Economics of Transition, Volume 1(1), 61-87, 1993

The Role of the State, Ownership and Taxation in Transitional Economies*

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1. Introduction

Central to a transition from a command to a market economy is a radical transformation in the role of the state, involving both a withdrawal from economic decision-making and greater responsibilities for social welfare. Schematically, transition may be seen as consisting of three interrelated strands: first, the recasting of enterprises into institutions akin to firms in market economies and their disengagement from the state; second, an overhaul of the public finances and, particularly, the tax system; third, the institution of a social security system which does not rely on extensive price subsidies and secure life-time employment.

These three strands are closely intertwined because enterprises are the principal source of tax revenue and the main social welfare agencies in command economies. In the packages pressed on transitional economies the emphasis has been on a transformation of ownership of enterprises. Reform of the tax system and the institution of a social security system, in contrast, have not received the same attention. As is becoming increasingly obvious, a neglect of these is likely to expose the transition process to dangers and mistaken decisions which may seriously damage its prospects for success. In this paper we examine both the transformation of ownership in relation to the role of the state and tax reform in transitional economies.

The purpose of this paper is to discuss the following issues:

- the pace of transition (section 2);
- ownership rights and taxation (section 3);
- tax design (section 4);
- taxation in transition (section 5).

Conclusions are provided in section 6.

We discuss transition from a comparative perspective and from the theory of public economics. We focus on the Chinese reform experience since 1978, but also on other current and historical examples. A great wall has seemed to separate discussions of the transition in Eastern Europe and the ex-Soviet Union, on the one side, and of the Chinese economic reforms on the other. We would argue that the Chinese experience, although *sui generis*, provides real insights into problems and opportunities which have been ignored or under-emphasised in the literature. We use the Chinese example not as a model for Eastern Europe and the ex-Soviet Union but to broaden the range of possibilities under examination and to question assumptions that appear to be regarded as self-evident in many analyses of transitions. As discussions of the Chinese reforms are available in other papers (Hussain and Stern, 1991 and 1992), we shall not dwell on the detail here. Since tax design and tax reform is a principal focus of the paper, we also draw on the theory of public economics and the extensive literature on the patterns of taxation and tax reform in developed and developing countries as a source of insights into taxation in the transition and beyond.

2. The pace of transition

Perspectives on transition to a market economy now differ widely. Following the downfall of the one-party state, most of the East European economies and the ex-Soviet Republics seem to have opted for a rapid transition. In contrast, the Chinese are persisting with their "long march" to a market economy. They have made step-by-step, though sometimes radical, reforms, whilst still maintaining features of the old command economy such as, in some sectors, output planning and the state-ownership of medium- and large-size enterprises. There appears to be widespread agreement in discussions of Eastern Europe that the two-track approach of grafting elements of a market economy to the command economy, which characterized earlier attempts at economic reform in Eastern Europe and the Soviet Union failed and, in some cases, left behind a legacy of a large foreign debt and money stock (Brus and Laski, 1988, Kornai, 1986). It is sometimes argued that such failure must logically follow from any attempt at "mixing systems" or from any route other than the rapid one (Lipton and Sachs, 1991a and b).

Yet the Chinese economic reforms, in contrast, have been an outstanding success in terms of economic growth. Whilst, as we have pointed out elsewhere (Hussain and Stern, 1991 and 1992), it still faces serious problems which call for major reforms, the Chinese economy looks set to continue on a high growth path at East Asian growth rates. Indeed, it shares a number of other resemblances with the economies in the area. In China, the combination of the command and a market economy has prevented neither the expansion of foreign trade nor the rapid growth of foreign investment (for a discussion of foreign trade see Lardy, 1992). On the contrary, the Chinese performance in these fields compares very favourably with those of other developing economies in the 1980s. The purpose of our drawing attention to this contrast is not to commend the Chinese approach to the East European economies. The initial economic, social and political conditions are very different. Comparatively speaking, the Chinese economy was stable, albeit traumatised by ten years of the Cultural Revolution, when it embarked on the reform process in 1978. In China the economic reforms have preceded political democratization, which has yet to happen. The reforms have been introduced from the top and the Communist party retains its monopoly of political power. In contrast, in the Soviet Union and Eastern Europe the break up of the traditional political order and democratization have preceded, or been contemporaneous with, the transition process. In some of these economies, the main problem is no longer pervasive government interference in economic activities and in the lives of citizens, but a breakdown of law and order and the inability of the government to take and implement decisions. It is this, rather than the survival of the elements of the command economy, which may turn out to be the main obstacle in the transition to a well-functioning market economy.

Our purpose here is to draw lessons, positive and negative, from the Chinese experience for other transitional economies, and also consider other examples from historical experience relevant to the question of the pace of the transition. One negative lesson from recent Chinese history is that combining elements of the command and the market economy, although it reduces uncertainty and helps to maintain stability in the initial stages of the transition, leads to problems of coordination which become progressively worse. For example, allowing output in excess of the plan quota to be sold at negotiated prices, as has been done in China, has not only undermined the government supply system but also stunted the development of markets. On the one hand, it gives enterprises a strong incentive to default on plan deliveries, with the knock-on effect of the government also defaulting on the delivery of inputs at plan prices to enterprises. On the other hand, it spawns segmented markets of various shades between white and black. Similarly, protecting enterprises from the down-side risk of bankruptcy whilst allowing them considerable discretion over investment and loosening administrative control on bank credit contributes to "over-investment" in industrial capacity with a lengthening of "gestation lag" and severe "bottlenecks" in transport and energy (for a discussion of the "congestion effect" of over-investment see Hussain and Stern, 1991). A second negative lesson is that the reform of the public finances and social security should not be left till later, as has been done in China. Rather it should be planned together with other reforms, in particular those concerning enterprises.

The Chinese example also offers important positive lessons. Prominent amongst these is that it is possible to provide, fairly quickly, economic incentives to households and small enterprises, without major sell-offs and give-aways, whilst maintaining the state industrial sector. Leaving decisions to individuals and groups and instituting incentives linking rewards to outcomes can have speedy and impressive effects, without immediate and complete privatization. A large state industrial sector does not necessarily crowd out an incipient non-state sector; in some cases they may even be complementary. The relative importance of the state sector in the Chinese economy has decreased steadily since 1978, due not to privatization but to the fast growth rate of the non-state sector. In the short run it is possible to use leasing and various types of contracts as a possible alternative to more radical privatization where that might be chaotic or inequitable (a point we take up in the next section). The Chinese experience also indicates that in a large economy there may be benefits in going for a geographical or sectoral decentralized approach to reforms, for example, letting particular regions and sectors race ahead.

One cannot do controlled experiments with transitions, but the history of transitions may provide some lessons. There can be few historical analogies to the process now under way in former command economies in terms of ambition and of the magnitude of the task. Yet there is one, the transformation of "market economies" into command economies in those countries in which transition is currently under way. The current controversies concerning the speed and the sequencing of transition are mirror images of controversies about the building of a socialist economy in the Soviet Union in the 1920s and in China in the 1950s (Carr, 1979, Cohen, 1973, Fairbank, 1986). For example, the idea of making the transition in one leap is not novel, on the contrary it was the favoured option of newly-established communist regimes in the past (Lewin, 1975). Some of the major economic disasters in these economies arose from the attempts to make rapid transitions either from a market to a command economy, or within a command economy. Notable examples are the wholesale confiscation of firms and productive assets in the

Soviet Union between 1918-1919 (the period of War Communism), the collectivization of land in the Soviet Union in the 1930s and the Great Leap Forward in China between 1958-1960 (Nove, 1969, Fairbank, 1986). It is important to note that all these disastrous attempts involved building of new institutions from scratch and radical changes in the forms of ownership. Many of the disastrous consequences of these policies were due not so much to their goal but to uncertainty, conflict and upheaval arising from haste.

Keynes wrote in the 1920s: "The economic transition of a society is a thing to be accomplished slowly... We have in Russia today the evils of insane and unnecessary haste. The sacrifices and losses of transition will be vastly greater if the pace is forced... A rapid transition will involve so much pure destruction of wealth that the new state of affairs will be, at first, far worse than the old, and the grand experience discredited." (Collected Works, XXI, p. 245).

Whilst examples of rapid transitions involving the building of new institutions are few, some fairly swift economy-wide adjustments have met with success. Commonly cited are monetary reforms such as those in Germany during the 1920s and after the Second World War (see Dornbusch and Fischer, 1986). The 1980s provide some notable examples of stabilization within a short period such as those in Israel (Bruno and Piterman, 1988) and Mexico (Cordoba, 1991). To this list one might also add the Chilean stabilization after the fall of Allende (Edwards and Cox Edwards, 1991). It does seem that history tells us that action on rapid inflation must be sharp and dramatic if it is to be effective (for a summary of these lesson see Blanchard *et al*, 1991). Difficult as this may sometimes be, it is a problem which is considerably more straightforward than restructuring an economy and we cannot automatically assume that the fast route is appropriate there too.

The decollectivization of agriculture in China between 1979-82 is a telling example of a successful transition from one system of economic organization to another. Within a few years, almost all collectively-owned agricultural land was parcelled out to households, and farm production grew at an unprecedented pace whilst this massive transition was under way (Lin, 1991). A central reason for the rapid success of the decollectivization of agriculture in China is that it was not based on the building of entirely new and unfamiliar institutions. Households as they existed provided a ready-made alternative to collective structures. A lesson therefore is that, given the right conditions and policies, the promotion of household-based economic activities can succeed within a relatively short time period.

Transition involves a delicate balance between the desire for a rapid introduction of the new economic order and maintaining social stability, protecting the population from extreme hardship. The possible dangers one may want to avoid are: reversion back to some form of command economy; the concentration of economic and political power in a few hands leading to the rise of a coercive oligarchy; or a populist backlash bringing to power a government with no long-term goal (Blanchard *et al.*, 1991; Lipton and Sachs, 1990b). One might argue that given the popular rejection of the command economy and of the one-party state in Eastern Europe and the ex-Soviet Union, the likelihood of reversion to the old command economy would seem to be remote there. It is more difficult to be sanguine about avoiding the other dangers.

The Chinese example would also seem to be instructive in gauging the risk of some form of relapse. In June 1989, the Chinese leadership crushed political demonstrations by students and citizens by force and went on to tighten party control. Although further economic reforms were frozen for a brief period and voices in favour of radical transformation of state ownership were silenced, there was no concerted attempt to reverse economic reforms such as household farming and non-agricultural activities and direct foreign investment, notwithstanding that they ran against the grain of traditional Communist ideology. Aside from the deep division within its ranks, what stopped the leadership from reverting back to the command economy was the expectation of an adverse reaction from ordinary citizens. The market-oriented reforms brought in their wake a massive improvement in living standards for a large majority and the number of losers had been (proportionately) small. Although particular reforms had hurt certain sections of the population and there was a widespread dissatisfaction with corruption and changes in the distribution of income, the economic reforms nevertheless commanded general support.

3. Ownership Rights and Taxation

Discussions of the transformation of ownership appear to be largely monopolized by the pace of privatization.[1] A crucial aspect which is often neglected is the possible types of ownership, especially during the initial stages of the transition. The binary opposition between "private and public property" does not capture the full complexity of the issues. The term ownership covers a wide range of rights and claims, including: custody or physical control; the right to manage; the right to income; and the claim to capital, including its transfer and use as a collateral. The list of rights and claims relating to property is open-ended and depends on the social and economic context and the object of ownership (see, Honoré, 1961 and Koopmans and Montias, 1985). Moreover, ownership rights may not all be *de jure*; some may be founded on social custom and trust. Commonly in economic theory, ownership is equated exclusively with the right to the residual income and other rights relating to ownership are assumed to follow from it (Hart, 1988). It is, however, important to recognize that many rights and claims constituting ownership are separable and may be vested in different agencies and persons, as in the case of business corporations. They may also be limited in various ways. The instances of limited ownership include franchises, leases, mortgaged property, and regulated public utilities, which are common in market economies but have been rare or absent in command economies. "Limited ownership" is of special relevance in the context of transition, as it not only enlarges the policy options but also may provide a way of proceeding with a transformation of ownership, whilst accommodating other objectives.

The Chinese example may be instructive here also. In agriculture, the reforms have taken the form of transferring ownership rights to households for a period of 15 to 20 years rather than in perpetuity. This leaves open the possibility of revising the division of land in future whilst providing farming households with an economic stake in land large enough to motivate economic incentives. The government has also leased out small state-owned enterprises to individuals and has instituted various forms of contracts covering performance, payment of dividends and taxes in medium- and large-size state-owned enterprises. As interim measures these have worked in the sense that the economy has continued to grow. They suffer from many problems, are far from the last step in the transformation of state ownership and they do not necessarily provide models for adoption elsewhere. But they indicate that the possibilities for limited ownership in the transition are real.

We would argue that focus on particular rights and their possible combinations rather than on a fixed and standardized bundle of rights, termed ownership, offers analytical advantages in drawing attention to relationships between phenomena which otherwise seem unrelated and in enlarging the set of policy options. We illustrate this with the examples of taxation and regulation. For example, a 50% profits tax, with full loss offset, has the effect of splitting profits and losses between the state and the non-government owners of the firm in the proportion 50-50. In a sense, this is equivalent to a partnership between the state and private agents whereby the partners have an equal claim to residual profits, and liability for losses (for examples of equivalence between cash-flow corporation tax and partnership see Bradford, 1986, p.121). Similarly a tax on capital income may be regarded as equivalent to an equity in capital, or, in the case of a capital gains tax, its change from some base value. In developed market economies these equivalences are of limited interest for tax policy because in the analyses of taxation forms of ownership are taken as given, and ownership is generally discussed in the context of a well-developed tax and regulatory systems. But they are of special relevance in transitional economies where the state still holds extensive ownership rights and has a tax system which is a mix of taxes inherited from the command economy and new taxes; and where both the state's ownership rights and the tax system are the subject of major policy choices.

In the same vein, regulation may be treated as equivalent to the right to influence the management and usage of assets, which may be exercised through the government holding a bundle of ownership rights or through a regulatory framework. In the market economies there has been a marked shift from public ownership of public utilities towards the regulation of privatized utilities. Arguably, breaking up monopolies and the division of firms is easier when they are in public ownership rather than privately-owned but subject to regulation (see for example Vickers and Yarrow, 1991). Moreover, taxation may be used instead of direct regulation, as in the case of environmental protection.

Our purpose here in drawing attention to these equivalences and relationships is that the transformation of state-ownership and the institution of a new tax system and a regulatory framework should be considered together rather than in isolation from each other. *Prima facie*, this would suggest a diversified approach to privatization, broadly interpreted to mean the transfer to non-governmental agencies of the rights to manage and rights to income and to capital. In some cases, a complete privatization involving a transfer of all ownership rights may be immediately desirable and also feasible. This may apply to agricultural land where family farming remains, small shops and firms. The privatization of large enterprises poses serious problems, as the growing literature rightly acknowledges. Since furthering competition and the regulation of monopolies is also important for a well-functioning decentralized economy, there may be arguments for retaining some form of public ownership of medium and large-size enterprises, whilst they are being reorganized. There would also seem to be a strong argument in favour of retaining government equity in land, buildings and housing in part as a way of taxing capital gains since their privatization in the initial stages of transition may be haphazard and overlaid with corruption and graft.

There is, however, one aspect of state ownership in command economies which is incompatible with the emergence of a decentralized economy founded on contracts between economic agents: the lack of a clear delineation of various ownership rights. In fact, "state ownership" in a command economy is different from "state ownership" in a market economy; as evidenced by problems encountered in privatization. In most command economies "state ownership" was highly ambiguous, with overlapping rights and claims on property by government tiers, enterprises and in some cases also the labour force. Such ambiguity did not pose special problems in an economy built around authority and commands, but it causes problems for a decentralized economy built around contracts. The problem of ambiguous property rights has been compounded in some economies by the breakdown of governmental authority and law and order which has given rise to illegal appropriation or outright plunder. The protection of property rights by the state is essential for a well-functioning economy regardless of whether those rights are vested in the government or non-governmental agencies, or are *de facto* or *de jure*. Although the plunder of state property is regarded as a justification for immediate and complete privatization (see for example Blanchard *et al.*, 1991), the connection is far from clear. Property rights, even if vested in non-governmental agencies or individuals, will have to be protected. Plunder does not respect the division between public and private, however defined, and it is difficult to see how it could be stopped by giving away state property. What is needed is the institution of the rule of law and mechanisms for the protection and enforcement of property rights, whatever form they might take.

4. Tax design

We turn now to the institution of a new tax system in transitional economies, and consider first, in this section, the tax design for the long-term and then, in the next section, taxation in transition. A number of countries in Eastern Europe have declared their intention, or have been advised, to go for a Western European tax structure eventually, if not immediately. This may be justified on pragmatic grounds of paving the way for their eventual membership of an enlarged European Economic Community. However, the question still remains how Western European tax structures square with economic principles and what choices exist for long-term design. It is to these issues this section is addressed, drawing on both theory and experience.

The major sources of tax revenue in Western Europe are: the value-added tax (VAT); excises on cigarettes, tobacco and oil; the personal income tax; the corporate income tax; and social security contributions (see Table 1 for examples). On average the total tax revenue might constitute 30-35% of GDP, although there is a very substantial range. A typical breakdown might be 5-6% (of GDP) from VAT, 4-5% from excises, 8-10% from the personal income tax, 3-4% from the corporate income tax, and 8-10% from social security contributions. Thus grouping social security contributions with the direct taxes, tax revenue would be divided approximately 2:1, direct versus indirect.

Interestingly, viewed at this level of aggregation (direct versus indirect), the breakdown of tax revenue is not dissimilar from the pre-transition command economies where the bulk of tax revenue came from taxes on profits of enterprises and turnover taxes on those enterprises. This similarity, however, is due largely to nomenclature and the level of aggregation. Almost all direct taxes in command economies came from enterprises rather than households, which in industrial economies are a more important source of direct taxes than companies (see Table 1). Moreover, the sense in which turnover taxes were indirect taxes is unclear. If the price and output of the factory are subject to government direction, the turnover tax is unrelated to any sales or output decision that the company might make and is therefore, in one sense, akin to a direct tax on enterprises.

The figures for Western European and other developed countries are presented in Table 1 and those for Eastern European countries in the 1980s in Table 2. Comparisons must be rather imprecise, given the unreliability of data for Eastern Europe, the different definitions and the exclusion of some local taxes for Western Europe. Subject to this caveat, it is interesting to contrast the patterns in two parts of Europe with the state of affairs in developing countries. The levels of tax revenue, as a fraction of GDP, and the make-up of that tax revenue for developing countries, vary enormously. However, generally speaking, their tax composition looks very different from that in developed countries. On average, in developing economies tax revenue divides 2:1 indirect and

Table 1. Tax revenue by type of tax (percent of GDP)

Industrial Countries	GNP per Capita (1987 $s)	Years		Total Taxes	Income Taxes: Total	Indivi-dual	Corpo-rate	Other
Switzerland	21310	1985	1987	19.62	3.00	2.45	0.55	0.00
United States	18580	1986	1988	18.45	10.39	8.58	1.81	0.00
Luxembourg	17780	1984	1986	38.84	16.24	11.07	4.83	0.33
Norway	17450	1985	1987	38.41	9.31	3.96	5.35	0.00
Iceland	16890	1983	1985	22.57	2.40	1.81	0.58	0.00
Japan	15840	1985	1987	20.69	8.57	4.77	3.79	0.00
Sweden	15613	1986	1988	37.59	7.55	5.38	2.11	0.10
Canada	15070	1986	1988	17.32	10.13	7.96	1.93	0.24
Denmark	14910	1986	1988	36.34	15.76	12.10	2.29	1.37
Finland	14670	1985	1987	27.03	9.21	8.61	0.59	0.00
Germany	14440	1986	1988	27.44	5.12	4.06	1.06	0.00
France	12910	1986	1988	38.25	7.32	4.98	2.31	0.03
Austria	11970	1985	1987	31.74	6.62	5.44	0.99	0.19
Netherlands	11790	1986	1988	45.75	13.11	9.57	3.54	1.00
Belgium	11470	1985	1987	43.09	16.66	13.92	2.73	0.00
Australia	11180	1985	1987	24.87	16.88	14.05	2.54	0.30
United Kingdom	10540	1985	1987	33.64	14.49	10.23	4.26	0.00
Italy	10430	1986	1988	37.75	13.69	11.08	2.57	0.03
New Zealand	7870	1985	1987	33.63	22.95	19.64	3.05	0.25
Ireland	6290	1985	1987	37.29	14.24	12.81	1.43	0.00
Spain	6010	1984	1986	25.20	6.43	4.94	1.45	0.05
INDUSTRIAL	13477	--	--	31.21	10.96	8.45	2.37	0.14
DEVELOPING	1241	--	--	18.05	5.51	2.08	3.29	0.40

Source: Burgess and Stern (1992).

direct. Indirect taxes are split roughly 50:50 between domestic and trade taxes, whereas direct taxes are predominantly from the corporate sector. The different tax structure in developing economies may be traced largely to the paucity of tax handles, where, in many cases, weak state administration is the major obstacle to raising revenue.

Table 1. Tax revenue by type of tax (percent of GDP)
(Continued)

Domestic Taxes on Goods and Services				Foreign Trade				Other Taxes		
Total	Sales, turnover, VAT	Excises	Other	Total	Import Duties	Export Duties	Other	Social Security	Wealth & Property	Other
4.02	3.03	0.65	0.34	1.51	1.51	0.00	0.00	10.20	0.88	0.00
0.75	0.00	0.61	0.14	0.34	0.34	0.00	0.01	6.81	0.17	0.00
9.94	5.35	4.14	0.45	0.03	0.03	0.00	0.00	10.33	2.25	0.05
18.34	9.51	6.92	1.92	0.25	0.23	0.02	0.00	10.00	0.43	0.08
12.62	8.36	2.36	1.90	4.07	3.84	0.01	0.22	1.24	2.19	0.06
2.19	0.00	1.91	1.28	0.19	0.48	0.00	0.00	8.54	0.74	0.47
12.68	7.39	4.54	1.74	0.23	0.23	0.00	0.00	12.89	4.22	0.03
3.56	2.40	1.04	0.11	0.78	0.78	0.00	0.00	2.85	0.00	0.00
17.45	10.16	4.85	2.44	0.03	0.02	0.00	0.00	1.54	1.58	0.00
13.40	8.28	4.62	0.50	0.25	0.25	0.00	0.00	2.99	1.11	0.08
6.49	3.80	2.34	0.36	0.00	0.00	0.00	0.00	15.77	0.05	0.00
12.17	8.63	2.61	0.94	0.01	0.01	0.00	0.00	17.41	1.27	0.07
9.29	6.19	2.39	0.71	0.49	0.48	0.01	0.00	12.80	2.14	0.39
11.06	7.82	2.56	0.68	0.00	0.00	0.00	0.00	20.32	1.06	0.20
10.17	7.20	2.14	0.83	0.01	0.01	0.00	0.00	15.37	0.88	0.00
6.46	2.39	4.02	0.05	1.39	1.33	0.03	0.02	0.00	0.14	0.00
11.45	6.03	4.56	0.86	0.02	0.02	0.00	0.00	6.85	0.81	0.01
8.60	4.83	2.47	1.30	0.01	0.01	0.00	0.00	14.05	0.78	0.63
8.53	4.87	3.23	0.43	1.33	1.28	0.03	0.02	0.00	0.79	0.04
13.03	3.01	4.02	1.00	3.08	3.38	0.00	0.00	5.58	1.36	0.00
5.85	2.89	1.48	1.48	1.06.	1.05	0.00	0.00	11.39	0.45	0.03
9.43	5.58	3.02	0.83	0.72	0.70	0.00	0.01	5.90	1.11	0.10
5.21	2.46	2.07	0.68	5.13	4.32	0.62	0.20	1.30	0.45	0.54

Accordingly, the taxation of trade and the taxation of companies, both of which are administratively easier than domestic indirect taxation and taxation of individual incomes, are more important in developing than in developed economies (see Burgess and Stern, 1992, for a discussion).

The different composition of taxes in the three groups of economies: the developed, the developing and transitional, may usefully be illustrated using the triangle diagram of

Figure 1. The points A, B, and C in the triangle represent 100% of tax revenue from income and social security taxes, 100% from trade and other taxes, and 100% from domestic indirect taxes, respectively. A point on the line BC corresponds to a zero level of income and social security taxes, and similarly the lines AC and AB represent the other axes. It can be seen that the developed countries cluster very close to the AC axis, whereas the developing countries are spread out with an average close to the centre of gravity of the triangle (*i.e.* where one-third of revenue comes from each category). There are also clear differences in the levels of taxation, expressed as a fraction of GDP, both across and within different types of economy. As Tables 1 and 2 show (using figures for mid-late 1980s), there is a ranking which can be expressed as:

"Eastern Europe and the ex-Soviet Union" > "Developed" > "China" > "Developing".

Table 2. General government tax revenue of transitional economies, 1986 (percent of GDP).

<table>
<tr><th></th><th>Bulgaria</th><th>Czecho-slovakia</th><th>Hungary</th><th>Poland</th><th>Romania[1]</th><th>Yugo-slavia</th><th>USSR</th><th>China</th><th>OECD</th></tr>
<tr><td>Profit taxes</td><td>18.7</td><td rowspan="2">25.1</td><td>11.1</td><td>11.0</td><td>13.5</td><td>6.4</td><td>16.0</td><td>7.1</td><td>3.0</td></tr>
<tr><td>Income taxes</td><td>4.0</td><td>0.8</td><td>3.8</td><td>6.0</td><td>8.6</td><td>3.9</td><td>0.0[2]</td><td>12.1</td></tr>
<tr><td>Social Security contribs.</td><td>9.7</td><td>5.9</td><td>16.6</td><td>10.3</td><td>7.2</td><td>8.1</td><td>3.3</td><td>0.0</td><td>9.3</td></tr>
<tr><td>Turnover taxes</td><td>16.5</td><td>15.9</td><td>16.7</td><td>11.6</td><td>9.8</td><td>6.8</td><td>11.5</td><td>10.7</td><td>11.5</td></tr>
<tr><td>Customs duties</td><td>0.5</td><td>0.7</td><td>3.5</td><td>2.8</td><td>0.9</td><td>1.8</td><td>7.2</td><td rowspan="2">7.0</td><td>--</td></tr>
<tr><td>Other</td><td>0.2</td><td>1.0</td><td>3.5</td><td>4.1</td><td>--</td><td>5.0</td><td>3.8</td><td>2.2</td></tr>
<tr><td>Total</td><td>49.6</td><td>48.6</td><td>52.2</td><td>43.6</td><td>37.4</td><td>36.7</td><td>45.7</td><td>24.8</td><td>38.1</td></tr>
</table>

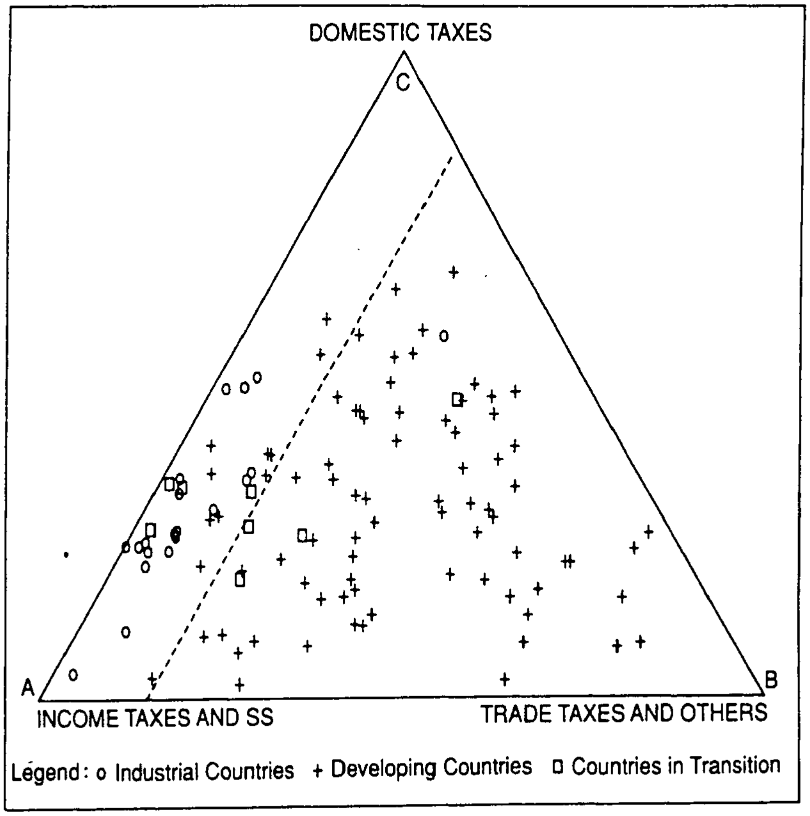
Sources: Tanzi (1991) and World Bank (1990) for China.

1. 1988
2. These exist but are negligible

An interesting example of how transition affects the pattern of taxation is provided by the Chinese economy (for details see Hussain and Stern, 1992). At the start of her economic reforms in 1978 the ratio of taxes to GNP was around 40%, similar to those in many developed economies, but it fell to around 20% by the end of the 1980s due largely to a sharp fall in profits taxes relative to GNP. In the late 1970s, the composition of taxes in China resembled the pattern in other communist countries in that it was focused on enterprise taxation and therefore fairly close to the AC axis and the A corner. As foreign trade has increased, and along with it trade taxes, and as companies have been allowed to retain more of their profits, the Chinese tax structure, by the late 1980s, has turned into a kind associated with developing countries, near the circumcentre of the triangle but closer to the BC axis than the AC (see Figure 1). Over time it is likely to move back towards the AC axis, driven most likely by the growth of social security contributions and personal income taxes rather than the restoration of profits taxes.

Table 3 brings out a number of significant points in relation to the Chinese experience. The decrease in the revenue ratio 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

Figure 1. Breakdown of tax revenue by type: industrial and developing countries



Notes:

1. This is adapted from a figure in Burgess and Stern (1992). We are grateful to Tony Atkinson, Robin Burgess and Stephen Howes for advice and help with the diagram.
2. The dotted line represents 15% of tax revenue from trade and other taxes. The only industrial country to the southeast of the 15% line is Iceland. The transitional country close to the Icelandic position is China.
3. "Domestic taxes" at apex C refers to indirect taxes only.
4. Sources: Industrial and developing countries - Burgess and Stern (1992); China - World Bank (1990); East Europe and USSR - Tanzi (1991)

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, 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.

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. 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

Table 3. The composition of government revenue in China

	% 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, p.8.

a large revenue source. From the perspective of efficiency 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.

We may now ask how the Western European tax model squares with the economic principles of taxation. In doing so we draw on the basic lessons from the modern theory of normative taxation, as expressed through the models of optimal direct and indirect taxation and consider in turn indirect, personal income, corporate and property taxes. For a summary of those lessons see Atkinson and Stiglitz (1980) or Ahmad and Stern (1989, 1991), or Burgess and Stern (1992). A first lesson from that theory is that intermediate goods should not be taxed, save where output cannot be taxed or where there is some special objective pertaining to income distribution which cannot effectively be achieved in ways other than influencing sectoral profit by taxation of intermediate goods. Broadly speaking, a VAT-based indirect tax system is consistent with this principle, as would be a final-stage sales tax. Advantages of the VAT are that it can more readily be extended to services, that it is levied at all stages of the chain, and thus has more robustness to evasion than single-point taxes, as well as providing a system of checks. It also yields information on income arising from sale of commodities. A disadvantage, however, is that it relies on the participation of a large number of economic agents. It should also be noted that the principle of avoiding intermediate taxation when applied to public-sector pricing says that intermediate goods should be priced at social marginal cost, and final goods at this price plus an element for indirect taxation.

A second principle concerns the desirability of additional taxation of commodities generating negative externalities, over and above that arising from revenue considerations. This furnishes a partial justification for the heavy taxation of cigarettes, alcohol and oil products. Such taxes may be of great importance in Eastern Europe with its environmental problems and a wasteful use of energy. Arguably, the possibilities of introducing such corrective taxes may be greater in transitional than in settled market economies, since adding on a corrective tax is likely to encounter less resistance when economic agents are already expecting and reconciled to a massive change in relative prices.

Thirdly on indirect taxes, we have the question of differentiation of rates on final goods. The Ramsey-type results point to higher taxes for those goods which have the greatest complementarity with leisure (the untaxed source of income). It is unlikely, however, that we can identify the relative strength of these complementarities with any confidence and in practice distributional concerns provide the main justification for a differentiation of rates. The force of distributional considerations depends crucially on the impact of the direct tax and transfer systems. It would seem that the direct tax and transfer systems are not sufficiently finely tuned in concept and in practice to justify ignoring income distribution considerations in setting the indirect tax structure. In many countries such distribution-based differentiation is provided through exempting certain important items such as food and having higher rates of VAT, or special excises, on certain goods seen as luxuries[2]. Such divisions tend to be coarse since administrative considerations limit the degree of differentiation. Political considerations are also relevant in this regard since the finer the differentiation on individual grounds the greater the scope for lobbying by interest groups for special treatment.

The fourth principle of indirect taxation is that domestically produced and imported commodities should be treated alike. This is based on the same idea as that which underlies the principle of avoiding the taxation of intermediate goods, namely that the tax system should not be a source of production inefficiency. This principle rules out tariffs and quotas on imported commodities, except in cases of an infant industry (learning) or where the industry is subject to static or dynamic increasing returns to scale. Even in such cases, measures which act directly on the perceived problem are likely to be preferable to tariffs and quotas. Whilst there may be an argument in favour of some tariffs in developing economies on the grounds that such taxes are easier to collect than alternatives, even here one should take care not to dismiss other sources of revenue too readily. The relative absence of trade taxes in West European economies, however, does not mean that imports are not taxed. VAT, of course, is not just levied on domestically produced goods, but also applies to foreign goods. One of its merits is that, being more transparent than a complex system of domestic sales taxation, it can help to eliminate hidden protection.

However, substantial trade distortions can still be slipped in through regulation, administration and quotas. One can, for example, insist on documentation so complicated that it is difficult or costly to comply. Similar tactics can be pursued using production standards or administrative procedures for imports. A particularly notorious example of restrictive practices and implicit taxation is the agricultural policy of the EC. Although food is not taxed explicitly on apparently distributional grounds, it is heavily taxed implicitly through the maintenance of higher than world prices in the EC. What we have, essentially, is a subsidy to producers financed by a tax on consumers.

We may conclude then from our comparison of indirect tax structures and the theory of indirect taxation that, broadly speaking, tax structures of the kind imposed in Western Europe are not widely at variance with the economic theories of normative taxation. And to this extent, the Western European model constitutes a reasonable long-term goal. Of course, consistency with economic principles would be of little value if the taxes in question could not be collected, but the excises and the VAT have shown themselves to be good performers on this score. They do, however, involve a certain amount of sophistication and record-keeping on behalf of the tax-paying population, and this has been seen as an obstacle by some developing countries, notwithstanding the more-or-less successful implementation of a VAT in more than 20 developing countries (see, for example, Tait, 1988). With the high levels of education in Eastern Europe this problem may be less serious, but the more widespread and better understood coherent accounting practices are, the better this type of indirect tax system is likely to operate.

On personal income taxes, theory tells us that, from the point of view of both efficiency and equity, the tax base should be "global", encompassing all types of income, including income-in-kind and changes in capital value. We leave on one side here the vexed question of the appropriate unit (individual, family or household) and assume also that the structure of elasticities of supply for the types of work within a household do not themselves provide arguments for taxing income from different sources differently. In some circumstances this may be a rather implausible assumption and there may well be an efficiency case for taxing more heavily less elastic types of labour supply. A problem with a global income tax is that it requires the authorities to have reliable information on various types of income and their recipients. It also requires from income tax payers both honesty and an understanding of the system. These, of course, might be enforced by random audit and heavy penalties, but even with random audit the authorities must be in a position to trace incomes. The gathering of such information poses challenges for any economy and the flow of capital across national boundaries compounds the problem further. Although the principle of global income taxation has been widely accepted, it still remains far from realization. Income in kind, in particular from owner-occupied housing and capital gains are either not taxed at all or taxed at a lower rate.

Turning to the rate structure, in many circumstances the theory of personal income taxation tells us that marginal rates should first rise and then fall (see, for example, Mirrlees, 1971, or Stern, 1984). This feature of falling marginal rates at higher levels of income does not seem to be observed in Western tax systems. For example, the effect of the interaction of the personal tax and social security systems in many countries is such that marginal rates of tax are at their highest at the lowest levels of income. Such problems are endemic wherever the targeting of benefits is based in part on income, which is a base for taxation. The interaction of the personal tax and social security systems should lie at the heart of both theoretical and applied analyses of taxation and income support, but all too often it is poorly understood.

Economic theory does not provide strong arguments for taxing corporate income, except as a component of personal income which should be consolidated with all the other types of personal income under the same tax schedule. In this sense the emphasis in Western tax systems on the integration of the personal and corporate income taxes is consistent with theory. The residual reasons which theory does offer for taxing corporate income are as follows:

1. as a means for taxing monopoly rents (although these are very difficult to identify);
2. as a means of taxing income accruing to foreign residents;
3. to prevent the emergence of capital gains which would be associated with the removal of such a tax, gains which might have undesirable redistributive consequences.

This third is an argument for not removing existing corporate taxes in an economy with private equity in companies rather than for introducing them. The attractions of withholding the personal income tax at the corporate stage as a convenient method of collecting part of the personal income tax do not constitute a theoretical reason for taxing corporate income separately.

Broadly speaking, the income taxes of the Western European system are in parts consistent and in parts inconsistent with theory. As compared to indirect taxes, in particular VAT, they would seem to commend themselves less as a long-term goal for transitional economies. Moreover, as we shall argue in the next section, there are arguments for transitional economies to go initially for bases for taxing incomes which may be very different from those in Western Europe.

Before leaving the Western European tax systems with this apparently (fairly) good theoretical bill of health one must also ask whether they have any major holes or defects. Whether there are goods, activities or incomes which could usefully be taxed but are not, or which are treated in particularly problematic ways. The revenue needs of developed economies are probably such that a variety of taxes is necessary. The interactions between VAT, excises and income taxes do not in general give rise to features widely at variance with theory, though most tax systems display some peculiarities. However, the taxation of property (land and buildings) in many economies suffers from major defects. For a variety of historical reasons, property taxation in most Western European economies is far from satisfactory. Most notably in the UK we have seen the confusion over the local tax system which moved, at the end of the 1980s, from property taxes (land and buildings) to head taxes, the so-called poll tax, and is now moving back to some form of property taxation (the Council Tax). Property taxation has much to commend it and provides opportunities which may be very valuable to transitional economies. Property (including land) taxes have the virtue of being attractive both from efficiency and distributional perspectives since elasticities of supply are low and the value of property owned is strongly related to wealth. Further, the tax base is fairly easy to measure, at least relative to some income-based taxes. We discuss the problems associated with introducing property taxes in transitional economies in the next section.

The revenue potential of a property tax is also, in principle, substantial. One may gain a quantitative feel for its potential from the following calculation. The ratio of the value of private houses to average household gross incomes in the UK has generally moved in the range of 3 to 4 over the last few decades (Hills, 1991). The ratio of house prices to incomes in the UK does not seem to be an outlier compared to other European countries (it seems a little lower in France and a little higher in Germany, see, for example, *Nationwide Anglia Bulletin of House Prices in Europe*, 1987). Let us take the ratio as 3.5

for the purposes of the calculation. If the asset yields a real rate of return of 5-6% (imputed or realized income plus capital gain) then the imputed income from owner-occupation would be of the order of 20% of personal incomes. Taxation of that income at a rate of 20-25% would yield 4-5% of personal incomes in property taxation, or 1% or so of property values. In fact in the UK in the late 1980s domestic rates were around 3.8% of gross household incomes (UK Government *Economic Trends*, 1987, 1988). To domestic property should be added commercial property and not-built-on land, also of considerable revenue potential. In sum, property provides a substantial tax base which transitional economies would be unwise to ignore. But it also should be recognized that property taxes need careful planning, as once established, they can prove extremely difficult to change.

5. Taxation in transition

Let us assume that a Western European type tax system with appropriate modification is the long-term goal of the transitional economies of Eastern Europe and the ex-Soviet Union. The following changes will be needed:

1. the introduction of a wide-ranging personal income tax, including employee contributions to social security;
2. a substantial shift from taxes on enterprises to taxes on persons and the introduction of a "Western-type" corporation tax integrated with personal income taxation;
3. the replacement of the turnover tax and government-determined prices with a wide-ranging VAT and excises on selected commodities;
4. the introduction of some form of property tax.

There are some arguments in favour of going straight for such a system quickly on the grounds of keeping the number of steps towards the long-run structure low. Given the range and complexity of problems thrown up by the transition, the government may want to economise on decision-making and implementing changes. It may also want to institute a clear and stable tax system to facilitate long-term decision-making by economic agents. On the other hand, the immediate introduction of (1) to (4) poses formidable problems of implementation and raises issues which would suggest a route to the long-term structure via special tax measures in the initial stage of transition.

In the initial stages of transition, the ratio of government revenue to GNP is likely to fall uncomfortably short of the ratio of government expenditure to GNP. Governments in transitional economies would normally find that the existing taxes (especially those on enterprises) erode more rapidly than it is able to put in place new taxes such as a personal income tax and corporate taxes. Hungary has managed to introduce a wide-ranging personal income tax fairly quickly, but that may turn out to be too ambitious for other transitional economies. On the expenditure side the government may be faced with still considerable expenditure liabilities despite its withdrawal from the economy plus an increasing expenditure on providing social security. In such circumstances an attempt to move very rapidly to a long-run tax system may lead to major problems of collection in the short run which will be superimposed on lower potential tax revenues associated with a depression (in addition to rapidly changing bases), and high expenditures associated with unemployment.

In such a situation securing tax revenue may have priority over a rapid progress towards the desired long-term tax system. The two may not be consistent and the tax system in the transitional phase may in certain key respects have to be quite different from the long-term goal. Generalizing from the experience of developing economies, indirect taxes are usually easier to introduce and enforce than direct taxes. Therefore in the transitional phase, indirect taxes may have to play a more important role in raising revenue they would in the long-run. Further, given that economic inequality is likely to rise during the transition, distributive considerations are also likely to weigh more heavily in determining the rate structure of indirect taxes than they would when a comprehensive personal income tax and a social security system are fully operational.

There is, however, a general aspect of Western European tax systems which needs to be adopted in the initial stages of transition, *i.e*, a diversification of tax bases. Generally, command economies relied almost exclusively on enterprise taxes of various types. It may well be that, in the short run, the transition sees a swing in favour of wages and against profit, as seen in China, some Eastern European economies such as Poland and the former Soviet Union (see for example, Lipton and Sachs, 1990a & b; Mackinnon, 1991, Ch. 11). In fact, this is to be expected when wage determination is delegated to enterprises which are heavily influenced by their work-force but not yet subject to a strict financial discipline. Competition from domestic or foreign producers and, in many cases, a sharp fall in GNP, lead to a further erosion of enterprise profits. In these circumstances what is needed is a tax system of sufficient breadth so as to reduce volatility and uncertainty associated with a heavy reliance on a few taxes. This would put some form of wage taxation high on the agenda so that movements from profits to wages (or *vice versa*) would not destabilize revenues. Some countries, for example Poland, have tried to control increases in wages through an "excess" wage tax as well as introducing an income tax.

Some of the precepts of good taxation for the long term may be neither feasible nor even desirable during the transition. For example, the rule that intermediate goods should not be taxed may need extensive qualifications. When relative prices of inputs are heavily distorted, there is a case for using taxes on intermediate goods to compensate for distortions. Certainly this is what the theory of optimal taxation in the presence of distorted markets would suggest (see, for example, Dreze and Stern 1987). There is a basic principle that it is better to remove distortions at source than try to compensate for them elsewhere. Notwithstanding the importance and validity of this canon, there is no doubt that in the transition, many of the distortions will remain and the price system will work inefficiently. Further, until a comprehensive personal income tax system is firmly in place, there is a justification for using taxes on intermediate goods as an indirect instrument for taxing incomes which might otherwise escape taxation such as those of the self-employed and small firms. This can be done in part through a VAT, assuming that is possible, by treating the economic agents outside the reach of personal income tax or corporate taxes as "final users" and thus not entitled to a refund of taxes on inputs.

There may also be an argument for tariffs in transitional economies from the point of view of being comparatively easy to collect and providing protection to domestic producers as they learn about new technologies, products and economic organizations and adjust to large changes in relative prices. The argument that protection through direct subsidies to producers is superior to tariffs is less persuasive when the government is faced with a severe revenue constraint and domestic taxes are limited in scope. By the same token, there would seem to be no justification for import quotas in preference to tariffs. In transitional economies of Eastern Europe the usual danger of tariff protection becoming entrenched may be less than in developing economies, given their desire to join the European Community as full or associate members in the not too distant future, with the concomitant commitment to bringing their tariff structures in line with those of the Community.

Finally, amongst considerations pointing towards some special tax measures in the transition are the limited administrative capability on the part of the state, as well as individuals and enterprises. Accounting practices are burdensome and take time to learn and introduce. They also require trained personnel. In these circumstances simple tax bases and presumptive assessment have strong attractions. We examine briefly some directions in which these transitional considerations point.

Although command economies did not have a wide-ranging personal income tax, difficulties in its introduction are likely to prove less daunting than in developing economies. A large part of the labour force is still wage-employed in the "formal sector" and its cash income is relatively easily measured. Further, most of the wage-employed labour force is entitled to extensive social insurance, which makes it possible to introduce employee contributions and which also provides a mechanism for collecting information on incomes. There are, however, two problems to be considered: first, the payment of a part of wages in kind or services provided by the unit of employment and the second is the difficulty in ascertaining the incomes of growing numbers of the self-employed and small firms. Ultimately, the answer to the first lies in converting wages in kind or services into cash in keeping with the development of a decentralized market economy. In the interim, different types of income may have to be taxed separately. Tax evasion by the self-employed and the small private sector poses a special problem in transitional economies: it is not easy to resolve but cannot be neglected, neither in revenue terms as it grows, nor in that it is a source of social resentment with an adverse effect on voluntary compliance with tax laws. Probably the best way of getting at such incomes is through presumptive tax assessment. A value-added tax system can also be used to tax their incomes partly by not allowing businesses without verifiable accounts to reclaim taxes on inputs. In sum the implication is that in the transitional phase, moves towards the globalization of the personal income tax base to the degree common in developed economies may not be feasible. McLure (1991) has suggested a simple form of interim taxation of incomes where no attempt is made initially to link company and personal income tax. He calls it the Simplified Alternative Tax (or SAT). The personal income tax would be largely withheld at source with some simple personalization for household circumstances. No attempt to "globalize" income would be made, so that, for example, there would be no taxation of interest or dividend income.

Social security taxes are an important revenue source in Western European economies. Most transitional economies, including China, have inherited a comprehensive old-age pension and health insurance system, in most cases almost entirely financed by employers. Although the division of costs between employers and employees does not matter in the short-run, the introduction of employee contributions offers two potential benefits. First, it provides the possibility of tailoring them to individual circumstances such as income. Second, it also helps to change the perception of the cost of old-age pensions and health insurance on the part of employees by making them bear a part of the cost, even when wages are adjusted to compensate for the introduction of employee contribution. The linking of old-age pensions and unemployment insurance, on the one hand, and personal income taxation on the other could help to secure greater compliance with personal income tax laws. For example, income in employment used for calculating the old-age pension or unemployment insurance could be restricted to that declared to income tax authorities (for a discussion see Diamond, 1992).

These arguments suggest that a combination of simplified taxes for the employed on the lines suggested by McLure, employee contributions towards social security and presumptive taxes for the self-employed would be a more attractive proposition for transitional economies than a full-blown income tax system.

Notwithstanding the weak theoretical case for corporation or profits taxation, firms are likely to remain in transitional economies both a significant tax source and an important point for levying various taxes. The main practical problem for a profits tax is likely to be a wide latitude for misreporting provided by the absence of standard accounting practices and the wide asymmetry of information on prices and transactions available to managers and tax authorities. Schooled in negotiating their way around a command economy, many enterprise managers have acquired special skills in evading laws and regulation and manipulating the system to their advantage. Habits of non-compliance with laws die hard and the problem is compounded by a wide-spread suspicion of the state. This will raise a major challenge for taxation and may militate in favour of the simpler, more directly observable bases for corporate taxation. The possible options are employment, some measure of output or, as suggested by McLure (1991), cash flow.

Property taxes in transitional economies raise the difficult problem of assessment of property values in a situation where the market for buildings and land is still in its infancy. But a detailed assessment is not necessary for the introduction of a property tax. The fact that buildings and land are highly durable provides the possibility of starting with a rough interim assessment and revising it over time. Further, there would seem to be a strong case for the government to introduce a capital gains tax on housing or to retain part equity in privatized housing and land by way of taxing capital gains which are likely to accrue over time. Public housing and land are likely to be sold at prices which sitting tenants are currently able and willing to pay. These are likely to be much lower than the long-term value of housing. In such a situation public authorities retaining part equity in housing and land would seem to be a sensible way of proceeding with privatization whilst safeguarding the balance sheet of the public sector.

In a transitional period when the government is revenue constrained and the long-run tax system is being established, there would seem to be little justification for dissipating potential revenue from the privatization of state-owned enterprises through give-aways or hasty divestment. Revenue from privatization could help to reduce, if not bridge, the gap between revenue and expenditure. One must take care, however, not to exaggerate the potential revenue from privatization and attempts to realise it quickly may make it even smaller. The following considerations indicate orders of magnitude. Let us suppose we value an enterprise (generously) at twice its turnover (or, say, 6 to 8 times profits). If the whole of GNP came from saleable enterprises, the maximum potential revenue would be twice GNP. But the amount that can actually be realized is likely to be considerably less. First, a substantial percentage of GNP may be generated in organizations which cannot be sold off as firms; examples include some public utilities and providers of services and household and collective farms. Second, much of the capital in saleable enterprises may be in a poor state and ill-adapted to activities that could profitably survive in the new regime. Third, the valuation of firms by buyers is likely to be heavily clouded by large uncertainties in the short term. Fourth, weak capital markets will hamper the ability to finance purchases even if some companies look profitable.

The combined effect of these four factors, which are all multiplicative, will be to greatly reduce potential receipts from privatization. Assuming that each of them reduces the receipt from sales by one-third (a modest reduction), the capital stock valued at twice the GNP will fetch only around 40% of GNP. Given the problems mentioned above, this can only be realized over a fairly long period. Revenue from privatization in the initial stages of transition is likely to be low (for a discussion of these issues see Bolton and Roland, 1992). Note that revenues from privatisation in Chile after Allende reached a maximum level of 3.5% of GNP in one year (Vickers and Yarrow, 1991) and much of that was later lost in bad loans. It looks unlikely, therefore, that revenues in any one year would exceed those from excises on tobacco or alcohol, and these latter would, of course, be gained annually whereas those from privatization would last for only a brief period.

Much of our discussion of taxation in transition has centred around the need to secure government revenue in the short run, side-stepping the issue of the speed of movement towards the long term design. In some broad respects, such as a diversification of tax bases and a shifting of taxes away from the corporate sector towards households, the desiderata of long term design and short-term revenue needs are not incompatible. Further, the degree of mutual compatibility is likely to increase as the economy stabilizes and as tax administration is consolidated. Yet, as we have argued, in the initial stages of transition the two can be inconsistent in many other respects. In such instances progress towards the long term design is at the cost of tax revenue in the short run and the choice between them depends crucially on the possibilities and the cost of making up the foregone tax revenue from "non-tax sources", taking the expenditure as given. Besides revenue from privatization, there are only two alternative sources: foreign borrowing or a domestically financed budget deficit. We shall not go into a detailed analysis of "revenue" from these sources, but the potential revenue is likely to be severely limited both in the short and long term; hence our concentration on taxation.

Given the experience of other transitional economies, it is interesting to ask how China has managed to avoid high or hyper inflation rates. In the Chinese case, this would not seem to be due to major efforts on the tax front. Tax reforms have been piecemeal, and as we have seen (Table 3) tax revenues have fallen not only sharply relative to GNP but also more sharply than expenditure. Budget deficits have been common during the reform periods, and it would appear that the official figures are underestimates (see Hussain and Stern, 1991 and 1992). Further, as in other transitional economies, a substantial percentage of state-owned enterprises run at a loss, and they are subsidized either from the government budget or the banking system at government's behest. In sum, China has not completely avoided some of the problems which have contributed to inflation elsewhere.

Broadly, five factors seem to be relevant to an answer. The first is the exceptionally high propensity of households to save and their willingness to hold most of their savings in bank deposits. Second, relative to other transitional economies, the state sector in the Chinese economy has been small, which means that subsidies to loss-making enterprises, although high relative to GNP, have been lower than in other transitional economies. Third, in the 14 years from 1978 to 1992, the Chinese economy has grown at around 9% per year, which has helped in both containing the inflationary pressure from the supply side and absorbing the increase in money supply. Moreover, there has also been increased absorption due to the monetization of the rural economy. Fourth, the government retains a considerable degree of control over the economy, particularly concerning wages, the banking system and the sanctioning of investment; and that control can be sharply imposed when high inflation threatens, as in 1989. Fifth, workers are prepared to take a long-term view and restrain wages to promote investment in their firm, to which there is a long-term commitment. The first of the reasons may be powerful. The proportion of income saved by households has risen over the reform period (for indirect evidence see Hussain and Stern, 1991), and except for short periods (for example, in 1988-89) households have been willing to hold their savings in bank deposits. The high propensity to save is not easily explained in terms of any single measurable factor. As for other East Asian economies, one must acknowledge the importance of cultural factors. Amongst economic factors, the steady improvement in the range and the supply of consumer goods (especially durables) since 1978 would appear to be central. As consumer credit is not well developed, households have to finance their purchases by saving. Moreover, given past experience, it would be reasonable for them to expect an improvement in the range and the supply of goods. The high savings phenomenon deserves further research. Willingness to hold savings in bank accounts is influenced by a combination of confidence in the future, the lack of other assets and severely limited intermediate sources of finance, and increased monetization of the rural economy.

We turn finally to a simple illustration of the implications of the discussion in this section for a tax reform package for a transitional economy, which is guided by three general considerations or desiderata:

1. raising the tax revenue relative to GNP, assuming that current revenues are insufficient to cover government expenditure;
2. to reduce fluctuations in the tax revenue due to shifts in tax bases, particularly in the distribution of income between profits and wages;
3. reliance on taxes which are relatively easy to collect and on using existing and well-tried mechanisms for raising revenue, provided these are not seriously flawed.

Our illustration concerns the Chinese economy, where the ratio of tax revenue to GNP is currently around 20%, and it is designed to raise the ratio to around 30%. This may be ambitious but, we would suggest, not infeasible.

The principal taxes in the Chinese economy are indirect taxes and excises, the corporation tax, and import duties. These duties have become increasingly important with the sharp rise in foreign trade relative to GNP. Amongst the other taxes which yield little revenue currently but are important potential sources of extra revenue are agricultural taxes (see Table 3) and the personal income tax. We would argue that a widening of the coverage of personal income tax (or taxes based closely on wages) is crucial to reducing fluctuations in tax revenue associated with shifts in the distribution of income between profits and wages. However, a wide-ranging personal income tax of the kind common in OECD economies does not seem to be immediately feasible. Around 59% of the labour force is in farming, mostly in household farming, and their incomes are difficult to assess for tax purposes. Therefore a personal income tax (or a similar tax) is only feasible for the wage-employed labour force, which is around 40% of the total labour force. It is the taxation of this section of the labour force which is relevant for insuring against fluctuations in tax revenue linked with changes in the distribution of value added between wages and profits. Perhaps the easiest way of proceeding towards a personal income tax would be through a payroll tax. This exists at present but is used solely for financing old-age pensions under labour insurance, which, except for ex-government employees, are not included under government expenditure. The main advantage of the payroll tax is that it avoids individual tax assessment. The problem it faces is an under-declaration of payroll by employers. One possible way of dealing with the problem is to make that income which is subject to the payroll tax the base for calculating labour insurance benefits.

At present labour insurance covers around 62% of the wage-employed labour force. It could be extended to the whole of this labour force. This extension would not only be desirable on social security grounds, but also feasible. In fact it is an important component of the social security reform packages under consideration now.

One possible reform package would look as follows (Table 4):

Table 4. An illustrative tax package for China

Taxes	Base, % of GNP	Rate	Yield, % of GNP
Domestic indirect	50%+	30%	15.0
Import taxes	17%*	15%	2.6
Payroll Tax	31.5	10%	3.2
Corporate and business taxes	32.5%+	25%	8.0
Agricultural taxes	35%*	5%	1.5

Legend: * As in the national income accounts; + assumed.

The tax bases for import taxes and agricultural taxes are assumed to be shares of imports and agriculture in GNP in 1990 (see TJN 1991). The rates assumed are averages across the bases - doubtless some parts of the base would be exempt or evaded and correspondingly the actual rates would have to be higher than those assumed. For domestic indirect taxes, which include excise duties, it is assumed that they apply to half of goods and services, which is ambitious but not infeasible. The base for the payroll tax is a rough estimate of the total wage bill. It is based on the assumption that the wage-employment sector of the economy accounts for 63 out of 65 percentage points of the GNP produced by the non-agricultural sector, and that wages are 50% of the value added. Similarly, the base for corporate and business taxes (on small businesses) is assumed to be 50% of the value added in the non-agricultural sector (65%). Currently agricultural taxes are a form of land tax (for details see Hussain and Stern, 1992), which raised around 0.1% of GNP in 1989.

The total revenue of the package represents just over 30% of GNP. There is no doubt that it is ambitious (particularly with respect to domestic indirect taxes), but the disaggregation into rates and bases of this kind gives a measure of the task at hand. It is straightforward to use the techniques embodied in the table to generate more modest proposals. The approach does make it clear that a range of taxes will be necessary if revenue generation is to approach 30% or so. This is a figure which approximates that in advanced countries (see Burgess and Stern, 1992). Nevertheless China has many advantages relative to other poor countries in terms of literacy, numeracy and effectiveness of social control. Higher tax revenue may become an urgent necessity if, for example, the savings rate drops or pressure for infrastructural investment grows still stronger. The broad range of bases will also provide some insurance against the uncertainties and shifting bases which will accompany the transition process.

5. Conclusions

We have approached the analysis of transition by asking what role is perceived for the state both during the process of transition and as a long term goal. In doing this we have drawn on the experience of the Chinese reforms and on the theory and practice of public economics. Both the Chinese experience and the reform of public finances have received insufficient attention in discussions of East European countries and erstwhile Soviet Republics. These perspectives provide real lessons and warnings.

Transition from a command to a market economy is a process of the withdrawal of the state from economic decision-making, but also one which is charted and steered by the state. This somewhat paradoxical role confronts economists and policy-makers with the problem of coping with economic dislocation, whilst building the new institutions needed for a decentralized economy. As far as the East European countries and the former Soviet Republics are concerned, an influential view seems to be that piecemeal reforms soon peter out and attempts at combining a market economy with the ownership structures and the forms of government control inherited from the past, even in the interim phase, are doomed to failure.

Yet, the Chinese reforms would seem to cast doubt on these assumptions. The Chinese experience suggests the following:

- piecemeal reforms can, cumulatively, produce some successes;
- the pay-off to providing market incentives can be rapid and large even without immediate privatization;
- it is possible for the household and the private sector to prosper in the presence of a large state industrial sector;
- the combination of old-style planning and markets creates problems of coordination which worsen over time, but it can help to reduce uncertainty and maintain stability in the initial stages of transition;
- if economic reforms bring tangible benefits to a majority of the population whilst protection is offered to the losers, a constituency in favour of continued reforms can emerge;
- the reform of the public finances and the institution of a new social security system should be contemporaneous with enterprise reforms rather than left till later.

The arguments in favour of comprehensive reforms with a "big bang" are regarded by many as compelling. Yet the historical experience of attempts at a rapid transition from one economic system to another seem to indicate they take much longer than envisaged and can inflict a heavy cost arising from severe economic and social dislocation. It is important to draw lessons from the historical experience of the building of command economies in the same economies where transition is now taking place - an experience which parallels the magnitude of "social engineering" involved in the transition to a market economy. Some of the major policy-induced economic disasters of this century are associated with the attempts to institute public ownership or redirect the economy with a big bang.

Lest there be any misunderstanding of our position we should make clear that we are not arguing that a slow route is always superior. What we are saying is that the argument that there is no alternative to the fast route cannot be accepted without the most careful scrutiny. The evidence from theory and from history in favour of the fast route cannot be regarded as overwhelming. The point at issue is well expressed by Arrow in another context (1974, p. 29): "Rationality and foresight are indeed capable of creating delay and doubt;.... The true believer is much more effective in social action, but whether it is in the right direction may be another question. 'The native hue of resolution/Is sicklied over the pale cast of thought.' ..There are moments in history when we must simply act, fully knowing our ignorance of possible consequences, but to retain our full rationality we must sustain the burden of action with certitude, and we must always keep open the possibility of recognizing past errors and changing course."

Central to the transition is a radical transformation of relations between enterprises and the state and the recasting of enterprises into market firms. This transformation has to take account of the multifarious role of enterprises in a command economy and requires more than a devolution of economic decision-making from the government to enterprises, as in the earlier economic reforms in Eastern Europe and the Soviet Union, or privatization (with the attendant risk of bankruptcies), as envisaged in the current policy packages for transitional economies. It also requires the institution of a social security system to cater for contingencies arising from the replacement of permanent with terminable employment and the ending of price subsidies on consumer goods. Moreover, a radical overhaul of the tax system, which is heavily dependent on enterprises, is also needed.

Discussions of privatization in transitional economies have often been based on a rather restrictive opposition between "private and public property", foreclosing, by default, many possibilities open to transitional economies. Instead we have adopted a broader view of ownership as a combination of diverse rights and claims, which may be vested in different agencies and persons and may be limited in certain ways. "Limited ownership" such as leasing and franchising, which are widely used in market economies, suggest that policy options for a transformation of ownership are very wide. "Give-aways" of permanent rights may squander public assets and court the risks of chaos and macroeconomic destabilization.

The broader view of ownership brings out the relation between it, taxation and regulation. For example profits taxation at 50% with loss-offset is equivalent to 50% ownership, in the limited sense of right to income and liability for losses. Similarly, a capital gains tax of, say, 25% is equivalent to the government retaining a quarter claim to (or 25% equity in) the capital value on realization in excess of the initial sale price. These equivalences suggest that the retention of part claim on income or capital by the state can be substitutes for income and capital gains taxes and may in certain cases be easier to institute than corresponding taxes. Moreover, such ownership claims may be combined together with government liabilities for a part of losses so as to distribute risks between the state and economic agents.

Similarly, there are also important connections between regulation and taxation. For example, some forms of regulation are close to profits taxation. For example, price regulation with a view to controlling monopoly profits is akin to an excess profits tax. A tax-based incomes policy, which is used in a number of transitional economies in the form of an excess wage tax, provides another instance of close similarities between regulation and taxation.

The aim of Eastern European countries and many former Soviet Republics is to fashion their economies on the "Western" pattern. Western market economies, however, exhibit an enormous range in the level and scope of government activities and their finance and simply to elect for the tax systems associated with these economies leaves a wide range of vital issues unsettled. As we have shown, there are good arguments for emulating Western European tax systems, especially in the case of indirect taxes and with some qualification in the case of income taxes. But these tax systems suffer from major defects when it comes to property (land and buildings) taxes. There is ample room for innovations in property taxes open to transitional economies. Such taxes commend themselves on the grounds of efficiency and equity and are in some respects easier to administer than a range of other taxes.

Public finance measures in the medium term should be related to the circumstances of the transition as well as to the usual criteria of revenue, equity, efficiency, and administrative convenience which guide the long term design. The trade-off between revenue and distortion which is central to tax issues in most economies will have important dynamic aspects here. In the initial phases of transition, some of the considerations important in market economies such as the interface between personal and corporate taxes will not be of great importance. Instead, raising enough revenue in the face of an erosion of the traditional tax base such as enterprise profits and reducing particular types of inequities such as large personal gains through exploitation of gaps in the system may be paramount. Some of the new taxes such as the personal income tax may initially have to be introduced in a piecemeal fashion, for example, via employment taxes, social security contributions or a levy on benefits in kind such as heavily subsidized housing. Presumptive assessments are likely to be needed for the self-employed. They could later be consolidated as part of a personal income tax. Moreover, there may be justification for holding in abeyance some of the rules of good taxation, such as no taxes on intermediate inputs, so as to correct price distortions and to get an indirect handle on incomes which may otherwise escape taxation.

Central issues for taxation in transition include: the relationships between tax policies and the market distortions which will no doubt persist into the medium term; measures to deal with short- and medium-term hardship of both enterprises and individuals in restructuring; the new distribution of income and wealth which will emerge, much of which may be gratuitous and chaotic; and deficiencies of record-keeping, accounting and administration where new methods have to be learned and implemented. The arguments for transitional tax measures must be examined very carefully and one should not assume that the only sensible route is to go straight for the desired long term structure, even if one were clear as to what that should be. The instantaneous route for taxation, as with other aspects of the transition, appears to carry with it many perils and pitfalls.

Endnotes

* We are very grateful for the advice and support of Robin Burgess and Chenggang Xu, for the assistance of Stephen Howes and the comments and guidance of the editors. Research on this paper was supported by the Bradley Foundation and the Instiute of Policy Reform. All errors and opinions are ours. We received helpful comments from seminars at the Universities of Siena and Bucconi (Milan) and at a conference organized by the Centre for Economic Policy Research held in Cambridge.

1. See Blanchard *et al.*, 1991; Grosfeld and Hare, 1991; Lipton and Sachs, 1990a and b; Milanovic, 1990; Vickers and Yarrow, 1991 for discussions of privatization.

2. A higher rate of VAT would bring redistribution concerns within the VAT system (*e.g.* for a Western economy, 20% VAT on yachts as opposed to 10% VAT on televisions) at the cost of some complication of VAT arrangements. Special excises, parallel to those on alcohol and tobacco, would require special arrangements.

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