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1400 16th Street, NW / Suite 350  
Washington, DC 20036  
(202) 939 - 3450

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*Economic Reforms and Public Finance  
In China*

Athar Hussain\* and Nicholas Stern\*

*\*London School of Economics*

*\*Sir John Hicks Professor of Economics  
London School of Economics*

*and*

*Senior Research Fellow  
Institute for Policy Reform*

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Chinese economic growth since the start of the reforms in 1978/9 has been very rapid, yet has encountered severe public finance problems. Incentives have been introduced but many markets are distorted and segmented. While the government has shed responsibilities for investment it has also lost a considerable fraction of its pre-reform tax base - enterprise profits. Subsidies on food (arising from higher rural prices but controlled urban prices) and to loss-making enterprises have mushroomed. Freedom to take decisions at the enterprise level has now resulted in high investment demand and rising wages. Many of the difficulties of changing tax bases, taxation in distorted markets, and long-term tax design arise in other transitional economies and the Chinese experience carries lessons for both opportunities and dangers. This paper provides a brief description of relevant aspects of the pre-reform Chinese economy and of the reforms since 1978/9. The trends of revenue, expenditure and deficits are analyzed both in magnitude and composition. Some aspects of the operation of the tax system are examined together with possibilities for reform through the transition and longer-term design. It is clear that the analysis of either industrial/enterprise reform or the fiscal system, one in isolation from the other, can be seriously misleading.

**Economic Reforms and Public Finance in China**

**Athar Hussain & Nicholas Stern**

London School of Economics

September 1991  
STICERD  
London School of Economics  
Houghton Street  
London WC2A 2AE

## 1. Introduction

In terms of economic growth, the Chinese reforms would seem to have been an outstanding success. In the period of the reforms, real national income grew by over 9% (1978-89). With a population growth rate of 1.2% per annum there was an annual growth rate of per capita income of around 8%. The rates of economic growth would not look out of place amongst the growth records of the 'high performance' East Asian economies. Only a few years ago, the Chinese economic reforms appeared radical when compared to the then still cautious reforms in the Soviet Union and Eastern Europe. But now it seems the reverse. The Chinese economy still has a long way to go towards a full transition to a market economy. Markets in goods and services have grown rapidly, but they are awkwardly segmented and multiple prices are pervasive. The price structure involving 'plan prices' and 'non-plan prices' (the two-track pricing system) is heavily distorted. Prominent on the agenda for further reforms are the following:

- 1) the abolition of the two-track pricing and trade system and the phasing out of price subsidies;
- 2) a transformation of state-owned enterprises;
- 3) the institution of a new social security system and a reform of housing;
- 4) an overhaul of the public finances.

As we shall see, the first three have important implications for public finances, the strained state of which has in recent years become, and has been recognized as, a crucial issue. In a recent speech to the National People's Congress (China's closest equivalent to a Parliament), the Minister of Finance went out of his way to emphasize the importance of raising sufficient

revenue to cover expenditure and stressed the difficulties in so doing [Beijing Review No.16 1991, pp. 33-38].

It might seem somewhat paradoxical that the Chinese government, which still maintains a tight grip on the economy, is struggling to raise enough revenue to meet its expenditure and keep the budget deficit under control. Such problems are common in developing economies, but usually arise in cases where a large segment of the economy is outside the reach of tax authorities. The implications of the economic reforms for public finances have received insufficient attention in the discussions of transition from a command to a market economy. It is to these implications this paper is addressed. Although our concern is with the Chinese economy, we would argue that many of the issues raised here are also relevant to the transitional economies of Eastern Europe and the Soviet Union, and that a major reform of the public finances should be an essential component of transition to a market economy. Further, the analysis of possible reforms and decisions on a strategy must take careful account of the interrelationship between the incentives, revenues and expenditures in the public finances on the one hand and the changing economic and institutional structure, tax burdens, incomes and behaviour of economic agents on the other.

The paper is organized as follows. Section 2 provides a brief description of relevant aspects of the pre-reform Chinese economy, many strands of which still survive, and the trajectory of the economic reforms since 1979. In Section 3, we analyze the trends in public finances in terms of broad aggregates: revenue, expenditure and the budget deficit. Section 4 examines the changes in the composition of government revenue and expenditure during the reform period. In Section 5 we set out some details of the tax system and in Section 6

discuss tax reform and tax design. Section 7 ends with concluding remarks, where we highlight analytical lessons for the tax system and its component parts, in the long-term and in the transition. Many of these lessons are borne out by the Chinese experience.

## **2. The pre-reform economy and the trajectory of reforms**

The government's control of the economy and public finances in the pre-reform period were founded on three pillars: first, the state ownership of industry, second, a virtual monopoly of trade by government agencies and, third, wage and price setting. These together furnished the government with powerful handles for raising revenue and also instruments for achieving 'non-revenue' objectives such as output targets and income support.

On the eve of the reforms in 1978, state-owned enterprises (SOEs) accounted for an overwhelming proportion of non-agricultural output - around 78% of gross industrial output [Statistical Yearbook of China (SYC) (1989), p. 225]. Their profits flowed automatically to the government. They sold their products to and obtained their inputs from government agencies at controlled prices. In contrast to the 1980s, collecting revenue from enterprises posed no special problems of implementation. Money on its own had little value for enterprises: the purchase of most goods required a government 'licence' as well as money and there was little or no economic incentive for enterprises to evade profit remittance to the government. It is important to emphasize that enterprises were not merely rich revenue sources for the government. They also performed many functions which in other economies would be performed by either government agencies or civil associations, including the household. Enterprises organized and financed labour insurance and housing for their employees, which they continue to do, although this was of limited financial significance as

their budgets were integrated with that of the government. Thus in the pre-reform period, it made no substantive difference to the public finances whether an expenditure item was financed through enterprises or directly by the government. But following the separation of enterprise budgets from the government budgets the division of financing between enterprises and government assumes importance because expenditure liabilities carry responsibilities for financing them. Many enterprises are now unable to meet their labour insurance liabilities. Hence, as we shall argue, the process of transition will involve not merely a devolution of economic decision-making to enterprises but also divesting enterprises of many of their non-economic functions and instituting alternative mechanisms for organizing and financing them.

In the pre-reform economy, the government set prices and used its trade monopoly partly for income maintenance, although not for raising revenue as is practised by some African economies - revenue came primarily from the surplus of enterprises. The reforms have rolled back government control over prices and trade, although substantial interventions remain. In urban areas the prices of staples were kept low and stable, a feature the government has tried to maintain in the reform period, at great cost to the public finances, as we shall see. A guarantee of a job to all, together with low-price rations of staples, equivalent to a cash transfer according to the household size, took care of income maintenance in urban areas. The monopoly of the marketing of agricultural outputs and inputs provided the government with a powerful instrument for controlling incomes in the farming sector. Rural units (usually production teams) had to sell a pre-given quota of output at government-set prices and also paid the Agricultural Tax (usually in kind) which was very similar to a land tax. Moreover, taxes or subsidies were implicit in the prices charged for agricultural inputs. However, after the 1950s, the government did not use the procurement of agricultural produce

to raise revenue, though the low price for food in urban areas was shifted back to procurement prices for agricultural produce. The Agricultural Tax remains, as does the selective procurement of agricultural produce, though their burden on the rural population is much lighter than in the pre-reform period.

As wages were set by the government, concern for economic equality amongst the formally employed labour force (almost all in urban areas) could be built into the wage schedule. Moreover, the wage schedule could also be used for determining the distribution of income between the personal and the non-personal sector and also for macroeconomic stabilization. For example, wage rates remained constant throughout the 1970s until the beginning of the reforms. The government's power to set wages and prices made a wide-ranging personal income tax unnecessary - it was needed neither for raising revenue nor achieving equity. As in other command economies, personal income tax in China was reserved for a few individuals with a very high income relative to the average.

Given the range of policy instruments at the disposal of the government, there was little need for an elaborate tax system. Aside from the profit remittances from enterprises, most taxes that existed raised little revenue. The Agricultural Tax was a significant revenue source in the 1950s but its share of revenue went down steadily [SYC (1989), p. 571]. Unlike in most developing economies, foreign trade was not a revenue source; on the contrary the foreign trade corporations, which monopolized foreign trade, had to be subsidized. A central feature of the tax system was that the considerations of raising revenue and equity which, together with efficiency, are central considerations in tax design in a decentralized economy were largely separated. Equity was not directly relevant to the taxes which were significant

revenue sources such as profit remittances from enterprises, and the pricing and trading policies which were used to achieve equity did not constitute significant revenue sources.

The Chinese leadership embarked on the economic reforms in 1979 unencumbered with a budget deficit or foreign debt, and hence with much greater room for manoeuvre than is available to the present-day East European and Soviet economies. As compared to what is happening in Eastern Europe and the Soviet Union, the Chinese economic reforms did not bring economic hardship to a significant segment of the population. On the contrary, they brought in their wake a record rise in personal incomes, albeit at different rates for different groups. The reforms, more or less at the outset, abolished rationing for a wide range of consumer goods. This did not, however, lead to a runaway inflation even though it was accompanied by a rise in wages and rural incomes. It was only in the latter half of the 1980s that inflation accelerated sharply. The reform of agriculture came first and was followed by reforms of industrial enterprises, which after selective experiments were generalized in 1984. The agricultural reforms replaced collective with family farming and gave households discretion over the cropping pattern subject to a quota of sales to the government. They were a spectacular success, prompting the leadership to embark on enterprise reforms. These have consisted of the granting of financial and operational independence to enterprises and allowing them to sell above-plan target output at negotiated prices.

In addition to the speedy and substantial supply response of agriculture and light industry, a major reason for the smooth progress of the Chinese economic reforms until 1988 was that the state of public finances and foreign borrowing (much of it on concessionary terms) enabled the government to introduce economic incentives whilst cushioning the

population from their adverse impact. For example, the procurement prices of agricultural commodities have since 1978 been raised continually in order to provide economic incentives to farmers but the government has passed on only a part of the increase to urban consumers, absorbing the rest. Similarly, the government has reduced its 'tax-take' from profitable enterprises but has kept loss-making enterprises afloat in order to maintain employment. As it were, the government has provided an open-ended 'social insurance' to shield the population from the adverse consequences of the economic reforms, whilst at the same time reducing its revenue share in national income. For 'social insurance', the government, rather than introducing a new social security framework, has relied on the protective features of the pre-reform economy such as guaranteed employment and low-price rations of staples for the urban population. As we shall see, this strategy has proved costly for the public finances.

Given the substantial room for manoeuvre it had, the government went ahead with the economic reforms in agricultural and industry without, it seems, fully taking into account their consequences for the public finances. The decline in government revenue relative to GNP appears to have been much greater than expected and the steep increase in price subsidies and subsidies to loss-making enterprises also seems to have come as a surprise. Public finance has now emerged as a key issue because the leeway the government had in the early 1980s has disappeared. The Chinese government has a large domestic and foreign debt, though not a debt problem of the proportions seen elsewhere, and control of inflation has become a major public policy concern.

### 3. Trends in government revenue, expenditure and deficits

The purpose of this section is to provide a background to the later discussion of the shifts in the composition of revenue and expenditure and bring out the fiscal aspects of the broad macro changes and problems associated with the reforms. As shown by Table 1, there has been a massive decline in both the ratios of government revenue and of expenditure to GNP. Over the 12 years from 1978 to 1989, the government revenue ratio has fallen by around 15 percentage points. The government expenditure ratio has tracked the revenue ratio but with a lag. As a result there has usually been a budget deficit in the post-1978 period.

**Table 1**  
**Revenue, Expenditure and Deficits (% of N.I)**

	Govt Revenue/ONP %	Govt Expenditure/ONP %	Deficit/ONP %
1978	34.4	33.8	- 0.6
1979	31.6	37.3	5.7
1980	29.4	33.7	4.3
1981	29.0	31.2	2.2
1982	27.2	29.4	2.2
1983	27.4	30.0	2.6
1984	26.4	28.7	2.3
1985	26.3	28.0	1.7
1986	24.8	27.9	3.1
1987	22.2	25.8	3.6
1988	20.4	22.9	2.5
1989	19.8	20.8	1.0

**Source:** World Bank (1990a), pp. 8 & 13.

The falls in the revenue and expenditure ratios are in keeping with a transition to a decentralized economy: letting economic agents keep a substantial percentage of their income

and shifting the financing of various items from the government to other economic agents. Judged in these aggregate financial terms, the Chinese economic reforms have been remarkably successful in rolling back the frontiers of the state. By the end of the 1980s the revenue ratio in China was similar to those in middle-income developing economies, though significantly higher than the average for low-income economies, the category in which China is placed in the World Bank classification [see, Burgess and Stern (1991)].

Cross-country comparisons provide a useful bench-mark for indicating the scale of government activities, but have to be treated with caution, especially in the case of transitional economies. The boundaries between the government and the non-government sector in such economies are neither well-defined nor stable. Indeed a central feature of the transition is a shift in these boundaries. Further, the responsibilities of the government in a transitional economy are likely to be more extensive than in other economies with comparable per-capita income. The Chinese economy has provided to its population (especially urban) a far more extensive level of real income protection than enjoyed by populations in economies with comparable incomes per capita. Much of this protection such as guaranteed employment, old-age pensions and cheap housing has been built into the basic fabric of the economy and is organized and financed by enterprises rather than directly by the government. It is important, however, to bear in mind that the distinction between 'enterprise-financed' and 'government-financed' is not clear cut in the Chinese, as the government has to step in as the 'financier of last resort' when enterprises cannot meet their social welfare liabilities. It is also becoming increasingly obvious that a radical enterprise reform will involve divesting enterprises of much of their social welfare responsibilities carried over from the pre-reform era. Moreover, a comprehensive unemployment insurance scheme is needed if life-time employment, which

used to be a norm, is to be replaced with terminable employment, whilst at the same time preserving some income protection.

Government budget deficits seem to have become a permanent phenomenon since 1979 (see Table 1). This, although a departure from the situation in China before the reforms, is not unusual by international standards - by these standards the ratios of (measured) deficit to GNP are comparatively small (see Table 1). In the Chinese context, however, the (measured) budget deficit is misleading in a number of senses which are important both for analyzing behaviour and assessing the public finances. As we emphasized, the distinction between the government and the non-government sector, in particular the enterprise sector, is not clear-cut. The principal source of the blurred boundary is the commitment (overt or covert) on the part of the government to keep state-owned enterprises afloat, though as we shall argue an effective solution to the problem does not lie simply in reneging on the commitment and hardening the budget constraint. The cost to the public finances of this commitment takes two forms: first, subsidies from the budget to loss-making enterprises, and, second, loans, usually soft, from the banking system to loss-making enterprises. The first does not pose a problem for the calculation of budget deficits as it is included under government expenditure (see Table 3), though it has adverse implications for the composition of government expenditure, which we discuss in Section 4. But bank lending to enterprises at the behest of the government does pose a problem for the public finances even though it is not included under government borrowing.

Such lending makes it possible for the government to short-circuit the process of borrowing on its own account to finance loss-making enterprises by instructing commercial

banks to lend directly to these enterprises. We may think of this as 'disguised public borrowing'. One implication of such lending (termed 'policy lending' in China) is that the size of the actual budget deficit is greater than the measured deficit, and that the actual fall in government expenditure is lower than indicated by Table 1. Loans to enterprises with a high risk of default (partial or complete) create a potential future liability for the government. The full extent of such loans is not known because the Chinese banks do not as yet re-evaluate their portfolio periodically and write-off bad debts. However, for example, as much as 13.5% of loans of the Agricultural Development Bank, a specialized bank serving agriculture, are regarded as doubtful [World Bank (1990b), p. 67]. At some stage, as part of a financial reform the government will have to write off bad debts of commercial banks and may have to take over at least a part of the debt. For example, in South Korea, where dubious lending was at one stage common, the government had to take over a percentage of bad debts and also allow them to be written off against tax payments [see Cho and Khatkhate (1989)]. Loan defaults by enterprises have not as yet led to a banking crisis in China, which is perhaps due in part to an exceptionally steep rise in household bank deposits in the 1980s [for a discussion see Hussain and Stern (1991)].

Usually, the main sources of financing government deficits are taken to be three: money creation (or borrowing from the central bank), domestic borrowing or bond sales and foreign loans. Over the reform period, the Chinese government has resorted to all three, though there has been a shift away from money creation towards bonds and foreign loans. In a transitional economy, the financing of deficits assumes a special importance. The need to keep inflation under control severely limits reliance on money creation and the underdeveloped financial markets and the lack of credibility in the government restrict bond

sales. The availability of foreign loans is in most cases also limited. The general implication is that the possibilities of financing deficits within the constraints of macroeconomic stability in transitional economies are far more constrained than in other economies. This puts a special premium on the development of a flexible taxation system capable of generating revenue to meet unforeseen contingencies, and also of tapping alternative sources of revenue. The most important of such sources is the large proportion of the economy's assets owned by the government. Thus we would argue that the sale of state assets or a transformation in their ownership, which is a central component of transition to a market economy, should be considered conjointly with public sector finances. 'Give-aways', although highly attractive from the point of view of speeding the transformation of the economy and the behaviour of economic agents, dissipate sources of public revenue in a situation where the financing of expenditure liabilities is likely to pose great problems.

As we shall see, the size of the budget deficit (actual) is just one of the problems in the link between economic reforms and public finance in China. Further serious difficulties are associated with the changes in the composition of revenue and expenditure to which we now turn.

#### **4. The composition of government revenue and expenditure**

The changes in the composition of government revenue in the reform period are presented in Table 2. For the present purposes we have divided government revenue into four parts: taxes on enterprise profits (termed direct taxes in the table), indirect taxes, taxes on agriculture and the rest. The rest covers *inter alia* custom duties, non-tax revenue and personal taxes [for a discussion of the tax system see Easson and Li Jiyun (1987) & World Bank (1990a)]. The

distinction between direct and indirect taxes is, as ever, somewhat arbitrary. We have followed the standard approach distinguishing according to the base - a tax is indirect if the base is (non-factor) output or input, and direct if the base is income to a factor of production. In fact, Chinese statistics do not distinguish between the two, which are lumped together under a general heading enterprise taxes. Neither can one assert that the difference between the two taxes in terms of incidence is clear cut. As both output and prices are in many cases regulated, indirect taxes often act like direct taxes. Hence, we have for some purposes grouped together direct and indirect taxes under a general heading 'enterprise taxes'. A striking difference between the composition of taxes in China and more advanced market economies is the insignificance of personal income tax, which applies to only a very small minority of the population, as the exemption limit excludes almost all formally employed labour force. Its contribution is negligible even by the standards of poor countries.

Table 2 brings out a number of significant points. The decrease in the revenue ratio by around 15 percentage points between 1978-89 is almost entirely accounted for by the decrease in the ratio of direct enterprise taxes to GNP. *Prima facie*, this decrease could arise as a result of two factors: first, a reduction in the proportion of profits taken by taxes and a reduction in the share of profits in GNP. It may also be due to an under-declaration of profits by enterprises so as to evade the profits tax, for which there is now an economic incentive, unlike in the pre-reform period. There is some evidence for a fall in enterprise profitability (see Table 5), which is from one perspective paradoxical, given that the general thrust of the enterprise reforms is to encourage profit seeking. The Agricultural Tax relative to GNP has also declined. Hence both in agriculture and industry, the reforms have proceeded along with a significant reduction in the tax-take.

Table 2. The composition of government revenue

	% of government revenue				% of GNP			
	Enterprise taxes		Agricultural Taxes	Rest	Enterprise taxes		Agricultural Taxes	Rest
	Direct	Indirect			Direct	Indirect		
1978	59.9	33.7	0.9	5.5	20.6	11.6	0.3	1.9
1979	58.2	35.1	0.9	5.7	18.4	11.1	0.3	1.8
1980	57.5	36.1	0.7	5.8	16.9	10.6	0.2	1.7
1981	55.9	36.9	0.7	6.5	16.2	10.7	0.2	1.9
1982	51.1	40.1	0.7	8.1	13.9	10.9	0.2	2.2
1983	47.1	36.5	0.7	15.7	12.9	10.0	0.2	4.3
1984	43.9	37.9	0.4	17.8	11.6	10.0	0.1	4.7
1985	30.8	42.2	0.4	26.6	8.1	11.1	0.1	7.0
1986	28.6	43.1	0.4	27.8	7.1	10.7	0.1	6.9
1987	26.6	43.2	0.5	29.7	5.9	9.6	0.1	6.7
1988	24.0	44.6	0.5	30.9	4.9	9.1	0.1	6.3
1989	18.7	46.0	0.5	34.8	3.7	9.1	0.1	6.9

Source: World Bank 1990a: 8.

As one would expect given the fall in direct enterprise taxes, the share of indirect taxes in government revenue has risen. But what is more striking is that the ratio of indirect taxes to national income seems to have fallen over the period of the reforms, especially since 1985. The fall, which cannot be attributed directly to the enterprise reforms, may be due partly to the reform of indirect taxes undertaken in the 1980s and partly to multiple prices (discussed later). A large part of the increase in the 'rest' is due to the increase in customs revenue arising from the substantial expansion of foreign trade relative to GNP. However, as compared to developing economies, foreign trade taxes are still not a large revenue source. This might be regarded as a blessing given the highly distortionary effect of foreign trade taxes in many developing economies. Until recently the government foreign trade corporations ran at a loss. As a result, foreign trade made either an insignificant or negative contribution to revenue.

At the start of the reforms, the revenue composition in China, with 60% of government revenue derived from direct taxes on enterprises, was strikingly different from that in developing economies. In these economies a fairly common pattern might be one third direct taxes (predominantly corporate taxes and/or social security contributions), one third domestic indirect taxes and one third foreign trade taxes. But by the late 1980s, with a very high share of indirect taxes, the tax composition was more similar, though the share of direct taxes still remains comparatively high and the share of foreign trade taxes very low. When making such comparisons, we should remember the blurred difference between direct and indirect taxes in China. A distinctive feature of the Chinese tax system is that it remains heavily dependent on enterprise taxes (direct and indirect taxes taken together). In this

particular respect, the post-reform tax system is similar to the pre-reform system. Significant innovations in taxes are yet to come. This as we shall argue in Section 6 is not due to a lack of possibilities but to a neglect of a reform of the tax system.

Figures on the composition of expenditure are presented in Table 3. Two features stand out: first, an increasing percentage of government expenditure taken up by price subsidies and subsidies to loss-making enterprises, and, second, a substantial shift from capital to current expenditure. Both are direct consequences of the economic reforms. The first may be attributed to the government's attempt to cushion the negative effects of the economic reforms on the urban consumers (prices to farmers have been raised but those for consumers have been held down). Whereas price subsidies maintain real incomes, subsidies to loss-making enterprises maintain employment. An overwhelming proportion of price subsidies have gone on grain and cooking oil, low-price rations of which have, since 1953, been supplied to all urban inhabitants, though not to those in rural areas. The ration amounts, which have not changed during the reform period, depend on age, and occupation (manual/non-manual) but not on income [for details see Hussain 1991]. Thus they are equivalent to an income transfer to households depending on its composition [this is similar to 'demogrant' analyzed by Deaton and Stern (1986)].

The increase in price subsidies has, as we have revealed, been due mainly to large increases in the procurement prices of agricultural commodities (in particular grain), by way of economic incentives, which have not been fully passed on to urban consumers. As a result, in the 1980s the procurement price of grain exceeded its sale price to urban consumers. The share of price subsidies in total government expenditure fell substantially after 1982, but

Table 3. The composition of government expenditure

	% of GNP			% of government expenditure		
	Price Subsidies	Enterprise Subsidies	Capital Expenditure	Price Subsidies	Enterprise Subsidies	Capital Expenditure
1978	2.1	0.98	14.7	6.4	2.9	43.5
1979	4.1	0.90	15.4	10.9	2.4	41.3
1980	5.5	0.78	10.9	16.4	2.3	32.3
1981	7.1	0.90	8.0	22.6	2.9	25.8
1982	6.4	1.03	7.0	21.6	3.5	23.7
1983	5.7	1.83	7.6	19.1	6.1	25.2
1984	4.8	1.26	8.3	16.7	4.4	28.8
1985	3.9	2.16	7.8	14.1	7.7	27.7
1986	2.6	3.43	8.0	9.2	12.3	28.7
1987	2.7	3.43	6.9	10.4	13.3	26.7
1988	2.2	3.18	5.8	9.8	13.9	25.4
1989	2.5	3.12	4.7	11.8	15.0	22.8

Notes: price subsidies, largely consist of those on grain, cooking oil and fertilizers. Source: World Bank 1990b: 13

began to rise from 1987 with the acceleration in the inflation rate. The deceleration in the inflation rate between autumn 1989 and autumn 1990 has relied heavily on the control of purchaser prices for consumer goods. The public finance implications of supplying low-price rations of staples in urban areas are now very different from those in the pre-reform period. The government can no longer exercise complete control over the procurement prices and rely entirely on coercion to meet its procurement targets. It has to provide sufficient economic incentives to producers. The parallel markets in agricultural produce, together with the discretion of rural households over the deployment of their labour, set a lower bound on procurement prices. This means that the scope for reducing the price subsidies on staples for urban residents by reducing procurement prices in rural areas is much less.

The share of expenditure on subsidies to loss-making enterprises has risen fairly steadily since 1980. This may be attributed to two sets of factors: first, the separation of enterprise budgets from that of the government, and second changes in relative prices and a decrease in enterprise profitability in the wake of the reforms. Most of China's SOEs date from the pre-reform period, and they were not established on the basis of profitability. As in other socialist economies undergoing market-oriented reforms, making enterprises responsible for their own profits and losses immediately creates a sizeable population which is not financially viable and thus has to be subsidized, given the absence of bankruptcy. Further, as we saw earlier, subsidies from the budget are only a part of subsidies to such enterprises. We have in addition disguised subsidies in the form of soft lending from banks. Besides the change in budgetary practice, other changes arising from the economic reforms would also have an impact on the composition of government revenue and expenditure. For example, whereas losses arising from a change in relative prices have to be covered by subsidies, extra

taxes on gains appear under revenue. However, losses covered from the government budget are likely to exceed the tax revenue on gains because the government has to cover 100% of losses but receives a much smaller percentage of gains. Moreover, as we shall see later, there has been a decline in the profitability of SOEs and also of collective enterprises.

Loss-making enterprises have confronted the Chinese government with a dilemma: given the extensive social welfare and other obligations of enterprises to their employees and pensioners, it is wary of letting loss-making enterprises go bankrupt; on the other hand, sustaining loss-making enterprises through budget subsidies goes against the 'incentive' spirit of the reforms and creates a substantial public finance problem.

The decline in capital expenditure in the government budget shown in Table 3 is implied by the enterprise reforms seeking to shift the financing of investment from the government budget to own-funds of enterprises or to loans. There are, however, limits to the displacement of government investment by enterprise investment, as there are items of investment which cannot be so shifted. These include not only investment in infrastructure and public goods but also investment in those industries which are forced to sell a significant proportion of their output at low 'plan prices'. These industries include the coal, the electricity, the oil and the steel industries. The implication is that price controls imply extra responsibility for certain types of investment from the government budget. At the same time the decrease in the share of investment in government expenditure has to be judged in relation to overall investment in the economy, which has been higher in the reform than in the pre-reform period [see Hussain and Stern (1991)].

Taking Tables 2 and 3 together, we see that as the profit tax revenue has fallen and subsidies to loss-making enterprises have risen, the net yield from the profit tax must therefore have decreased. The government reduced its share in positive profit from 100% to 55% (the highest profit tax rate) or less. On the other hand, the commitment to keep SOEs afloat means that the government still has to bear 100% of losses. From the perspective of ownership as the right to residual income, this is equivalent to the government retaining the full ownership of loss-making enterprises, but only a part-ownership of profitable ones. The interesting feature in Table 4 is not so much the decline as its magnitude. The dramatic fall suggests that enterprise profits are no longer a significant source of net revenue for the government. In fact, if government liabilities from soft lending to enterprises were included, the yield would be still lower and probably negative.

**TABLE 4**  
**Net Yield From Profit Taxes (%s of GNP)**

	Profit Taxes	Subsidies	Net Yield
1978	20.6	0.98	19.62
1979	18.4	0.90	17.5
1980	16.9	0.78	16.12
1981	16.2	0.90	15.3
1982	13.9	1.03	12.87
1983	12.9	1.83	11.07
1984	11.6	1.26	10.34
1985	8.1	2.16	5.94
1986	7.1	3.43	3.67
1987	5.9	3.43	2.47
1988	4.9	3.18	1.72
1989	3.7	3.12	.58

Source: Tables 2 & 3

We now examine the effect of the reforms on profitability. The aggregate figures for all enterprise and SOEs are presented in Table 5:

**Table 5**  
**Enterprise Profit Rates**

	Gross profit / Capital Stock at Historic Cost	
	SOEs	Collective
1979	24.9	38.5
1980	24.3	37.5
1981	22.9	32.8
1982	22.2	30.3
1983	21.7	31.7
1984	22.3	30.7
1985	22.4	35.0
1986	19.9	27.5
1987	19.7	25.6
1988	20.2	27.8
1989	17.5	21.7

Source: SYC 1985, 1986, 1987, 1988, 1989 & 1990; Ministry of Finance (1989).

The denominator of the profit rate is capital at historic cost. Whilst the profit rate as calculated may be a poor measure of social rates of return it is informative in the context of financial flows, our particular focus here. In any case other capital stock series are difficult to come by. The table shows a steady decline in profitability in both SOEs and collective enterprises. Collective enterprises, although more profitable than SOEs, have experienced an even sharper fall. This would suggest that some of the factors responsible for the decline are not particular to state-owned enterprises. There would seem to be at least two possible (interrelated) explanations. One is increased competition in the product markets, and the second is the loosening of government control on wages. The reforms have spurred the growth of the non-state industrial sector, the share of which in industrial output has increased. SOEs face strong competition from collective enterprises (rural as well as urban) in light

industrial consumer and producer goods. The increased competition would seem to be consistent with the fall in profitability in both SOEs and collective enterprises.

A second explanatory factor is the loosening of wage controls. A national wage-scale still governs time wages in SOEs, though no longer in collective enterprises. However, there has been a marked shift from time wages towards piece wages, which are not controlled by the government. The economic reforms have also reintroduced wage bonuses linked to performance which were suppressed during the Cultural Revolution. The standards of performance are, however, mainly defined by enterprises themselves and thus can be used by the management to grant wage increases packaged as bonuses. There is anecdotal evidence that in many cases enterprise managers, rather than resisting pressure for wage rise, have exploited gaps and loopholes in the regulations to meet the demand of their labour force to match wage increases in other enterprises.

Both factors would suggest an increase in the share of value-added going to wages. Wages and salaries escape personal income tax as the tax exemption level of 400 Yuan per month (excluding benefits in kind, which form a substantial percentage of personal incomes in urban areas) is too high. A shift towards wages, therefore, puts a two-way pressure on public finance. It reduces the share of value added accruing to the government as direct taxes, and, on the other hand, by eroding the profit margins of enterprises it also increases government subsidies to loss-making enterprises. Thus an increase in the share of personal incomes in GNP is likely to reduce the share of government revenue in GNP. The Chinese national income accounts do not provide the breakdown in terms of personal/institutional incomes, but indirect calculations in terms of personal consumption plus changes in household

deposits (which are likely to be an underestimate of savings) suggest a significant shift towards personal income [see Hussain and Stern (1991)].

### **5. The current tax system**

Our account here of the tax structure is restricted to direct and indirect enterprise taxes, which together raised two-thirds of tax revenue in 1989 (Table 2). We consider first the tax structure and then the issues of tax collection and assessment. Direct taxes include both remittances to the government from enterprises and the profit tax (personal income tax is not yet a significant revenue source). Between 1979 and 1983 (during the first phase of the enterprise reforms), direct government revenue from enterprises accrued largely in the form of 'remittances', which were enterprise-specific and decided through bilateral bargaining. Since then, for 'financially independent' SOEs, a profit tax has replaced remittances. For SOEs, the distinction between taxes and remittances (or return to the ownership of capital) is blurred. The replacement of remittances by taxes was designed to base the relationship between the government and SOEs on general rules, fixed for a time, and to reduce bilateral bargaining. This was taken a stage further with the introduction of multi-year tax contracts, which we discuss later. The introduction of profit taxation was also prompted by the proliferation of non-state-owned enterprises, including foreign-owned and private.

A central feature of profit taxes in China is that tax rates vary with enterprise size (defined in terms of the value of assets and other indices) and ownership status. This makes the yield from the profit tax conditional on the size and ownership distribution of enterprises. Large- and medium-size SOEs are subject to a tax rate of 55%, and they may also be subject to an enterprise-specific 'income adjustment tax', which is meant to take account of the

differential endowment of assets inherited from the pre-reform era free of charge. Small SOEs and collective enterprises face a non-linear tax schedule with a maximum marginal rate of 55%. The heavier taxation of medium- and large-size SOEs is meant to take account of their preferential treatment in the allocation of inputs and investment funds and also meant to include a return to capital, which *de jure* the government owns. The economic reforms have spurred the growth of collective enterprises and their share of industrial output has risen which should, *ceteris paribus*, reduce the profit tax yield.

Another notable feature of the Chinese profit tax is that not merely is interest on loans tax-deductible, but so is the principal. This curious provision, which applies to SOEs and selected collective enterprises, is intended as a transitional measure to cushion the shift from grants to loans. The actual effect of the provision, however, has to be judged in relation to not only this shift but also in relation to the financial constraints on enterprises and other changes arising from the reforms. The changes in the banking system from the mid 1980s loosened credit rationing considerably. Further, the nominal interest rate has been low and the real rate for the most part negative. The 1980s saw a massive increase in borrowing by enterprises, SOEs included, and a rise in the investment ratio. In this context, the main effect of the provision would seem to be encourage enterprises to borrow and to substitute loans for own funds in financing investment [see Hussain & Stern (1991) for a discussion].

The principal indirect taxes are the Product Tax and the Value Added Tax (VAT). Both are expressed as percentages of purchaser rather than producer prices, as would normally be the case. The Product Tax is a turnover tax imposed on sales at widely different rates ranging between 3% to 60% on manufactured and imported goods. The tax is extremely

intricate, distinguishing between around 400 groups, and the rates vary not only across but also within groups [World Bank (1990a), p. 402]. The main reason for this complexity is that the tax is regarded as a component of purchaser prices, and its structure mirrors the wide range of prices set by the government. In setting the final price simplicity or uniformity in the Product Tax would not be a relevant criterion. The VAT, which is eventually intended to replace the Product Tax, as yet applies only to a limited number of commodities at rates ranging from 6 to 16% of the purchaser prices. The two taxes have co-existed for some time so that some enterprises may pay both taxes, though not on the same product.

The analysis of indirect taxes in transitional economies such as the Chinese involves some special problems associated with government price controls. Price controls already embody a web of implicit taxes on producers and subsidies to users, and the Product Tax and the VAT are layered on top of these indirect taxes. Whilst the calculation of implicit taxes may be complex both conceptually and empirically, it is likely that the rate structure of net indirect taxes (implicit and explicit taxes together) will be very different from that of the explicit indirect taxes. Hence, an assessment of indirect taxes in terms of explicit taxes alone may be misleading. For example, coal is subject to the Product Tax, going against the precept from standard theories of public economics of not taxing intermediate goods. However, the tax-inclusive domestic price of coal in the Chinese economy (the price set by the central government) is well-below the international price. Similarly, the VAT in the Chinese economy does not actually avoid the taxation of inputs, as it is supposed to do, because the prices exclusive of explicit taxes still include taxes or subsidies arising out of price controls. In fact, the rebate of tax (including the Product Tax) on inputs such as coal for which domestic prices are low would widen further the wedge between the international price and the domestic price

to users.

Indirect taxes, particularly the Product Tax, existed in the pre-reform period, the reform allowing enterprises the disposal of a part of their profits has changed the significance of these taxes and of price controls. In the pre-reform period, these taxes and controls had a minor, if any, effect on enterprises as operational profits accrued to the government and losses were covered by the government. But following the enterprise reforms they do have important implications for enterprises. As a result, the Product Tax schedule was revised in 1983 so as to counteract the perceived distorticary effects of price controls. Thus a professed aim of the Product Tax is to reduce the dispersion of profits (the ratio of profits to sales) between industries. Leaving aside the issues of the desirability and the feasibility of the objective, it is important to recognize the pervasive effect of price controls on the structure of indirect taxes.

We now consider some of the problems of assessment and implementation of direct and indirect taxes created by the coexistence of market and planning in the Chinese economy. These arise essentially from multiple prices and a lack of reliable information on enterprise incomes and sales. In China, medium- and large-size SOEs have to sell an output quota at government-fixed (or plan) prices - a commodity can have several of these depending on the government tier fixing the price. In turn, enterprises receive an input quota at government-fixed prices, and they are also allowed to sell above-quota output at negotiated prices, which are invariably higher than government-fixed prices and are often subject to a ceiling. This in a general outline is the so-called 'two-track pricing system'. The system creates special problems for both indirect and direct taxation. The principal source of such problems is the

seepage from the plan to the market track in the form of arbitrage, which the government can only hinder to a certain extent. Such arbitrage, which is illegal, has a number of adverse implications both for the implementation of indirect (including price controls) and direct taxes. First, it involves the evasion of taxes implicit in controlled prices by producers or their appropriation by middlemen. Second, it also involves a partial evasion of *ad valorem* indirect taxes because, given the illegality of arbitrage, the recorded prices are bound to be lower than the actual sale prices.

The absence of reliable information on the prices at which transactions actually take place has a knock-on effect on the income accounts of enterprises. They are generally reckoned to be unreliable because every enterprise has an incentive to use lowest credible prices when calculating revenue and highest credible prices when calculating costs. Hence, like recorded sales, recorded profits are also likely to be underestimates. This problem, however, is not particular to China; it also arises in many developing economies and also in other transitional economies. The Chinese government has responded to the problem by introducing multi-year contracts for profit taxes and in some cases also for indirect taxes. Thus both direct and indirect taxes paid by enterprises may depart considerably from formal rates. The use of futures contracts for taxes is unusual by international standards but is an innovation which deserves consideration outside China. In the short-run it can simplify administration and help avoid incentive problems.

Tax contracting in China is embedded in a wider contract covering also an assortment of performance and investment targets, which takes a variety of forms. The most common form is the 'Contract Management Responsibility System', which covers around 70% of SOEs

[for a discussion of the CMR see Koo (1990)]. Under the system an enterprise pre-commits itself to handing over to the government fixed amounts of taxes every year over the period of contract, which ranges over 2 to 5 years. The contracted sum is usually equal to the tax bill for the year preceding the start of the contract, and may rise at a pre-set rate over the contract period. These contracts, which are arrived at by bargaining between the supervising agency and the enterprise, vary widely. The contracted sum of taxes is fixed in nominal terms. If the income of an enterprise falls short of the expectations then the enterprise nevertheless has to meet the contract from own funds. However, when an enterprise is "unable" to meet the contract, it can appeal to the government for a revision of the contract on the ground of circumstances beyond its control. In 1988, around 9% of enterprises covered by the CMR failed to meet their tax target; the figure for 1989 and 1990 is expected to be considerably higher because of the economic downturn. In this sense the contract is not a 'firm' one.

Tax contracts, which are also used for sharing tax revenue between different government tiers, have a number of important consequences for government revenue. First, the tax rate on above-target profit is zero or very low as compared to 55% for large- and medium-size SOEs. Similarly, pre-set quotas for indirect taxes imply that output in excess of the expected level is free of taxes. Both reduce the income elasticity of government revenue but limit disincentive effects associated with marginal taxation. The quotas for indirect taxes may account for the fall in the ratio of indirect taxes to GNP mentioned above, assuming that actual growth rates were higher than those implicit in the contract. In many cases this implicit growth rate would be zero. Second, government tax revenue bears (in real terms) the consequences of any unforeseen increase in the inflation rate and variations in enterprise profits. For example, the sharp acceleration in the inflation rate in 1988 and 1989 appears to

have been unforeseen. If profit exceeds the government estimate implicit in the contract then the whole of the unforeseen profit accrues to the enterprise. Where profit is below expectations, the enterprise is expected to meet the contract from its reserves. However, if the enterprise is simply unable to meet the contract then the government has no option but to revise the contracted sum downwards, as inability to meet financial obligations is still not regarded as a sufficient reason for bankruptcy. Whilst this 'insurance' might encourage investment and risk-taking, it is likely to lead to problems for revenue raising and macroeconomic stability.

In a transitional economy, there is probably no option but to rely on presumptive tax bases, especially for direct and indirect taxes on enterprises and the self-employed. Such bases are not uncommon in a number of market economies. Tax contracting has much in common with presumptive taxation and shares with it the virtue of simplifying tax collection. The effect of the system on economic incentives is not unambiguous. The overall direct tax regime in China is not one of lump-sum taxes, since in addition to the tax contracts, enterprises are also subject to various forms of *ad hoc* levies and forced contributions by the local government, and these depend on the financial position of the enterprise. These are of dubious legal status but appear to be widespread, given that they were singled out for criticism in the Central Committee communique at the end of the important November 1989 plenum [See Beijing Review 1990: No.7]. Besides, the period of tax contracts is only 2 to 5 years. Expectations concerning the terms of the next contract are likely to have a strong bearing on current enterprise behaviour. Generally speaking, enterprises would expect that the target rate of profit and thus tax quotas in the next contract would depend on the difference between the target and the actual rate of profit during the current contract period. This would give rise to

the 'ratchet effect' common under the traditional output planning in socialist economies. The current performance acts like a notched gear wheel in fixing the target for the following contract period. However, the 'ratchet effect' can be treated like a dead-weight loss, which can be minimized by setting the parameters of contract [for a discussion see Weitzman (1980)]. Moreover, multi-year fiscal contracts are like a built-in macroeconomic destabiliser, in that they make the disposable enterprise profit high when the growth rate and the inflation are high and vice-versa.

## **6. Tax reform and design**

We think of the problem of tax reform as that of finding an improvement from an existing position and that of tax design of finding a new system which is superior to other options and where the existing tax system is not regarded as a constraint on feasible options. The general principles for tax reform and design in transitional economies such as the Chinese are the same as those which apply to other economies. These include efficiency, equity, administrative costs and flexibility. Dynamic aspects, however, must also be a central consideration. The details of taxes and of their pros and cons depend crucially on the features of the economy such as the composition of GNP, types of institutional structures and how these are likely to change (and the effect of tax structures on possible changes). In this section we shall discuss special features of the Chinese economy relevant to the tax reform and tax design. We shall also point to those aspects of the problem which are common to other economies in transition or which are integral part of the logic of transition. We shall argue that the Chinese experience carries strong lessons for other countries [for discussion of principles of tax reform and tax design in developing economies see Ahmad and Stern (1991)]

and Burgess and Stern (1991)].

The Chinese economy displays features of both a developing economy and of a command economy undergoing transition to a market economy in its own distinctive way. As in developing economies, agriculture accounts for a substantial percentage of GNP (around 30%) and employs an even larger percentage of the labour force (around 60%). This means that the taxation of agriculture and the rural population is a central issue for tax policy in China. As Table 2 shows, the agricultural tax accounts for a small percentage of government revenue, though agriculture is also taxed implicitly via procurement of agricultural produce at government-set prices. Low explicit taxation and reliance on implicit taxation via the pricing of agricultural produce is a feature China shares with other developing countries, even though Chinese agriculture is *sui generis*. All agricultural land is publicly owned, though parcelled out to households on long-term leases, and the distribution of agricultural land across households is highly egalitarian by international standards.

Having been a command economy, the Chinese economy is strikingly different from developing economies in many respects central to tax policy. The assortment of feasible tax handles depends crucially on the administrative reach of the government and on the range of information on economic activities and individuals. Tax handles depend on what the government can monitor and on its administrative capacity. In contrast to most developing economies, the Chinese government has, for example, detailed data on households and individuals from obligatory household registration (*hukou*). The household register carries details of household members including their ages, relationships, occupation and the employment unit, and covers 100% of the (permanent) urban population. Coverage of the

rural population is less than 100% but still comparatively very high by the standards of information available to governments of other developing countries. Although household registration is geared towards maintaining public order and controlling the movement of population, it is also used for social welfare purposes such as the issue of entitlements to low-price rations of staples. It could also be used for taxation and cash transfers as we discuss later.

In China a large segment of industry is state-owned and the non-state-owned sector remains subject to extensive control. State-ownership and a panoply of controls over industry still furnish the government with powerful tax handles for raising revenue to meet its expenditure. The government continues to rely heavily on enterprises, especially state-owned enterprises, as the principal handle for both indirect and direct taxes. This heavy reliance is a fundamental problem with the current Chinese tax system. As we saw earlier, enterprise profits are no longer a rich revenue source and the net yield from the profits tax has dropped sharply. There would seem to be scope for increasing the yield from profits taxes, by redesigning tax contracts, preventing tax evasion and cutting down on subsidies to loss-making enterprises. A central question is whether the profit tax can be the mainstay of government revenue as it was in the pre-reform period (indirect taxes are discussed later). The available evidence suggests a steady decline in profitability together with an increase in the share of personal incomes in GNP. It is likely that some of the observed fall is due partly to tax evasion; from the point of view of the distribution of GNP the important issue is who are the recipients of disguised profits. As the tax authority is also (in most cases) the owner of enterprises, these profits do not accrue to the owners of capital. They are either retained in enterprises or accrue in various forms to the enterprise employees.

Whatever the factors responsible for the fall in enterprise profitability, the general point is that they are no longer all under government control. In principle, the government is capable of reversing the decline (at least partially) so as to safeguard its principal tax base. But the problem is that such an attempt will have to rely heavily on administrative means, which goes against the grain of autonomy for enterprises. The basic problem is not simply raising enough revenue to meet the government's expenditure liabilities, but raising revenue in a manner which does not hinder progress towards a market economy.

Thus, we would argue, tax reform and tax design in a transitional economy has to begin with the premise that the government's control over the functional and personal distribution of incomes is much weaker than it was under the command economy. This suggests two guidelines for tax design: first, there should be a diversification of taxes (and also non-tax revenue sources), and, second, equity should become a central consideration in tax design. Tax and revenue diversification is desirable in all economies but are of special importance for transitional economies. As compared to economies with stable structures, such economies are much more likely to experience major shifts in the distribution and composition of GNP within a short time period. These shifts mean that the narrower the bases of a tax system the more uncertain will be the tax revenue. An obvious strategy to deal with heightened uncertainty is to diversify tax handles and non-tax revenue sources. In particular, a diversification of taxes away from enterprise taxes is necessary for securing government revenue, given that the transition is likely to involve a decrease in the share of GNP accruing to large- and medium-size enterprises, which has been the main source of tax revenue.

Further, the usual argument in favour of diversification in other economies also applies to a transitional economy. That is, given total tax revenue, a heavy reliance on a few taxes or tax handles implies high marginal tax rates. As the distortionary effect of taxes depends on the marginal tax rate, there is a presumption in favour of broad based tax systems with lower marginal rates. Moreover, high marginal tax rates also encourage tax evasion by raising the return from it. Much of the information and many of the devices for monitoring enterprise income which are available to the government in transitional economies are based on the structures of the command economy. A grant of autonomy and leeway for activities prompted by economic incentives reduces available information on incomes. Independent accounting and auditing and organized transactions which yield much of the information for tax assessment in a decentralized economy are still absent. Thus a transitional economy provides much wider scope for tax evasion than either a developed market economy or a command economy. A possible response to tax evasion is to supplement taxes with ad hoc levies and forced contributions, which are common in China. These compound the original problem by introducing arbitrariness in taxation and providing a further incentive to enterprises to distort information. An alternative way of dealing with the problem is to reduce tax rates, and thus the return from tax evasion, and make up the revenue shortfall by diversifying tax handles.

It is important, therefore, to examine the possibilities of diversification. There are two areas of taxation which at present raise little revenue, but where there would be considerable scope for raising revenue. These are: first, the Personal Income Tax and, second, the Agricultural Tax; we consider these in turn. Personal income taxation has been unimportant in China, as in other command economies, because it was unnecessary, not because it was infeasible. The government controlled personal incomes through wage-salary schedules and

pricing policy and the personal income tax was reserved for a few earning very high incomes compared to the average. The economic reforms have loosened controls over both wages and salaries and over prices, on the one hand, and opened up new opportunities for earning incomes on the other. *Prima facie*, introducing a wide-ranging personal income tax should be easier in the Chinese than in many other developing economies. An overwhelming percentage of the urban wage-employed labour force is either in the state or the collective sector. Information on wages and salaries (in cash) of the employees of these sectors is readily available, as they are covered by a comprehensive labour insurance scheme whereby compensations are related to (cash) income. There are, however, problems: a substantial percentage of income of the employees of the state and the collective sector accrues in kind, which generate problems of both measurement and of equity amongst the wage-employed. The most important component of which is heavily subsidized housing. Around three-quarters of housing in urban areas is owned by work units (*danwei*). House rents are often too low to cover even the cost of maintenance. As part of housing reform, which is under way in China, house rents have been increased and employees have been given cash compensation. This is generally regarded as an essential preliminary to the privatization of housing.

Another reform for extending the range of personal income tax, interpreted here to include social security contributions, would be to introduce employee contributions for labour insurance, covering old-age and disability pensions, health care and maternity benefits. Employee contributions, which existed in the 1950s when the system was introduced, were abolished during the Cultural Revolutionary Period on the grounds that wages and salaries could be adjusted to take account of insurance benefits such as old-age pensions. In the pre-reform economy it was understandably argued that only net payments were relevant.

Employee contributions were re-introduced in the 1980s, but only for fresh recruits under the newly-introduced employment on terminable contracts. Thus an overwhelming percentage of the employees of the state and the collective sector enjoy extensive non-contributory benefits, the costs of which are all borne by enterprises. The introduction of an employee contribution related to income can enlarge the coverage of personal income tax and also relieve financial stress on the labour insurance system.

There are some problems in extending personal income tax to the labour force outside the state and the collective sector, but they would seem to be less serious than those encountered in extending personal income tax to the 'informal' sector in urban and rural areas in other developing economies. The self-employed labour force in urban areas is subject to licensing and is already liable for income tax. A substantial percentage of the labour force in rural areas is now wage-employed in rural industries (usually collectively-owned), rather than engaged in household farming. But they are not treated as part of the wage-employed labour force because of the administrative distinction carried over from the pre-reform period, whereby rural industry is grouped together with agriculture. Hence the rural labour force is regarded as 'self-employed' regardless of occupation, and labour laws and regulation applying to the non-agricultural sector do not extend to the employees of rural industry. Employees of rural enterprises, some of which are quite large and no more related to agriculture than are urban enterprises, are not covered by labour insurance laws. The status distinction between the employees of urban and of rural industry is becoming increasingly anomalous because of the rapid growth of rural industry and its removal would pave the way both for extending personal income taxation and labour insurance to the wage-employed labour force in rural areas.

In any discussion of agricultural taxation careful consideration should be given to land taxation. The Chinese Agricultural Tax is a form of land tax. It has decreased steadily in importance as a source of government revenue since the 1950s when it was a major revenue source. The decrease accelerated (see Table 2) when, as part of the rural reforms, the government exempted poorer areas from the tax altogether and froze the tax for the rest. The main arguments in favour of raising the Agricultural Tax are that (1) agriculture seems to be very lightly taxed relative to its share in GNP, (2) a significant percentage of those in agriculture are not poor relative to other groups outside agriculture, and (3) as a tax it is superior on efficiency grounds to the 'implicit' taxation of agriculture through procurement prices. That the average income in agriculture is low relative to average income in the non-agricultural sector does not seem to us a convincing argument for not raising the Agricultural Tax. For agricultural incomes are very far from equally distributed. In fact, rural incomes in China are more unequally distributed than urban incomes [see Hussain, Lanjouw and Stern (1990)]. The argument for raising the yield from the agricultural tax is essentially the same as that for introducing a wide-ranging personal income tax. The Chinese agricultural tax is a form of land tax roughly adjusted for the quality of land. The main problem with it is that much of the quality valuation of the land dates from the 1950s and 60s and is based on then assumed potential for grain yield. An agricultural tax based on current quality valuation is highly attractive both from the perspective of both efficiency and equity. [see for example Ahmad and Stern (1991)].

Similar arguments apply to the taxation of land in urban areas as they do to agricultural land. At present, almost all land is publicly owned, though by different agencies. Traditionally, in China, as in other ex-command economies, land has been priced very cheaply

or carried no price at all. Although there is a huge shortage of land in urban areas, the existing land is very inefficiently used. An urban land tax would be a good way of diversifying the tax base, and would also encourage a more efficient land use.

An analysis of the reform of 'explicit' indirect taxes must be considered jointly with a reform of price controls or price liberalization. As pointed out earlier, price controls involve taxes on producers and subsidies to users. From the perspective of standard public economics there would seem to be no general justification for price controls on producer goods, though, in principle, such price controls may be justified in transitional economies to curb monopoly profits or as a temporary measure to arrest a spiralling inflation.

The general implication is that in price liberalization the priority should be on the removal of price controls on producers goods and 'non-essential' consumption goods (the case for price controls on 'essential' consumer goods is considered later). The priority in the removal of price controls in the Chinese economy seems to have been different. Whilst price controls are lax on 'non-essential' consumer and producer goods, strict price controls remain on 'essential' consumer goods and also producers goods such as coal and steel. These price controls generate problems for public finance as well as economic efficiency. As discussed earlier, price subsidies and subsidies to loss-making enterprises, some of which are due to price controls, account for a substantial percentage of government expenditure.

The pervasiveness of price controls and distortions must be taken into account in the analysis of taxes and one cannot assert without qualification the usual protocols for indirect taxes, such as no taxes on inputs. Whilst this may be a good long-term goal, taken together

with price liberalization, the shorter-run policies are not so clear-cut. The rate structure should be decided taking account of the opportunity costs or shadow prices of goods [see Dreze & Stern (1987)]. For internationally traded producer goods it is sensible to take relative world prices as shadow prices [see Little & Mirrlees (1974) and Dreze & Stern (1987)]. Thus apart from raising revenue, a function of indirect taxes under widespread price controls is to compensate for distortions on prices of producer goods. In principle it would be superior to attack the problem of distortions arising from price controls at source but if they have to be taken as given in the short-run then the tax analyst cannot ignore them. As we saw, the Product Tax in China is already levied so as to offset the effect of price controls. Such taxes will reduce distortions on prices paid by purchasers, though not on those received by producers. Thus a next stage could be to absorb taxes into producer prices. In this way could do both reduce the impact of distortions and play a part in their eventual removal. Such an absorption would decrease government tax revenue, but that decrease will be partly offset by an increase in the profit taxes or a decrease in subsidies to loss-making enterprises. The remainder will have to be covered by other taxes.

Multiple prices for the same commodity, which in the Chinese economy arise from price controls, pose an additional problem for indirect taxes. The government lacks reliable and verifiable information on prices at which transactions are conducted, but may have some information about some features of the distribution. In such a situation, the rule could be that indirect taxes should not increase the dispersion of prices. This favours fixed rather than *ad valorem* indirect taxes, though fixed taxes do not rule out regular revision in line with inflation. However, we should recognize that multiple prices weaken the role indirect taxes can play in correcting the impact of price distortions.

In China as in other transitional economies, economic reforms have led to a considerable widening of the range of available consumer goods. This provides a scope for differentiated taxation of consumption goods, high taxes for luxuries and low for necessities. The degree of desired differentiation should depend on the degree to which income distribution objectives can be pursued through the direct tax and transfer system. In China with its comparatively (at least with respect to other countries) equal distribution and potentially powerful transfer system the case for highly differentiated indirect taxes is weaker than elsewhere. There are also good administrative reasons for keeping down the number of rates.

We consider now low-price rations of staples such as grain and cooking oil which are provided to the urban population (but not the rural population). As we saw earlier, price subsidies on staples account for a substantial part of government expenditure. We should begin by asking when reliance on low-price rations for social welfare purposes is justified. Such policies are usually based *inter alia* on two assertions about the society:

- 1) income transfers to households are not feasible;
- 2) sections of the population run severe risks of not achieving a basic minimum standard of living.

Paradoxically, the arguments for the provision of low-price rations in the pre-reform period were weak because incomes in urban areas were very equally distributed. Further, cash transfers to households would seem to be administratively far more feasible in the Chinese economy than in most developing economies. The rationing system is based on an elaborate household registration system. The coverage of household registration amongst permanent urban residents is total as there is a strong economic incentive and administrative pressure on households to register. In principle, the government has potentially all the information it needs

to make cash transfers related to household size and income.

In China as in other transitional economies revenue sources are not confined to direct and indirect taxes of the conventional kind. The privatization of enterprises (as distinct from providing incentives and decentralizing decision-making) is not yet on the political agenda in China but the privatization of housing stock is. Obviously, 'give-aways' provide the quickest road to privatization. However, we would suggest that one needs to balance the speed of privatization or a transformation of the ownership structure - for a number of reasons rapidity may be of importance for the success of the transition - with the raising of revenue and safeguarding the public finances (as well as the problems of inequity and chaos which may be associated with haste).

Finally we consider the issue of subsidies to loss-making enterprises. The simplest way to solve the problem might appear to be to let the loss-making enterprises go bankrupt. The basic argument in favour of bankruptcy is that it will provide a selection mechanism leading to the elimination of inefficient enterprises and the survival of the efficient. There has been a bankruptcy law on the books in China since 1988, but as yet only a few enterprises have been made bankrupt. There is, however, a fundamental problem in using bankruptcy as a selection mechanism to weed out inefficient enterprises when the price structure is highly distorted. Whether bankruptcy furthers efficiency depends crucially on how high a percentage of bankrupted enterprises are in fact efficient, and what proportion of profitable enterprises are inefficient. In the Chinese context, bankruptcy as a selection mechanism poses an additional problem. Given that profitability varies greatly by industry, loss-making enterprises are not evenly distributed but heavily concentrated in certain industries. As a result, a rigorous

enforcement of the bankruptcy law may wipe out a substantial proportion of, or even the whole of, certain industries which are forced to sell their output at low prices. In assessing technical efficiency on the basis of measured profits, one might keep in mind that price controls already embody a web of taxes and subsidies. This would suggest that the removal of price distortions ought to have priority over bankruptcy and that the closure of enterprises should be assessed on the basis of shadow prices. The decision to keep enterprises afloat could be approached as an investment decision, and assessed by the available methods for project appraisal. Given the distorted price structure, such an approach would entail subsidizing some loss-making enterprises and also taxing some profitable enterprises.

Added to the difficulties with the use of profitability as a short-run criterion in a distorted economy, we have problems associated with inadequate capital markets. Market economies require for their effective functioning efficient capital markets which can identify long-run potential and smooth short-term difficulties. In China, as in many transitional economies, such markets are not yet present. To the problems of distorted prices and weak capital markets we must also add the difficulties of maintaining a social security system, when so many obligations are discharged through the enterprise. Thus ruthless application of bankruptcy laws is not a sensible short-run answer to the problems of loss-making enterprises. What is required is considered cost-benefit analysis of which enterprises to maintain and which to shut down with the government continuing to play an important role. This government role in the decision of which enterprises to maintain and which to close down would be gradually reduced as prices are liberalized, capital and labour markets evolve and social security systems are developed.

## 7. Concluding remarks

From the perspective of accounting, transition from a command to a market economy is a complicated rearrangement of claims to income (including the tax-take) and responsibilities for expenditure. This involves, on the one hand, the government reducing its tax-take from enterprises (which provide the main tax handles in command economies) and transferring the responsibility for financing industrial investment to enterprises. On the other hand, it also entails the government taking over responsibilities or instituting alternative financing mechanisms for social welfare expenditure previously financed by enterprises. Moreover, transition to a market economy also confronts individuals with the risks of unemployment and destitution, risks which have been very low in the command economy. These new social risks, which are covered by markets either inefficiently or not at all even in developed market economies, have to be taken into account by the social security system. In general the responsibilities of the government are likely to be far more extensive in a transitional economy than in other economies with comparable per capita incomes.

The logic of transition implies a loosening of government control over the functional and personal distribution of GNP and the opening of new earning opportunities. This has important implications for the public finances and tax policy, because the tax base is likely to alter radically, weakening the effectiveness of old tax handles, and because in the old regime the power over income determination meant that equity was not a central consideration in tax policy. Arguably, transition involves a shift away from profits accruing to enterprises. Decentralized wage bargaining increases the power of the employed labour force to increase its share of the value added. In addition competition arising from the lowering of entry barriers and the relaxation of restrictions on domestic and foreign trading are likely to erode

mark-ups.

*Prima facie*, transition to a market economy will increase inequalities in the distribution of personal incomes. Decentralized wage determination favours some sections of the employed labour force as compared to others. Moreover, wider economic opportunities for earning an income mean that some, due to chance or aptitude, will do better than others. Although the transition may also bring in its train a dilution of concern with equality, the resulting inequalities may well go beyond what is generally regarded as acceptable. Given the lower (although not negligible) level of income inequalities inherited from the command economy, the tolerance level of inequalities may be lower in transitional economies than in many market economies. This would suggest that equity should be a central concern in the reform of taxation and expenditure policies. This concern may be founded either on the ethical values of the government or the need to ensure political stability.

The need to diversify tax bases and revenue sources applies with a greater force to transitional economies than it does to market economies and economies with stable structures. The tax bases carried over from the pre-reform period are comparatively narrow. Moreover, as compared to economies with stable structures, transitional economies are much more likely to experience major shifts in the distribution of and composition of GNP within a short time period. An obvious strategy to deal with uncertainty is to diversify both tax and non-tax revenue sources. We consider personal income, corporate income and indirect taxes in turn.

The possibilities of evading taxes on profits and income from self-employment are greater in transitional economies than in either developed market economies or in a command

economy. Independent accounting and auditing practices take time to develop and market transactions, which are usually the main source of information on bases for *ad valorem* commodity taxes and taxes on income derived from the sale of commodities, are likely to remain disorganized and ill-coordinated for a time. There is, however, a feature of transitional economies which provides the possibility of diversifying tax bases. Having been a command economy, an overwhelming percentage of the labour force in a transitional economy is wage-employed and personal incomes in cash (if not in kind) are easily ascertainable, at least relative to other economies with similar incomes. Thus on grounds of both feasibility and desirability there are strong arguments for introducing a wide-ranging personal income tax.

The relative importance of basic issues in the design of corporate taxes for a transitional economy is somewhat different from a developed market economy. Much of the discussion of corporate taxation in developed market economies is dominated by two issues and their interrelationship: first, the interplay between the personal income tax and the corporate income tax and, second, the effect of taxation on the choice between different forms of investment financing, particularly between equity and loan finance. Neither of these are likely to be of immediate importance in transitional economies. Capital is either for the most part publicly owned or, as in Eastern Europe, in the process of privatization. A wide-ranging personal income tax is yet to develop. Moreover, for some time to come bank loans or own-funds will be the main sources of financing. Changes in the cost and availability of bank loans will be of importance but it is likely that these will depend more on bank reforms than on changes in the taxation system.

Of central importance in a reform of enterprise taxation in transitional economies is likely to be the disengagement of the government and enterprises. A main component of such disengagement has to be a reduction in the tax-take from enterprises. It may be argued that so long as enterprises remain the dominant revenue source, the government would intervene in their functioning, at least to safeguard its revenue. As the government sheds expenditure responsibilities some reduction in tax-take from enterprises would be possible without substitute sources but as transition proceeds the government may have to assume new responsibilities, especially in the social security field. In the medium-term a diversification of revenue sources will be a priority. The main alternatives to enterprise taxation in advanced economies are usually personal income tax and the taxation of consumption goods. Reliance on foreign trade taxes is generally undesirable because of their distortionary effects, and a similar argument applies to the taxation of intermediate goods. Whilst these distortions should preclude tariffs and intermediate good taxation in the long-term, it may nevertheless be unwise to rule them out completely in the transition.

A reform of enterprise taxation involves issues beyond the reduction of the tax-take. Amongst these is the lack of reliable information on enterprise profits. One way of avoiding or reducing the problem is presumptive taxation and here the Chinese practice of tax contracting would seem to be relevant. Whilst this has some attraction on incentive and administrative grounds, it suffers from the serious weakness of neither providing an economic incentive to enterprises to reveal information nor promoting enterprise accounting of a kind which makes profitability transparent for both market and tax purposes. It is, in principle, possible to design tax contracts which accomplish this.

An analysis of the reform of indirect taxes in a transitional economy should be closely linked with that of price controls and distortions. The speed with which price controls are removed would vary from economy to economy and in some economies and in some sectors they are likely to remain for considerable periods. For example, so long as price controls on intermediate inputs remain, a prominent principle of indirect taxation from public economics, i.e., that intermediate goods should not be taxed or subsidized, cannot be adopted without careful scrutiny. During the process of price liberalization, indirect taxes can have an important role to play in reducing the cost of price distortions and facilitating the change to a regime where most prices are free of government control. Even if price controls are formally abandoned there are likely to be substantial areas of monopoly, rigidity and poor information, which will make some prices highly distorted. These controls or distortions may have important consequences for taxation.

It may be argued that the discussions of tax design, if not tax reform, are otiose in transitional economies. The tax systems in developed market economies already furnish models for adoption. In fact, many East European economies have already decided to adopt a Western tax system. This raises three issues. First, Western tax systems, whilst sharing some common features, vary widely so that declaring for a 'Western tax system' leaves open many crucial issues. Second, as the existing Western tax systems are far from perfect, such an approach overlooks the question of avoiding mistakes made by these systems. Third, the adoption of a Western system does not resolve the issue of an appropriate tax system during the transition process. The process of transition, is likely to be long. We have already pointed out why some of the features of a tax system which are desirable in market economies with stable structures may not be applicable during the transition process. Fourth, there may be

valuable opportunities for taxation available to a country making a fresh start which elsewhere have been eliminated by history and vested interests.

The election for a capitalist system with a Western style tax system as a long-term goal leaves much that is crucial to be defined. Further, the movement towards whatever tax system is chosen for the long-term is a process which carries perils and pitfalls. The immediate imposition of standard models for that tax system would be an abdication of analytical responsibility which could carry serious consequences for the efficiency, equity and stability of the transition process itself.

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