

The Tax Base in Transition

The Case of Bulgaria

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Economies in transition may be better off not imitating the tax structures of mature western market economies. Lower taxes and strong administration with well-publicized penalties for evasion may be the best route to a broader, more equitable tax base that increases revenue without reducing incentives for private enterprise.



Summary findings

The transition from socialism characteristically reduces existing tax revenues at the same time that it increases the need for government spending. An increasing need for revenue combined with an eroding tax base creates a transition-related fiscal gap and a challenge for tax policy.

The solution, say Bogetić and Hillman, is not to lay a heavier tax burden on new private firms. The issue is how to meet revenue needs *without* inhibiting private sector development. Large-scale tax evasion in the private sector — the *de facto* outcome in Bulgaria and in many other transitional economies — may be a good incentive for development of private enterprise, but it is illegal and inequitable to wage-earners and salaried workers.

The chief means of increasing tax revenue are to (1) reduce tax rates to decrease the benefit of evasion, (2) improve tax administration (to increase tax coverage and better detect evasion), and (3) increase penalties for evasion. These three measures effectively decrease the benefits and increase the cost of tax evasion to economic agents.

It takes time to improve tax administration, however. Given administrative limitations, what should the tax structure be? Bogetić and Hillman contend that an administratively feasible system designed to encourage development of the private sector during the transition should:

- Be simple, not complex or oversophisticated.
- Be administratively implementable with current resources.
- Impose a low tax burden on all economic agents.
- Rely on broad tax bases with minimum exemptions.
- **Begin the long-term improvement of tax administration.**
- Limit the severity of tax penalties in the transition from an authoritarian to a democratic regime.

In theory, reducing the cost of compliance and increasing the expected cost of noncompliance should reduce tax evasion and increase tax revenues. In practice, small businesses and self-employed citizens tend to evade taxes, providing an effective zero tax base. The government has little to lose from reducing taxes on the self-employed but, to be equitable, it should reduce taxes for everyone. As a general rule, say Bogetić and Hillman, economies in transition should impose *lower* tax burdens than are imposed in mature western market economies. Low tax rates may counter the traditional lack of trust in government by citizens in formerly socialist economies. It may also reduce the perception of “exploitation” by giving the impression of a more modest government consistent with the dynamic private sector led economy.

This paper — a product of the Country Operations 1 Division, Europe and Central Asia, Country Department I — is part of a larger effort in the region to study public finance issues in southern European countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Faith Smith, room H5-247, extension 36072 (33 pages). March 1994.

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THE TAX BASE IN TRANSITION

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by •

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Tax issues have a certain commonality in all countries as governments seek to match budgetary demands against revenue availability. Specific tax-related issues arise in developing economies, where neither markets nor traditions of tax compliance are well developed (see Newbery and Stern, 1987; Bird, 1992; and Burgess and Stern, 1993). Economies in transition, and developing countries generally, are also characterized by absence of a tradition of voluntary tax compliance. There are also other identifiably distinct transition-related aspects of taxation (see Tanzi, 1993a). In particular, the transition from socialism to a market economy has characteristically given rise to a fiscal gap as expenditure obligations increase and traditional tax bases inherited from socialism erode. Potential new tax bases are in the expanding private sector, but the tax administration in the early stages of transition is not yet equipped to monitor the market transactions of the many new private businesses, and in the absence of tradition of voluntary self-assessment individuals are not forthcoming in complying with tax obligations. Improvement in tax administration enhances tax monitoring capabilities, but leads to a policy dilemma, in that success in encompassing the private sector in the tax base discourages private initiative, when the private sector provides the primary impetus for development of a market economy.

In this paper, we demonstrate these circumstances against the background of the experience of Bulgaria, and consider the form that the tax system might take to accommodate the conditions of the transition. Section 1 describes the characteristic

budgetary expenditure pressures associated with transition. These pressures are then subsequently taken as given, and following sections describe (i) the general background on Bulgaria's experience with transition, (ii) the tax bases inherited from socialism, (iii) the revenue performance of these tax bases in the early transition, and (iv) the tax system introduced in Bulgaria to replace the prior socialist tax structure. We then propose reasons why economies in transition (and Bulgaria in particular) might contemplate choosing other than to model tax structures after those of more mature western market economies, and why the design of a tax system for the transition should take account of Laffer-curve effects that encompass tax-evasion as well as supply-side incentives. The final section demonstrates the need for accuracy in projections of tax revenue in the transition, by comparing revenue realized from different tax bases with revenue projections forming the basis for policy conditionality for international agency financing. We show how, if the distinct problems associated with tax bases in the transition are not recognized, the ensuing overly optimistic revenue projections inevitably lead to non-compliance with required limits of budgetary deficits. Thus, we present the case for a modest tax structure in the transition, and also for modesty in making revenue projections for revenues from tax bases in the transition.

1. GOVERNMENT EXPENDITURE IN THE TRANSITION

In the initiation of the transition from planning to a market economy, the government withdraws from pervasive planning and regulation of economic activity, and the state enterprise, an extended hand of government under socialism, withdraws from its role as social protector of workers and their families. The socialist factory had attended to the housing needs of its workers, day care, education, health clinics, culture, and assurance of employment.¹ The transition brings to an end the factory's social role, because of a change to a market conception of the role of a factory, and also because of financial duress of state enterprises,² which cannot be counted upon to be capable of continuing to provide the social services of the past, even where out of habit, principle, or worker pressure, management seeks to maintain the past paternalism towards workers.

The government therefore confronts the obligation to replace the factory as provider of social services, including attending to the social consequences of unemployment that under socialism would have remained contained within the factory. The social safety net that the government is obliged to provide can be required to be encompassing of broad segments of the population,

¹ For elaboration on the transformation of the role of the factory in the transition, see Hillman (1994).

² In the short run, enterprises have assets that can be run down to cushion adverse demand and input shocks. See, for example, the behavior reported by Gelb et al. (1992) on the response of Polish firms to the "big-bang" reform program initiated in January 1990.

who fall into poverty not necessarily because of unemployment (which is often maintained at low levels), but as the consequence of erosion of real values of fixed incomes and transfer payments. Maintenance of infrastructure, energy subsidies for private consumption, and the like, can add to expenditures, as can political pressures for state-enterprise subsidization. With internal borrowing possibilities limited by the absence of developed domestic capital markets and by lack of trust in the government, and foreign borrowing constrained by past debt, only increased tax revenues stand in the way of inflationary financing.³

2. SOME BACKGROUND ON BULGARIA

In contrast to Hungary and Poland, where there had been gradual introduction of market forces and enterprise decentralization throughout the 1980s, Bulgaria began the transition from socialism in 1989 from a high level of planning and negligible private production. When state orders ceased, Bulgarian enterprise managers had no experience with a market economy. Bulgaria had also made less prior adjustment in its international trade to western markets, and Bulgarian enterprises were consequently very adversely affected by the end of the CMEA trading system. Following the 1990 moratorium on external debt repayments, Bulgaria lost access to commercial external

^{3/} This opens up macroeconomic issues associated with budgetary deficits that are not our direct concern in this paper. On these issues, see Easterly and Schmidt-Hebbel (1991).

financing.⁴ There was a significant acceleration of reforms in 1991, when a liberalization and stabilization program was launched amidst a harsh environment of output decline.

Privatization however moved slowly.⁵ On the other hand, private sector development was significant. The private sector contributed less than 5% of GDP at the end of 1989, and 36.8% in mid-1993; and whereas there were registered 24,500 private enterprises at the end of 1989, there were 315,000 enterprises registered in mid-1993.⁶

The expansion of the private sector took place against the background of the characteristic declines in GDP associated with the transition. The state enterprise sector was making significant losses: in 1992 these losses were in the neighborhood of 7% of GDP (which equalled the government's budget deficit for that year), and for the first three quarters of 1993 preliminary estimates indicated combined losses of the state-enterprise sector of approximately 15% of GDP.⁷ The private sector was in

⁴ Outstanding debt has not been necessary for difficulties in access to external finance. Romania, which had no substantial debt before it embarked on the transition, also faced a severe external financing constraint, due to perceived low creditworthiness, even in the absence of large pre-existing debt.

⁵ Only two large state enterprises had been privatized by the end of 1993, and a small number of joint ventures had been authorized by the Ministry of Industry.

⁶ Source: Small and medium enterprises division, Ministry of Industry, Government of Bulgaria.

⁷ Source: World Bank staff estimates.

contrast overall profitable.⁸ Whereas the state-enterprise sector was concentrated in industrial production, the private sector was more specialized to trade and services; and whereas the state enterprises were characteristically large, the private enterprises were in general small, with average employment of 2.2 employees at the end of 1993.⁹

These circumstances have implications for the tax base in transition, to which we shall return. First, however, we consider the tax bases inherited from the prior socialist system.

3. SOCIALIST TAXATION

As was the case in socialist countries generally, the principal tax base in Bulgaria under the socialist regime consisted of state enterprise surpluses subject to turnover and profits taxes. In 1988, the last complete year of planned socialism, these two taxes together with excises provided approximately 60% of total government revenue, equal to some 34% of GDP (see Table 1). Numerous different rates of turnover tax reflected pricing decisions based on conceptions of social need, while the profits tax distributed surpluses from enterprises whose prices yielded a "profit" to enterprises whose prices resulted in "losses." These profits and losses did not have the

^{8/} In 1992 aggregate profits of the private sector, for firms encompassed by the survey of the National Statistical Institute of Bulgaria and reporting, were 3.4 billion leva on revenue of 67 billion leva.

^{9/} Source: National Statistical Institute of Bulgaria

same connotations as in a market economy; on the contrary, an enterprise making losses was perceived to be rendering socially valuable services at affordable prices. Consistently, there was no bankruptcy.

Social security payments were also a significant source of revenue, 9.5% of GDP in 1988. Small amounts of revenue, around 1% of GDP, were raised from excise taxes and import duties on goods traded outside of the CMEA system of international trade. Non-tax revenue was 10 percent of GDP, of which 4 percent derived from the taxes and subsidies of the CMEA price equalization mechanism.¹⁰

The personal income tax contributed revenues of 4 percent of GDP in 1988. The purpose in principle of the personal income tax in the planned socialist economy was to equate aggregate earned income with aggregate expenditures, rather than to raise revenue per se.¹¹ Since the state had direct claim to enterprise surpluses via the profits tax, there was no need to tax the wages of workers. Any income tax could be equivalently collected from

¹⁰ The budgetary contribution from the CMEA-related price equalization fund varied considerably. For example, the fund contributed 10.5 percent of government revenue in 1987 but only 5.4 percent in 1986. CMEA-trade related taxes and subsidies could in principle be a net source of revenue or expenditure for the government. For a detailed analysis of the budgetary impact of the cessation of these taxes and subsidies in the Hungarian case, see Abel et al. (1992).

¹¹ Since the state was responsible for investment and since it guaranteed universal retirement benefits (i.e., pensions, health benefits), there was little incentive for personal saving. Personal asset accumulation via personal savings was inconsistent with the objectives of the socialist system. Individuals could however have personal savings accounts.

Table 1: Consolidated General Government Revenues, 1988/1993

	Actual					Est	Actual					Est
	1988	1989	1990	1991	1992	1993	1988	1989	1990	1991	1992	1993
	(Millions of Leva)						(% of GDP)					
Total Revenue	22.1	23.0	24.0	34.9	77.8	112.2	57.5	57.9	52.8	41.9	36.7	32.1
Tax Revenue	18.2	19.5	19.2	50.8	66.7	95.0	47.4	49.3	42.4	38.8	31.7	27.7
Profit Taxes	8.1	9.2	8.1	23.0	16.8	18.1	21.2	23.2	17.9	17.4	8.0	5.2
Income Tax	1.5	1.6	2.0	5.0	10.9	15.7	4.0	4.1	4.2	3.8	5.2	4.5
Turnover Tax and Excises	4.4	4.4	4.1	9.7	12.3	21.9	11.6	11.2	9.0	7.4	5.9	6.3
Customs Duties	0.3	0.3	0.4	1.5	4.0	9.9	0.8	0.8	1.0	1.2	1.9	2.8
Social Security Contributions	3.6	3.8	4.4	11.4	18.5	28.4	9.5	9.6	9.6	8.7	8.8	8.1
Other	0.1	0.1	0.3	0.4	4.1	2.0	0.3	0.3	0.7	0.3	1.9	0.6
Nontax Revenue	4.0	3.4	4.7	4.0	12.3	17.2	10.2	8.6	10.4	3.1	5.9	4.9
Memo Item												
GDP at market prices	38.4	39.9	45.4	131.0	210.0	350.0						

Source: Bulgaria: Public Finance Reforms in the Transition (1994), World Bank, Washington D.C., chapter two.

enterprises by directly paying workers a net-of-tax wage, with the implicit income tax being transferred to the enterprise surpluses, or alternatively, the subsidy to the enterprise could be reduced.¹²

4. CHANGES IN THE TAX BASE IN THE TRANSITION

Table 1 also demonstrates the changing pattern of revenues in the early years of transition. These changes reflect the influences of (i) the decline in state enterprise output and

^{12/} The tax instruments under socialism were not used for the typical fiscal policy purposes as in a market economy: see Mario I. Blejer and György Szapáry (1991).

profitability noted above, (ii) the breakdown of financial discipline and enforcement of contracts at all levels, (iii) the incompatibility of tax administration capacity with market transactions and the changing nature and scope of the administrative task, (iv) tax evasion reflecting self interest and a distrust of government carrying over from the previous regime, (v) effects of inflation on revenues, in particular the decline in real value of revenues as a result of inflation due to collection lags (the Tanzi effect), and also the complex interactions of inflation and specific provisions of the tax system (inventory accounting, depreciation method, and interest payment deductibility), (vi) revenue loss due to reductions in tax rates from high values under socialism, the lower tax rates coinciding with reduced levels of economic activity in the traditional taxed sectors, and (vii) the end of CMEA trade-related revenues.

While these effects catalogued above were present in Bulgaria to different degrees, most significant was the erosion of the tax base provided by the state (and municipal) enterprise sector. The state enterprises, which had been previously sheltered from the market by guaranteed state orders,¹³ were obliged to negotiate contracts in a market environment, and to locate new buyers for their output. The enterprises were also

¹³ In case of exports, state orders were guaranteed via the CMEA system.

obliged to secure their own inputs.¹⁴ The change to market transactions affected tax revenues. The direct supervision and control that had accompanied state orders was no longer present, and since managers were not direct claimants to enterprise profits, incentives were present to shift profits to private firms.¹⁵ Failure to comply with tax obligations was also part of a general phenomenon of arrears or non-payments in the state-enterprise sector; arrears took a variety of forms, including tax arrears from non-financial state enterprises, banks, private individuals and enterprises, wage arrears to state enterprise employees, and interenterprise arrears, both within the state sector and between private and state sectors. The government's share of arrears was reflected in unpaid taxes. The interlocking arrears tied enterprises to one another, and in the absence of financial discipline, the threat of penalties for non-payment, including in particular taxes due, lacked credibility.

The tax administration was also required to adapt to market transactions. Whereas the large state enterprises in decline were part of the official tax system wherein they traditionally

^{14/} Thinking was also often geared away from association between financial gain and production, as evidenced by large, often country-wide Ponzi schemes in post-socialist economies. In Poland, Yugoslavia (Serbia and Montenegro), and Romania, for example, "bankers" were paying interest sometimes as high as 800 percent per quarter to their "depositors" as long as the supply of new deposits exceeded the debt service. In the end, the schemes broke down. The wide participation in these schemes despite their evident nonsustainability was indicative of the magnitude and the spread of a speculative mind-set in the transition (*Washington Post*, October 17, 1993).

^{15/} See Hillman and Peters (1993).

paid profits and turnover taxes, private sector expansion created potentially taxable entities that previously had no tax files. To include the new private sector in the tax base, the tax administration was obliged to identify, locate, monitor, and enforce collection of tax obligations. This was facilitated in part by the requirement that enterprises register with the tax authorities in the course of registration with the Chambers of Commerce (such registration permitting foreign exchange transactions to be conducted via the commercial banking system). Monitoring the vast number of new potential taxpayers was however a formidable task for the tax administration. The administration had been designed for direct auditing of a smaller number of state enterprises. Under the socialist system, tax monitoring could be conducted in the course of all-encompassing mandatory field audits and inspections. Since enterprise outputs were predetermined by planning, auditors knew what should have been produced and shipped, at what prices -- and to whom.¹⁶ The calculation and monitoring of tax obligations was therefore relatively simple. With the onset of a market economy, too many individual agents incur tax obligations for the previous direct auditing system to continue to be effective. Administrative specialization is necessary in assessing and collecting taxes. Self-assessment and random audits replace detailed direct tax liability calculations.

^{16/} That is, measurement of output preceded market sales: see Hillman (1991).

Tax compliance in the new private sector is also influenced by cultural and historical influences.¹⁷ Under socialism, there was a widespread individual distrust of government. The distrust carries over into the transition, making individuals reluctant (or more reluctant than usual) to cooperate with tax authorities in the manner required in a market-based tax system in providing information via voluntary self assessment of tax obligations.

The outcome of these different effects is reflected in Table 1 in the changes in revenue collections from different taxes. Revenues from the profits tax declined from over 21% of GDP in 1988 and over 23% in 1989, to 8% of GDP in 1992, and revenue from the turnover tax declined from around 11% in 1988 and 1989 to under 6% in 1992. The decline in revenues from these two taxes was the principal cause of a decline in the total revenue-to-GDP ratio from 57 percent in 1988 to 37 percent in 1992.

Social security contributions increased somewhat relative to GDP, and non-tax revenue fell (in particular due to the end of the CMEA-related taxes and subsidies). Revenue from the personal income tax on wages and salaries however increased, from 4.0 percent of GDP in 1988 to 5.9 percent in 1992.

An Olivera-Tanzi effect reduced real tax revenues in 1991, when inflation was over 300%. In contrast, there was an inverse Olivera-Tanzi effect in 1992 and 1993, as inflation decreased to 90% and 70%, respectively. In the absence of data on collection lags it is not possible to assess directly the relative strengths

^{17/} See Casson (1993).

of these effects. What is evident, however, is that despite the increase in real value of tax revenue due to the fall in inflation in 1992 and 1993, the more fundamental transition-related influences described above continued in these years to erode the traditional tax bases.

5. BULGARIA'S CHANGING TAX SYSTEM IN THE TRANSITION

How did Bulgaria respond in the transition in changing the tax system that had been inherited from socialism? We proceed now to describe briefly how the tax system evolved in the transition.¹⁸ The focus is on the three key taxes: profits tax, turnover tax (and its replacement, VAT), and the personal income tax.¹⁹

A. The Profits Tax

As of mid-1993, state enterprises were taxed at the rate of 52 percent (consisting of a 40 percent standard tax rate accruing to the central government, 10 percent to the municipality in which the enterprise was located, and a 2 percent irrigation tax), and enterprises owned by a local municipality were taxed at the rate of 42 percent (the 40 percent standard rate to the

^{18/} For a detailed description and evaluation, see The World Bank (1993).

^{19/} Other taxes -- excises, property taxes, user charges, capital gains, and import duties -- have do not have the potential (and in the case of trade taxes are not desirable means, see George Fane, 1993) to resolve the transitional fiscal gap. Other tax possibilities include presumptive taxation (Tanzi and Casanegra de Jantscher, 1987).

municipality and the 2 percent irrigation tax).²⁰ The tax rate on profits of private enterprises depended in a complex way on the extent of private and/or foreign ownership and the value of profits.²¹ However, the profits tax base was, to all intents and purposes, confined to the state and municipal enterprises. The tax base was reduced by exemptions to agricultural cooperatives and to (very few) foreign joint ventures in food processing and "high-technology" industries. There were also additional taxes, levied by off-budgetary means, on profits of successful enterprises which were used to subsidize loss-making enterprises. Different tax rates applied to financial enterprises, many of which were state-owned: commercial banks were taxed at 50 percent, the Bulgarian State Savings Bank at 70 percent, and the Bulgarian National Bank at 100 percent through quarterly transfers of profits to the Treasury.

A draft profits tax law proposed replacing this structure in 1994 with a uniform 40 percent rate for all enterprises, state, municipal, and private.²² Exemptions would also to be

²⁰ The owner (the state or municipality) had in addition, in principle, the right to take an additional 60% of the remaining profits of an enterprise through an extrabudgetary fund.

²¹ Enterprises with up to 49 percent private participation was 30 percent on the first million leva of profits and 40 percent on profits above this sum. Enterprises with no more than 49 percent foreign participation, which had invested in excess of \$100,000, and which are an affiliate of a foreign corporation, were taxed at 30 percent. Where foreign ownership exceeded 49 percent, the tax rate was however 40 percent.

²² This was to be achieved by elimination of the 10 percent of profits tax paid by state enterprises to municipalities and abolition of the 2 percent irrigation tax.

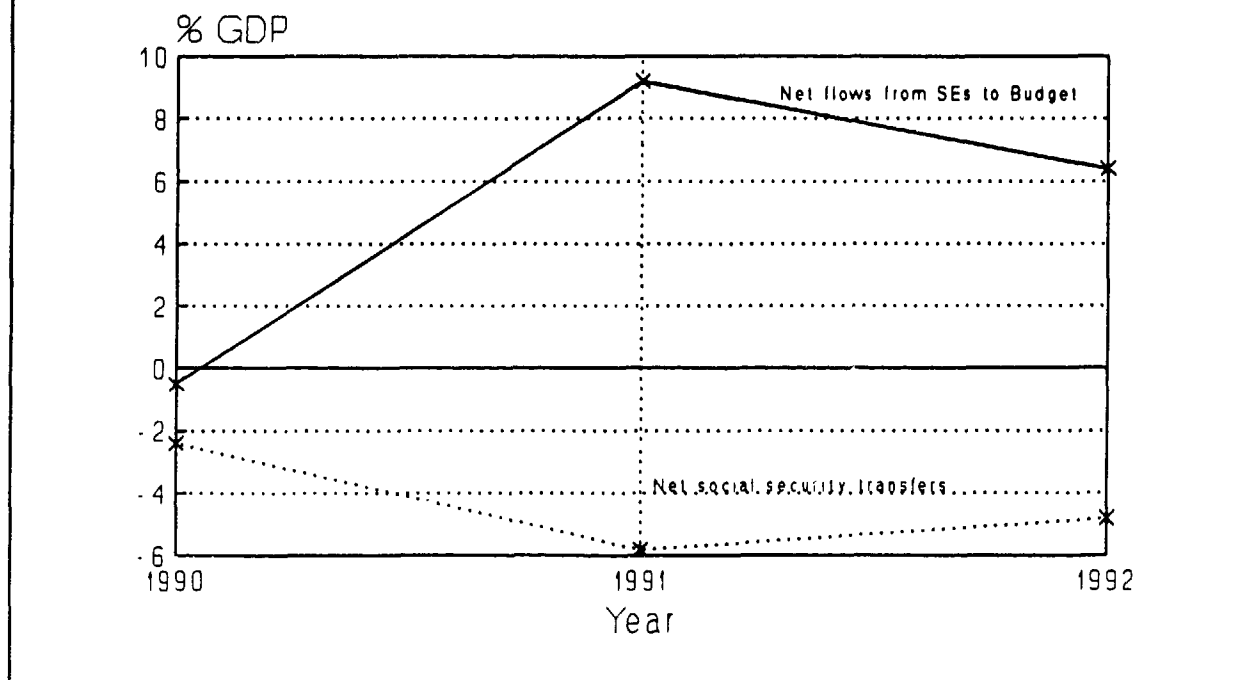
reduced,²³ and a 20% tax was to be imposed on distributed dividends. The new simplified structure thus set a uniform rate for non-financial enterprises.²⁴ For commercial banks, insurance companies, and the State Savings Bank, there was also to be a uniform rate, of 50 percent.

These changes left unresolved the problem that the tax base for profits and turnover taxes continued to consist basically of the eroding surpluses of the state and municipal enterprise sector. The erosion of the state and municipal sector tax base was moreover greater than indicated by the budgetary statistics. Figure 1 shows the net contribution to the budget of state enterprises, when net flows from state enterprises to the budget are recalculated to include the difference between profits taxes and non-tax revenues, and subsidies and debt write-offs. As a result of reduced subsidies, the state enterprises' budgetary contribution increased from minus 2 percent of GDP in 1990 to 8.42 percent in 1991, but then fell to around 6 percent of GDP in 1992, as compared to 8% recorded in the budgetary statistics of Table 1. State enterprise cross-subsidization further reduced the revenue contribution of the state enterprise sector to the

^{23/} Exemptions and concessions were for sheltered workshops, approved investments to meet environmental objectives, charitable donations, and dividends received on which taxes have been paid.

^{24/} There had been a previous proposal to favor private enterprises, with a 30 percent rate. This rate would have applied to domestic enterprises with more than 50 percent foreign participation, domestic trading enterprises with no state or municipal participation, and privatized enterprises with more than 50 percent private equity.

Figure 2.1
Flows between SEs and Budget



Source: The Authors' estimates.

government. The implication is that if profits and turnover taxes were to be relied upon as a significant revenue source, the taxes would have to be levied on profits of firms other than in the state and municipal enterprise sector.

B. Indirect taxation: The turnover tax and VAT

In October 1993, the Bulgarian Parliament passed a law replacing the turnover tax with an 18% VAT.²⁵ The turnover tax

^{25/} For a detailed discussion and assessment of the Bulgarian VAT, see Bogetic and Varga (1993).

had been levied at three rates:²⁶ 2% on construction material and buildings for dwelling purposes; 10% on food, children's goods, eyeglasses, sanitary and hygienic appliances, rent paid for residential purposes and passenger transportation; and 22% on all other goods and services not exempted (28% when measured as a proportion of the producer price). The turnover tax was also levied on imports. Exemptions from the turnover tax were extensive,²⁷ and in particular included goods for resale, so in effect the turnover tax was a tax on sale for final consumption.

^{26/} The turnover tax had been levied at 43 different rates before March 1991,

^{27/} Exemptions were goods and services not designed for final consumption; exports; organized travel excursions; international transport, international communications and international mail services; goods and services sold within duty-free zones of airports, ports, border check points and on board ships, aircraft and trains in international traffic; goods sold to diplomats in special diplomatic shops; milk, yogurt, ordinary and dietary bread; prostheses, orthopaedic shoes, medical belts, wheel chairs and other appliances for disabled persons; recycled goods if they are not harmful; fees collectible by state or municipal institutions for services rendered to individuals; fees for transportation of merchandise, goods and passengers by public transportation; health, educational, teaching and community and cultural centers; services rendered by children's gardens, centers for the elderly, boarding houses and other similar establishments; banking, insurance, reinsurance and other financial services; sale of postal and revenue stamps; non-commercial radio and television broadcasting; rental or lease of land and premises with the exception of services rendered by hotels, motels, camping sites; revenue from the organization of congresses, conferences and other scientific deeds of educational and scientific institutions receiving a subsidy; goods produced from recycled material; services rendered for environmental clean-up; and cultural and religious activities. Blanket exemptions had also applied to cooperatives (which were exempt generally from taxation); in July 1992, the Cooperatives Law was amended, to make only the cooperatives of handicapped people exempt from turnover tax; however, these cooperatives were not exempt from turnover tax on imports.

The replacement of the turnover tax by a value-added tax had been deferred a number of times.²⁸ Since the VAT enhances efficiency and offers a superior tax base and revenue potential,²⁹ the reasons for deferment can be sought in distributional considerations. There were fewer exemptions to the VAT than to the turnover tax,³⁰ and the uniform VAT rate of 18% raised the tax rate for goods and services subject to the lower turnover tax rates. Also, whereas VAT revenues accrued to the central government, revenue from the turnover tax from sales by state and municipal enterprises accrued to the state or municipality, whichever was the owner of the enterprise that paid the tax; the competing claims of the central and municipal authorities to revenue thus had a role in the deferral of the VAT.

Evasion was an important consideration. The turnover tax was easier to evade than the VAT. Planning procedures under the socialist regime designated when "sale" was for final consumption, but in a market economy, "sale for final

^{28/} There had been a draft law to introduce a VAT as early as 1986. In 1990, it was envisaged that the VAT Law would be passed on January 1 1991. The Law was passed in October 1993.

^{29/} See Tait (1988), Gilles, Shoup, and Sicat (1990).

^{30/} Transfer of ownership of land; leasing of land and buildings; financial services; insurance services; educational services, health services; supplies by non-profit organizations where the supplied item has been donated to the organizations, and gambling services. International transport including that of passengers is classified as an export, which is zero rated.

consumption" became flexible, permitting sellers to claim that sale was for further resale.

Evasion was also facilitated by commercial relationships between state enterprises and private firms. Under the turnover tax, goods could be sold by state enterprises to private firms, with the sale designated as for resale. The state enterprises were therefore not obliged to pay the turnover tax, and private firms being new and outside of the tax system had a comparative advantage in evasion of tax obligations. Incentives for profit shifting from state to private firms left state enterprises with low or no value added and private firms with high value-added; the VAT thereby potentially subjected private firms to high tax liability. State enterprise managers and private entrepreneurs therefore both had reason to oppose the replacement of the turnover tax by the VAT.³¹

With the VAT finally introduced, could VAT revenue be expected to solve the problem of the transitional fiscal gap? Some indications are available from a study by Bogetic and Hassan (1993), which estimates a relationship between VAT revenues and VAT rates in 22 countries that had single VAT rates in 1988. The estimated relationship predicts VAT revenue for Bulgaria from an 18 percent single rate of approximately 8 percent of GDP.³²

^{31/} See Hiliman and Peters (1993) for more extensive discussion.

^{32/} This estimate is an upper bound. An important implicit assumption behind this prediction is that Bulgaria's VAT would have a base (or the number of exemptions) and tax administration capacity similar to the average country in the sample. To the extent that exemptions are more numerous and tax administration

Projected revenue depends also on projected compliance. The structure of the VAT makes evasion difficult relative to other taxes, because of the reporting to the tax authorities by buyers entitled to tax refunds. Potential compliance problems arise at the stage of sale for final consumption, where the final purchaser may not report the transaction to the tax authorities because there is no rebate. However, the seller for final consumption cannot unreasonably report purchases for purposes of rebate without reporting further sales. Experience from other countries suggests that extensive compliance with the VAT develops gradually over time, in line with the administrative capabilities of the tax authorities and the development of the appropriate taxpayer ethos (Tait, 1988).

C. The Personal Income Tax

While the profits and turnover tax bases were eroding, the personal income tax base was expanding. The personal income tax base had two quite different components, wages and salaries of employees, and incomes from sole-proprietor private businesses. The maximum marginal rate in 1992 was 40% with five tax brackets. The maximum rate was increased to 52% in 1993, and the number of brackets increased to nine -- to take advantage of tax-base

is weaker than average, VAT revenues are likely to be lower than predicted by this model.

expansion.³³ There were exemptions for agricultural cooperatives, "young families"³⁴ with income from agriculture, income for social service payments, and income from production of consumer goods (25% exemption).

Relations between state and local government also affected the personal income tax. The sharing arrangement for revenues from the tax was subject to negotiation.³⁵ Since revenue from the personal income tax was becoming increasingly prominent, this tax base became subject to competition between central and local governments.

As with the profits and indirect taxes, tax evasion issues are again central. Incentives for cooperation between employer and employee to evade the personal tax increase with the difference between net wages received by employees and the gross cost of labor to the employer. At a normalized gross wage of 100, from the perspective of the employer, the addition of social security contributions (42 percent average in Bulgaria) and contributions to the unemployment and retraining fund contribution (7 percent) increase the gross cost of labor to 149. If a health fund payment is added, the employer's cost of labor increases to more than 160. From the employee's perspective, an

^{33/} A proposal for 1994 was a simplified structure with three marginal rates of 15 percent, 30 percent, and 40 percent.

^{34/} Defined as where one partner was less than 35 years old at the time of marriage.

^{35/} In 1992, the revenue from the tax was for example divided 70 percent to the municipality and 30 percent to the central government.

average tax rate of 12 percent yields a net wage of 88, as compared to a gross cost of labor of 160. At the maximum marginal tax rate, the difference is more than the gross wage. Such magnitudes leave considerable scope for bargaining between employer and employee regarding the sharing of gains from an employment relation outside the tax system. The illegality of such an informal employment relation also creates incentives for the employer to limit employment to family members and close trusted friends.

While in principle, the personal income tax was levied on incomes of self-employed individuals as well as employees, in practice the tax administration could not monitor the large number of small businesses, so enhancing evasion opportunities in the private sector, both for employees and the self-employed. However, in distinction to the profits tax and the turnover tax, the employer had an incentive to report the personal income tax obligations (and make the payment via withholding) of his employees. As we have observed, the personal income tax base was not subject to the tax-base erosion of the profits and turnover taxes.

6. TAX EVASION

Tax evasion is a recurring theme in the above consideration of taxation in the transition.³⁶ Under the tax system described above, opportunities for tax evasion are not uniform. The temptation is nonetheless to tax those who can be taxed. Wage and salary earners subject to withholding then bear the brunt of tax increases, while the self-employed who can conduct unreported cash transactions contribute less than a proportionate (or "fair") share of revenue. The tax system is in particular not horizontally equitable, insofar as employees and employers in the private sector have better opportunities for the evasion than those in the state and municipal enterprises. In a competitive labor market, wage differentials would capitalize the different effective tax rates, eliminating horizontal inequity. However, in the transition, labor markets tend not to be competitive; as we have noted, employers in the private sector prefer to hire family and close personal friends, for reasons of trust, to facilitate tax evasion. With employment conditions described by insider/outsider relationships, income discrepancies associated with "good" jobs in the private sector and "bad" jobs in the state sector can therefore persist -- where "good" and "bad" reflect tax evasion possibilities. The perceived inequalities can provide a justification of increased efforts at non-compliance.

³⁶ Evasion has been extensively studied. See Cowell (1990) and Tanzi (1993b).

It has been proposed that in the conditions of the transition, the effectively low tax rates in the private sector due to widespread evasion should be left as such, because of incentives for private sector development (for example, McKinnon, 1991). Yet whatever sympathy one may have with this position, because of expenditure needs of the transition and the erosion of traditional tax bases, the question may be not whether, but how to tax the private sector, and how to do so without unduly adversely affecting incentives for private sector development?

7. A TAX SYSTEM FOR THE TRANSITION?

The Bulgarian tax system introduced in the transition resembles that of western market economies, with regard to rates of taxation and types of taxes. However, neither the tax bases of the western market economy nor western standards of tax monitoring and compliance are present in the transition.³⁷ Recommendations for deterring tax evasion and increasing revenue collection can be readily proposed. A list would include: (i) improved tax administration, to increase coverage of the tax system and to increase the probability of detection of evasion; (ii) increased penalties to increase the cost of detection, and (iii) reduced tax rates to decrease the benefit of evasion. Each of these policies decreases the expected benefit of tax evasion.

^{37/} See also for comparison Shome and Escolano (1993), who review tax policies in the central Asian and transcaucasian states of the former Soviet Union, and find the tax systems inappropriate, but for reasons of inconsistency with long-run efficiency and equity, and short-term budgetary stability.

The policies have however different time dimensions of implementation. Improving the tax administration is a more prolonged task than changing the structure and rates of taxes and penalties.³⁸ In the short term, because of limited administrative resources, it may be possible to detect and discipline only a small number of many evaders. The administration will tend to focus on large tax payers, hence leaving smaller potential taxpayers to confront lower risks of detection. There are also limitations on penalties for evasion, in particular in the new post-communist democratic environment.

Given the administrative constraints and the propensities for tax evasion, what form should the tax structure take?³⁹ Beyond adherence to general principles of tax design,⁴⁰ is replication of the tax structure of developed market economies appropriate for the transition? The conditions of the transition suggest that in choosing a tax rate structure, regard be taken of a transition-Laffer curve that encompasses both supply incentives and tax evasion. That is, it is possible that lower marginal tax rates combined with publicized penalties may increase revenue.

^{38/} See Bird and Casanegra de Jantscher (1992).

^{39/} An answer to this question could be sought in models that specify revenue-maximizing tax and penalty structures in the presence of opportunities for evasion and probabilities of detection; see for example Polinsky and Shavell (1991) and Bebchuk and Kaplow (1993). In practice, the theoretical results are not readily translatable into concretely defensible, detailed specifications of tax and penalty rates, because of information required on individuals' factor supply elasticities and levels of risk aversion.

^{40/} See Shalizi et al. (1991), the World Bank (1993).

This possibility is of importance given the tendency to increase tax rates in attempts to increase revenue.⁴¹

In theory, a lowering of tax rates should *ceteris paribus* reduce tax evasion, since the expected benefit of evasion is reduced. However, potential taxpayers outside of the tax system may choose to remain so even at the lower tax rates, while revenues from those taxpayers who are "visible" and subject to the tax authorities' scrutiny decline because of the lower rates. On the other hand, rampant tax evasion reduces the scope for revenue loss from preexisting taxpayers, and individuals previously not paying taxes may be led by the reduced rates to comply with their tax obligations. It is therefore an empirical matter whether revenues rise or fall in consequence of reduced tax rates -- which of course underlies the Laffer curve.

Although data to calculate tax-revenue elasticities with respect to tax rates is not available, there is nonetheless a basis for a case that in the circumstances of the transition, a lowering of marginal tax rates from the neighborhood of 50 percent, or 40 percent, to modest maximum rates of 20-25%, would increase rather than decrease revenue. With the limitations in the tax administration's enforcement of private-sector tax compliance, the case rests on changing behavioral norms. Tax evasion is subject to a demonstration effect. Some part of the

^{41/} Buchanan and Lee (1982) note that governments may increase tax rates even when the Laffer curve dictates that revenue will as a consequence fall, because the fall in revenue will be realized in the long run, whereas increased revenue will be provided in the short run.

population may regard it as a civic duty to pay taxes,⁴² but if many individuals in the taxpayer's reference group are evading taxes, then sentiments of civic responsibility may become unsustainable. The ease of evasion has a further indirect effect on voluntary compliance: where there is no explicit communication among prospective taxpayers, each individual's perception of his opportunities for evasion nonetheless leads to the inference that similar opportunities confront other individuals, who following their individual self-interest evade tax payments; and individuals perceiving this may well do likewise. Particularly in an economy in transition, where civic sentiments are initially not pervasive and there is a distrust of government because of past experiences under socialism, such demonstration effects and matching behavior reinforce natural incentives for evasion.⁴³ With the prior socialist economic system as the frame of reference, individuals view high tax rates as arbitrary and unjust, and as confirmatory evidence that government continues to be rapacious. Low tax rates provide a counter to the lack of trust and the perception of "exploitation" by giving the impression of a more modest government.

This is then the case for a moderate and modest tax regime in the transition. High taxes are evaded. Lower taxes may also be evaded, but with a lower likelihood; and if the social stigma

^{42/} See Harberger (1993) on the moral dimension of taxation.

^{43/} For a formalization of this type of strategic matching behavior, see Joel Guttman (1987); for experimental evidence, see Guttman (1986)

of being subject to publicized penalties is a deterrent to evasion, this stigma is greater and the moral basis for evasion is diminished when it is moderate taxes that are evaded.

A modest tax structure is not in itself sufficient to expand the private-sector tax base. An associated impediment is individuals' perception of the time inconsistency of announced tax policies. That is, individuals may perceive a modest tax structure as a short-run strategy by the government to entice them into participation in the tax system. This is reinforced if as in the case of Bulgaria tax rates are routinely changed. A constitutional limitation on future tax increases provides the assurance of a maintained modest tax structure.⁴⁴

8. TAX BASE ADEQUACY AND CONDITIONALITY

We conclude with observations on the relation between tax base adequacy in the transition and conditionality for international-agency assistance. It is the supportive role of international institutions such as the World Bank and the International Monetary Fund to provide external financing that assists governments to manage balance of payments and budgetary expenditure pressures of the transition. The conditionality of policy-based lending typically requires compliance with a pre-agreed government budgetary program that specifies an upper limit to the government's budget deficit relative to GDP (on the case

⁴⁴ On the case for constitutional limitations that bound political discretion, see Brennan and Buchanan (1980) and Buchanan (1993).

Table 2: Differentials Between Projected and Actual Government Revenue for 1992

	<u>Percent Differential from the Projections</u>			
	Q1, 1992	Q2, 1992	Q3, 1992	Q4, 1992
TOTAL REVENUE	+ 1.3	- 9.9	-15.1	-1.0
TAX REVENUE	+ 6.0	- 2.9	-10.8	-7.0
Profits taxes	-20.0	+ 7.2	-50.8	-37.0
Nonfinancial	-31.6	-24.8	-38.3	-42.0
Financial	+ 3.7	+61.2	-69.1	-30.0
Turnover tax	+16.0	-12.2	-4.2	-5.0
Income tax	+60.6	+71.0	+102.0	+80.0
Customs duties	+64.3	+16.5	+30.7	+32.0
Excise taxes	-74.8	-55.9	-46.3	-78.0
Social security	-	- 6.1	+ 7.7	-2.0
NON-TAX REVENUE	+36.6	+36.6	+108.4	+52.0

Source: Ministry of Finance and IMF.

of Bulgaria, see the World Bank, 1993). The conditionality specifies macroeconomic targets and fiscal performance objectives, and is also a discipline on government, either directly, or by providing a force-majeure response to claimants for government transfers and subsidies. For the tax-base related reasons that we have set out, compliance with the budgetary conditionality requirements has in practice been difficult. If (or when) a program breaks down because of failure of compliance, the tax-base problems are exacerbated, since the government is also left without the foreign financing which is withdrawn as the penalty for non-compliance.

Table 2 compares budget projections and realized tax revenues in the four quarters of 1992. The differences are a reflection of the extent of uncertainty, or indeed, optimism in

revenue collection from the traditional primary tax bases. Revenues from profits taxes were below budgetary predictions (with the exception of the second quarter), as was turnover tax revenue. Revenue from the personal income tax was however significantly above budgetary projections. In the second and third quarters, aggregate revenue was respectively 10% and 15% below budgetary projections. In the fourth quarter, due mainly to the compounding increase in revenue from the personal income tax and customs duties, the differential between projected and realized revenue was reduced to 1%.

Since overly optimistic projections of government revenue are in themselves a reason for potential non-compliance with conditionality of assistance programs, accuracy in the computation of the revenue capacity of tax bases is important. Inadequate tax bases in the transition are a problem, but non-existent tax bases that were presumed in advance to be available compound budgetary problems when the projections form the basis for budget deficit conditionality targets. This then complements our conclusions regarding the tax regime. Not only should the tax regime be modest, but there should likewise be modesty in projections of what is feasible with regard to tax bases in the transition.

References

- Abel, Istvan, Arye L. Hillman, and David Tarr, 1992. "The government budgetary consequences of reform of the CMEA system of international trade: The case of Hungary," in *The Transition from Socialism in Eastern Europe: Domestic Restructuring and Foreign Trade*, edited by Arye L. Hillman and Branko Milanovic, The World Bank, Washington, DC, 1992, 277-293.
- Bebchuk, Lucian Arye, and Louis Kaplow, 1993. "Optimal sanctions and differences in individuals' likelihood of avoiding detection," *International Review of Law and Economics*, 13, 217-224.
- Bird, Richard M. 1992. *Tax Policy and Economic Development*, The Johns Hopkins University Press, Baltimore and London.
- Bird, Richard M. and Milka Casanegra de Jantscher, 1992. "The reform of tax administration", in *Improving Tax Administration in Developing Countries*, International Monetary Fund, Washington D.C., 1-15.
- Blejer, Mario I. and György Szapáry, 1991. "Market oriented reform and fiscal policy," in *Markets and Politicians: Politicized Economic Choice*, edited by Arye L. Hillman, Kluwer Academic Publishers, Dordrecht and Boston, 231-262.
- Bogetić, Željko and Fareed Hassan, 1993. "Determinants of value-added tax revenue: A cross-section analysis," *World Bank Policy and Research Paper Series No.1203*, October, The World Bank, Washington, D.C.
- Bogetić, Željko and Julia Varga, 1993. "Introducing value-added tax in the transition: The case of Bulgaria," The World Bank, Washington, D.C., Country Department One, mimeo.
- Brennan, Geoffrey and James M. Buchanan, 1980. *The Power to Tax*, Cambridge University Press.
- Buchanan, James M., 1993. "How can constitutions be designed so that politicians who seek to serve 'public interest' can survive?," *Constitutional Political Economy*, 4, 1-6.
- Buchanan, James M. and Dwight R. Lee, 1982. "Politics, time, and the Laffer curve," *Journal of Political Economy*, 90, 816-819.
- Burgess, Robin and Nicolas Stern, 1993. "Taxation and development," *Journal of Economic Literature*, 31, 762-830.

- Casson, Mark, 1993. "Cultural determinants of economic performance," *Journal of Comparative Economics*, 17, 418-442.
- Cowell, Frank, 1990. *Cheating the Government*, MIT Press, Cambridge, MA.
- Easterly, William and Klaus Schmidt-Hebbel, 1991. "The macroeconomics of public sector deficits: A synthesis", *World Bank Policy, Research and External Affairs Working Paper Series*, No. 775, October.
- Fane, George, 1993. "Trade policy and government revenue in the transition: Bulgaria," Australian National University.
- Gelb, Alan H., Erika Jorgensen, and Inderjit Singh, 1992. "Life after the Polish big-bang: Episodes of preprivatization behavior," in Arye L. Hillman and Branko Milanovic, 1992, editors, *The Transition from Socialism in Eastern Europe: Domestic Restructuring and Foreign Trade*, The World Bank, Washington, D.C., 197-214.
- Gilles, Malcolm, Carl S. Shoup, and Gerado P. Sicat, 1990. Editors, *Value-added Taxation in Developing Countries*, The World Bank, Washington, D.C.
- Guttman, Joel, 1986. "Matching behavior and collective action: some experimental evidence," *Journal of Economic Behavior and Organization*, 7, 171-198.
- Guttman, Joel, 1987. "A non-Cournot model of voluntary collective action," *Economica*, 54, 1-19.
- Harberger, Arnold C., 1993. "The other side of tax reform," in *Policymaking in the Open Economy*, edited by Rudiger Dornbusch, Oxford University Press.
- Hillman, Arye L., 1991. "Some problems of statistical measurement of economic activity in the transition from planned socialism, in *Economies in Transition: Statistical Measures Now and in the Future*, edited by Petr O. Aven, International Institute for Applied System Analysis, Laxenburg, Austria, 69-78.
- Hillman, Arye L., 1994. "The transition from socialism: An overview from a political-economy perspective," *European Journal of Political Economy*, forthcoming.
- Hillman, Arye L. and R. Kyle Peters, 1993. "The interface between the private sector and state enterprises," World Bank, Washington D.C.

- McKinnon, Ronald I., 1991. "Financial control in the transition from classical socialism to a market economy," *Journal of Economic Perspectives*, 5, 107-122.
- Newbery, David and Nicolas Stern, 1987. Editors, *The Theory of Taxation for Developing Countries*, Oxford University Press.
- Polinsky, Mitchell A. and Steven Shavell, 1991. "A note on optimal fines when wealth varies among individuals," *American Economic Review*, 81, 618-621.
- Shalizi, Zmarak et al., 1991. *Lessons of tax Reform*, The World Bank, Washington, D.C.
- Shome, Parthasarathi and Julio Escolano, 1993. "The state of tax policy in the Central Asian and Transcaucasian newly independent states (NIS)", *IMF Paper on Policy Analysis and Assessment*, International Monetary Fund, July.
- Tait, Alan A., 1988. *The Value-Added Tax: International Practice and Problems*, International Monetary Fund, Washington, D.C.
- Tanzi, Vito, 1993a. "Financial markets and public finance in the transformation process", in *Transition to Market: Studies in Fiscal Reform*, edited by Vito Tanzi, International Monetary Fund, Washington, D.C.
- Tanzi, Vito, 1993b. "A primer on tax evasion", *IMF Working Paper, Fiscal Affairs Department*, International Monetary Fund, Washington, D.C.
- Tanzi, Vito and Milka Casanegra de Jantscher, 1987. "Presumptive income taxation: Administrative, efficiency, and equity aspects," *IMF Working Paper 87/54*, International Monetary Fund, Washington, D.C.
- World Bank, 1993. *Bulgaria: Public Finance Reforms in the Transition*, Report No.1273, Washington, D.C., October.

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