

Paper no. 05/2006

## **Macroeconomic Policy, Inequality and Poverty Reduction in India and China**

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### **Abstract**

*The two “success” stories of globalisation, India and China, characterised by the high and sustained rates of growth of aggregate and per capita national income, the absence of major financial crises and substantial reduction in income poverty, along with their significant impact on global inequalities make a good case for a comparison of the nature of macroeconomic policies in these two countries, and the extent to which these have been “pro-poor”. This paper attempts such an examination, assessing the growth performance and its impact on poverty and inequality in these two countries, and also specifically addressing the question of how their macro policies have contributed to the observed outcomes. The paper deals with the Indian and Chinese experiences in separate sections, followed by a comparative assessment and some relevant policy conclusions.*

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### **JEL Classification**

O150; E600; I300

### **Key Words**

China, India, macroeconomic policy, poverty, inequality, liberalisation, capital flows

## Macroeconomic Policy, Inequality and Poverty Reduction in India and China

C.P. Chandrasekhar and Jayati Ghosh

It is now commonplace to regard China and India as the two economies in the developing world that are the “success stories” of globalisation, emerging into giant economies of the 21st century. The success is defined by the high and sustained rates of growth of aggregate and per capita national income; the absence of major financial crises that have characterised a number of other emerging markets; and substantial reduction in income poverty. These results in turn are viewed as the consequences of a combination of a “prudent” yet extensive programme of global economic integration and domestic deregulation, as well as sound macroeconomic management. Consequently, the presumed success of these two countries has been used to argue the case for globalisation and to indicate the potential benefits that other developing countries can reap, as long as they also follow “sensible” macroeconomic policies.

The importance of these two countries spills over into discussions of international inequality as well. Almost all of the studies which have found that global inequalities have declined in the period of globalisation (Dollar and Kraay 2002, Surjit Bhalla 2003, Sala-i-Martin 2003, among others) rely very substantially on the increase in per capita GDP in China and India – which together account for around one-third of the world’s population – to arrive at their conclusion. Conversely, those who have been more sceptical of the impact of global economic integration on inequality have tended to look at patterns of inequality within these countries in particular (Cornia 2003, Milanovic 2004 etc.) to find that there has been an increase in economic differentiation (including increased rural-urban inequalities) and probably more vulnerable conditions for the poor in these countries (hidden by the per capita GDP figures), which change the conclusions with respect to global inequalities.

For all of these reasons, a comparison of the nature of macroeconomic policies in India and China, and the extent to which these have been “pro-poor” is of great analytical importance at the present moment. In this paper, we attempt such an examination, assessing the growth performance and its impact on

poverty and inequality, and also specifically addressing the question of how the macro policies have contributed to observed outcomes.

It is important to note that we are not actually comparing fundamentally similar economies. Although there are some superficial attributes in common, such as large populations covering substantial geographical areas, regional diversity, relatively high rates of growth over the recent period and so on, the institutional conditions in the two economies have been and remain very different. India has since Independence been a traditional “mixed” developing economy with significant private sector participation, and even during the period of the “dirigiste” regime the emphasis was dominantly on the regulation of private capital rather than actual determination of levels of production by the state. The neoliberal reforms undertaken in the phase of globalisation have, however, substantially expanded the scope for private activity and reduced regulation. Essentially, macroeconomic policies in India have been designed and implemented in contexts similar to those in other capitalist economies, where involuntary unemployment is rampant and fiscal and monetary measures have to be used to stimulate effective demand.

However, China, by contrast, has had a very different institutional structure for most of this period, where the basic elements of a command economy have been much more in evidence. Even after the wide-ranging economic reforms that have taken place since 1979, state control and influence, including in the determination of macroeconomic outcomes, remains substantial. But that control is not always exercised through what are seen as standard fiscal and monetary macro-policy instruments such as fiscal and monetary contraction or changes in interest rates. Because of the significance of state-owned enterprises in total production and of state agencies in total investment, the ability to influence aggregate demand has not depended only upon fiscal policy in terms of purely budgetary measures, since many “off-budget” expenditures can be increased or reduced. Further, monetary policy as is generally understood in capitalist economies has very little meaning in China where private financial activity is limited and state-owned banks still dominate overwhelmingly in the provision of credit.

This means that for most of the period under discussion, macroeconomic policies in China were necessarily very different and had very dissimilar implications, from those in capitalist developing economies. In particular, macroeconomic adjustment takes the form of “administrative measures”, which typically involve direct restraints on investment and expenditure by regional and provincial governments and public and private corporations ensured through administrative fiat rather than the use of specific economic levers. We will argue in this paper that the Chinese economy is currently in a phase of transition into one where more traditional “capitalist macroeconomics” may be applicable in

future. But China's periodic macroeconomic imbalances and its ability to quickly ensure macroeconomic correction when seen as required are related to the fact that advance in this direction is still limited and the process already reflects its own tensions and challenges.

In what follows, we deal with the Indian and Chinese experiences in separate sections. This is followed by a comparative assessment and some relevant policy conclusions.

## **1. Economic Growth, Poverty and Macroeconomic Policies in India**

It is now accepted that after a period of deceleration in industrial growth during the late 1960s and 1970s, widely considered a period of "stagnation", India moved from a path characterised by a slow 3 per cent "Hindu rate of growth" on to a rather creditable growth trajectory involving GDP growth of around 5 to 6 per cent per annum from the early 1980s. That is, the recovery from a period when growth decelerated sharply starting in the mid-1960s did not begin with the "economic reform" of 1991, but a decade earlier. However, there were a number of weaknesses characteristic of this otherwise creditable rate of growth. First, growth was far less pronounced in the commodity producing sectors than in services. In fact, during the 1990s, the rate of growth of per capita food production in the country was at its lowest level for decades.

Second, there were signs that this growth was accompanied by increased vulnerability inasmuch as it exploited the benefits for developing countries associated with the rise of finance internationally. Especially during the 1980s, growth was driven by debt financed public expenditure, which was supported with debt creating inflows from the international system. That resulted in a doubling of India's external debt to GDP ratio and led to a crisis in 1991 when a loss of investor confidence resulted in a freeze in such flows. Though during the 1990s non-debt creating inflows and remittances from migrant Indian workers abroad (particularly in Gulf countries) helped shore up the balance of payments, financial liberalisation has encouraged volatile capital flows that imply that vulnerability is still a problem. This vulnerability is not immediately visible because of the large inflows on the current account of remittances from non-resident workers and earnings from software and IT-enabled services exports. Further, the response of the central bank to the substantial inflows of portfolio capital involves purchasing foreign exchange to prevent excessive appreciation of the rupee. The consequent increase in India's foreign exchange reserves presents a picture of a strong balance of payments.

Finally, very recent trends in the economy suggest that performance has been far below potential. This is illustrated by the extremely poor performance of agriculture and allied sectors and the increased volatility of industrial growth over the recent period. Indeed, only the services sector shows sustained high growth rates.

Table 1 presents decadal compound rates of growth since the early 1950s, for Gross Domestic Product and per capita Net National Product at constant 1993-94 prices. It is evident that real GDP growth rates increased to a higher level in the last two decades. Increases in per capita income were even more marked because of the fall in the rate of population growth.

**Table 1: Annual rates of growth of national income (per cent)**

Period (year starting April)	Gross Domestic Product	Per capita Net National Product
1950-52 to 1960-62	3.9	1.8
1960-62 to 1970-72	3.5	1.2
1970-72 to 1980-82	3.5	1
1980-82 to 1990-92	5.6	2.9
1990-92 to 2000-02	5.6	3.5

Notes: 1. Both GDP and NNP are measured in constant 1993-94 prices.

2. Rates of growth are compound annual rates for the three-year averages.

Source: *National Accounts Statistics*, various issues

As Table 2 shows, this has been associated with some amount of structural change, although perhaps not as much as might be expected. Investment rates have increased over time, which is only to be expected in a developing economy achieving higher rates of per capita income, but the rate of increase actually slowed down, and the last decade shows almost no change in the investment rate. Meanwhile, the share of agriculture in GDP has fallen along predictable lines in the course of development, but there has been little increase in the share of the secondary sector, which has not changed at all since the early 1990s. Rather, the share of the tertiary sector has increased dramatically, to the point where it now accounts for around half of national income.

**Table 2: Structural change in the Indian economy**

Period (year starting April)	Investment rate	Sectoral shares as percentage of GD		
		Primary	Secondary	Tertiary
1950-52	15.5	59	13.4	27.6
1960-62	19.4	53.1	17.3	29.6
1970-72	23.8	46.6	20.4	33.0
1980-82	22.0	41.3	21.8	36.9
1990-92	26.0	34.4	24	41.6
2000-02	26.2	26.1	24.7	49.2

Source: *National Accounts Statistics*, various issues.

Such changes in output shares were not accompanied by commensurate changes in the distribution of the workforce. The proportion of all workers engaged in agriculture as the main occupation has remained stubbornly above 60 per cent, despite the collapse in agricultural employment generation of the most recent decade and the fall in agriculture's share of national income. It is also intriguing that the higher rates of investment of the last two decades have not generated more expansion of industry, but have instead been associated with an apparent explosion in services, that catch-all sector of varying components.

### *The Economic Recovery of the 1980s and 1990s*

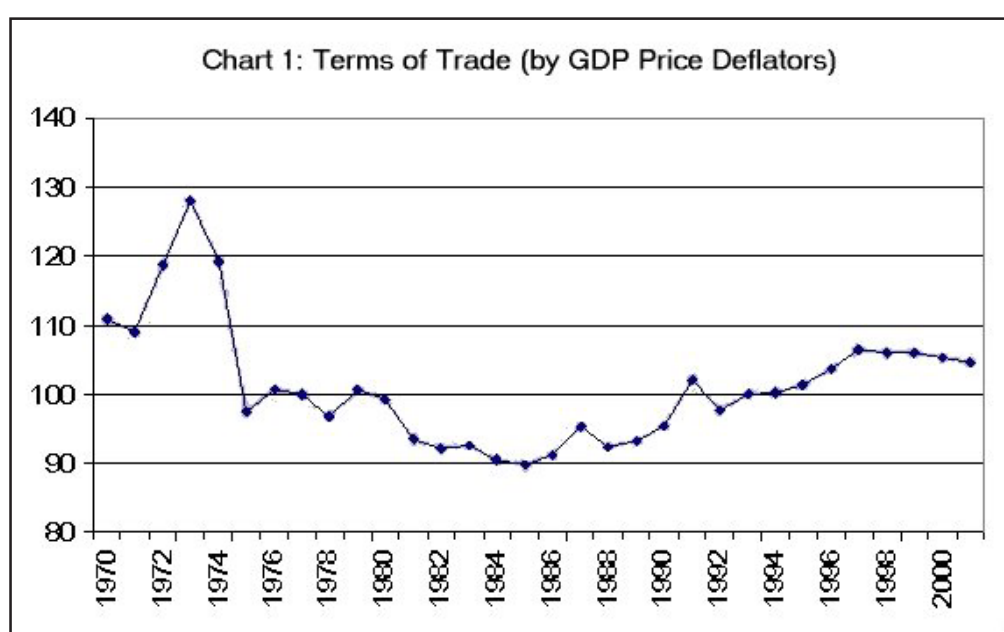
In the 1980s, the escape from the growth impasse of the earlier period was enabled by the adoption of an expansionary macroeconomic policy. Public expenditure rose rapidly, more as a result of an expansion in the current expenditure of the government rather than in capital formation. Increases in government employment and the per capita earnings of government employees was an important element contributing to the increase in the government's current expenditure.

This increase in expenditure was not accompanied by an increase in resource mobilisation by the government, resulting in three tendencies: first, a rise in the fiscal deficit to GDP ratio, especially at the Centre; second, an increase in the revenue deficit which explained a growing share of the fiscal deficit; and, third, a rise in the current account deficit in the balance of payments. The significance of the third of these needs noting. While a fiscal deficit *per se* is not inflationary, it can have inflationary consequences if there are major supply side bottlenecks in the economy. Such bottlenecks were indeed a reality in India, especially in the agricultural wage goods sector. However, inasmuch as the government was in a position to import commodities and ensure domestic supplies in excess of domestic production in these areas, inflation was avoided but the trade and current account deficit tended to rise.

But it was not just these commodities that were imported. Increased access to external commercial borrowing as a result of changes in the world financial system encouraged India to begin, in the mid 1980s, a process of liberalisation of imports of capital goods, intermediates and components. These imports, together with imported technology, permitted production of a range of goods targeted at the more well-to-do sections of the population. And these too contributed to a widening of the trade and current account deficits financed with external commercial borrowing.

Thus, the fiscal stimulus to the economy provided by government spending and the growth of import-intensive consumption were financed increasingly by external commercial borrowing. One reason why

the model of public sector-led expansion inherited from the 1950s and 1960s could continue for some more time without generating higher inflation was of course the liberalisation of imports. It should be noted, however, that despite the import liberalisation from the middle of the 1980s, throughout the decade of the 1980s the capital account of the balance of payments was quite strictly controlled and the exchange rate of the rupee, rather than being market-determined, was administered to maintain some degree of stability with respect to a basket of currencies reflecting India's trade pattern.



Source: *National Accounts Statistics*, various issues

Some role in avoiding inflation in this period was also played by the intersectoral terms of trade, as indicated in Chart 1. The first half of the 1970s marked a peak in terms of the relative price of agricultural goods, but after 1977, and through to around 1985, such a tendency was effectively contained and the domestic terms of trade were generally favourable for industrial expansion. In turn, this pattern of the terms of trade can be partly explained by the fact that world agricultural prices were declining over the 1980s. But what was more significant was that growth after 1980 in the Indian economy generated much less employment than before, and therefore implied much less demand for food than would have been the case with more employment-intensive expansion.



Thereafter, while intersectoral terms of trade for agriculture remained low compared to the early 1970s, from the mid-1980s onwards for about a decade Indian agriculturalists were relatively protected from the international movement of terms of trade against primary products. The liberalisation of imported manufactured goods that started from the 1980s, also played a role in ensuring that terms of trade improved to some extent for agriculture. The domestic relative prices for agriculture worsened again in the late 1990s, when trade liberalisation exposed farmers to declining world prices.

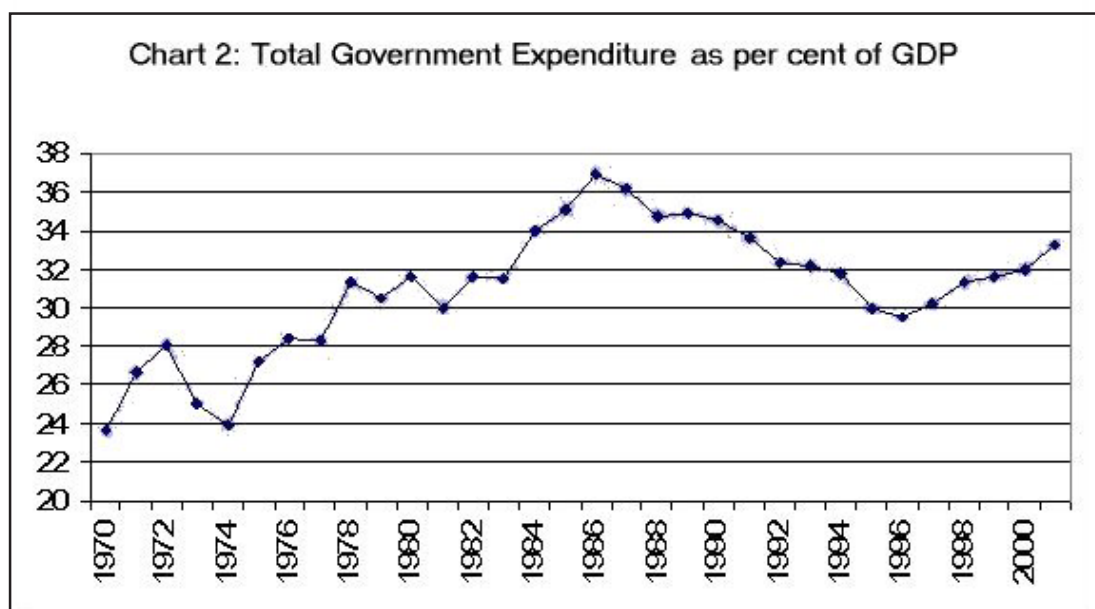
The 1980s experience suggests that over this period, notwithstanding the limited liberalisation, Indian economic growth still depended on the fiscal stimulus that government expenditure provided, rather than on an expansion of exports. Since such government expenditure was not accompanied by tax and other measures aimed at mobilising additional resources, but was financed through borrowing, the excess demand in the system was bound to spill over in the form of either inflation or a current account deficit. Keeping inflation under control through imports enabled by trade liberalisation, in turn required more external borrowing to finance the growing current account deficit.

It should be clear that this strategy could be continued only so long as India had access to private capital flows from abroad. To the extent that such access tapered off, the economy would be faced with a crisis involving a combination of inflation and balance of payments stringency. Such a crisis would in the short run necessitate severe import contraction and resort to conditional borrowing that would be recessionary and have extremely adverse implications for the level of poverty incidence and the pace of poverty reduction. To avoid such a denouement the government would have had to mobilise through taxation the resources necessary to finance its expenditures. Needless to say, such taxation if it is to be pro-poor in character must consist of direct taxes on the rich and/or indirect taxes on non-essential consumption. Overall, a reliance on foreign finance as a substitute for domestic resource mobilisation, especially in a context of low and even declining tax-GDP ratios, cannot be part of a pro-poor growth strategy.

Does this imply that the macroeconomic stance of the 1980s, while stimulating growth in the short run, was not effective from the point of view of poverty reduction? It does not, inasmuch as public expenditure generated employment and incomes that helped reduce poverty. Chart 2 indicates that the period 1975 to 1986 was one characterised by very large increases in the share relative to GDP of total government expenditure (minus interest payments from which, it is assumed, that the marginal propensity



to consume is low).<sup>1</sup> This was clearly the basis for the high growth rates observed in the 1980s, since the positive effects of such expenditure operate immediately as well as with a time lag.

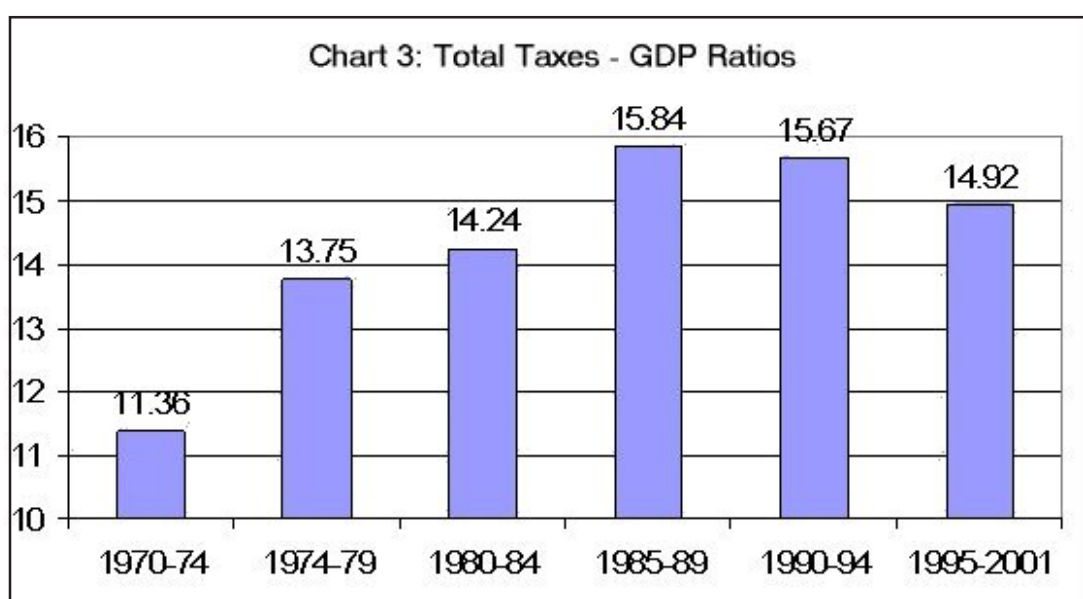


Sources: *Public Finance Statistics of India*; and *National Accounts Statistics*, various issues

The effects of state expenditure were particularly marked in rural India in the second half of the 1980s. This was a period when, along with a rapid increase in all sorts of subsidies and transfers to households from government, there was a very large increase in expenditure on the rural sector by State and Central governments. More generally, throughout the period political developments tended to give rural interests greater power and they were able to command an improvement in the historically low share of government expenditure benefiting rural areas. This flow of resources involved an expansion of 'rural development' schemes with an explicit redistributive concern, as well as the greater accessibility of the rural elites to the varied benefits of aggregate government expenditure. There were various rural employment and IRDP programmes as well as a plethora of special schemes for a variety of identifiable 'target' groups. While these programmes were less than entirely successful in reaching target groups, they still represented a fairly massive net transfer to rural areas. This was instrumental in causing the rural employment diversification of that period as well as allowing for a greater spread of economic growth in the country than has been achieved subsequently.

Chart 2 suggests that this positive fiscal stimulus declined after 1986. During the 1990s, the proportion of state expenditure to GDP decreased. But since economic liberalisation measures such as reduced

import tariffs and domestic duty rates, caused the total tax-GDP ratio to decline (Chart 3), the ratio of the fiscal deficit to GDP still remained high. But it needs to be noted that the fiscal stimulus associated with a given level of the fiscal deficit to GDP ratio was now lower because of a lower tax-to-GDP ratio. Further, in the early 1990s, financial liberalisation measures significantly increased the cost of government borrowing, such that total interest payments of central and state governments became ever more significant, and accounted for as much 7.3 per cent of GDP on average by the turn of the decade.

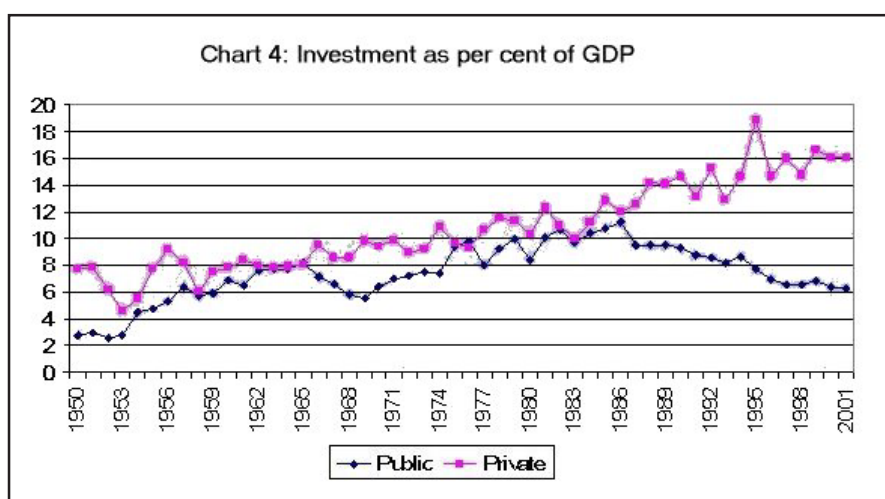


Sources: *Public Finance Statistics of India*; and *National Accounts Statistics*, various issues

In sum, while during the 1980s the macroeconomic situation was characterised by an expansionary fiscal stance of the government facilitated by foreign borrowing to finance larger deficits, the 1990s saw a transition to a deflationary stance, even if in some years the fiscal deficit appeared to be high relative to GDP. This transition had sectoral characteristics with significant implications for poverty reduction. It implied that the flow of investment funds to rural areas declined, the emphasis on employment generation programmes in rural areas weakened and social expenditures and subsidies had to bear a part of the burden of adjustment involving reduced revenue generation because of tariff reductions and tax concessions aimed at stimulating private investment.

The question that arises is, what allowed the rate of growth in the period after the mid-1980s to be maintained despite the apparent decline in the fiscal impetus after 1986? First, while fiscal expansionism was checked, government expenditure was still quite significant—above 26 per cent of GDP—until around 1993. Thereafter, there was a period in the mid-1990s when high growth was partly the result

of the once-for-all spurt provided by import liberalisation, as discussed below. This is also indicated by the spurt in private investment in the mid-1990s, as evident from Chart 4. Private investment as a share of GDP reached a peak in 1995, and thereafter stabilised at around 16 per cent of GDP. Meanwhile, the fiscal stimulus, which had been falling continuously, started increasing again around 1998, although it still remained below the levels of the early 1980s. The tapering off of growth in the latter part of the 1990s (from a compound rate of 5.8 per cent per annum in the period 1989-91 to 1995-97 to a lower compound rate of 4.6 per cent in the period 1995-97 to 2000-02) should be seen in this context. What this essentially shows is that the Indian economy remains critically dependent upon state expenditure to ensure growth, despite the periodic stimuli provided by liberalisation, exports and so on.



Source: *National Accounts Statistics*, various issues.

### *Economic Reforms in the 1990s*

The explicit aims of the neoliberal economic reform process adopted from 1991 onwards were: (i) to do away with or substantially reduce controls on capacity creation, production and prices, and let market forces influence the investment and operational decisions of domestic and foreign economic agents within the domestic tariff area; (ii) to allow international competition and therefore international relative prices to influence the decisions of these agents; (iii) to reduce the presence of state agencies in production and trade, except in areas where market failure necessitates state entry; and (iv) to liberalise the financial sector by reducing controls on the banking system, allowing for the proliferation of financial institutions and instruments and permitting foreign entry into the financial sector. These were all based on the notion that greater freedom given to private agents and market functioning would ensure more efficient and more dynamic outcomes. The government's aim was also to restructure production towards

areas of international “comparative advantage” (defined in static rather than dynamic terms). These areas were also seen as inherently more labour-intensive, which led to the further prediction that, after an initial brief period of net job loss, such a strategy of trade liberalisation would actually create more employment over time in more sustainable ways.

These aims translated into successive changes in the pattern of regulation in different sectors as well as in aggregate macroeconomic policies. By the early years of the current century, therefore, the Indian economy had undergone the following policy changes:

- very substantial reduction in direct state control in terms of administered prices and regulation of economic activity;
- privatisation of state assets, often in controversial circumstances;
- rationalisation and reduction of direct and indirect tax rates, which became associated with declining tax-GDP ratios;
- attempts to reduce fiscal deficits which usually involved cutting back on public productive investment as well as certain types of social expenditure, reducing subsidies to farmers and increasing user charges for public services and utilities;
- trade liberalisation, involving shifts from quantitative restrictions to tariffs and typically sharp reductions in the average rate of tariff protection, as well as withdrawal of export subsidies;
- financial liberalisation involving reductions in directed credit, freeing of interest rate ceilings and other measures which raised the cost of borrowing, including for the government;
- shift to market determined exchange rates and liberalisation of current account transactions;
- adoption of a significant degree of capital account liberalisation, including easing of rules for Foreign Direct Investment, permissions for non-residents to hold domestic financial assets, easier access to foreign commercial borrowing by domestic firms, and even freedoms for domestic residents to hold foreign assets.

However it needs to be noted that there was one area in which the reform in India was more cautious when compared with many Latin American countries, for example. This was the relatively limited extent of capital account liberalisation over much of the period. While there were certainly some changes in this area – primarily in terms of easing the rules for FDI and allowing foreign portfolio investment – external financial liberalisation was still relatively limited, and this meant that the Indian economy was

not subject to sharp and potentially destabilising flows of capital, either inflows or outflows, over this period. Further, the Indian economy was not really chosen to be a favourite of international financial markets until the very recent period from 2002. Meanwhile, greater stability was imparted to the balance of payments by the substantial inflows of workers' remittances from temporary migrant workers in the Gulf and other regions, which amounted to more than all forms of capital inflows put together and ensured that the current account was characterised by either low deficits or even surpluses in most years.

It has already been observed that the transition to a higher economic growth trajectory was associated in the 1980s with the fiscal stimulus provided by the state in a context of import liberalisation. In the 1990s, this fiscal stimulus was much weaker, declining in the first part of the decade and only increasing somewhat from 1997 onwards (Chart 2). The growth performance was more uneven, with deceleration in agricultural output growth and fluctuating performance in manufacturing. Since the 1990s liberalisation was not accompanied by any new dynamism in the commodity-producing sectors of the economy, the expansion of services proved to be crucial over this later period, as evident from Table 3.

**Table 3: India: Growth rates by sector (Average annual rates of output growth)**

	Primary	Secondary	Tertiary
1971-72 to 1979-80	2.22	4.64	4.87
1981-82 to 1989-90	3.37	6.95	7.04
1991-92 to 1999-2000	3.30	6.98	8.35
1985-86 to 1989-90	5.72	8.66	8.83
1991-92 to 1994-95	3.77	8.04	6.40
1995-96 to 1999-2000	1.95	4.99	7.20

Note: The figures are based on data with 1993-94 as base year.

Source: *National Accounts Statistics*, various issues

Despite the weakened fiscal stimulus, both in terms of public investment and aggregate expenditure, the role of the state remained crucial, since it was the state that determined the contours of tax reductions, deregulation and other policies that allowed for economic growth based on the demands of a relatively small and dominantly urban section of the population. The explosion in the consumption of the upper quintile of the population (discussed below and shown in Chart 5) fed this growth that involved increased inequality, both across regions of India and within regions across different economic and social categories. There was also a widening gap between incomes in agriculture and non-agriculture, such that the ratio

of per worker domestic product in non-agriculture to that in agriculture increased from about 2 in the 1950s to well over 4 in the 1990s.

### *Trends in Income Inequality and Poverty in India*

One consequence of the pattern of growth during the 1990s was the very low rates of employment generation. Rural employment in the period 1993-94 to 1999-2000 grew at the very low annual rate of less than 0.6 per cent per annum, well below the rate of growth of rural population. Urban employment growth, at 2.3 per cent per annum, was also well below that of earlier periods, and employment in the formal sector stagnated. The Census of India also suggests that there was dramatic deceleration in employment defined in terms of the number of main workers, with greater increases in the number of “marginal workers”<sup>2</sup>. Further, the quality of employment deteriorated, with increases in casual and part-time work rather than regular, as well as greater fragility of contracts.

**Table 4: Growth rates of employment (per cent change per annum)**

	<b>Rural</b>	<b>Urban</b>
1983 to 1987-88	1.36	2.77
1987-88 to 1993-94	2.03	3.39
1993-94 to 1999-2000	0.58	2.27

Note: Employment here refers to all workers, Principal Status plus Subsidiary Status

Source: Based on NSS employment rates and Census population figures

Agricultural employment showed the sharpest deceleration of all, with absolute declines in the number of people usually employed in agriculture over the 1990s. Part of this was due to technological and cropping pattern changes that reduced labour demand in agriculture. In addition, the growth of landlessness (as cultivation became less viable given the squeeze on the peasantry because of rising input costs and falling or stagnant crop prices) also had an impact, since peasants using family labour tend to use labour more intensively than farmers using hired labour.

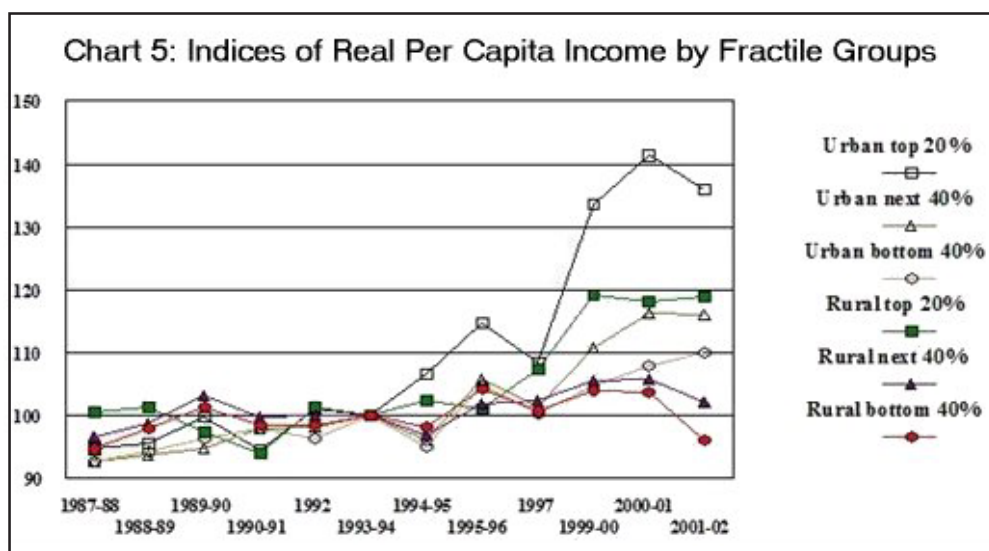
For urban India, the deceleration and even decline in organised sector employment was one of the more disturbing features of the period after 1990, especially given that industrial output increased manifold and the service sector (in which much of the organised employment was based) was the most dynamic element in national income growth.<sup>3</sup> This was due to the decline in public sector employment,

which was not compensated by the increase in private organised sector employment. Further, several “economic reform” measures—such as the reduction of credit allocation to the priority sector and the removal of various forms of support—worked against the interests of most small producers, who accounted for not only the most labour-intensive forms of urban production but also the dominant part of urban manufacturing employment. In addition, there was the pressure coming from newly freed imports becoming available at lower average rates of tariff.

Inadequate employment growth obviously implies that the process could not have been pro-poor in practice. There is a lively debate among economists about whether income and consumption inequalities have increased in India in the post reform period. Most studies have used various rounds of NSS consumption expenditure survey statistics for calculating per capita incomes and Gini coefficients. As regards inequality, it is well known that the NSS surveys with a relatively low lower bound for its highest expenditure range, does not capture upper income group consumption adequately. With regard to poverty estimates, there is a well known problem about lack of comparability of NSS statistics between the quinquennial large-sample consumption survey for 1999-2000 (55<sup>th</sup> Round) and the earlier ones.<sup>4</sup> According to Sen and Himanshu (2004a and b), this has lowered the measured rural poverty in India by almost 50 million. As a consequence, rural inequality measures have also been affected.

Revised estimates of rural inequality have been calculated by Deaton and Dreze (2002) Sundaram and Tendulkar (2003a, b) and Sen and Himanshu (2004a and b). General observation of these studies show that though unadjusted data show inequality has reduced between rounds 50 and 55, if one uses the adjusted (comparable) data, then it shows that rural inequality has in fact gone up in India between 1993-94 (50<sup>th</sup> Round) and 1999-2000 (55<sup>th</sup> Round). Striking evidence about increased inequality in India in the post-reform period comes from Sen and Himanshu (2004a and b). Based on indices of real mean per capita expenditure (MPCE) on uniform reference period (URP) basis by fractile groups, they show that whereas the consumption level of the upper tail of the population, including the top 20 percent of the rural population, has gone up remarkably during the 1990s, the bottom 80 percent of the rural population have suffered during this period (Chart 5). This graph clearly shows that the income/consumption disparity among the rich and poor and among urban and rural India has increased during the 1990s.<sup>5</sup>





Source: Sen and Himanshu (2004 a and b)

Similarly, using adjusted NSS data, Deaton and Dreze (2002) find three distinct changes in the pattern of inequality during the 1990s. They show that there is strong evidence of divergence in per capita consumption across states. Their estimates of state-wise per capita expenditure reveal that rural-urban inequality in per capita expenditure has significantly increased at an all India level. They also found strong evidence of increased rural-urban inequalities within states between 1993-94 and 1999-2000. Jha (2000) also concludes that in both rural and urban sectors, all-India level inequality was higher during the post reform period than it was during the crisis period of early 1990s.

Sen and Himanshu (2004a and b) also provide state wise rural and urban Gini coefficients for the 50<sup>th</sup> round and the 55<sup>th</sup> round NSS surveys. These Gini coefficients are comparable because they are based on adjusted data. Table 5 reports the Gini coefficients. From the table it can be seen that for the rural sector, 8 of the 15 states have experienced a decline in inequality whereas for 7 of them, inequality has increased. On the other hand, for all the 15 states, urban inequality has increased during 1999-2000 as compared to 1993-94.

**Table 5: Gini Coefficients using comparable estimates for 50<sup>th</sup> and 55<sup>th</sup> Round NSS Survey**

	Rural		Urban	
	50th Round	55th Round	50th Round	55th Round
Andhra Pradesh	24.9	23.8	30.3	31.7
Assam	17.6	20.3	28.3	31.2
Bihar	20.9	20.8	29.7	32.3
Gujarat	22.3	23.8	26.9	29.1
Haryana	26.9	25	26.7	29.2
Karnataka	24.3	24.5	30.4	33
Kerala	27.2	29	32.3	32.7
Madhya Pradesh	25	24.2	29.7	32.2
Maharashtra	26.7	26.4	33.5	35.5
Orissa	22.4	24.7	29.4	29.8
Punjab	23.8	25.3	26.5	29.4
Rajasthan	23.5	21.3	26.8	28.7
Tamilnadu	28.2	28.4	32.8	39.1
Uttar Pradesh	25.2	25	30.2	33.3
West Bengal	23.8	22.6	32.7	34.3
<b>All India</b>	<b>25.8</b>	<b>26.3</b>	<b>31.9</b>	<b>34.8</b>

Source: Sen and Himanshu (2004a and b)

Estimates of the extent of poverty are similarly affected by attempts to make the various NSS surveys compatible. Table 6 indicates the differences in estimates that can result from using even slightly different methodologies to interpret the same survey data. However, it does also suggest that while the incidence of head-count poverty had been declining from the mid-1970s to 1990, subsequently that decline has been slowed or halted. This suggests that rising inequality is clearly one major reason why India has not made more progress in reducing poverty.

**Table 6: Trends in poverty (per cent of population below poverty line)**

	Urban			Rural		
	Planning Commission estimate	Method 1	Method 2	Planning Commission estimate	Method 1	Method 2
1977-78	45.2	45.2		53.1	53.1	
1983	40.8	40.8		45.7	45.6	
1987-88	38.2	38.2		39.1	39.1	
1993-94	32.4	32.6	27.9	37.3	37	31.6
1999-2000	23.6		24.8	27.1		28.4

Source: Economic Survey, GOI, various issues and Abhijit Sen and Himanshu (2004a and b)

Note: Method 1 refers to the earlier pattern of questioning with 30-day and 365-day reference periods, while Method 2 refers to the new pattern with 7-day questions also added, as well as different reference periods for particular commodities.

### *Agricultural Growth, Non-agricultural Activity and Poverty*

The proximate role of inequality in worsening poverty or limiting gains in terms of poverty reduction has conventionally been situated in arguments that point to a complex combination of influences on rural poverty in particular. The early literature focussed on two kinds of variables: movements in agricultural production or productivity, and movements in prices (such as of food) that may impact directly or indirectly on real income and poverty. Even though movements in agricultural production would obviously impact on poverty, the significance of that impact would depend on whether agricultural growth is accompanied by an increase in inequality or whether there is a simultaneous increase in sources of non-agricultural income in the rural areas.

As for prices, the relevant variable is not the nominal price level of food, but the relative price of food and the rate of increase of nominal food prices. A faster rate of increase of agricultural prices can have two contradictory effects on poverty. First, to the extent that agricultural growth is stimulated by a shift in terms of trade in favour of agriculture, and assuming that inequality does not increase, the rise in agricultural prices would contribute to a reduction in rural poverty to some extent. Second, since a large part of the rural population consists of agricultural labourers, small farmers and non-farm workers, who are all net purchasers of food, a sharp increase in the price of food would squeeze real incomes and worsen poverty.

If inequality is increasing, we should expect that the effect of any increase in per capita agricultural output on poverty would be weaker. However, there have been a number of experiences to the contrary. In India, for example, the Green Revolution of the 1970s and 1980s, while leading to some increases in agricultural output per capita, was characterised by some increase in concentration of operated area and marketed surpluses, as well as a substantial increases in regional inequalities in agricultural production. Yet, the incidence of poverty during these years was declining significantly, forcing researchers to look to other factors that could explain the decline in rural income poverty.

This decline was all the more surprising because evidence indicated that the output increases during the Green Revolution years and later were accompanied by a decline in the output elasticity of the demand for labour in agriculture. There seemed to be one factor that was neutralising the effect of these trends, viz. a rise in agricultural wages, which was then seen as an important influence on poverty. But why were real agricultural wages rising if employment in agriculture was inadequately responsive to agricultural growth? The empirical answer seemed to lie substantially in an increase in rural non-agricultural employment. Over the 15-year period from 1972-73 and 1987-88, the share of rural male non-

agricultural employment in total rural male employment rose by 9 percentage points and that of female non-agricultural employment in total rural female employment by 5 percentage points. This seemed to make the growth of rural non-farm activities and rural non-farm employment an important cause for reduction in rural poverty – a conclusion supported by experience in other countries, especially China. Further, the subsequent deceleration of poverty reduction, especially in rural India, in the later period, can be related to the stagnation of rural employment opportunities in the 1990s.

There are some important inferences that can be drawn from this brief survey of the literature. It is clear that in India, macro policies have not contributed to substantial reduction in poverty in the recent past, because of the negative effects of such policies upon relative prices of food and employment generation. Poverty reduction has been predicated on the following (i) a relatively egalitarian path of growth; (ii) increases in agricultural productivity that help raise wages and keep food prices under control; (iii) expansion of non-agricultural employment, including in rural areas; and (iv) direct public action in the form of poverty eradication programmes aimed at generating productive employment for the poor. The process of fairly continuous poverty reduction from the late 1970s to the early 1990s hinged upon a combination of a certain pattern of growth with expansion in rural non-agricultural employment, led by public expenditure increases. The subsequent slowdown in the pace of poverty reduction has been associated with macro policies that have adversely affected employment generation, especially rural employment generation, possibly worsened inequality in consumption and contributed to an increase in the relative price of food. However, since policies of reform did not go far enough to embroil India in the financial crises of the late 1990s, the slow pace of poverty reduction was not capped by a sharp increase in incidence of poverty over a relatively short span as happened in many East Asian countries.

## **2. Economic Growth, Poverty and Macroeconomic Policies in China**

Macroeconomic policy discussions rarely incorporate any recognition that the institutional structure of the system influences economic outcomes. This is partly because conventional macroeconomic discussions are principally concerned with market economies, which from a Keynesian, structuralist or Marxist point of view, are demand-constrained systems. This obviously renders discussions of macroeconomic policy in centrally planned economies, which in ideal form are supply constrained systems, *sui generis*. This is substantially true of China, prior to the launch of economic reforms in 1978. Even after 1978, in the course of the “transition”, the macroeconomic mechanisms differed substantially from those in predominantly market-driven economies. These differences relate to the availability of monetary or fiscal levers of the kind available in market economies, to the nature of the

institutionally determined transmission mechanisms and to the outcomes of what appear to be similar policies. Only inasmuch as “economic reform” results in the generation of features characteristic of market driven economies in centrally planned systems, would the transition result in a gradual process of convergence in the nature of the policies, mechanisms and outcomes being addressed.

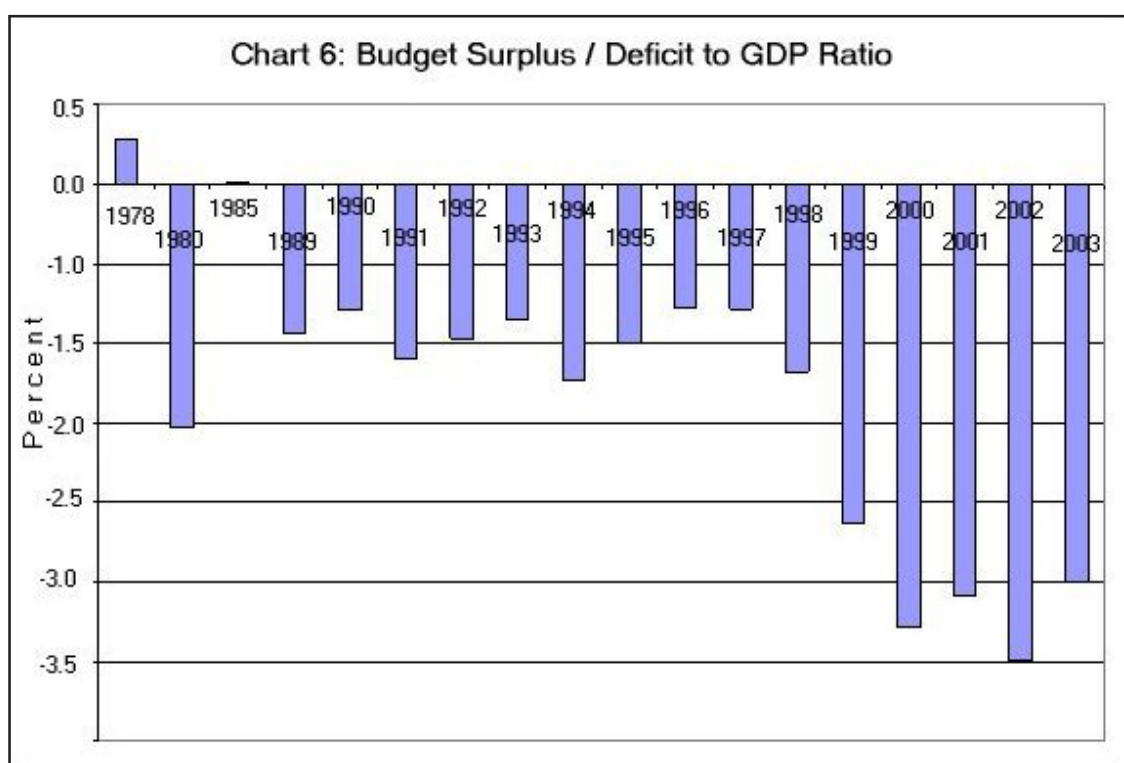
Because of the nature of state control over monetary institutions and the use of non-fiscal levers to manage the economy, a role for autonomous macroeconomic tendencies in China is relatively recent. Before the 1978 reform, the financial system of China was vastly different from that in most countries. Starting from 1951, banks and other financial institutions were taken over by the state and assimilated into a system dominated by the People’s Bank of China (PBC).<sup>6</sup> Until 1984 this system essentially implemented the cash and credit plans formulated by the central authorities, which supported the physical plan for mobilisation, allocation and utilisation of real resources. All public sector transactions, including those between various levels of government and the state enterprises, were through transfers on their accounts with the People’s Bank. These account transfers at the People’s Bank accounted for an overwhelming share (of up to 95 per cent) of all transactions.

Moreover, cash (to serve the needs of households and non-state-owned enterprises) was printed and issued by the PBC on demand by the central government and allocated according to instructions issued. The main elements of money in circulation were wage payments to workers and staff, the purchase of agricultural products by the government, other purchases of goods in the rural sector, and the withdrawing of savings deposits by individuals. The banking system was not responsible for provision of resources for fixed asset investments by the state-owned enterprises (SOEs) and for much of their working capital requirements, which were made available free of charge by the Ministry of Finance. The banking system was merely responsible for providing additional working capital and some loans, for accepting deposits from households and other non-government entities and for settlement of transactions.

So, there was little role for monetary policy prior to reform. Credit provision was centralised and strictly controlled. Enterprises and other economic entities received grants and loans directly from the PBC. Bank branches had to merely meet credit targets. And lower level banking entities had to hand over deposits that exceeded their credit provision targets to higher level units. If the government felt the need for restricting economic activity, it did so directly through administrative means rather than using levers of monetary policy. To manage the supply of cash and its utilisation, the central authorities could adjust (administered) prices relative to money wages (using a turnover tax if necessary). However,

since the objective was to keep prices mostly stable, excess cash in circulation was absorbed through rationing, when commodity supplies fell short of demand, and by encouraging savings.

Despite the government's complete control over the creation of money, fiscal policy, in the sense of using deficit financed expenditures to prime the economy, does not appear to have been a major thrust of the government. As Chart 6 shows, even though deficits have been recorded on the budget in the early reform years, these have rarely exceeded 1 per cent of GDP till the late 1980s. It is only in recent years that the government has started resorting to expansionary fiscal policies to stimulate recovery or growth.



Source: *China Statistical Yearbook*, 2000 and 2004

Finally, with both prices and imports controlled by the government, any excess of demand over supply did not spill over in the form of inflation or a current account deficit, but was dealt with through rationing. This implied the enforced realisation of a certain level of household financial savings in keeping with the physical plan. On the other hand, any excess of supply over demand in particular sectors resulted in the accumulation of inventories the holding of which was financed by the government and the banking system.

*The Effects of Reform*

The process of reform has resulted in a gradual change in all elements of this system. To start with, financial reform has created a situation in which banks, financial institutions and enterprises at provincial and local levels have more flexibility in providing and accessing loans, so the ability of the government to control sharp increases in investment and consumption has been to an extent reduced. Second, faced with the inadequacy of monetary levers, the government has quite recently attempted to use countercyclical fiscal policy to correct for recessionary or inflationary tendencies. Third, price reform has meant that a growing number of commodities have been removed from the administered price category, so that excess demand can lead to inflation. Fourth, trade policy reform has meant that excess demand can spill over onto the balance of payments in the form of a reduced current account surplus or a current account deficit.

In the early phases of the economic reform, along with price reform, certain significant changes were made in the financial field as well. In 1979, the government declared its intention to reduce the share of investment funds for enterprises granted exclusively from the cost-free state budget, and to gradually replace budgetary grants with bank loans which were subject to interest charges. This did result in major changes in the financing of investment. The share of budgetary appropriations in financing capital construction declined dramatically and that of loans and self-raised funds increased quite significantly (Table 7).

This would increase the role of monetary policy only if the government went beyond using the financial system as a mere instrument to implement cash and credit plans. Towards that end, a two-tiered banking system was established in 1984 by converting the People's Bank of China into the country's central bank and getting the specialized banks to undertake the commercial banking business. Further in 1986, reform of the non-bank financial sector resulted in the creation of a number of trust and investment companies, and financial intermediaries such as leasing companies, pension funds and insurance companies. Subsequently, foreign banks were allowed to begin business for the first time. However, even under the new arrangement it was in principle possible for the PBC to rein in overdrafts being run by these banks and prevent them from exceeding loan limits or quotas. Further, now the PBC could control the terms of its lending by charging lower rates of interest for loans within the credit plan and penalise unauthorised borrowing. Thus the ability of the PBC to realise its credit plan was strengthened by the reform.



**Table 7: Investment in capital construction by source of funds and administrative relationship (per cent)**

Year	By Source of Funds					By Administrative Relationship	
	State Budgetary Appropriations	Domestic Loans	Foreign Investment	Fund-Raising	Others	Central Government Projects	Local Projects
1978	77.7		5.6	16.7		53.2	46.8
1980	53.7	7.4	9.6	29.3	0.0	52.4	47.6
1985	35.5	17.5	6.8	31.6	8.5	53.5	46.5
1989	20.8	18.9	14.3	31.9	14.1	54.0	46.0
1990	21.3	22.2	13.2	31.1	12.2	53.9	46.1
1991	16.5	24.9	11.3	35.3	12.0	50.1	49.9
1992	10.2	27.6	11.1	41.3	9.8	44.5	55.5
1993	9.2	23.8	9.7	42.4	14.9	39.8	60.2
1994	6.8	24.9	14.3	44.3	9.7	37.8	62.2
1995	6.8	22.7	14.6	43.1	12.9	40.1	59.9
1996	6.1	22.7	14.5	44.2	12.5	39.2	60.8
1997	5.9	23.1	13.9	45.6	11.4	38.9	61.1
1998	8.8	24.2	12.4	41.9	12.6	34.6	65.4
1999	12.5	25.1	9.0	41.0	12.4	32.5	67.5
2000	12.6	28.3	6.7	41.3	11.0	32.0	68.0
2001	14.4	25.5	6.3	43.7	10.1	29.7	70.3
2002	14.7	25.6	6.0	44.5	9.2	25.6	74.4
2003	9.2	26.9	5.4	49.3	9.1	18.1	81.9

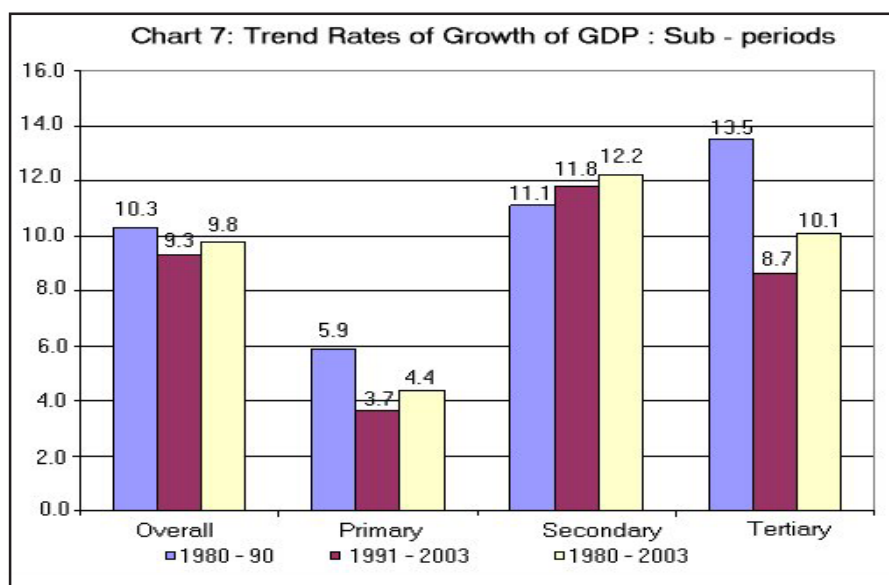
Source: *China Statistical Yearbook*, 2000 and 2004

However, with a greater degree of decentralisation of financial activity and the ability of local officials to influence provincial and local appointments in the banks, it was possible for provincial and local governments to easily obtain finance for special projects adding another element to the investment hunger determined by soft budget constraints in the SOE sector. Over time this problem has only increased with an increase in the number of financial entities, a change in property rights in the financial sector and a far greater degree of functional autonomy. In the process the capacity of the central bank to use monetary levers to control investment expenditures is weakened.

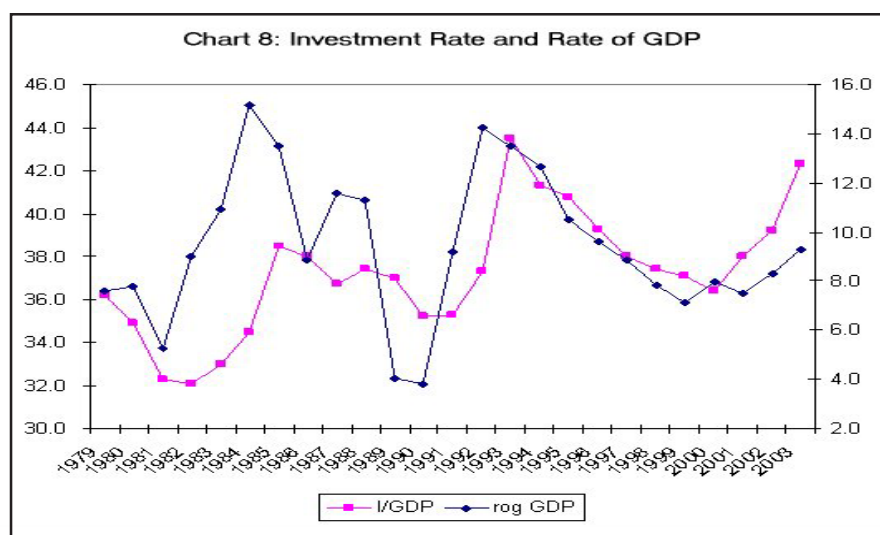
### *Macroeconomic Trends since the Reform*

China's spectacular growth performance - an annual trend rate of growth of GDP of 9.8 per cent during the quarter century ending 2003 – is depicted in Chart 7. This is most fundamentally a reflection of the high investment rates that have characterised the economy over this period. As Chart 8 shows,

capital formation as a share of GDP has been very high by international standards, varying between 32 per cent and 44 per cent of GDP. Rates of growth of GDP have been strongly associated with investment rates which is only to be expected, but there has also been substantial volatility in both of these indicators, around an increasing trend. .

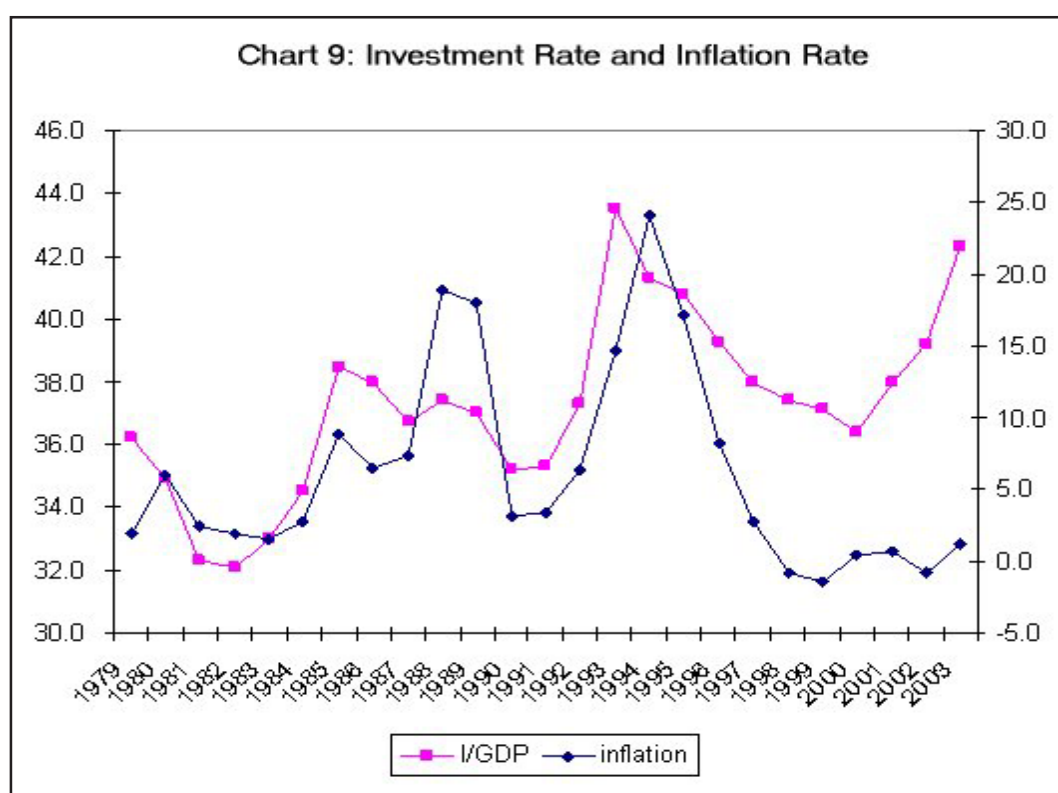


Source: *China Statistical Yearbook*, 2000 and 2004



Data Source: *China Statistical Yearbook*, 2000 and 2004

The question then becomes, what explains this pattern of volatile but generally high rates of investment? It is evident that the stop-go cycles that characterise investment reflect the broader macroeconomic policy of adjusting domestic investment (and indeed consumption demand) to price changes. Macroeconomic policy generally – and therefore aggregate investment, which continued to be substantially influenced by government decisions given the nature of the economy – appears to have been strongly responsive to the inflation rate. Chart 9 indicates the extent to which higher investment rates have caused high inflation in the subsequent period, thereby leading to cutbacks in investment.



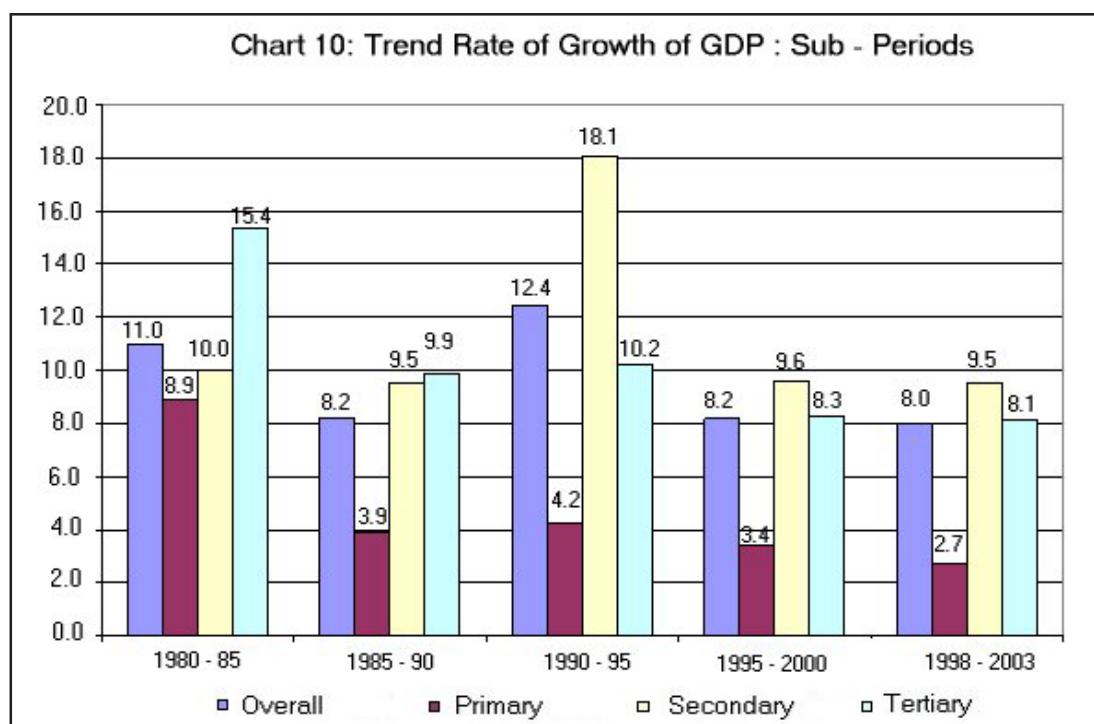
Data Source: *China Statistical Yearbook, 2000 and 2004*

However, as has been noted, these fluctuations occurred in a context of generally very high rates of investment. It is notable that despite volatility, the investment rate of the economy increased from 34.5 per cent of GDP for the three year period at the start of the “economic reforms” (1979-81) to 39.8 per cent for the three year period 2001-03. Most recent data indicate that the investment rate in China is above 40 per cent currently.

These imply rates of domestic saving which are exceptional not only by international standards, but more particularly for an economy at China’s level of per capita GDP. Foreign savings contributed

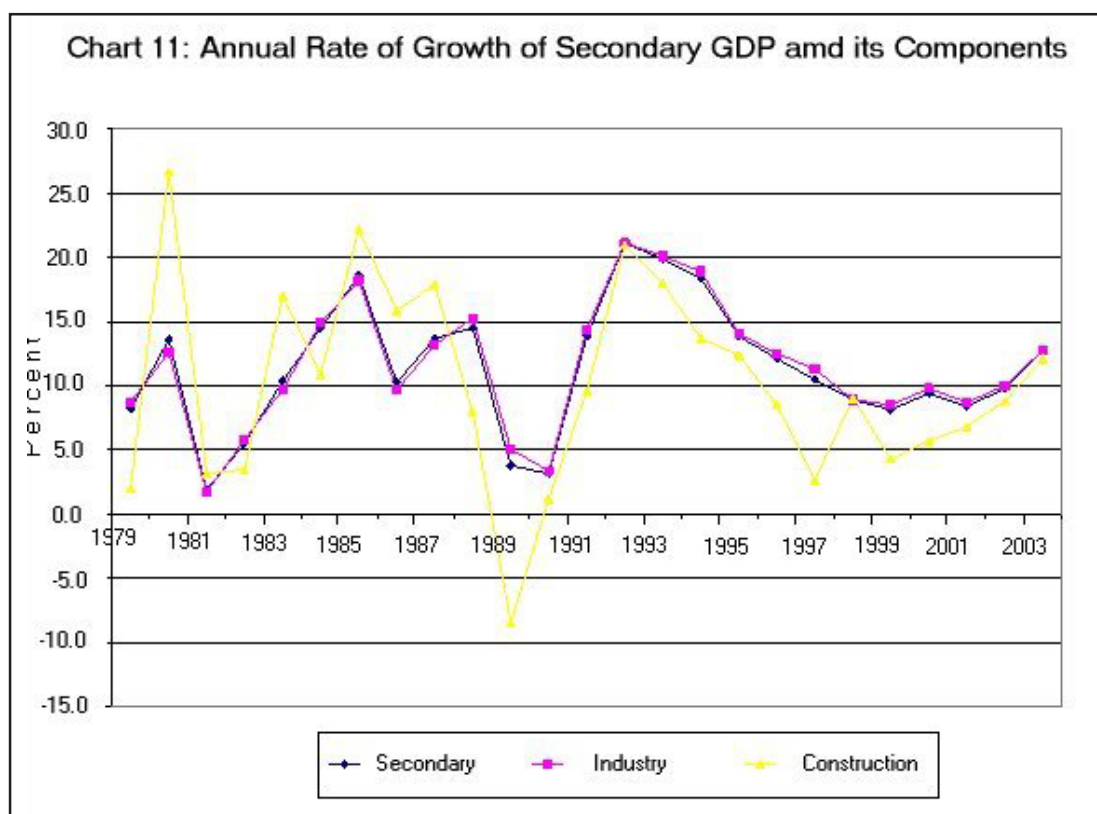
relatively little to aggregate domestic investment and in recent years have only added to external reserves. Such high rates of domestic saving in turn imply a suppression of domestic consumption out of incremental income, which reflects a combination of the sheer rapidity of the growth itself, which has allowed absolute increases in consumption, as well as evident spatial inequalities.

It may be argued that domestic savings has been less significant than foreign savings, and in particular FDI, in allowing for such high rates of investment. This is particularly so because of the emergence of China as the second largest recipient (and the largest in the developing world) of FDI, which has increased from near zero in the early 1980s to more than \$50 billion in recent years on average. However, in fact China's dependence upon external capital for financing investment has been relatively low, especially when compared to other developing countries. At its peak, the ratio of foreign capital inflow to GDP was 8 per cent in 1994, and thereafter has hovered around 5 per cent. Furthermore, the large inflows of the past few years have not contributed to domestic investment, macro-economically speaking, since they have been associated with even higher domestic savings rates and the consequent build-up of foreign exchange reserves.



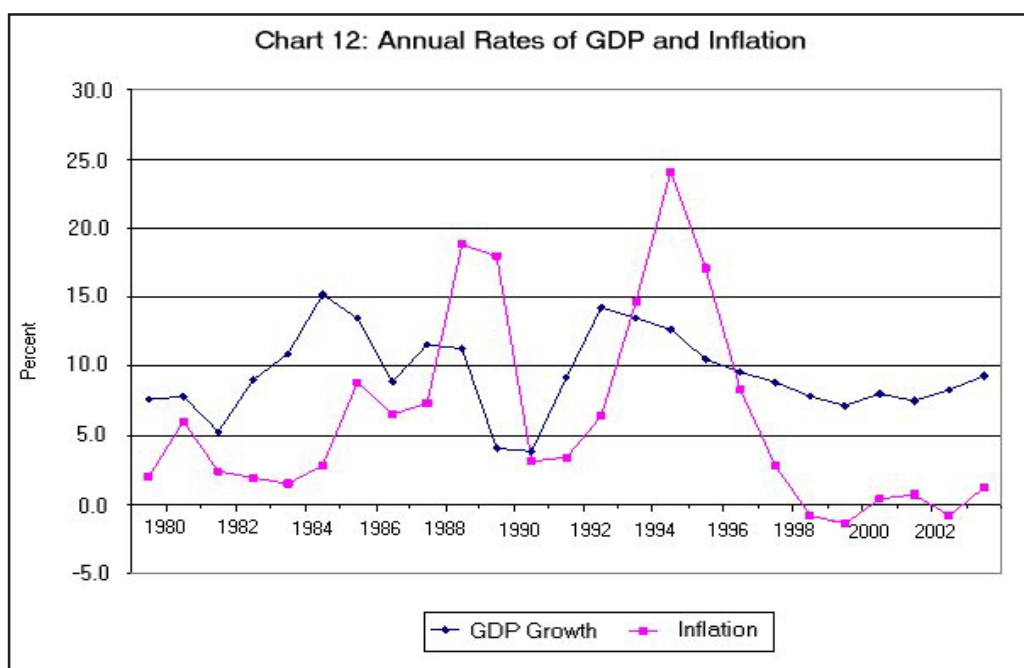
Source: *China Statistical Yearbook, 2000 and 2004*

Needless to say, sectoral figures do point to some changes in the nature of Chinese growth. In particular, there has been some noticeable deceleration of growth in the primary and tertiary sectors during the 1980-1990 and 1991-2003 periods. And breaking these periods down into shorter five year spans (Chart 10) suggests that there has been a persistent and significant deceleration in primary sector GDP growth from the first half of the 1980s. There appears to be a similar deceleration in tertiary sector GDP growth as well, though growth rates appear to have stabilised at relatively high levels over the last decade. What is clear, however, is that the secondary sector, in particular industrial production, has been crucial to the consistently good growth performance (Chart 11). What is more, the growth of that sector has substantially made up for the deceleration in growth elsewhere.



Source: *China Statistical Yearbook, 2000 and 2004*

This structure of growth is of relevance because, despite the overall high trend rate of growth, discussions on the need to manage bouts of deflation or “overheating” recur periodically in Chinese economic discussions. As evident from Chart 12, since 1979, the Chinese economy has been through a series of cycles defined by movements in retail prices and output.



Source: *China Statistical Yearbook, 2000 and 2004*

The question that arises is the specific mechanisms through which these cycles around a high trend growth rate were mediated. Monetary policy, though important, was limited in its role. In the increasingly liberalised financial environment, the People's Bank of China encountered difficulties in enforcing quantitative credit controls, leading to signs of "overheating" and accelerated inflation when demand was buoyant. Though in the 1980s the exchange rate was occasionally devalued, this instrument too was used rather sparingly. Thus elements of monetary policy was combined with a range of "administrative measures"

For example, in the middle of 1993, policy measures to deal with inflation involved the recall of unauthorised loans extended by specialised banks to enterprises and non-bank financial institutions. Interest rates were raised and the returns on long-term deposits were pegged to inflation to encourage the public to hold more illiquid savings deposits. And, finally, administrative orders were issued to restrain construction works and investment in real estate and property development.

However, around 1997 the Chinese government did change course, and shift to an expansionary monetary environment. This involved: eliminating ceilings on commercial bank lending; reducing excess reserve requirements; and reducing interest rates on central bank refinance to commercial banks, on deposits with commercial banks and on loans provided by commercial banks. However, the evidence seemed to be that this was inadequate to stimulate the economy. This was partly because the earlier

process of stabilisation merged with the recession induced by the East Asian currency crisis in 1997, which saw a collapse in exports growth, capital flows and some currencies. Hence, 1998 proved to be one of the most difficult years of the 1990s. Due to the global recession, China's export growth fell in late 1997 and deteriorated further in 1998. In the event China experienced a tendency it had not encountered before: that of deflation.

By this time, China was grappling with another problem: the dramatic upsurge of foreign exchange inflows fuelled strong expansion of reserve money. This, combined with the continuous expansion of domestic credit, made control of money supply extremely difficult. The ineffectiveness of monetary policy during the late 1990s downturn can be attributed to a number of changes in the financial and monetary sphere. Firstly, with capital flows being autonomous and export growth becoming a crucial component of the growth process, foreign reserves are "autonomously" determined, making it difficult for the central bank to control money supply. While the PBC initially attempted to deal with the problem through sterilisation involving the sale of government securities, this became increasingly unviable as the central bank's holding of securities declined.

The second cause for the breakdown of monetary policy is that deregulation and the decentralization of banking control has meant that provincial and local governments are able to easily influence banks to provide them credit based on their own deposits. Higher interest rates do not affect these borrowers, because they do not face conventional budget constraints. On the reverse side, in times of deflation, it is extremely difficult to get banks to lend to SOEs in difficulty. Chinese banks have accumulated a huge amount of non-performing loans (NPLs), and the government has tightened the regulation and supervision of their lending activities. Heavy penalties are being imposed on bank managers who are responsible for the creation of new NPLs. As a result, commercial banks have become much more concerned about loan safety than profitability. Banks are very reluctant to lend to most enterprises, because of the risks.

Firms too are reluctant to take on debt during a downturn. According to Yongding Yu (2001) owing to structural problems, such as low productivity and profitability, lack of exit mechanisms and high debt-equity ratios, enterprises are not responsive to the easier access to bank credits and lower interest rates offered during a deflation. Thus the relaxation in monetary policy after 1997 failed in some areas to lead to increases in investment demand. Instead, the capital market tended to absorb the increased liquidity.<sup>7</sup>

Thus credit to finance desired expenditures has indeed been easily available in China because the transition from a controlled to a more decentralised monetary system has implied a relatively lax monetary policy. This has resulted in a situation where local government functionaries, who influence appointment of banking and other functionaries at the local level are able to easily access funds for their projects.



More recently, the decision to maintain a pegged exchange rate while liberalising capital flows into and out of the country, has forced the central bank to buy dollars by selling yuan (RMB) so as to pre-empt any appreciation of the currency. The increase in the foreign exchange assets of the central bank this implies is not easily sterilised, since the government has almost exhausted its holding of government securities because of past sales aimed at sterilising capital flows that lead to reserve accumulation. As a result, the high powered money base of the central bank has expanded and the Chinese economy has been characterised by an easy money situation that makes available the funds that finance sometimes unwarranted capital construction projects.

With growing evidence that monetary policy was proving increasingly ineffective because of changes in financial structures, the government turned to fiscal policy as a means of macroeconomic control that accompanied the so-called “administrative measures”. During the 1980s and up to the first half of the 1990s, the role of the government budget in macroeconomic management was very limited, because of the dramatic fall in the proportion of GDP which comprised the government’s budget, and because of other institutional constraints. For example, implementation of the enterprise contract responsibility system in the 1980s virtually deprived the government of any flexibility to use expenditure and taxes to influence macroeconomic activities. Consequently, monetary policy assumed a dominant role in macroeconomic management in China during this period. However, since the middle of 1998, due to the impotence of monetary policy, fiscal policy has replaced monetary policy as a more active instrument in China’s macroeconomic management, aimed at getting rid of deflation.

It should also be noted that the Chinese government retained very substantial control over trade policy despite the various measures towards trade liberalisation undertaken from the early 1990s. A substantial proportion of trade volumes remained under administrative authority, either through trade restrictions, including quota controls and fairly high tariffs, or indirectly because State Owned Enterprises accounted for more than half of all trade. The asymmetric liberalisation not only allowed the Chinese government to retain control over macroeconomic processes more systematically than was possible in India, but also had implications for employment and therefore poverty. Unlike India (and many other developing countries over the same period) where the employment benefits of export expansion were outweighed by the employment losses in import-competing activities, in China almost all of the increases in export employment were net increases in employment until the turn of the century. The mercantilist emphasis on net export expansion therefore allowed for more employment generation than would have been possible otherwise.

However, the crucial role of the government in spurring expansionary bouts and contractionary spells in the process of sustaining a high trend rate of growth is explained in part by the composition of fixed assets formation and the behaviour of its individual components. As Table 8 shows, as is to be expected

productive investment, captured by the components “capital construction” and “innovation”, account for significant shares of fixed assets formation<sup>8</sup>.

**Table 8: Composition of fixed assets formation**

	2002	2003
Capital Construction	40.6	41.2
Innovation	15.5	15.5
Real Estate Development	17.9	18.3
Others	26.0	25.0

Source: *China Statistical Yearbook*, 2000 and 2004

However, what is interesting is the high share of real estate development in the total. This category includes the investment by real estate development companies, commercial building construction companies and other real estate development units of varied ownership, in the construction of residential buildings, factory buildings, warehouses, hotels, guesthouses, holiday villages, office buildings, and the complementary service facilities and land development projects, such as roads, water supply, water drainage, power supply, heating, telecommunications, land levelling and other projects of an infrastructural kind. It excludes simple land transactions. Thus the item includes real estate development by central and local government bodies as well as investment in residential construction. The former includes investment by local government bodies in economic development zones and what have come to be referred to as “image projects” launched by local leaders to beef up their public stature. The latter includes a substantial amount of private residential construction that is underway, especially in urban China, in the wake of relaxation of laws governing residential property ownership.

It should be expected that the relaxation of residential property ownership rules must have resulted in the conversion of savings accumulated in the past into investment in residential property. This spurt, together with the high degree of volatility of local government development expenditures, has made real estate development the most volatile part of fixed assets formation. According to economist Yongding Yu (2001), “during the early 1990s, the growth rate of investment in real estate varied between 11.7 and -1.2 per cent.”

This kind of volatility is partly facilitated by the manner in which capital formation is financed in China (Table 9). Budgetary appropriations and foreign investment account for small shares of between 4.4 and 7 per cent of total fixed assets formation in 2002 and 2003. The major finance comes from three sources all of which involve a substantial degree of borrowing. Domestic loans refer to loans of various forms borrowed by investing units from banks and non-bank financial institutions. “Raised” funds refer to extra-budgetary funds for investment in fixed assets received by investing units from central government

ministries, local governments, enterprises and institutions. And “other funds” refers to funds for investment in fixed assets received from sources other than those listed above, including capital raised through issuing bonds by enterprises or financial institutions, funds raised from individuals, and funds transferred from other units. All of these involve some degree of direct or off-budget borrowing.

**Table 9: Sources of finance for fixed asset formation**

	2002	2003
State Budgetary Appropriation	7.0	4.6
Domestic Loans	19.7	20.5
Foreign Investment	4.6	4.4
Fundraising	50.6	53.7
Others	18.0	16.8

Source: *China Statistical Yearbook, 2000 and 2004*

The importance of expenditures of this kind financed in this fashion becomes clear when we realise that the fiscal stimulus for growth in China is limited. Fiscal revenues in 2000 stood at just 15 per cent of GDP, and it is the growing desire of the centre to control expenditures that is seeing an increase in that ratio to 20 per cent by 2004. But even of these expenditures a considerable share goes to current expenditures rather than capital formation. This is illustrated by the priorities for fiscal policy set by the government for 2004, which include expenditures that support the rural sector; education health and science and technology; transfers to poor provinces; tax reforms; and wages and salary expenditures of government.

Hence, expenditures financed through other means account dominantly for the spurt in fixed asset formation. Clearly then it is the flexibility to acquire funds that enables different entities to undertake such investment expenditures that raises the investment income ratio and keeps growth going at high levels. And given the observed volatility of these expenditures it must be true that finances to undertake such expenditures are easily available “on demand”. If the government is to control volatility, this means it must use a range of administrative measures, including restrictions on the disposition of land to influence expenditures and outcomes.

The problem is that when growth is triggered with such expenditures, it propels further such expenditures and the resulting expansion soon runs into bottlenecks of various kinds, especially bottlenecks in the power, steel and other infrastructural areas. Inevitably, inflation ensues. The problem confronting the Chinese government is to deal with the inflation that results in such circumstances of “overheating”. Since capital inflows are “autonomous”, so long as the exchange rate is pegged, it is difficult to control money supply. What the government can try and do is engineer an increase in (administered) interest

rates. But, there is no evidence that the kind of investment expenditure being spoken of is interest rate sensitive. Further, increases in interest rates could create a host of problems. In the first instance they can, just as a possible revaluation of the yuan, result in a spurt in capital inflows into the economy, worsening the exchange rate management problem. Second, they would adversely affect the viability of the already weakened state-owned enterprises, default by whom would worsen the non-performing assets problem of the banks.

Hence the Chinese government still uses administrative measures, including the use of central “commands” and guidelines to hold back runaway rates of investment. The difficulty is that once such commands and guidelines are carried down to decision-makers at lower levels in what is still politically a centralised system, they remain in place till the government retracts these guidelines and works to ensure that the message reaches down to where it matters. In the meantime a bout of deflation is a possibility. And if this occurs in a context of the kind created by the East Asian crisis, that adversely affected China’s exports, such deflation can indeed be prolonged. “Stop-go” around a high trend seems to be an inevitable feature of the current conjuncture.

The essential point, however, is that thus far the reform has not adversely affected the high rates of saving and investment that sustains the high trend rate of growth of the economy. Further, since this high rate of saving is supported by large increments in income it has not resulted in a squeeze in consumption that can neutralise the effects of growth on poverty reduction. The “unconventional” demand management policies used by the Chinese government to regulate economic cycles – which were possible only because of the particular institutional conditions prevailing in China - have also ensured that despite the oscillations, there have been no serious or prolonged contractions and growth has remained at a very high level.

### *Implications for Poverty Reduction*

How has this evolving macroeconomic scenario affected the poverty reduction effort? The evidence relating to the early years of reform suggest worsening inequality in China. As Bouche *et. al.* (2004) argue, China’s economic reforms seem to have led up to an increase in regional inequality. “The urban-rural income disparity has been widening since the first five or six years after the economic reform in 1978,” they note. Official statistics indicate that while before the start of reform in 1978, the ratio of urban to rural income had declined to 2.36 from 3.48 in 1977, the income ratio of urban residents to rural increased from 2.4 in 1978 to 2.8 in 2000. Other analysts corroborate this observation Price and production reform in agriculture ensured that this trend continued till 1985. However, after 1985, the ratio began to rise again and stood at 2.61 in 1994. National, rural-urban and regional inequality,

measured by the Gini, also clearly rose over the period 1984-2000 (Table 10) by most estimates. Within rural and within urban inequality also peaked around 1994, fell somewhat in the following years but generally fluctuated close to the 1994 levels (Table 10). This worsening of income distribution may have neutralised some of the significant benefits in terms of poverty reduction ensured by the rapid rates of growth in aggregate income China has managed to ensure since the beginning of the reform.

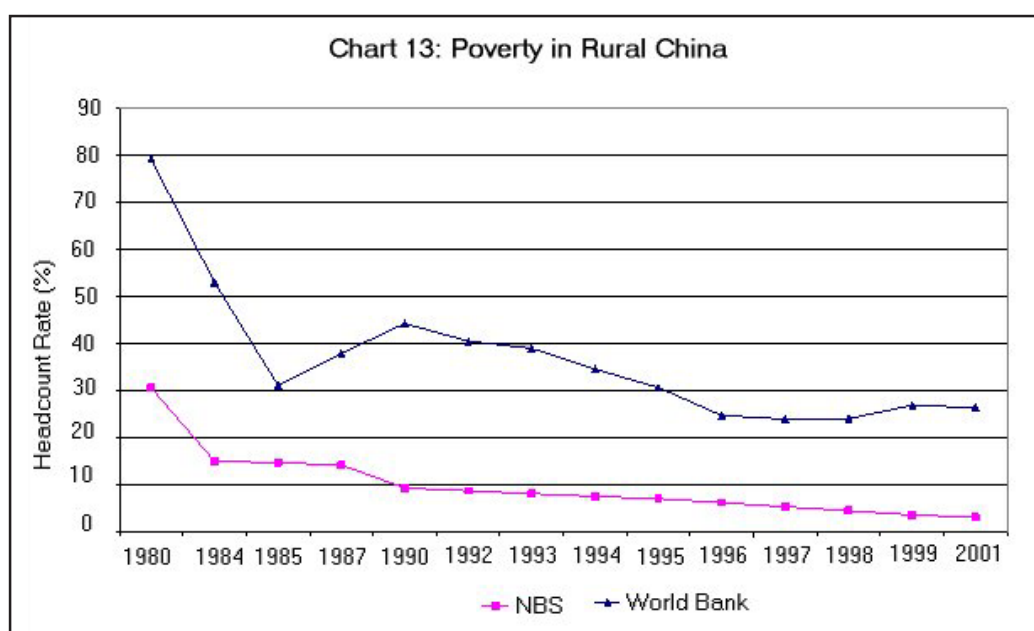
**Table 10: Estimates of inequality 1984-2000**

	Kanbur and Zhang				Chen & Wang		
	Gini (%)	GE (%)	GE (Theil)		(Gini)		
			Rural-Urban	Inland-Coast	Rural	Urban	National*
1984	25.6	10.9	6.3	0.4			
1985	25.8	11.1	6.6	0.5			
1986	26.8	11.9	6.9	0.5			
1987	27.0	12.0	6.8	0.6			
1988	28.2	13.1	7.7	0.8			
1989	29.7	14.4	9.3	1.0			
1990	30.1	14.9	9.5	1.0	29.87	23.42	33.34
1991	30.3	14.9	9.9	1.2			
1992	31.4	16.0	10.2	1.5	32.03	24.18	37.23
1993	32.2	16.8	10.9	1.7	33.70	27.18	40.18
1994	32.6	17.2	10.8	2.0	34.00	29.22	41.46
1995	33.0	17.7	11.5	2.3	33.98	28.27	39.84
1996	33.4	18.2	11.7	2.6	32.98	28.52	38.16
1997	33.9	18.9	11.7	2.7	33.12	29.35	38.21
1998	34.4	19.6	12.2	2.9	33.07	29.94	38.70
1999	36.3	23.4	12.8	3.2	33.91	29.71	39.97
2000	37.2	24.8	13.9	3.8			

Source: Kanbur and Zhang 2005, Chen and Wang 2001

One reason for this inequality was the priority given to coastal development from the early 1980s to the late 1990s. In order to attract investment to the coastal regions, the government provided a range of incentives, though these regions were already more advanced than the rest of China. In the event, the slow and inadequate development of the central and western regions, where much of China's poverty is concentrated, became an obstacle to reducing poverty in these provinces.

The Chinese and Indian cases both illustrate the crucial importance of growth in agricultural incomes for poverty reduction. The relation between poverty reduction and growth has varied over time, being strong at the beginning of the period, that is in the period 1979-82, and much weaker afterwards, especially in the late 1990s.<sup>9</sup> This change had much to do with the nature of the growth, which began by being centred on agriculture and the rural economy where most of the poor live, and then shifted toward the coastal cities where the poor are less evident.



Source: *China Statistical Yearbook*, 2000 and 2004, Chen and Wang 2001

What is striking about the early, post-reform Chinese experience with growth and its effects on poverty reduction is that while Chinese growth was consistently high across time, rural poverty reduction was concentrated in particular periods. Thus, while the early Chinese record in terms of the reduction in the absolute number of poor is impressive, official data shows that the reduction was concentrated in two relatively brief periods between 1979 and 1999: the first five years of the reform period, 1979-1984; and the middle three years of the 1990s (Chart 13, NBS data). The first period, corresponding to the beginning of the era of reform and transition, was when reform focused on the countryside. Over these years the rural people's communes were dismantled, land was parcelled out to households on an essentially egalitarian basis, farmers were encouraged to abandon the previous "grain first" policy and to diversify production, and farm prices were raised 30 percent. In addition, chemical fertilizer supplies increased rapidly.

The second period of sharp decline in rural poverty occurred in the middle years of the 1990s. In the first third of the decade the rural poverty rate according to this line was running at over 40 percent of the population; it dropped to about 24 percent by 1996. The Poverty Reduction Plan (1994-2000) brought the number of absolute poor down from 80 million to below 30 million by the end of 2001. The main operative factor in explaining this steep fall is an equally steep rise in farm purchase prices, especially of food grain, which doubled in the middle of the decade. This increase in income benefited middle-income families who were reliant on agricultural returns (Chen and Wang, 2001). The real per

capita income of rural China increased by 21 per cent in the three years from 1993 to 1996.<sup>10</sup> Thus, poverty reduction proved to be highly income elastic: a 21 percent increase in rural income was accompanied by a 40 percent decrease in rural poverty.

However it has been argued (Hu Angang, Hu Linlin and Chang Zhixiao 2003) that despite China's substantial improvement in poverty reduction since 1978, the pace of poverty reduction has slowed down and new forms of poverty have arisen. The annual decrease in the poverty population has reduced by half with the number of poor decreasing only by 8 million annually; the average growth rate of farmers' consumption per year was only 2.5 per cent; the average growth rate of farmers' per capita net income was only 3 per cent. This is explained by the authors in terms of two factors: the deteriorating quality of growth and an increase in the degree of inequality.

It is known that reforms in China impacted adversely on urban poverty by generating unemployment through the restructuring of the state-owned sector in a context where the social security system was weak or absent. Bouche *et. al.* argue that urban poverty is closely associated with inability to work, and that the increase in urban unemployment as a result of market-oriented reforms and withdrawal of financial support for ailing state enterprises, had been a prime cause of the increase in urban poverty. Prior to the restructuring of the state-owned enterprises (SOEs), there was no great variation in urban poverty among regions due to guaranteed employment and the ubiquitous urban welfare system. This regional pattern changed when market oriented reforms that restructured the SOEs and weakened the social welfare system. The decision to restructure before putting in place a social safety net proved to be a mistake. This is corroborated by the fact that the change over time in the regional distribution of urban poverty was highly correlated with the original structure of industry and with regional economic growth. Poverty was higher in regions where the heavy industries set up during the era of central planning were concentrated.

Moreover, financial stringency also limited the poverty reduction effort. In China, most poverty reduction programs financed by the central government and by international donors required counterpart funds from local governments, but most local governments in poor counties faced severe budgetary constraints. As a result a report by the State Auditing Bureau indicated that 370 out of 592 poor counties had not provided any counterpart funds from 1997 to 1999. The problem was similar in urban areas, since many city and town governments lacked the fiscal resources to provide counterpart funds for financing the new unemployment, pension and medical insurance systems.

Finally, despite high growth, the most important and urgent economic problem China has been facing is unemployment. According to Yu Yongding (2001), every year a labour force totalling 10 million is thrown into the job market. In addition, there are more than 5 million redundant workers from former



state-owned enterprises waiting for re-employment. Finally, there are hundreds of millions of migrant farmers constantly moving around the country seeking jobs. As a result, even the high rate of growth in China, if not accompanied by special structural features, cannot meet the pressure for job creation. In 2003, with a 9.1 per cent growth rate, 8 million jobs were created, but even this was inadequate given the continuously growing “backlog” of increase in the labour force and reduced demand for labour in many traditional activities including agriculture.

It is in this background that the more comprehensive and positive evidence on inequality from the Chinese Academy of Social Sciences (CASS) survey of households relating to 2002 (Khan and Riskin 2005) needs to be assessed. The first such household survey aimed at estimating income and its distribution by an independent international group of economists, in collaboration with the Academy, and was conducted in 1988 and repeated in 1995. The results of those surveys suggested that income inequality had risen sharply in China during the reform years. The principal cause for the increase in inequality indicated by the 1988 and 1995 surveys were: (i) increases in inter-regional inequality; (ii) slow and inequalising rural income growth; (iii) regressive transfers to households and reduced transfer from rich to poor provinces; (iv) slow growth in employment and inadequate social protection for retrenched workers; and (v) restrictions on and discriminatory treatment of migrants.

Though these trends appeared to be continuing after 1995, a number of developments including greater rural urban migration and policy changes aimed at reducing regional inequality by promoting investment in western and interior provinces, ensuring the spread of wage employment in rural areas and provision of better social security benefits appear to have reversed the tendency towards an increase in inequality. Between 1995 and 2002, income inequality in both rural and urban China declined as a result of a decline in regional inequality, improvement in the distribution of both farm and wage incomes, housing reform and the reform of public finance. But the Gini coefficient for China as a whole did not change between the two years because of a rise in the already high gap between average urban and rural incomes. In fact, the increase in the rural-urban income gap would have been even larger, but for a substantial decline in rural population after 1995, when the absolute size of the rural population peaked.

When migrants and their incomes are added to the urban population, national inequality and the urban-rural wage gap in 2002 declines, though urban inequality increases. This is because while on average migrants double their income by moving from rural to urban areas, their average income still remains less than two-thirds that of full status urban residents and one half of full status urban workers. While income poverty in rural areas has been reduced by rural-urban migration, in the urban areas most of the poor are recent migrants, who tend to be much worse off than other urban residents. Migrant workers typically have high turnover of employment, and also suffer from the disadvantages of being excluded from the formal labour market, public housing and access to health services and schooling for children

at low cost that urban residents are entitled to. In the early 1980s the urban poverty rate was about 2 per cent and the absolute amount of the urban poverty population was 4 million. This decreased to only about 1 million in 1989 according to official estimates. There is evidence that decline in urban poverty has slowed or even been reversed in the 1990s. The most recent government estimate of the number of urban poor is as high as 12 million people. This can only be because of the increase in urban income inequalities coming from the gap in incomes and benefits accruing to migrants and full status urban residents.

This study suggests that poverty reduction in China has been more strongly related to declines in inequality than to GDP growth *per se*. If so, China's ability to sustain the pace of poverty reduction will depend on its ability to keep in place recent policies aimed at reducing inequality. This is in keeping with lessons derived from the pre-reform experience as well. China was served well by a combination of egalitarian land distribution and experience with commune and cooperative forms of organisation, which ensured a degree of income equality and helped release and pool labour resources for undertaking non-agricultural activities that were jointly managed with State support. To the extent that economic reform undermines such egalitarianism and adversely affects the growth of the TVEs, it would set back the poverty reduction effort as well.

### 3. Conclusion

The implications of all this evidence need to be drawn out. To start with, it should be clear that the egalitarianism that the Chinese revolution ensured and the control state could exercise because of the persistence of substantial state ownership of and investment in capital assets as well as the continuance of the earlier financial structure and system, meant that the process of global economic integration was carried out under fundamentally different premises from that which occurred in India. To a significant extent, some of the basic development issues, including ensuring adequate food supplies and universal primary education, were already dealt with. The domestic market for consumption goods was also significantly larger than proved to be the case in India. More significantly for our current purposes, the control retained by the Chinese state over financial institutions and the activities of the State Owned Enterprises allowed it to sustain high levels of investment and deal with volatility, to prevent undesired levels of inflation from persisting beyond relatively short periods. In the event, the state could ensure that cyclical fluctuations occurred around a high overall trend rate of income growth. The early phase of opening up, which essentially involved increasing remuneration to farmers, operated substantially to reduce poverty and deprivation. Subsequently, the heavy emphasis on infrastructure development, combined with some amount of "controlled" trade and investment liberalisation, created much greater possibilities for export-oriented employment generation, which became the next engine of growth.

Because this occurred in a context of still heavily regulated and monitored imports, it ensured that export employment was a net addition to aggregate manufacturing, rather than having to balance for losses in employment in other domestic sectors, since these were not really having to face import competition on par with other countries that underwent trade liberalisation in that period. When import liberalisation accelerated, a drastic devaluation of the yuan was resorted to in 1994, which meant that import competition was still limited.

The transition to a market driven system in China while indeed delivering growth, proved to be inequalising beyond a point. But measures by the state aimed at preventing such tendencies and the migration-mediated process of trickle down have helped to partially reverse these inequalising outcomes. However, in as much as the current pattern of economic expansion is predicated on high rates of saving and investment as well as loosening of the earlier credit and cash planning system, the dangers of volatile growth and inadequate reductions in unemployment and poverty persist, necessitating appropriate macroeconomic corrections as well as supportive policies.

In comparison, India, with its market driven and demand constrained system, which has greater space for conventional macroeconomic levers has not only failed to deliver the same growth success but has also been far less successful on the poverty reduction front. The implication is that macroeconomic flexibility in a market driven environment is not the best recipe either for growth and stability or for poverty reduction. India's growth experience, while more stable than for many other developing countries, was still nowhere near the rapid growth experienced by China and other East and Southeast Asian economies. This was strongly related to the reduced public expenditure by the Indian state in the period of reform, most significantly the substantial reduction in central capital expenditure (mainly on infrastructure) as a share of GDP, but also public spending directed towards the rural areas generally. In addition, central government policies in various ways created resource problems for the state governments, forcing them to cut back on crucial developmental expenditure. This meant that first, rates of aggregate income growth were well below those which could have been achieved; and second, that employment growth was well below the rate of GDP growth. These problems were compounded by the effects that trade liberalisation had on small scale production in some manufacturing sectors. Agrarian distress and inadequate employment generation have therefore emerged as the most significant macroeconomic problems at the current time.

Of course it is true that the Indian experience has allowed for greater financial and macroeconomic stability than experienced by many other "emerging markets" over this period, primarily because until relatively recently liberalisation of the capital account was limited and India was not "chosen" as an attractive destination for finance capital. With changes occurring on both these fronts, the country is currently experiencing a surge in capital inflows that exert an upward pressure on the exchange rate as well as reduce macroeconomic flexibility.

There is an overarching conclusion, of wider relevance, that can be drawn from this comparative analysis of the experiences of macroeconomic management in China and India in the past twenty years. Discussions on macroeconomic policy counterpose the policies adopted in the *dirigiste* period, ostensibly characterised by financial repression, with the framework increasingly in vogue in emerging market economies characterised by a reduced role for fiscal policy and state expenditures and a greater role for a liberalised financial sector in mobilising and channelling investment. The Chinese experience makes it clear that such either-or dichotomies are not inevitable and that a pro-poor macroeconomic framework must provide a role for state policies pursued within an area of control ensured with state regulation. On the other hand, India's experience suggests that relentlessly pursuing the transition to a "marketist" macroeconomic framework makes it difficult to sustain investment and growth and to translate the benefits of that growth into better outcomes with regard to employment and poverty reduction. In fact, India seems to have avoided the volatility that has characterised countries that were even more successful on the growth front by limiting liberalisation with respect to capital flows. Country-specific choices of a consistent set of policies derived from the rich experience with macroeconomic policy options world-wide, rather than easy choices from either-or options seems to be the route that any appropriate and pro-poor macroeconomic policy should take.

## Notes

- <sup>1</sup> There are several reasons for believing that increases in interest payments by government are likely to have lower multiplier effects. Most government securities are held by economic agents whose marginal propensity to consume is very low. In India, a significant proportion is held by banks, whose increased returns from such investment do not tend to translate into greater spending by the system as a whole.
- <sup>2</sup> Those having employment for less than 183 days in the year.
- <sup>3</sup> The only positive feature in employment patterns was the increase in opportunities for the educated groups, largely related to the expansion of IT-enabled services in metropolitan and other urban areas. However, while this feature, along with that of software development, received much international attention, it still remained too insignificant in the aggregate economy to make much of a dent in overall employment.
- <sup>4</sup> As Sen (2000) points out, the reference periods in the Consumer Expenditure Survey of the 55th Round of NSS survey were changed from the uniform 30 day recall used till then to both 7 and 30 day questions for items of food and intoxicants and only 365 day questions for items of clothing, footwear, education, institutional medical expense and durable goods.

- <sup>5</sup> These findings are based on NSS ‘thin sample’ surveys, conducted annually since 1986. These surveys are not as comprehensive as the NSS comprehensive rounds or the ‘thick sample’ surveys but provide sufficiently good estimates at the national level. Also, these thin samples results are comparable across successive surveys as they use a common form of questionnaire.
- <sup>6</sup> For a discussion of the evolution of China’s financial system refer Xu (1998).
- <sup>7</sup> For example, in 1997, with the euphoria of China’s coming restoration of sovereignty over Hong Kong, in contrast to the falling prices in the real sector, assets prices, especially stock prices increased drastically. In May of 1997, the average price-earning ratios of the 595 companies listed in Shenzhen and Shanghai stock exchanges were 47.74 and 51.62, respectively. In the same period in 1996 the corresponding figures were 18.20 and 23.75, respectively. The growth rates of the stock price indices in the two stock exchanges were 162.14 percent and 117.25 percent, respectively. Obviously, the newly available funds found their way to the stock exchanges rather than to the real sector. In fact, to pre-empt a speculative bubble, the government blocked the flow of funds from the banking sector to the stock exchanges by forbidding commercial banks to participate in the bond repurchase market.
- <sup>8</sup> Capital construction refers to the new construction projects or extension projects of enterprises, institutions or administrative units mainly for the purpose of expanding production capacity or improving project efficiency. Innovation refers in general to the technological improvement of original facilities, including renewal of fixed assets, by the enterprises and institutions.
- <sup>9</sup> A similar argument is made by Bouche et al, UNDP 2004.
- <sup>10</sup> *China Statistical Yearbook*, 1998, p. 78.

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