the single most important subsidy programme, did not exist in the 1950s since the margin between procurement and ration prices was more than sufficient to cover processing and distribution costs and to leave large profits for the Ministry of Food. As late as 1959, when procurement prices were about 10 per cent higher than in 1952, profits on the purchase and resale of cereals were approximately 400 million *yuan*. When grain procurement prices were raised by about one-quarter in 1961, while retail prices remained unchanged, the state began to incur moderate losses. But these were eliminated in 1965 when the retail prices of wheat flour and rice were raised by 7.5 and 2.7 per cent, respectively, but recurred persistently after 1966 when the procurement price of cereals was raised by 15 to 20 per cent while retail prices remained unchanged. Between 1974 and 1978 cumulative losses on the purchase and resale of cereals were 20.8 billion *yuan*, an average of over four billion *yuan* per year.

Subsidies of urban housing have also increased dramatically over time. Prior to 1955 rents were set at a level sufficient to cover maintenance and replacement costs. But rents were lowered absolutely, first in August 1955 and again during the Cultural Revolution, and by the late 1970s averaged only about a third of the rents charged in the 1950s. On the other hand between 1957 and 1978 the cost of residential construction rose from 47 to 89 *yuan* per square metre.²⁰ By the late 1970s urban residential rents, on average, covered less than 25 per cent of average costs.

18. *NYNJ* 1980, pp. 382–83.

19. *TJNJ* 1983, pp. 147, 453.

20. *TJNJ* 1983, p. 357. These figures exclude the cost of land.

Other subsidy programmes increased over time as well. The subsidy of coal for home heating, for example, was introduced in 1965 in many urban areas.²¹ But further research is required to verify the magnitude of the increases. Even if other subsidy programmes were unchanged, the growth of rent, food and heating subsidies alone was sufficient to more than double the value of subsidies per worker between the 1950s and 1978. Thus while per worker income stagnated between 1957 and 1978, the value of subsidies grew rapidly, increasing the gap between urban and rural per capita real incomes.

In summary, average per capita consumption grew quite modestly between the end of the First Plan and the late 1970s. This cannot be attributed to the slow growth of aggregate output but rather reflects an imbalanced growth strategy in which investment resources were allocated preponderantly to heavy industry. Agriculture and consumer goods manufactured by light industry grew quite slowly, both because they were starved for investment resources and because the prevailing institutional arrangements failed to provide adequate production incentives. Except for a brief period of liberalization in the first half of the 1960s, the structure of collective farming was inimical to rapid growth. Similarly the cooperativization of handicraft production in 1956 stifled output growth in a sector that had been the source of a large share of consumer goods. Finally, the consumption gains that did occur after 1957 were concentrated in the urban sector and were due to the increased value of indirect subsidies and to increases in the urban labour force participation rate rather than to any change in nominal wages per worker.

Effects of the Readjustment

The Readjustment strategy embraced at the end of the 1970s was premised on the need to reverse the historical pattern of imbalanced growth by providing increased incentives for agricultural production and by increasing the flow of investment resources to agriculture and light industry. These sectors were to supply the wage goods necessary to make the new incentive systems effective in increasing labour productivity. Since the nature of these programmes has been widely discussed the analysis below addresses only the issue of how successful the new arrangements have been and are likely to continue to be in increasing the levels of the real incomes.

To anticipate the conclusions derived below, there is no question that the growth of real incomes between 1978 and 1983 has been unprecedentedly fast. This is suggested by the rapid growth of national income and the simultaneously rising share of consumption as well as by the increased per capita supplies of major consumption goods, both agricultural and manufactured. As reflected in Table 1, between 1978 and 1983 grain consumption rose 19 per cent, vegetable oil consumption more than doubled, pork consumption rose 60 per cent, and so forth. Yet measuring

21. Ji Long, Wang Zhenzhi, and Wang Yangzhi, *Shehuizhuyi jiage wenti yanjiu* (*Research on Socialist Price Problems*) (Beijing, 1982), p. 121.

the precise rate of increase in consumption and analysing the more interesting distributional issues continues to be plagued by the methodological problems discussed above. Changes in the level of prices have been more rapid and more complex than at any other period since the beginning of the First Five-Year Plan and available price indices continue to be based on too narrow a range of commodities to be analytically very useful. Similarly, subsidy programmes have expanded enormously, complicating analysis of income trends based on nominal income. Finally changes in the dependency ratio of urban workers continue to have a major affect on per capita incomes of those employed outside of agriculture. Thus, most conclusions about income trends since 1978 need to be carefully qualified and will remain tentative until the Chinese make available improved data on prices and subsidies.

Changes since 1978 in aggregate consumption measured in current prices can be derived from data on the division of net material product into consumption and accumulation, summarized in Table 3. Because of the continued growth of output and a rise in the consumption share from 63.5 to 70.0 per cent, material consumption rose by 72 per cent between 1978 and 1983. In per capita terms the growth was 62 per cent or 10.1 per cent per annum. Unfortunately, the Chinese have not published a price deflator for material consumption so it is difficult to estimate the growth of consumption in real terms. Economists at the World Bank estimate that between 1978 and 1981 prices of the consumption component of national product rose by only 15.4 per cent, implying that real per capita consumption rose by 21 per cent or 6.7 per cent annually.²²

Table 3: Consumption Per Capita, 1978–83 (current prices)

	1978	1979	1980	1981	1982	1983†
Available National Income*	297.5	335.6	368.6	388.7	425.4	465
(billions of yuan)						
Of which:						
Investment share (%)	36.5	34.6	31.6	28.5	29.0	30.0
Consumption share (%)	63.5	65.4	68.4	71.5	71.0	70.0
Consumption (billions of yuan)	188.8	219.5	252.1	278.1	302.1	325.5
Index of consumption	100	116	133	146	160	172
Index of per capita consumption	100	114	130	140	152	162

Notes:

*Net material product adjusted for the difference between imports and exports and statistical error.

† Author's estimate.

Source:

TJNJ 1983, p. 25.

22. International Bank for Reconstruction and Development, *China: Country Economic Memorandum* (Washington, D.C.: International Bank for Reconstruction and Development, 1983), p. 95.

Yet the Bank's estimate of price inflation of the consumption component of output is subject to a wide margin of error. It is derived as a residual from an implicit price deflator for net material product, calculated from Chinese data, and an estimated price deflator for industrial output which is taken as a proxy for the investment component of total output. Unfortunately, the implicit price deflator for net material product is calculated from an index of net material product in comparable prices rather than in constant prices and it is not clear if the estimated gross output deflator for industry is a good approximation of changes in the price level of investment goods. The implicit deflator for net material product for 1981 is only 111.3 (1978 = 100), suggesting that it may be constructed on a commodity base composed predominantly of fixed price goods, giving inadequate or no weight to commodities sold in markets not subject to direct state price control and no weight to illicit marking up of prices over the state list price.²³ Thus the only conclusion one can draw is that 6.7 per cent per annum represents an upper bound on the rate of growth of real consumption between 1978 and 1981.

Estimates based on aggregate material product can be compared with the wages of workers and peasant incomes, subject to the provisos mentioned earlier. Wages of both state employees and of workers in urban collective enterprises rose about 35 per cent between 1978 and 1983 [Table 2, columns (1) and (2)]. Until the end of 1982 almost 40 per cent of the increase can be attributed to increased bonus payments,²⁴ the remainder to two general increases in wage rates instituted in 1979 and 1980 and a separate 5 *yuan* per month monthly cash subsidy awarded to state employees beginning in November 1979. That subsidy was designed partially to offset the increased retail prices for subsidiary foods products such as pork, eggs, fish and so forth. Between 1979 and 1983, 39.2 million new urban workers were hired, reducing substantially the number of urban unemployed further increasing the labour force participation rate.²⁵ By 1983 there were only 0.71 dependants per worker, compared to 1.06 in 1978.²⁶ Even with unchanged wage rates that is the equivalent of a 20 per cent increase in per capita income for members of households with a wage earner(s) employed outside of agriculture. The combined effect of wage increases and increases in participation rates was a 61 per cent or 10 per cent per annum increase in income per capita. The official index of the cost of living of urban workers increased only 9.9 per cent over the same period, implying that real per capita income rose 46 per cent or 7.9 per cent per annum.²⁷

23. The highest level references to illicit price mark-ups are found in State Council, "Notice on strengthening market and price management," *Zhonghua renmin gongheguo guowuyuan gongbao* (Bulletin of the State Council of the People's Republic of China), No. 12 (1983), pp. 523–25 and SSB, "Communiqué on fulfilment of China's 1983 national economic plan," *Beijing Review*, No. 20 (1984), p. IX.

24. *TJZY* 1983, p. 79.

25. *TJZY* 1983, p. 20 and "Communiqué on fulfilment of China's 1983 national economic plan," p. XI.

26. *TJZY* 1983, p. 81; *TJZY* 1984, p. 94.

27. *TJZY* 1984, p. 88.

However, the Chinese cost of living index is almost certainly biased downward, particularly during this period of rapid change both in the composition of consumption and in the relative price structure. The Chinese retail price index uses current period weights (a Paasche index) and thus answers the question how much more (or less) does it cost to buy today's basket of goods as compared to the same basket of goods in the base period?²⁸ The problem of bias arises because the urban consumption basket has changed significantly in recent years to include substantially more consumer durables such as radios, tape recorders, televisions, refrigerators and washing machines. But the prices of these commodities have been reduced substantially in recent years as production has soared.²⁹ The retail index is constructed on the presumption that the quantity consumed in the base period is the same as that in the current period but that purchases made in the base period were at base period prices. Of course, the construction is hypothetical since the quantity of the goods available in the base period was a small fraction of the quantity consumed in the current period, and even had the larger quantity been available earlier in all likelihood it would not have been purchased and consumed at the higher prices that then prevailed. On the other hand the prices of some important goods, such as vegetables, meat, eggs and so forth, have risen substantially and this tends to push the index up. The overall index, however, shows little year-to-year change because of the offsetting affect of sharp declines in prices of some manufactured consumer goods. While consumers benefit from the much larger volume of these goods now available at lower prices, the use of current year weights understates the rate of price inflation since few consumers actually bought these goods at the higher base period prices. In the words of one Chinese author, "Few of those now buying televisions are aware that prices have been lowered."³⁰

The urban cost of living index, in turn, is the weighted average of the retail list price index (discussed above), the retail negotiated price index, and the index of market prices. The weights for the three indices are not known. It is possible that over-weighting of the list price index is also a source of downward bias in the urban cost of living index. Thus deflating the growth of nominal wages with the urban cost of living index will overstate the growth of urban real wages.

Data on peasant income in Table 2 show a similar remarkable spurt after 1978. But again price problems preclude precise disaggregation of the reported increases into real and inflationary components. Successive

28. You Xingyi, "Opinions on the compilation of the retail price index," *Jiangxi caijing xueyuan xuebao* (Bulletin of the Jiangxi Finance and Economics College), No. 3 (1981), pp. 33–37, reprinted in *Caimao jingji* (Finance and Trade Economics) Chinese People's University Nationals Reprints, F.5, No. 3 (1982), p. 56. By contrast, the United States consumer price index employs base year weights (a Laspeyres index).

29. Liu Zhuofu "Issues in stabilizing market prices," *Gongye jingji guanli congkan* (Industrial Economic Management Abstract), No. 4 (1981), pp. 10–14, reprinted in *Caimao jingji*, F.5, No. 9 (1981). This cites 1980 price reductions approved by the State Council for the following commodities at the retail level: nylon socks, plastic products, western medicines, refrigerators, televisions, tape recorders and digital watches.

30. You Xingyi, "Opinions on the compilation of the retail price index," p. 60.

surveys of rural households show that per capita farm income [column (5)] rose about 130 per cent between 1978 and 1983, an average annual rate just over 18 per cent. Unfortunately there is no reliable price deflator. Although the SSB releases an urban cost of living index they apparently do not even attempt to compile an index of the cost of living of rural residents.³¹ Outside efforts to construct such an index are based on the most fragmentary data. World Bank economists, for example, estimate that the appropriate rural price index increased by as little as 6.6 per cent annually from 1978 through 1981.³² Yet in 1978 the largest single component of rural income was the value of in-kind distribution of major agricultural products. The value at prevailing purchase prices of per capita rural cereal consumption, for example, was 50 *yuan*.³³ To prevent the 20 per cent increase in the purchase price of cereals instituted in 1979 from inflating the value of reported collectively distributed income, collective units were instructed to continue to calculate the value of in-kind distribution of cereals at 1978 prices. Yet this procedure broke down quickly as many local cadres calculated the value of in-kind distribution at higher prices. By 1982 this problem was so severe that the SSB discontinued publishing average national data on distributed income derived from collective sources. They continued, however, to publish the survey data, but without disclosing the procedures for valuing in-kind distribution. Since procurement prices rose 47.7 per cent between 1978 and 1983, or 8.1 per cent per annum, the appropriate price deflator for the in-kind component of peasant income may be higher than the 6.6 estimated price deflator referred to above. This judgment is reinforced by trends in rural market prices. When these markets were reopened in 1978 and 1979, the prices prevailing for many commodities were more than twice the level of state-set prices for identical products. Yet an official index of the prices of consumer goods sold in these markets reflects only a 5.8 per cent increase in the price level between 1978 and 1982. Again this low rate suggests the index is based predominantly on commodities which, although sold in nominally free markets, are subject to indirect state price control. Finally, very little is known about the prices of inputs purchased by farm households for the production of sideline commodities. Since fully half of the reported increase in per capita farm income between 1978 and 1982 is due to increased income from sideline production this is a major

31. You Xingyi, *ibid.* for example, lists only the state list price index, the negotiated price index, and market price index. In half a dozen other articles dealing with price indices, there is no mention of a rural cost of living index or even an index of retail prices in rural markets. The published index of prices of manufactured goods sold in rural areas is not an acceptable substitute both because it excludes food products and services and because the number of manufactured commodities included in the index is too small. See the discussion in Lardy, *Agriculture in China's Modern Economic Development*, pp. 108–112.

32. International Bank for Reconstruction and Development, *China: Country Economic Memorandum*, p. 96.

33. Peasant cereal consumption in 1978 was 192.5 kilograms (measured in terms of trade grain) and the weighted average procurement price for six kinds of grain was 0.2128 *yuan* per kilogram, unhusked weight. Lardy, *Agriculture in China's Modern Economic Development*, pp. 158, 249. The product of the price (adjusted to a trade grain basis) and the quantity consumed is 49.3 *yuan*.

shortcoming.³⁴ If the prices of inputs have increased more rapidly than the sales prices for the final goods in rural markets, the official data may overstate the growth of income derived from sideline production.

Uncertainties about price trends are particularly acute in any analysis of trends in the distribution of income by category of income recipient. As discussed above, nominal income of urban residents and peasants rose by 61 per cent and more than 100 per cent, respectively, between 1978 and 1983. Yet one cannot necessarily infer that policy since 1978 has reversed the long standing trend of increasing differentials in urban and rural living standards. Now, for a broad range of products, the relative prices faced by urban and rural consumers diverge more widely than ever before. State subsidies, almost all of which accrue to urban residents, have grown substantially since 1978, allowing the retail network to hold down the prices charged for some important goods and services, even in the face of rising costs. For example, urban subsidies for rationed cereals have soared from just over 4 billion *yuan* per year in 1978 to 9.8–11.6 billion *yuan* in 1981.³⁵ This has allowed the continued distribution of rationed cereals to urban consumers at prices unchanged since 1965, despite a 45 per cent rise in the average procurement price for grains. Rural consumers, on the other hand, are not generally eligible for rationed commodities and when they must purchase grain from the state or on open markets they now face prices that range up to twice the level paid by urban consumers.³⁶ Similarly, rapidly rising wages and continuing increases in the cost of construction materials have still not affected urban rents but are in part passed along to peasants who build their own homes, at least in part with materials purchased through the state distribution system.³⁷

Despite extensive discussion in the press on the need to reduce the level of subsidies, the growth of subsidy and benefit programmes has far outstripped the growth of wages. The decision to keep retail prices of rationed wheat flour and rice unchanged since 1978 adds another 150 *yuan* per worker to the value of food subsidies. Fringe benefits financed through the labour insurance system increased 170 per cent from 6.69 to 18 billion *yuan* between 1978 and 1983, while the number of state employees grew by only 18 per cent over the same period.³⁸ Housing subsidies have also increased at an unprecedented pace. More than 450 million square metres of new urban housing were completed between 1978 and 1983 at a cost per square metre by the end of the period of three times that of 1957. The

34. *TJZY* 1983, p. 84.

35. The total value of subsidies on domestically produced cereals was 12.9 billion *yuan* and I have estimated the subsidy on imported cereals at from 0.6 to 2.4 billion *yuan*, the lower figure applying when the official exchange rate is used in the estimate, the higher when the domestic resource cost of earning a unit of foreign exchange is used as the implicit exchange rate. Lardy, *Agriculture in China's Modern Economic Development*, p. 195. Of this amount 3.7 billion *yuan* was for rural consumption, the residual, 9.8 to 11.6 billion *yuan* went for subsidies of urban consumption. Indirect evidence suggests that almost none of the four billion *yuan* in annual subsidies in 1975–78 accrued to rural consumers.

36. Lardy, *Agriculture Prices in China*.

37. The cost of residential construction in urban areas rose 50 per cent, from 89 *yuan* to 135 *yuan* per square metre, between 1978 and 1982. *TJNJ* 1983, p. 357.

38. *TJZY* 1984, p. 93.

average value of the urban housing subsidy has increased enormously both because the rental charges per square metre have not been adjusted upward and the average space per urban resident has increased significantly. In total the value of price subsidies and fringe benefits accruing to the non-agricultural workers by the end of 1983 was approaching 1,000 *yuan* per year, twice the level of 1978, whereas nominal wages were up only about a third.

Prospects for Future Income Growth

Projections of future income growth are hazardous since they depend on a correct assessment of historical trends and the ability to predict policy changes. The only projection that can be supported with any confidence is that the pace of consumption growth in the next five years will lag behind that of 1978–83. That assessment is based on several factors. First, measured in current prices more than one sixth of the increase in material consumption per capita between 1978 and 1983 was due to the rising share of output allocated to consumption. Put alternatively, one-sixth of the increase in consumption measured in current prices, would have occurred even if per capita output had not expanded at all. Yet this source of income growth has now been exhausted since the 71:29 ratio between consumption and investment targeted for the Sixth Five-Year Plan (1981–85) does not allow for a further increase in the consumption share of output in 1984–85.³⁹

A similar conclusion emerges from examining the income side, although there is somewhat greater uncertainty in agriculture than in manufacturing. In industry the largest single component of increased wages was bonuses which shot up from 11.6 *yuan* to 81.5 *yuan* per worker between 1978 and 1982.⁴⁰ But as problems in the allocation of bonuses arose and no evidence emerged that suggested that bonuses contributed to increased worker productivity, the state curtailed the growth of bonuses between 1981 and 1983 and called for even more modest increases in the future. Overall, as shown in Table 2, following major adjustments in 1979–80, the pace of increase in wages has been quite modest, even in nominal terms. Unless there is a dramatic change in policy, the outlook would appear to be for continued increases in nominal wages that little more than match the increase in the official cost of living index. Similarly, future declines in the dependency ratio, itself sufficient to have generated a 20 per cent increase in per capita urban incomes between 1978 and 1982, are likely to be moderate. The female labour force participation rate is already quite high and the backlog of the urban unemployed was reduced from some 20 million in 1978 to some three million at the end of 1981.

In agriculture the prospects for future income growth appear uncertain. The state has substantially slowed increases in the level of purchase prices; in 1982 and 1983 they rose only 6.7 per cent, following a meteoric rise of

39. "The Sixth Five-Year Plan of the People's Republic of China for national economic and social development," *Beijing Review*, No. 21 (1983), p. IV.

40. *TJZY* 1983, p. 79.

almost 40 per cent between 1978 and 1981.⁴¹ Most of the increase in income derived from collective sources since 1978 has been due to higher prices received for commodities sold to the state rather than to an increase in the volume of such sales. Increased sideline income has been more important than gains from collective income, but in the future may not increase by amounts sufficient to compensate for the likely slower growth of collective income in the future.

Thus, personal income gains in agriculture will depend more on expanding output than they have in the recent past. However, evaluating the prospects for the future growth of agriculture is complex. The sources of output growth in recent years can be divided, conceptually at least, into two components. The first is the affects of improved relative prices, a revival of private marketing opportunities, increased inter-regional specialization in production, and increased flows of inputs from the modern sector. All of these changes could have been undertaken within the framework of the rural ownership system that existed in 1978. The second source of growth derives from the improved incentives provided by decollectivization. My own view, set forth in some detail elsewhere, is that reforms in pricing, marketing and specialization and increased flows of current inputs and higher levels of fixed investment provide the best hope for sustained growth of both productivity and output.⁴² But by mid 1980 the dominant view in Beijing was to attribute most of the growth since 1978 to the re-emergence of farming based on households rather than collective units. Thus several of the most important policy changes announced in 1978 were subsequently reversed: state investment in agriculture was cut substantially rather than increased; the rate of increases in purchase prices was drastically curtailed; prices in non-state markets were subjected to increased control rather than being determined by supply and demand; finally, the level of inter-regional trade in cereal products was frozen for a three-year period, thus inhibiting further specialization. Yet the attribution of most growth since 1978 to decollectivization may be mistaken and the present policy mix, if sustained, may lead to a slower rate of growth of output over the medium term, compared to the recent past.

If present policies are sustained, China will appear remarkably similar to other socialist states during periods of leadership transition. Substantial spurts of consumption during succession periods, followed by declines in the rate of growth of consumption, have occurred in the Soviet Union, the German Democratic Republic, Poland and Czechoslovakia.⁴³ Policies that favour mass publics received the most attention in the aftermath of succession, and personal income, wages, social outlays and public housing programme all grow substantially above trend rates for periods of from two to four years. Subsequently, however, traditional priorities re-emerge

41. *TJZY* 1983, p. 76 and "Communiqué on fulfilment of China's 1983 national economic plan," *Beijing Review*, p. VIII.

42. Nicholas R. Lardy, *Agriculture in China's Modern Economic Development*.

43. Valerie Bunce, *Do New Leaders Make a Difference? Executive Succession and Public Policy under Capitalism and Socialism* (Princeton, New Jersey: Princeton University Press, 1981), pp. 158-67.

and the rate of consumption growth declines. China appears to be following this pattern. There was a spurt of growth of consumption in 1978–83 but as seen above, the increase was concentrated in the early years of that period when Deng Xiaoping was consolidating his leadership position. More recently the growth of consumption has declined and under current policies this trend seems likely to continue.