Georgia State University ScholarWorks @ Georgia State University

Economics Faculty Publications

Department of Economics

1999

Tax Systems in Transition Economies

Jorge Martinez-Vazquez Georgia State University, jorgemartinez@gsu.edu

Robert M. McNab Naval Postgraduate School, rmmcnab@nps.edu

Follow this and additional works at: http://scholarworks.gsu.edu/econ_facpub



Part of the Economics Commons

Recommended Citation

Jorge Martinez Vazquez and Robert McNab. Tax Systems in Transition Economies in W. Bartley Hildreth and John Richardson (eds.) Handbook on Taxation, New York: Dekker Publishing, 911-963,1999.

This Book Chapter is brought to you for free and open access by the Department of Economics at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Economics Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

Handbook on Taxation

edited by

W. Bartley Hildreth

Wichita State University Wichita, Kansas

Iames A. Richardson

Louisiana State University Baton Rouge, Louisiana



ISBN: 0-8247-0197-6

This book is printed on acid-free paper.

Headquarters

Marcel Dekker, Inc.

270 Madison Avenue, New York, NY 10016

tel: 212-696-9000; fax: 212-685-4540

Eastern Hemisphere Distribution

Marcel Dekker AG

Hutgasse 4, Postfach 812, CH-4001 Basel, Switzerland

tel: 44-61-261-8482; fax: 44-61-261-8896

World Wide Web

http://www.dekker.com

The publisher offers discounts on this book when ordered in bulk quantities. For more information, write to Special Sales/Professional Marketing at the headquarters address above.

Copyright © 1999 by Marcel Dekker, Inc. All Rights Reserved.

Neither this book nor any part may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, microfilming, and recording, or by any information storage and retrieval system, without permission in writing from the publisher.

Current printing (last digit) 10 9 8 7 6 5 4 3 2 1

PRINTED IN THE UNITED STATES OF AMERICA

Tax Systems in Transition Economies

Jorge Martinez-Vazquez and Robert M. McNab Georgia State University, Atlanta, Georgia

I. INTRODUCTION

One-quarter of the world's population lives in countries going through the largest economic experiment in history, the transition from centrally planned to market-based economic systems. New market institutions coexist with the remnants of the past economic systems, providing a unique challenge to economic reform. The governments of countries with transitional economies have been carrying out simultaneous reforms of legal, political, and economic institutions, thus there is hardly any aspect of economic policy that is not or has not been on the economic reform agenda of countries in transition (CITs). Economic reforms range from the privatization of markets to decentralization of government finances to dismantling the regulatory influence of the state. In most cases restructuring CIT economic systems has brought abrupt declines in real economic activity, considerable underemployment, and sharp cuts in government services. It is within this difficult environment that the reform of CIT tax systems has been taking place.

Effective reform of CIT tax policies and tax administrations has been widely recognized as a key element to the success of the economic transition experiment. All CITs have been involved in active tax policy reform. Some started early, in the late 1980s, and some waited until 1993–1994. Most of the CITs have also initiated reforms of their tax administration systems, but perhaps with less enthusiasm. This process of reforms has also brought the largest experiment in tax policy and tax administration design in economic history.

The goal of this chapter is to assess current tax reform in CITs. Although the process of reform is far from over, many significant developments have already taken place and it is already possible to learn from mistakes and early successes and to apply the knowledge to other countries.²

The rest of the chapter is organized as follows. We start in Section II by reviewing the tax systems in centrally planned economies (CPEs).³ The vast majority of revenues came from profit taxes, turnover taxes, and payroll taxes paid by the state enterprise sector. The enduring legacy of tax systems under central planning is covered in Section III. Many of the failures, problems, and idiosyncracies of the reform efforts during the transition can be traced to the past, where these tax systems started. The interventionist tradition of socialist planning has been hard to shake, and so has the tradition of negotiating tax burdens or customizing the tax system (even for individual enterprises). The fact that taxes were for the most part hidden from the population and that there was no system of self-reporting or voluntary compliance but rather an atmosphere of distrust toward the public sector, has been partly to blame for the poor revenue performance of transition tax systems. The undeveloped tax administrations of CPEs have been of little help. The lack of tax administration capacity represents perhaps the most significant of the troubling legacies from the past.

Section IV examines the general direction and timing for tax reform as viewed by western economists, who at the beginning of the transition gave advice to CIT governments in different capacities. The fundamental question at that time was whether or not CITs should adopt full western-style tax systems or instead adopt transition strategies that would be simpler to administer but also more distortionary. Several factors influenced this advice, including the institutional and administrative constraints faced by CITs, perceptions about the most appropriate timing for different aspects of the reform, and the lessons that could be learned from recent tax reform efforts in both developed and developing countries. Section V examines the actual tax policies that have been adopted by CITs over the past four to six years. These reforms have been wideranging, from the introduction of value-added taxes (VATs), excise taxes, and import levies, to radical reform in individual and corporate income taxation. On the whole, early advice offered by western experts was only partially heeded, and at times completely ignored, but in the continuous process of reforms, often continuous to a fault, there has been a convergence toward sensible tax structures. This is a judgment tempered by the fact that, as we will see, many problems remain in individual countries and in particular taxes. Where progress has been markedly slower is in the reform and modernization of tax administrations. There are bigger and deeper problems in this area of CIT tax systems, and solution will require significant investment of resources and time. Nowadays, the successful reform of the tax system in CITs is in most cases still compromised by antiquated and inefficient tax administrations. The last section of the chapter offers a summary of the main issues and some concluding thoughts.

II. THE TAX SYSTEM OF SOCIALIST PLANNED ECONOMIES

A. Overview

Most planned economies in Eastern Europe had tax systems based on the system of taxation in the Soviet Union (Bakes, 1991). Some differences existed between federal and unitary states and also in those countries in which taxation was used early on as a tool for economic development, such as in Poland in 1981 and Hungary in 1988. Before the transition, fiscal revenues in CPEs came largely from three taxes placed on the state enterprise sector: the profit tax, the turnover tax, and the payroll tax. Together these taxes accounted for almost 80 percent of tax receipts in Czechoslovakia and Poland and about 50 percent in Hungary. In a comparison of tax revenue structures between CPEs and western market economies, Kodrzycki (1993) shows that these planned economies raised almost four times more revenue than western European nations from the enterprise profit tax, while only raising half as much from individual income taxes. Taxes were levied primarily on state-owned enterprises due to the emphasis on industrial production and the ability of the state to manage production and cash flows. The private sector was commonly outlawed and property taxes did not exist.

According to Ickes and Slemrod (1991), central planners did not create large enterprises compared to western economies, however, because there was an absence of small enterprises, tax administrators did not need to develop the capacity to tax a large number of individuals or small enterprises. Furthermore, revenues were concentrated in the largest enterprises, so the primary focus of the collection effort was directed at these enterprises. Services, particularly trade and distribution, remained underdeveloped and highly constrained. Although individual taxation was relatively unimportant, the state played a major role in mediating between enterprises and households through subsidies and transfers, spending at times more than half of the gross domestic product (GDP) in this endeavor. On the other hand, administrative ceilings on wages were, in effect, 100 percent taxes on individual income.

Although tax administration was underdeveloped in CPEs, several special features of these planned economies facilitated tax administration and enforcement (Tanzi, 1993; Balcerowicz and Gelb, 1995). First, the relatively small number of taxpayers meant that the state could conduct a reportedly 100 percent audit each year to ensure compliance (Kodrzycki and Zolt, 1994). Second, restrictions on payment methods and the monopolistic role of the state banks facilitated

administration and enforcement. Enterprises had to settle their accounts through the state banking system, providing the state with an effective mechanism to monitor cash flows and collect taxes. Third, the state could and often did retroactively adjust administrative procedures, exemptions, deductions, and rates to meet its perceived revenue needs. Finally, the state served a dual role as the owner of enterprises and as the tax collector; thus there was little opposition to otherwise controversial tax measures.

Two major periods may be identified by taxation systems in CPEs. Under "classical socialism," the taxation system was for the most part just another element of the monetary reflection of the real economy, much like the case for prices and wages (McLure, 1990). Real resources were directly allocated through the plan and there was no need or purpose to use taxation to affect the allocation of resources. Under what Kornai (1992) has termed "reform socialism," for example, after 1968 in Hungary or after 1987 in the Soviet Union, the tax system was used as an indirect lever to collect revenues and also to influence economic decisions. Nevertheless, reform socialism did not produce substantial changes in the turnover, payroll, or profit tax. Any uniform or across-the-economy incentive effects from taxes tended to be muted because of the continued ad hoc negotiated nature of most taxes. In fact, the primary method to determine an enterprise's tax liability was the negotiation process. Large or strategically important enterprises were able to negotiate relatively more favorable tax liabilities than other enterprises. The description below of tax structures in CPEs covers both periods of classical and reform socialism.

B. Turnover Taxes

Turnover taxes applied mainly to consumer goods and to some services. They were generally single-rate levies differentiated by commodity, and at times by type of enterprise. Turnover taxes were collected either at the retail or wholesale level, and were often used as a mechanism to regulate prices and to support the allocation of resources set in the plan. The tax base was usually the differential between the controlled retail price and the producer cost, excluding margins for wholesalers and retailers. In practice, several methods were used to calculate the turnover tax liability: (1) as the residual from the difference between the retail and producer prices; (2) as a fixed amount per unit; or (3) as a percentage of the retail price. The residual method was the most common approach. Central planners worked with a pricing system by which the final selling price included a markup for the turnover tax, and most consumers did not perceive the turnover tax as a separate charge. In those cases in which the controlled retail price was less than the producer price, the turnover tax was negative, reflecting the subsidy to the consumer. Because the government fixed most prices, some authors have rightly argued that turnover taxes in planned socialist economies were actually not taxes but represented predetermined margins, or a residual wedge between retail and producer prices (Tait, 1988; Gandhi and Mihaljek, 1992).

C. Payroll and Wage (Income) Taxes

All wage and payroll taxes were collected (withheld) at the enterprise level. In most cases, gross wages, including some fringe benefits, formed the base of payroll and income taxes. Allowances or deductions from the tax base were negligible or nonexistent. Employers often offered workers a net-of-tax wage. Wage policy was used to influence employee behavior, but other policies such as fringe benefits, access to good supplies, and restrictions on residential mobility likely had a greater impact on employee behavior. The main purpose of wage and payroll taxes in CPEs under classical socialism appears to have been to gain flexibility in balancing aggregate income with aggregate expenditures, otherwise income taxes could have been eliminated and equivalent revenue collected from enterprise surpluses by paying workers net-of-tax wages.

Another unique feature of CPEs was the use of taxes to regulate the size of the wage bill

of individual enterprises, or more generally, the use of available funds for employee compensation. First introduced by Hungary in 1968, the excess wage tax (EWT) was levied on the differential between the actual and "normative" wage bill, where the normative wage bill was usually defined as the product of a multiple of the minimum wage and the number of employees. The imposition of an EWT was an attempt to limit the growth of the wage fund, regardless of labor market conditions, however, in the prereform period the effectiveness of the EWT was limited because of ad hoc exemptions, negotiated rates, and taxation of other capture of enterprise net profits. This tax was nevertheless an important precedent, since many transitional governments have adopted an EWT at some time during the transitional period.

D. Profit Tax

The profit tax was by far the most important tax in the CPEs. The profit tax was used not only to accumulate and centralize revenues but also quite often to regulate enterprise income (Bakes, 1991). While the most common elements in the tax base were gross profits and property holdings, the tax base varied industry by industry, and in some cases enterprise by enterprise. Deductions and exemptions were ad hoc in nature, nor was it uncommon to have differentiated profit tax rates by industry (sometimes by enterprise). Tax rates were typically set at 50 and 60 percent. Some countries had progressive tax structures with marginal rates as high as 100 percent (Gandhi and Mihaljek, 1992), however, the actual liability of the enterprise was more often the product of negotiation, especially for this tax, than of the actual application of tax law.

Since the state acted not only as tax collector but also as exclusive owner of enterprises, profits were actually syphoned out of enterprises in various combinations of exacted dividends and profit taxes. The combination was for all purposes irrelevant because the state actually customized the final transfer of funds for each enterprise at a predetermined level.

The use of the term *profit tax* in a CPE may have been quite misleading. The definition of gross profits in a CPE was markedly different from its definition in a market economy. In CPEs, profits were at times defined as a fixed percentage of production and distribution expenses. Most of the time, depreciation rules were poorly defined and capital was assumed to have an unrealistically long life, but at the same time, allowing state-owned enterprises to deduct full depreciation expenses would have seemed illogical since the rule was that the state provided the initial capital without any obligation for repayment. The measurement of the profit tax base was further confused by attempts under reform socialism to increase the efficiency of capital utilization. Several CPEs followed a policy of mandating a rate of return on the initial capital investment, regardless of the profitability of the enterprise. ¹¹

E. Other Income Taxes

Taxes on income other than enterprise wages and profits raised relatively little revenue in CPEs. These were largely schedular taxes falling on wages and salaries earned in the private sector and on professional fees and royalties. Individual income taxes were applied to performing artists, sportsmen, writers, and some small retailers (Gandhi and Mihaljek, 1992). The base for these taxes was net income adjusted for a minimum exemption, other personal allowances, and some expenses. Tax rate schedules were highly progressive and designed to penalize economic activity outside the state-socialized sector. Tax rates depended on how "socially undesirable" each activity was deemed (Owens, 1991a). Kodrzycki (1993), for example, points out that Bulgaria's general personal income tax rate prior to reform was only 14 percent, but the rate rose to 50 percent for artists and scholars and to 85 percent for private entrepreneurs.

Across countries, the relative importance of individual income taxes depended, of course, on the importance of private (nonstate) activities. While some CPEs allowed limited private activity in the liberal professions or small enterprises, stricter regimes controlled the activities even of artists, composers, and writers, and the private sector did not exist. Income from capital

was relatively uncommon in CPEs. Those countries that permitted private property had a schedular tax for rental income, most often with confiscatory rates. Interest income was typically allowed only on savings accounts in state banks and on government bonds, and the government usually controlled the rate of return that implicitly taxed savings (Mutén, 1992).

F. Import Taxes

Customs tariffs were imposed on goods imported from countries outside the Council of Mutual Economic Assistance (CMEA). Tariff revenues typically represented a small portion of total tax revenues since planning authorities preferred quantitative restrictions over nominal tariffs to regulate imports. Trade within the CMEA was basically bilateral with the Soviet Union. Typically, eastern European countries had favorable terms of trade with the Soviet Union. These countries could import raw materials at lower than internationally competitive prices from the Soviet Union and export manufactured goods to the Soviet Union at higher than internationally competitive prices. The wide belief is that most CMEA prices bore little relation to international prices or production costs, including opportunity costs. Involvement in—and dependence on—the CMEA differed across countries, so that Bulgaria, for example, relied on the CMEA more than Hungary. In Bulgaria, non-CMEA imports were merely 1 percent of GDP, while taxes and subsidies from the CMEA price equalization mechanism represented 4 percent of GDP (Bogetic and Hillman, 1994).

1. Implicit Taxation

The existence of implicit taxation was mentioned in the previous discussion but it is important to address it separately. Implicit taxation in CPEs was as common as explicit taxation. ¹² Enterprises were often allowed to mark up prices for labor and other production costs that dictated the size of the enterprise's surplus. The state, as owner of the enterprise and resources, could then capture part or all of this surplus. The state also had the means to set input prices differently for each economic sector and to capture any price differentials. As Kopits (1991) points out, administratively set wages were the equivalent of income taxes implicitly set at highly progressive rates. The implicit rates were higher the more set wages deviated from marginal productivity. Because the state tightly controlled interest rates and capital ownership, implicit taxation was also imposed on saving and investment throughout the economy. By rationing the supply of consumer goods, the state directed disposable income into savings accounts, where it was implicitly taxed due to artificially low interest rates. ¹³

III. THE LEGACY OF PLANNED SOCIALISM STILL PLAGUES THE TRANSITION

The values and practices of the past tax system have dramatically defined the path of tax reform in transition countries. Several particular features of tax systems in socialist economies need to be highlighted to better understand where tax reform stands today in transition economies and what difficulties lie ahead.

A. An Interventionist's Tradition and a High Share of the Public Sector in GDP

The role of taxes in CPEs under classical socialism was to raise revenues for public expenditures and support the monetary side of the plan. This role was further expanded under reform socialism to affect the allocation of resources. Taxes were also used by the state to appropriate surpluses in its role as the only owner of capital (Hogan, 1991). The multiple uses of taxes

reflected the state's strong intervention and control of society¹⁴ and the economy. As we will see below, after an initial decrease, the use of tax laws for economic and social engineering has been on the increase in the transition, but on a much lower scale.

On the surface, the relative size of the public sector in CPEs was high but not disproportionate. Kodrzycki (1993) shows that for 1988 and 1989 the average share of tax revenues to GDP for CPEs was 44 percent, only three percentage points higher than the average in the European Community. This figure, however, is misleading, because of the pervasiveness of government intervention in CPEs. Besides the different forms of implicit taxation already discussed, governments used a wide variety of instruments to include all sorts of nontax revenues, "off-budget" activities, and extrabudgetary funds in order to achieve planning targets and pursue government policies. The separation between the government and nongovernment sectors was often murky. For example, state enterprises were in many cases responsible for the provision of public social services and capital infrastructure. ¹⁵ Cross-subsidies were another major form of hidden government intervention. A substantial portion of budget subsidies to particular consumer groups, such as households or farmers, were financed by the enterprise sector without explicitly appearing in the budget.

CITs inherited the demands of a modern social system, not very different from those in western European economies, but with a comparatively inadequate system of revenue collection. Despite a strong policy emphasis on constraining fiscal spending (Easterly and Rebelo, 1993; Balcerowicz and Gelb, 1995), total public expenditures have remained high throughout the transition, ranging between 50 and 60 percent of GDP. Keeping fiscal deficits in check has required that transitional governments make a significant tax effort, but the causation has also been in the other direction, from taxes to expenditures. A case in point is discussed by Aslund (1992) for Hungary and Poland. Hungary's high taxes largely began in the early reforms before the demise of communism, and the better-performing tax system allowed or induced government to keep expenditures high. Poland, on the other hand, reformed the tax system later in transition but drastically cut public expenditures first. Reducing the size of the public sector in transitional economies has had a direct influence on the quality of tax reform. Governments that have been able to reduce the size of the public sector have not been forced as often to implement stopgap measures which, while perhaps bolstering collections, may sacrifice other worthwhile objectives of tax reform.

B. Customized and Negotiated Taxes

The tax system of CPEs lacked transparency and in many cases liabilities were subject to negotiation. Taxpayers did not know what other taxpayers (even those with similar circumstances) paid. Negotiation meant that generally there was little systematic relationship between statutory tax bases and actual tax liabilities. Negotiation constituted part of the soft-budget constraint facing firms and it virtually protected them from bankruptcy risk (Gray, 1991; Kopits and Offerdal, 1994; Owens, 1991b). On the other hand, the policy of keeping consumer prices stable while continuously changing producer prices often left firms unable to pay their liabilities immediately (Tait, 1988); this situation also required negotiations. As we saw in the discussion of turnover and profit taxes, CPEs commonly used tax rates to determine prices and control surplus (profit) margins of enterprises. Bargaining and negotiation were not only about liability but often about which taxes and subsidies firms were subject to (Newberry, 1990). Each country used a large number of turnover tax and profit tax rates and subsidies to achieve these objectives. The negotiations determined how much was left to alter workers' salaries, pay for additional capital, or undertake social expenditures in the community. This proliferation of rates, ad hoc exemptions, and negotiated liabilities, clearly meant that the tax systems lacked transparency.

The mixed role of government as tax collector and as owner of tax-paying enterprises complicated things. As mentioned, profit taxes were also used to capture income for the state in its role as owner of capital resources. Actually, taxes and other charges approximating rents, interest charges, and dividends were used interchangeably by the governments of CPEs to raise

public revenues.¹⁷ In addition, as owner of capital resources, the state had a free hand in levying taxes or distributing capital income to itself retroactively.

The legacy of customized taxes and negotiated payments has continued to limit the efficacy of tax reform and tax administration efforts in CITs. The dual role of the state as tax collector and owner of enterprises has been a contributing factor to poor revenue performance in those CITs in which privatization has lagged behind. Newly established and privatized enterprises continue to lobby the state for specific tax relief, and often choose to accrue tax arrears as a negotiating instrument. Until recently, governments in CITs had not been able to resist these pressures and compromised tax collections. In the case of large state enterprises the legacy of negotiation continues for the most part to undermine the tax reform effort in many CITs. ¹⁸ The large arrears and negotiated payments of large enterprises in the Russian Federation have figured prominently in the international media over the past year, however, the problem of arrears is significantly more complex. It is discussed further in Section V.

C. Taxes Hidden from the Population and Lack of Tradition with Voluntary Compliance

In CPEs the populations at large were neither aware of taxes nor had any perceptions of tax burdens, since very few individuals actually filed tax returns or paid taxes during transactions (Kodrzycki, 1993; Tanzi, 1994). As we have seen, the personal income tax was basically a final tax withheld at the source by employers. Turnover taxes, collected at the distribution level, were hidden from public view. The same was true, of course, of profit taxes levied on state enterprises. The legacy of tax systems in CPEs has included a population totally unaccustomed to paying taxes. It is not surprising that as reform progressed and the average citizen was explicitly taxed for the first time, there was considerable taxpayer resistance and a propitiatory environment and culture for tax evasion.

D. Excess Burdens

Planned economies for the most part had an absence of conventional tax distortions or excess burdens (McLure, 1991a, b). ¹⁹ In a planned economy, resources were allocated according to a state-devised plan. Practically all decisions regarding investment were also made by the planning agency. Enterprises were restricted to activities outlined in their founding charter. This arrangement left enterprises unable to react despite the nonuniform taxation of different economic sectors. Prices, and therefore taxes, ultimately were used only to ration demand. ²⁰ Tax systems also were characterized by a lack of certainty and stability, with tax rates continuously changing, therefore enterprises, even if free to react, could not reasonably anticipate the tax system's impact on any activity. In short, taxes in CPEs generally had not distortionary effects because taxpayers could make no decisions affecting them.

The absence of excess burdens was manifest in other ways. Taxation had little or no impact on risk taking because private initiative was severely repressed. Taxation also had minimal impact on savings. Many forms of saving or wealth were not common, partially because they were not allowed by law. Furthermore, households were not encouraged to acquire savings or personal wealth because both were viewed as antagonistic to socialist principles. The lack of conventional economic effects associated with taxation in market economies was perhaps also demonstrated by the fact that tax legislation typically was viewed as less important than other legislation on wages, prices, and production (Gandhi and Milhaljek, 1992).

There were exceptions to the absence of excess burdens. In countries such as Hungary, for example, early liberalization of the economy occurred and taxes began to be used as instruments to pursue the designated goals of the economic authorities. Another exception may have been the impact of EWTs on the labor-hoarding practices of enterprises.²²

Excess burden losses, or the distortions introduced by the tax system in the economy, are often not understood by politicians in charge of tax reform. The lack of concern with

efficiency issues in the tax systems of CPEs, to a large extent justified, created an attitude toward tax design that has come to haunt the tax reform process in the transition. As we see below, very few CITs have been able to internalize the lesson learned elsewhere over the past two decades that nonneutral tax measures can do much more harm than good for the efficient allocation of resources and for economic growth. Central planning was completely antithetical to this general conclusion.

E. Taxes and Income Redistribution

Equality in the distribution of income was, at least nominally, a fundamental objective of CPEs; however, the objective of income distribution did not figure prominently in CPE tax policies because the planner determined wages and income, and at the same time, private ownership of wealth was practically nonexistent. In short, in a system in which incomes were directly controlled, taxes were unnecessary to equalize income across individuals (Newberry, 1990; McLure, 1991b; Owens, 1991b). Even if the policy maker explicitly wanted to pursue equity or distributional objectives with tax policy, it would have been quite impossible. Obtaining a distribution of current tax burdens would not have made much sense because there was not one common or stable set of applicable tax rules.

It was not a well-kept secret, however, that real incomes may not have been very equally distributed. Although wages were administratively set with small differences in rates and social services were supposedly provided free to everyone, it was *access*, not income, that determined an individual's consumption possibilities, and access, it appears, was not at all equally distributed. ²³

Regardless of differences in real incomes due to differences in access, a legacy from the past system may have been expected to be a belief in the desirability of compressed nominal wage and income structures. As the transition to a market economy continues, the dispersion in nominal wages and income has invariably increased. During the transition, policy makers and tax administrators have expressed concerns about the growing income disparity, ²⁴ but as we will see below, distribution objectives have played a small role in CIT tax reform efforts so far.

F. Undeveloped Tax Administration

Perhaps the most conspicuous feature of tax systems in CPEs was an unsophisticated tax administration system. The majority of tax inspectorates were local organs and were primarily engaged in cash management (Tanzi, 1991). Tax inspectorates were organized by tax, and inspectors were often assigned to specific enterprises. Compliance was ensured due to the ability of the tax inspector to track cash flows through the state banking system. Auditing was a routine adding and checking function. Since production, prices, and wages were known parameters, audit tasks were relatively simple and there was no need to use third-party information. Tax arrears were mostly anticipated and routinely occurred when the state set the controlled retail price below production costs. In addition, the centralization of economic activity allowed tax administrators to focus primarily on a small number of large enterprises.

An unsophisticated tax administration apparatus was logically rational in the institutional environment of CPEs, however, this legacy left CITs dramatically unprepared to enforce taxes once the institutional environment switched to that of a market economy with private property, multiple payment systems, and a manifold increase in the number of taxpayers.

G. Public Distrust in Government Institutions

An undeveloped tax enforcement apparatus was only part of the troubled legacy in tax enforcement. The failure of economic policies in CPEs and the privileged status of those in power

bred widespread cynicism among the populations. In CPEs, there was a widespread belief that the bureaucracy was inherently corrupt (Kornai, 1990). This cynicism may have been more pronounced in those countries in which the population felt occupied by a foreign power—the Soviet Union. At any rate, cynicism kept pace with the rapid growth of the unofficial, or underground, economy, in which goods and services were available outside the government's purview. The combination of the public's belief in corrupt government, no history of voluntary taxpayer compliance, and the growing importance of the underground economy left fertile ground for tax evasion on transition economies (Ickes and Slemrod, 1991; Newcity, 1991).

IV. THE GENERAL DIRECTION FOR REFORM

A. Designing a Tax System for Transition or Adopting a Modern System

The transition to a market economy posed hard economic questions to the new governments. In the fiscal area a fundamental question posed early on was what type of tax structure to adopt. The main choices were to replicate a modern tax system or to develop a tax system that could be more optimally adapted to the peculiarities of transition economies. The first approach to tax reform in transition economies could be described as a "big-bang" approach, putting in place a tax system patterned after those in market economies. The second approach represented a more evolutionary or stepwise reform, gradually moving toward an ideal structure, but in the interim being more realistic about administrative and institutional constraints and also being concerned about the macroeconomic implications of substantial fiscal deficits that may arise from too ambitious a pace of reform.

From the start of the transition a goal shared by many CITs was to attain a modern tax system not unlike those in Western Europe or in North America. This desire was even stronger in those transition countries hoping to join the European Union (EU), however, also early on, international experts warned against the dangers of mere replication of western tax systems. McLure (1991b) and Tanzi (1992, 1993a, 1994) give several reasons why CITs should not duplicate western tax systems. In the first place, some western nations have poor tax policies. Transition countries should actually learn from these mistakes, not imitate them. More important, western economic systems characterized by stable prices and employment differed considerably from those in CITs. Similarly, the institutional framework of western countries included complex legislation and accounting rules that were very different from those that CITs had inherited from the previous regime. It was clear that these differences should be reflected in the respective tax systems. In addition, merely legislating a western tax system is very different from enforcing it. CITs had to consider the limited capabilities of their tax administrations vis-à-vis those in developed nations (Kodrzycki and Zolt, 1994; McLure, 1995a, b). Because the institutional background, economic structure, and administrative capabilities also differed among CITs, expert advice emphasized the need to develop tax systems that adapt to meet the particular needs of each country in transition (Bird, 1992; Bogetic and Hillman, 1994).

B. Tax Reform Constraints

What type of tax system to adopt during the transition was in part determined by the constraints facing policy makers. The transitional environment, on average, was not conducive to radical transformation of the tax system. Rampant inflation, industrial decline, increasing inequality, and a rapid increase in criminal activity all presented obstacles to the tax reform effort, but important institutional constraints, including the necessary reduction of the role of the state, the decline in production among state-owned enterprises, the weakness of tax administration, the lack of modern or western accounting practices, the lack of a tradition of voluntary compliance, and the threat of massive evasionary behavior overwhelmingly tipped the advice in favor or evolutionary and country-specific tax reform efforts in transitional economies. Ignoring the specific transitional environments would only exacerbate the anticipated problems in revenue

performance (Hussain and Stern, 1993; Kopits and Offerdal, 1994; McLure, 1991b; Owens, 1991b; Tanzi and Shome, 1993; Shome and Escolano, 1993; Gray, 1991). On the other hand, there was not much pressure to harmonize tax systems across CITs. If anything, their economies were now moving apart. While competition for foreign direct investment, for example, would impose constraints on how far a country's tax system could deviate from the norm of those in neighboring transition countries, there was little pressure to strive for a uniform system across transition economies. The only exception was the significant continuation of trade in Russia and the other former Soviet republics (excluding the Baltic States). All of these countries actually adopted an *origin method* for the VAT for trade among themselves, and the more conventional *destination method* for trade with other countries. Those CITs desiring to enter the EU adopted EU-style VATs, probably prematurely.

Was the advice offered by western experts heeded? Did CITs opt for interim tax systems better adapted to their constraints rather than putting into place some carbon copy of a model western tax system? As we will see in Section V there were a variety of approaches, which at times came close to transplanting western tax systems. For the most part, however, CITs embarked on a reform process that explicitly recognized at least some of the constraints they were facing.

C. The Timing of Tax Reform

Was there a most desirable timing for the reform of tax systems in CITs? Even though there was general consensus on the desirability of a more evolutionary approach to tax reform in CITs, there were also risks associated with this approach. First, a slower and more evolutionary approach to tax reform would likely make comprehensive tax reform more difficult to implement in the future. As privatization and market reforms proceed, vested interests would emerge independent of the state that could slow down or block fundamental reform. This problem was evidenced, for example, by large quasi-private entities in Russia, where these vested interests began lobbying (a continuation of the old negotiation culture) for specific tax relief and may have been successful in delaying important aspects of the reform. The second risk was that continuous tax reform would deprive CITs of the stability and certainty needed to stimulate domestic entrepreneurship and to attract foreign investors. Continuous changes in the tax structure would likely provide more opportunities for tax evasion and confuse tax administrators and honest taxpayers alike (McLure, 1991a; McLure, Martinez-Vazquez, and Wallace 1997). As we will see in Section V, this risk of too much instability in the tax structure creating an uncertain environment did actually materialize in many CITs.

D. The Content of a Transition Tax Structure

What should be the nature of an interim transition tax system? Tax experts were unanimous on at least one recommendation: give first priority to the improvement and modernization of the tax administration and to the introduction of western accounting practices. It was also widely recognized, however, that effective administrative reform would take considerable time to permeate the tax system. In reality, the focus and first priority in most CITs was on tax policy reform, leaving behind, sometimes a very low priority, the reforms of the accounting system and the modernization of tax administration. These two issues are discussed below.

The advice of tax experts on the substance of a transition or interim tax structure was based on the recognition of the different types of constraints and limitations present in the transition. Emphasis was placed on the adoption of taxes that could be enforceable (Ickes and Slemrod, 1991) and those with the breadth to reduce the volatility of tax revenues (Hussain and Stern, 1993). In this vein, Kornai (1990) advocated a tax system for Hungary that would exclude a western-style personal income tax because attempts to enforce a personal income tax could require the revival of a police state. Kornai advocated a system with four main taxes: (1) a linear consumption tax, (2) a linear payroll tax, (3) a linear profit tax, and (4) customs

duties. McKinnon (1991), Cnossen (1991), and Hussain and Stern (1993) suggested the early adoption of a western-type destination-based VAT applied at a uniform rate with very few exemptions, emphasizing the compliance advantages of a VAT.

More complete blueprints for transition tax structures were offered by McLure (1991a) and Shome and Escolano (1993). McLure (1991a) also advocated the early development of a VAT, because of its relatively simpler administration vis-à-vis income taxes, and because of its revenue yield, potential, and stability. McLure also argued that the corporate income tax should be introduced early in the reform to establish a more certain environment for domestic and foreign investors, but that no attempt should be made initially to link corporate and personal income taxation. Existing schedular individual income taxes should be kept in place, largely withheld at the source, and should have minimum adjustments for household circumstances. McLure also advocated the introduction of excise taxes on traditional goods early in the reform process because of their substantial revenue potential, easy administration, and relative economic efficiency. 30 Shome and Escolano's (1993) blueprint for an interim tax structure during the transition included, the following elements, among others: (1) a broad withholding tax on wages, interest, and dividends; (2) extraordinary tax bases, to include an excess wage tax for companies in the state sector; (3) multiple excise taxes on a wide range of goods and services; (4) a rudimentary VAT implemented at the importer-manufacturer level; (5) relatively high rates of import duties and temporary continuation of export duties; and (6) land taxes for urban and rural land.

In all, the advice offered by western experts for designing a tax system for the transition coincided in suggesting the early introduction of new indirect taxes, including a VAT and excises; the elimination of export taxes and the lowering of import taxes; and the delayed introduction of a modern western-style global income tax on individuals and, rather, the continued schedular income taxes with withholding at the source. There was less consensus on what form of corporate income taxation should be introduced and how much CITs should rely on levies on international transactions. In addition, there was little attention paid to how to deal with the effects of inflation in the measurement of income from capital (McLure, 1991c). As we will see in Section V, this advice was only partially heeded in the tax reform packages adopted by CITs over the past five years.

E. What Are the Lessons from the Western Model?

Most market economies subjected their tax systems to radical reforms during the 1980s.³¹ The general tenor of these reforms has been to simplify the structures of income taxes by flattening rates and widening the tax base, in many cases to introduce broad-based VATs on the consumption of most goods and services, and to increase excise tax rates. The broadest tax policy objectives, not always achieved, were to reduce economic distortions, to equalize conditions among economic agents, and to simplify the tax system. This worldwide reform movement sprang up as a reaction to the belief in the 1960s and 1970s that policy makers could pick winners and could direct economic growth in market economies by using tax policies to affect relative prices (Messere, 1995).³² These experiences no doubt influenced the policy advice given to CITs, although some recognized the short-run necessity of retaining distortionary and undesirable taxation.³³

From the western model CITs learned what to strive for (and what to avoid) in tax reform in the long run. The broad lines for CIT tax reforms in the long run would include: introducing a wide-ranging global personal income tax with a simplified structure; shifting emphasis from enterprise income taxation to personal income taxation; integrating corporate and personal income taxes; introducing a broad-based VAT and excises on selected commodities; keeping and enhancing traditional excise taxes; introducing some type of property tax at the subnational level; shifting the taxation of oil and other natural resources from production to profit bases; eliminating levies on exports; and using a low and narrowly dispersed import tariff only for moderate protection purposes.

F. Are There Lessons from the Developing Countries' Experiences with Tax Reform?

Because of significant differences in departure points of CITs and developing countries (Edwards, 1992; Kolodko, 1993), the immediate application of experiences of developing countries to tax reform in CITs is not advisable (McLure, 1992); however, there are also similarities, and it is possible to find useful experiences. Many markets and tax administrations are poorly developed in both transition and developing countries, and neither has a strong tradition of voluntary compliance such as exists in most western market economies. Most transition economies, like many developing economies, suffer from low revenues and pressing expenditure needs. Those conditions may demand in both sets of countries that securing tax revenue take precedence in the short run over other desirable goals of a tax system.

Several concrete experiences with tax reform in developing countries may carry useful lessons for CITs:

- Indirect taxes are typically much easier to legislate in an acceptable format and also
 much easier to enforce than direct taxes. During transition, therefore, indirect taxes
 may have to play a more important role in generating revenues than may be desired
 in the long run (Hussain and Stern, 1993).
- Property taxes and property tax administration are difficult to develop in any shape
 or form that makes them significant revenue producers. Although CITs should develop
 these types of taxes, there is little promise that they will become an important source
 of revenue for subnational governments any time in the immediate future.
- Successful efforts to raise revenues in developing countries have relied on widespread
 withholding presumptive taxation methods and alternative minimum taxes. These
 experiences are directly applicable to transition economies (Ickes and Slemrod, 1991).
- Traditional excise taxes are good revenue producers and are relatively simple to administer. Their relative good performance in developing countries should be repeated in CITs.
- It can be costly to ignore the impact of rapid inflation in the measurement of income from capital.
- The banking system can be used successfully to facilitate certain areas of tax administration such as collections and lower taxpayer compliance costs.

G. Development of the Tax Administration

The most important handicap for CITs early on was the lack of a tax administration system capable of enforcing taxes in a free market setting and generating adequate amounts of revenue. As we have already mentioned, without exception, studies of tax systems in transition economies recommended strengthening and developing the tax administration apparatus independently of the path taken for policy reform. Early work on the tax systems of transition economies revealed weaknesses in existing tax administration systems and their inability to enforce a modern tax system (Bakes, 1991; Gray, 1991; Tanzi, 1991, 1993). Major institutional weaknesses of tax administrations in CITs included the following:

- A lack of familiarity with standardized treatment and homogeneous rules for all taxpayers
- A lack of skills and experience with market-oriented taxes and tax administration techniques, despite the fact that the existing bureaucracy was experienced
- Stagnant resources and woefully inadequate training and equipment to deal efficiently with a large increase in the number of taxpayers
- A lack of adequate salaries for tax collectors to attract and retain quality personnel and to discourage dishonest behavior
- A lack of speed in adopting new approaches in enforcement and restructuring responsibilities along functional lines

- A lack of information systems with computerized records for registration and collections, and in many cases the lack of taxpayer identification systems
- · A lack of manuals and techniques for effective audit of private enterprises
- A lack of understanding of market economies

The weakness of tax administration systems was aggravated by two factors. First, many CITs did not have customs services or, if they did, they were understaffed and undeveloped. When they work properly, customs services collect not only customs duties but also and more important, VAT and excises on imported goods at points of entry. Customs services can also provide valuable third-party information for enforcing tax compliance with domestic taxes. Second, the effective enforcement of taxes was made more difficult by the lack of modern business accounting standards and invoicing practices. Tax enforcement agencies were also confronted with the fact that they needed to take over the collection functions previously performed by state-owned banks but without having had the time to develop alternative collection systems, such as contracting with private banks. The transformation of the tax bases resulting from the transition from a CPE to a market economy also presented a complication. The viability of large state enterprises, the traditional taxpayer in CPEs, was compromised by increased competition, constrained demand, restructuring, and the end of subsidies and available cheap credit. The allegiance of regional and local tax offices of the new national tax administrations to the local authorities also very likely compromised collections. The collapse of CMEA also contributed to the decline in enterprise revenues and profit tax collections. It does not come as a surprise that the transition reform period has been accompanied by an erosion of tax revenues in practically all CITs (Balcerowicz and Gelb, 1995; Tanzi, 1994).

The unpreparedness of tax administration systems in CITs called for particularly cautious approaches to those areas in which tax policy and tax administration overlap (Ickes and Slemrod, 1991; McLure, 1995b; Tanzi, 1993; Cnossen, 1991). Special measures that have been recommended include the following:

- Elevating the status of many tax administration issues by including the most important
 of them in the tax law
- Keeping the number of tax returns in the early stages of reform low by establishing final withholding of income taxes for most wage earners and by maintaining relatively high exemption thresholds for business
- Securing compliance of the VAT by integrating it with the administration and enforcement of a business income tax
- · Linking when possible taxes and explicit benefits from government services
- Strengthening the mechanisms of withholding at the source by business enterprises
- Reducing the risk revenue instability by avoiding heavy dependence on any single source of revenue
- Using presumptive taxation whenever the application of an ideal tax base is not measurable and cannot be monitored

V. CURRENT SYSTEMS OF TAXATION

This section reviews the current systems of taxation adopted in CITs as of mid-1996 and some of the history of tax reforms during the transition.³⁵ The process of tax reform tends to be different in every country and tends to have a marked impact on the final outcome. We start this section with a description of some of the peculiarities of the process of tax reform in CITs and then proceed with a description of the tax structures by main type of tax. In the last part of the section we examine current tax administration and enforcement issues.

A. The Process of Tax Reform in Transition Countries

The process for tax reform in CITs has been more complex then in other countries because of CIT peculiarities related to what we call the "legacy" of planned socialism. Without repeating here the details of those legacies (described in Section III), we describe several other features that have had an impact on the process of reform over the past five years.

First, the tax reform effort in CITs was initially hampered by finance ministries' difficulty in asserting their views. Traditionally, the role played by the ministry of finance in planned economies was secondary to that of other ministries, such as planning or economy, and to sectoral economic ministries. This problem has been solved slowly as the ministries of finance have become the dominant protagonists of fiscal policy (Tait, 1988).

Second, tax reform in CITs necessarily involved an increase in perceived (if not effective) tax effort. Under CPEs, we recall, most taxes were not visible in any way to taxpayers. This made it much harder for governments to win political and popular support for tax reform. In fact, some countries did take measures to soften the expected opposition from taxpayers to tax reform. For example, when the new individual income tax was introduced in Poland in 1992, the government raised gross wages and pensions by amounts corresponding to the lowest tax rate of 20 percent. The goal was to leave after-tax income unchanged for most of the population (Kodrzycki, 1993).

Third, passing new legislation and enforcing it was made more difficult because of the newfound confrontation between government and state enterprises, who earlier had acted as partners. Due in part to the importance of state enterprises in transition economies and attitudes left over from planned regimes, government authorities in CITs have oscillated between extracting additional revenues from this sector through discriminatory taxation and providing state enterprises with continued special tax treatment, subsidies, or condoning of tax arrears.³⁶

Fourth, the breakup of authority and the process of institutional and political reform created uncertainty among state institutions regarding who had the rights to or legal ownership of particular revenue sources and such assets as natural resources.³⁷ A clear example was provided by the fact that under the system of "labor management," in most state enterprises workers could vote themselves higher wages, and thus lower taxable profits. Many CITs tried to control the erosion of enterprise profits and assets by penalizing wage increases through full or partial elimination of wages from enterprise income and by introducing EWTs.³⁸

B. Direct Taxation

As of mid-1996, practically all CITs had the three pillars of a modern system of direct taxation: an enterprise profit tax, an individual income tax, and a payroll or social security tax. Until recently, it was common for many CITs not to allow the full deduction of wages or to have an EWT paid by enterprises. Although some western countries considered the idea of a similar type of tax at the center of the discussion over income policies during the 1970s, for example the tax-based income policies (TIPs) in the United States, EWTs are exclusively a CIT phenomenon. In this section we review the current structure of direct taxes, including EWT, together with some of the history of reform for these taxes during the transition years.

C. Enterprise Profit Tax

In 1989 Hungary and Poland were the first two countries to reform the Soviet-inspired enterprise profit tax. Many other CITs were slow in following this lead. For example, most of the Central Asia CITs, Ukraine, and Belarus waited to start these reforms in earnest until 1994 or 1995 and in the interim continued to use the tax structure inherited from the Soviet Union. The process of reform for this tax has often been torturous and has not always yielded the desirable results, as judged by the standard principles of tax policy, 39 but to be fair, the taxation of enterprise profits raises an array of complex issues for which there are no best-practice or standard

answers. Most western tax systems continue to struggle with some of these issues. As we see below, the approaches followed in CITs to the taxation of enterprise profits are also quite diverse. Perhaps the most important difference with current western tax systems is the CIT predisposition to use the tax code to promote or guide certain types of investment activities through either tax incentives and holidays or differential tax rates, however, even here the recent trend among CITs has been to follow the lead of western tax systems to provide a more level field for business activities across all sectors of the economy (OECD, 1995b).

1. Tax Rates

The general rates of the enterprise profit tax are moderate and often below those in western tax systems (Table 1). They range from 20 percent (Georgia) to 50 percent (Tajikistan). Out of twenty-five CITs, five have a rate of 25 percent and another five have a rate of 30 percent. Russia's current general rate is 35 percent. These are significant changes from the enterprise profit taxes in CPEs, which had rates as high as 85 percent. The trend over the past several years in most CITs has been toward lower tax rates.

With the exception of the Baltic countries, all the CITs in the newly independent states (NIS) have a separate and higher rate for banks and insurance companies, up to 55 percent in Ukraine. Other special treatments include lower rates for agricultural producers, small businesses, and joint ventures, and higher rates for gambling and some intermediary activities.

2. Tax Bases

The tax base of the enterprise income tax is typically calculated as the difference between taxable incomes and allowable expenses. One country, Croatia, significantly deviates from this rule. In Croatia the tax base is the difference in the net worth of the firm at the beginning and the end of the year, adjusted for several factors such as new capital contributions and excessive management payments (Martinez-Vazquez, 1995; Schmidt, Wissel and Stöckler, 1996; Martinez-Vazquez and Boex, 1996a).

The calculation of the tax base of the enterprise profit tax in CITs has undergone profound transformations since 1991. Early on, it was common in many CITs to limit all kinds of deductions from enterprise revenues, including wages, capital depreciation, and interest. For these reasons the tax was known in countries such as Russia as the *enterprise income* (rather than profit) tax. Most CITs currently allow the deduction of costs incurred in the generation of taxable income, however, many of the CITs still disallow the deduction of important expenses, which in western tax systems are regarded as perfectly legitimate deductions. For example, interest costs on long-term loans are not deductible in Belarus, Armenia, Azerbaijan, and Tajikistan; and Moldova's enterprise income tax does not allow the deduction of labor costs for banks and insurance companies (Table 1).

A more common occurrence is to limit the deduction of certain kinds of costs incurred in the production of income. ⁴³ In many instances these limitations go beyond sensible administrative measures (e.g., entertainment and travel expenses). Production and operation expenses that are still subject to limitations include labor costs, interest costs, expenses in research and development or environmental protection, and advertising (Table 1). Other awkward limitations exist on the deductibility of production expenses. For example, Bulgaria limits the deduction for capital expenses up to the level of profits in a particular year, thus enterprises with losses or zero profits are not granted a capital expenditure allowance in that year. These measures surely affect enterprise decisions on the type of technology or method of production used. The created distortions unnecessarily violate the tax policy principle of economic neutrality and add to the overall burden of taxation.

The norm among CITs is to allow the carry-forward of losses for a period of five years; however, in some countries, such as in the Central Asia group, carry-forward provisions are limited to joint foreign ventures. Out of twenty-five countries, five have no carry-forward provision (Table 1).⁴⁴ None of the CIT enterprise profit taxes provides for the carry back of

Table 1 Enterprise Profit Tax

Country	Basic rate	Other rates	Limits on deductions	Nondeductible expenses	Loss carry forward (back) in years	Tax incentives	Foreign investor incentives
Albania	30%	40% tourist activi- ties; 50% min- eral/energy ex- traction	Entertainment ex- penses; interest expenses ^a	Employee fringe benefits	3 (0)	Special activity reinvestment activities Small business ^b	None
Armenia	12–30% progressive	45% banks/insur- ance; 70% gam- bling	Environmental protection; R&D	Long-term bank loan interest	5 (0) for joint ventures only ^c	2- or 3-year new businesses ex- emption; in- creased pro- duction ^d	2-year tax exemption; 50% or 70% of basic rate thereafter
Azerbijan	25–35% progressive 35% after 500,000 rubles	45% banks/insur- ance; 70% gam- bling; 15–45% co- operatives	Some labor costs; environmental protection; R&D	Long-term bank loan interest ex- cept joint ven- tures; ^c expenses not specified in the law	5 (0) for joint ventures only ^c	2-year geographical exemption; in- creased produc- tion; d small busi- nesses	2-year tax exemp- tion; 3-year ex- emption with 10% rate if lo- cated in moun- tain region
Belarus	30%	15% small business; 44% banks/insur- ance; 60% gam- bling; 50–80% auctions/leasing	Labor costs; envi- ronmental pro- tection; R&D	Employee bonuses; housing allow- ances; long-term bank loan in- terest	None	Reinvestment activi- ties; profits used for social activi- ties tax exempt	3-year tax exemption ^c
Bulgaria	40%	30% small business; 50% banks/insur- ance	Medical care inter- est; Capital ex- penses ^f	Enterprise reserves	5 (0)	Some agricultural production tax exempt	None
Croatia	25%	None	Entertainment and travel expenses	Bonuses; excessive interest	5 (0)	None	None
Czech Republic	39%	25% investment, share, pension funds	Lease payments; ex- cessive interest; travel expenses	Entertainment ex- penses	7 (0)	5-year exemption for certain energy producers	None

Estonia	26%	4% general insur- ance; 1% life, pension, health insurance	Fixed asset costs; entertainment expenses	Gifts	5 (0)	None	None
Georgia	20%	0% agricultural activities; 10% industrial/manufacturing; 35% banks; 60% entertainment; 70% gambling	No information	No information	5 (0)	1-year exemption, with 50% rate re- duction in follow- ing 2 years; 10– 100% allowances for profits rein- vested in indus- trial equipment, technology, and certain social proj- ects	2-year exemption, followed by 50% rate reduction for 4 years; ⁸ 2-year exemption; ^h 100% foreign- owned firms ex- empt until initial investment re- couped
Hungary	18% declared profits; 23% distributed profits		Excessive interest; lease payments; consultancy fees	Nonentrepreneur- ial expenses	Unlimited in first 3 years; 5 (0) thereafter	Accelerated depreci- ation; interest al- lowance for in- vestment	85% liability reduc- tion for offshore companies
Kazakstan	30%	10% agriculture; 45% foreign branch offices	Interest payments	Exchange market losses; private expenses	5 (0)	20% basic rate if registered in free economic zone	None
Kyrgyzstan	35%	45% banks; 55% insurance; 70% gambling	Environmental pro- tection; social ser- vice labor costs	Expenses not allowed for in the law	5 (0) for joint ventures only; ^c 1 (0) otherwise, within limits	10% basic rate on reinvested profits	30% basic rate on joint ventures ^c
Latvia	25%		Bank interest; bad debts		5 (0)	Small businesses pay 80% of calcu- lated tax	None
							,

Table 1 Continued

Country	Basic rate	Other rates	Limits on deductions	Nondeductible expenses	Loss carry forward (back) in years	Tax incentives	Foreign investor incentives
Lithuania	29%	10% agriculture	Donations to cultural, social funds	Expenses not re- lated to produc- tive activity	None	Capital/profit reinvestment; small business start-up allowance ^J	3-year exemption and 50% reduc- tion for next 3 years for joint venture ^c
Moldova	15–32% progressive	10–50% cooperatives; 25% insurance; 40% banks; 70% excess profits	No information	Labor costs for banks and insur- ance companies	None	Maximum basic rate of 30% and accelerated de- preciation in free trade zones; in- vestment deduct- ibility in certain sectors	1–6 year exemption for qualifying joint ventures ^c
Poland	40%		Advertising; R&D	Director's fees	3 (0) in equal installments	Geographic invest- ment allowance	None
Romania	38%	25% agriculture; 60% gambling	Interest expenses; advertising; pub- lic relations	Expenses not re- lated to activity and not specifi- cally allowed	5 (0) for large enterprises 3 (0) for small enterprises	None	5-year tax exemp- tion for exporting joint ventures
Russia	35%	43% banks/insur- ance intermedi- ary activities; 70% video rental; 90% gambling	Bank interest; travel/entertain- ment; certain ad- vertising and mar- keting expenses; R&D charitable donations	Interest on inter- company loans; voluntary prop- erty insurance; certain em- ployee benefits, including bo- nuses	5 (0)	Small business; ^k Investment for expansion of production for certain sectors; 50% rate reduction for banks/insurance companies in agricultural section ¹	2-year federal tax exemption; 75% rate reduction in third year, 50% rate reduction in fourth year ^m

Slovak Republic	40%		Travel expenses; lease payments; interest in excess of debt/equity ra- tio; advertising	Entertainment ex- penses; director's remuneration	5 (0)	Certain energy pro- ducers exempt for 6 years; spe- cial deductions for farmers	None
Serbia	25%		Ecological ex- penses; promo- tional expenses	Fines and penalties	5 (0)	Reinvested profit al- lowance; small business re- duced rate; 3/1- year exemption for new enter- prises ⁿ	5-year tax reduction equal to share of foreign partici- pation (FP) if FP > 10%
Slovenia	25%		Labor costs; enter- tainment ex- penses	Interest on overdue accounts	5 (0)	New employee al- lowance; Invest- ment deductions ^o	None
Tajikistan	50%	25% farms, small en- terprises; 55% bank/insurance	Labor costs; envi- ronmental pro- tection; R&D	Lump-sum em- ployee pay- ments; Long-term loan interest	5 (0) for joint ventures	2-year rural small enterprise ex- emption; ag- ricultural reduced rate	30% basic rate for joint ventures; 2- year exemption for most enter- prises
Turkmenistan	25%	30% small business, banks/insurance; 60% gambling	Excessive labor costs; environ- mental protection	Expenses not specifically allowed in the law	None	1-year exemption and 50% rate re- duction for cer- tain producers ^p	Exempt from taxes until recoup ini- tial investment
Ukraine	30%	55% banks/insur- ance; 60% gam- ling	Advertising; busi- ness trips and meetings	Expenses not specifically allowed in the law	5 years only for first 3 years of costs	Accelerated depreci- ation on active production assets	Offshore compa- nies located in Ukraine tax-ex- empt
Uzbekistan	37%	3–20% agriculture; 35% banks/insur- ance; 60% gam- bling	Advertising; travel expenses; R&D training expenses	Interest on overdue and deferred loans	None	Reinvested profits; reduced rate or 2-year tax exemp- tion ^q	2–5 year exemp- tion, depending on sector

Table 1 Footnotes

aInterest expenses are not deductible if the interest rate exceeds rates approved by the Central Bank of Albania.

^bAlbania provides tax incentives for enterprises engaged in production (excluding oil and gas) for more than 10 years, starting 4 years after initial production. This is a 60% tax credit for all taxes paid on profits reinvested in the production sector. Reductions are also available for small business.

'Joint ventures with foreign participation of greater than 30% qualify for this incentive.

^dTypically, profit resulting from increased production of all or some goods may be exempt or taxed at a lower rate.

*Joint ventures with foreign participation of greater than 50% minimum investment of \$100,000 qualify for this incentive.

Capital expenditures up to the amount of annual profits are deductible if purchased assets are used for at least 1 year after costs have been deducted.

*Joint ventures with foreign participation (FP) greater than 20% minimum investment of \$100,000, and domestic investment greater than 20% qualify for this incentive.

both ventures with FP greater than 20% minimum investment of \$100,000 and domestic investment less than 20% qualify for this incentive.

'In most cases, excessive labor costs are defined as labor costs exceeding the normative wage fund, which is equal to the product of the size of the labor force and a multiple of the minimum wage.

Small enterprises pay 70% of the basic rate in the first 2 years and 50% of the basic rate in the third year after start-up.

^kTwo-year exemption, followed by 25% of basic rate in the third year, and 50% of basic rate in the fourth year, if greater than 70% of turnover is related to production or processing of agricultural, consumer, construction materials, or engaged in construction activities.

To qualify, more than 50% of total credits/policies must be within the agricultural sector.

"Joint ventures with more than 30% foreign participation and minimum investment of \$10 million qualify for this incentive.

ⁿEnterprise are granted an allowance for profits reinvested in fixed assets. Most enterprises qualify for the 3-year exemption; bank and insurance companies qualify for the 1-year exemption.

°20% of investments in fixed tangible assets and intangible long-term assets are deductible; 30% of gross wages of newly employed persons and trainees are deductible for 12 months.

PRate reduction applies to enterprises engaged in agricultural production, production of consumer goods, and construction enterprises.

⁹Companies not engaged in distribution, retail, wholesale, or intermediary activities are taxed at 25% of basic rate in the first year, 50% of basic rate in the second year. Exemption of two years applies to farms, consumers, and construction enterprises. 30% of profits reinvested or used to repay productive investments in foodstuffs, construction materials, and consumer goods are deductible.

Source: International Bureau of Fiscal Documentation (1996).

losses. This latter measure is probably justified at the current stage of development of tax administration in CITs. Carry-back provisions are difficult to implement because they require reopening returns for prior years.

The vast majority of the CIT enterprise profit taxes do not allow for explicit partial or comprehensive (à la Chile or Israel) adjustments for inflation. ⁴⁵ Croatia allows for a partial adjustment for inflation by granting enterprises a "protective interest deduction" equal to the enterprise's equity capital times the sum of inflation rate in the manufacturing sector and a 3

percent real rate of return.46

Because inflation rates have moderated considerably in the past one or two years in most CITs, the distortions associated with inflation in such areas as the depreciation of assets (at historical costs) or the deduction of full interest costs have decreased in importance. Many CITs have dealt with the problem associated with inflation in ways similar to those often used in western countries. These include allowing a one-time discretionary revaluation of assets, allowing first in-first out (FIFO) methods for the valuation of inventories, ⁴⁷ and in fewer cases, introducing some form of accelerated depreciation. The most common methods of depreciation allowed in CITs are straight-line and declining balance methods at historic costs. ⁴⁸ The relative merits of different approaches to the measurement of income from capital in CITs are discussed in McLure (1991c).

3. Tax Incentives and Holidays

This is an area riddled with problems. Most of the enterprise profit taxes in CITs remain saddled with special treatments and provisions. ⁴⁹ These measures have contributed to lower collections, directly and indirectly, by facilitating evasion and avoidance behavior, have produced an increasing perception of unfairness of the tax system, and have added to the distortions in the allocation of resources in CIT economies. Perhaps because CITs have not yet shared the failed experience of western and developing economies in trying to use the tax system for economic and social engineering ⁵⁰ they were bound to repeat some of the same mistakes. A legacy of intervention in the economic system for social and political reasons in these countries has contributed to this interventionist phase, but in fact the worst may be over. During the past years in several CITs there has been a significant reduction in the scope and level of tax incentives granted through the enterprise profit tax. ⁵¹

Tax incentives and holidays are provided by just about every CIT to both domestic and foreign enterprises. The latter usually have additional, more generous, provisions. The wide range of incentives granted to all enterprises includes reinvestment allowances as a share of profits (at times up to 100 percent), ⁵² investments in particular sectors (most often agricultural production, but also construction and mineral extraction), and investments in particular areas (e.g., those with high unemployment, "free trade zones," and mountainous or isolated areas). Often these incentives are granted at the discretion of the tax and economic authorities. Other incentives are available for small firms, for increases in production, for first owners of capital, for hiring new employees, for privatized firms, and for exporters. In addition to those incentives legislated in the tax laws, some CITs have followed in the worst tradition of many developing countries of negotiating customized tax incentives⁵³ or granting tax relief to individual enterprises

by special decree.54

Since early in the transition, many CITs have provided specific incentives restricted to foreign investors, but here also there has been a significant retrenchment from the more generous early practices. In fact, several CITs have eliminated all special incentives exclusively designed for foreign investors. In those CITs in which special provisions remain, to qualify for tax incentives foreign investors are typically required to have a participation of at least 30 percent in the business and often a minimum absolute dollar amount of investment. The tax incentive typically exempts profits or taxes them at a reduced rate for a period of two to five years. For example, in the Russian Federation, foreign investors engaged in production activities with a business participation rate above 30 percent and with a minimum investment of \$10 million

qualify for a two-year exemption from the enterprise income tax and for a tax rate reduction of 75 percent in the third year and 50 percent in the fourth year (Table 1).

4. Treatment of Foreign Income

Special tax incentives have been justified by the need of CITs to attract foreign investment.⁵⁷ Tax incentives are just part of the more general issue for CITs of how to tax income made by foreigners.⁵⁸ This question requires taking into account the (investor's) home country tax treatment of incomes generated abroad and perhaps also the treatment of other countries in transition that are potential competitors for foreign investment.⁵⁹ This complex issue still waits to be addressed in a well-balanced manner in CITs.

Most CITs treat foreign companies as domestic legal entities when they have been registered or incorporated in the country. Also, most of the CITs levy a withholding tax on royalties, dividends, and interest paid to nonresident enterprises at moderate rates, ranging from 10 to 25 percent.

D. Excess Wage Taxes

Excess wage taxes of various forms have been common levies peculiar to CITs. ⁶¹ These countries introduced excess wage taxation for a variety of reasons. First, there was a perception that state enterprise managers would use reconversion and privatization as a means to decapitalize the firm. The fear was that enterprise managers under pressure from labor would divert capital to the wage fund. With relaxed or no price constraints enforced by national planning, enterprise managers can buy industrial peace and perhaps personal gain by awarding excessive wage payments at the expense of capital (Tait and Erbas, 1995). Second, in the absence of profit-seeking behavior in private firms, there was no effective constraint on wage demands by labor. The EWT was designed to penalize "excessive" wage increases and prevent inflationary pressures. Finally, the growth in income disparity was deemed to be an undesired result of the transition process, and by limiting wage growth governments felt that they could limit the increasing disparity.

However, EWTs have been poor solutions to the more central problems of eliminating labor management and imposing stricter budget constraints on enterprises (McLure, 1991a). In addition, EWTs can discourage innovation and productivity growth by preventing firms from raising wages to attract and retain well-skilled, motivated workers or by penalizing those firms that have a more productive and better trained workforce (Shome and Escolano, 1993; Jackman, 1994).

The EWTs take different forms. In some cases, all wages (Uzbekistan) or part of the wages (Azerbijan, Belarus, Kyrgyzstan, Moldova, Tajikistan, and Turkmenistan) are not allowed as deductions and therefore are included in the base of the enterprise profits tax. Other countries, such as Poland, had a separate levy on excess wages. Although the trend has been for the elimination of EWTs, there has been hesitation. Kazakstan introduced a new EWT in 1996 shortly after the old EWT had been eliminated, however, this new EWT was never implemented and has now been repealed. 62

An EWT can generate significant revenues by widening the base of the standard enterprise profits tax. ⁶³ Although sizeable EWT revenues have been collected in some CITs, on average revenues have been limited, in part due to the increase in budget arrears. Tait and Erbas (1995) argue that a relatively small increase in the standard enterprise profits tax would generate sufficient revenue to more than match the revenue potential of most EWTs. In practice, EWTs are limited but did not stop state enterprise managers from granting exorbitant or inflationary wage increases. The endurance of EWTs is apparent because they can generate some revenue, and more important, because they are relatively easy to administer in the state enterprise sector. Countries that still continue to use an EWT have been generally less advanced in the privatization of the state enterprise sector, however, the effective administration of the EWT may be less dependent on the degree of privatization than on the average size of enterprises.

E. Personal Income Tax

The pioneer in the reform of individual income taxes was also Hungary, which introduced a broad-based individual income tax in 1988. This lead was followed by Poland, which introduced a global income tax in substitution for the previous schedular taxes in 1992. Most former soviet union (FSU) countries just continued using the taxes inherited from the Soviet Union. The big avalanche of reform of individual income taxes in other CITs came in 1993 and 1994. Most CITs have continued to reform and fine tune their individual income taxes up to the present time, however.

In designing new individual income taxes, CITs have had several important decisions to make (McLure, 1991a). Among the two most important decisions were the choice of tax base, income or consumption, and the overall structure of the tax, global (lumping all sources of income in one single base) or schedular (allowing for different bases and perhaps rates, depending on the source of income). Other important decisions included the partial or full integration of enterprise and individual income taxes, rate structure, inflation adjustment of monetary figures (exemptions and rate structure), use of indexation for inflation for the measurement of income, and the use of personal and family exemptions and itemized deductions to arrive at a taxable base.

1. Structure

As in the case of most income taxes in western and developing countries, CITs have adopted neither a full income tax base nor a consumption base, but rather a hybrid base with features from both approaches (McLure and Zodrow, 1996a; McLure, 1992a). To the extent that a consumption-based income tax provides more incentives to savings and investment, the choice of a consumption base would be more desirable in CITs because of their much higher needs for national savings and capital accumulation. Four CITs (Croatia, Albania, Latvia, and Lithuania) have adopted close to a consumption-based income tax by exempting dividends and all interest income (Table 2). This treatment is the equivalent of a consumption tax with nonregistered accounts, however, none of these four countries has adopted the complement of an enterprise cash-flow tax. As discussed below, many other CITs tax different forms of capital income more lightly than labor income.

The aim of most CITs has been to adopt a global personal income tax similar to that existing in Organization for Economic Cooperation and Development (OECD) countries, in which tax is paid on global income with credit for taxes withheld at the source and estimated tax payments. As is the case in developing countries, however, the lack of a well-developed tax administration in CITs clearly calls for a more significant role for withholding taxes and for the preservation of a schedular structure of income taxes to reduce the number of returns processed by the tax administration. There will be at least a temporary trade-off between what is administratively feasible and other desirable goals of tax policy. A schedular structure typically sacrifices horizontal and vertical equity and introduces economic distortions by treating income from different sources differently. On the other hand, it is much easier to administer and enforce effectively.

Almost without exception CITs eliminated all previous schedular taxes on labor or employment income, and all of these incomes are now taxed in a single base, however, many of these countries also use schedular final withholding taxes for salaried employees who have no other sources of income and whose salaries are subject to withholding. Also common are schedular final withholding taxes for several forms of capital income, when these are not exempt. ⁶⁸

2. Tax Base

The base of the individual income tax in CITs includes all types of labor and employment income. CITs with global individual income taxes also include income from capital and other sources that are not exempt (Table 2), ⁶⁹ but as mentioned above, many other CITs use schedular final withholding taxes for some forms of capital income.

 Table 2
 Personal Income Tax and Social Security Contributions

Country	Highest rate (%)	Excepted income (minimum ownership period)	Taxation of dividends	Treatment of interest	Employer social security contribution (%)	Employee social security contribution (%)
Albania	40	Capital gains, state pensions	None	None	32.5	10
Armenia	30	Capital gains on private prop- erty, state pensions	Personal income tax	Personal income tax	37	1
Azerbijan	40	Capital gains on private prop- erty, all pensions	Personal income tax; prepayment withheld at source	Personal income tax; in- terest on savings and securities exempt	37	2
Belarus	40	All gains on private property, al- imony, state pensions	15% final withholding	Exempt	36	1
Bulgaria	50	All pensions, severance pay- ments, royalties received from abroad	Personal income tax; prepayment withheld at source	Exempt	42–57 (20% expatriates)	0
Croatia	35	Immovable property (3 years), all interest, dividends, capped amount of all pensions	Exempt	Exempt	19.75	23.85
Czech Re- public	40	Primary home (2 years), other immovable property (5 years), share in joint stock companies (3 months), other movable property, alimony	25% final withholding	15% interest on savings; 25% interest on securi- ties	35	12.5
Estonia	26	Private dwellings (2 years), other private property, land and building received under property reforms, dividends, state pensions	26%	10% final withholding on bank interest; 26% creditable withhold- ing on nonbank in- terest	33	0
Georgia	20	All gains on private property, sale of agricultural produce, severance and compensation payments, all pensions	Personal income tax	Personal income tax; domestic bank inter- est exempt	37	1

Hungary	48	Primary home (5 years), all pensions, interest and capital gains on certain bonds, alimony	10% final withholding	Exempt	47 (8.5% expatriate)	11.5 (1.5% expatriate)	
Kazakstan	40	Sale of private residence	15% final withholding	15% final withholding	32	0	
Kyrgyzstan	40	Gains on private property, reinvested dividend income, state pensions	15% final withholding	Exempt	37		
Latvia	25 10	Sale on any personal property, dividends, alimony, state pen- sions	Exempt	Exempt	37	1	
Lithuania	33	Sale of any personal property, dividends, state pensions	Exempt	Exempt	30	1	
Moldovia	50	Gains on private property, all pensions, inheritance and gifts, alimony, all pensions	Personal income tax	Personal income tax	39	1	
Poland	45	Capital gains used for primary home purchase; gains on cer- tain securities, bonds, and in- terest-bearing securities	20% final withholding	20% final withholding on loans; interest on savings and securities exempt	48.5	0	
Romania	60	Gains from sale of any personal property, all pensions	10% final withholding	Exempt	20–50	4	
Russia	35	All pensions, gains not exceed 5000 multiple wages for im- movable personal property, 1000 multiple wages for all other property	Personal income tax	Domestic bank interest exempt	38.5	1	
Serbia	35	Immovable property (10 years), sale of immovable property if reinvested in dwelling, most gains from movable property, all pensions	90% taxed at personal income tax rates	Personal income tax; 20% advance with- holding at source	23.8	23.8	
						(continued)	

TAX SYSTEMS IN TRANSITION ECONOMIES

Table 2 Continued

Country	Highest rate (%)	Excepted income (minimum ownership period)	Taxation of dividends	Treatment of interest	Employer social security contribution (%)	Employee social security contribution (%)
Slovak Republic	42	Primary home (5 years), other immovable property (5 years), share in certain entities (5 years), other moveable property (7 years)	15% final withholding	15% final withholding on savings interest	38	12
Slovenia	50	Real estate (3 years); gains on securities until 1/1/97	60% taxed at personal income tax rate; pre- payment withheld at source	Personal income tax; prepayment withheld at source	19.37	22.1
Tajikistan	40	Gains on capital assets, state pensions	Personal income tax; prepayment withheld at source	Personal income tax; do- mestic bank interest exempt; prepayment withheld at source	38	0
Turkmenistan	8	Interest from domestic banks, state pensions	15% final withholding	15% final withholding; domestic bank inter- est exempt	30	1
Ukraine	40	Gains from sale of personal property, premium bonds, ali- mony, state and voluntary in- surance pensions	15% prepayment with- held at the source	Exempt	39	1
Uzbekistan	40	Gains from sale of personal property; interest from domestic banks, premium bonds, state securities, alimony, state pensions	Personal income tax; prepayment withheld at source	Personal income tax; do- mestic bank interest exempt; prepayment withheld at source	40	3

Source: International Bureau of Fiscal Documentation (1996).

The definition of employment income is wide. 70 An almost universal feature of CITs is the attempt to widen the individual income tax base to include fringe benefits, bonuses, allowances, and other forms noncash income. These forms of compensation appear to be more common in transition economies than in market economies,71 however, it is unclear how effective the taxation of fringe benefits has been. These forms of compensation are notoriously hard to tax even in countries with the most advanced tax administration systems. One way to ensure wider taxation of fringe benefits is to tax them at the company level. So far, only Hungary has used this approach among CITs.72 Still, a simpler administrative approach to this issue is to disallow companies a deduction for those fringe benefits not taxed at the individual level.75

Practically all CITs exempt income from pensions. 74 As discussed elsewhere in this section, many CITs also exempt interest income, and fewer of them exempt dividends and capital gains from the sale of private property. Other incomes commonly exempted from income tax include scholarships, compensation for damages, and welfare payments. Most CITs allow personal and dependent deductions in the individual income tax.

Tax Rates

Most CITs have a progressive tax rate schedule, however, there is a wide variety of rate structures, ranging from fifteen brackets for Romania and eight brackets in Bulgaria to a single rate in Estonia and two brackets in Croatia and Latvia (Table 2). The choice of rate structure overall seems to strike a balance between the goals of revenue raising and redistribution with those of encouraging work effort or savings and entrepreneurial activity. The normal top marginal rate in CITs is 40 percent. 7 Several countries have higher rates: Romania heads the list with a top rate of 60 percent, followed by Bulgaria, Slovenia, and Moldova, all with a top rate of 50 percent, Hungary with 48 percent, and Poland with 45 percent. 78 Russia's top marginal rate is 35 percent and Kazakstan's is 40 percent. Overall, these tax rate structures are not that different from the tax rates currently in force in OECD countries (Table 2).79 The need to maintain a close relation between the top individual rate and the company rate is not respected in many CITs (Tables 1 and 2).

None of the CIT countries has explicit adjustments for inflation in the individual income tax, however, about one-third define tax brackets in terms of minimum salaries or personal allowances. Minimum salaries do not necessarily respond to inflation in an automatic form, because they tend to be legislated periodically. Increases in minimum salaries are sometimes not granted because of their implications for macroeconomic and income policies, nevertheless, their use is likely to be quite effective in slowing down the "bracket creep" that accompanies individual income taxes in inflationary times.80

Revenue considerations have weighed heavily on the decision of whether or not to index individual income taxes for inflation. When Poland introduced the new individual income tax in 1992, it provided for the indexing of the three tax brackets for inflation. The government decided against the implementation of this measure in 1993, however, because of the need to raise revenues to close the budget deficit (Kodrzycki, 1993). The Russian Federation first defined the tax brackets in the individual income tax in terms of the minimum wage but later switched to nominal income amounts to define the brackets.

4. The Integration of Enterprise and Individual Income Taxes

The existence of two separate taxes on individual and company income can lead to double taxation of enterprise income and to the different tax treatment of distributed and retained profits of enterprises. This is a complex issue that has received significantly different solutions in Western countries.81 The approach to this issue also differs in the CITs. Some CITs have adopted a "classical system" which subjects dividends to both company and individual income tax at regular rates. 82 A more common approach is partial integration by providing relief through lower and flat rates for taxing dividends or partially exempting dividends from personal rates.84 Only four countries entirely exempt dividends at the personal level (Croatia, Albania, Latvia, and Lithuania), and one, Estonia, provides relief at the company level by granting a deduction for the individual tax withheld.

F. Payroll and Social Security Taxes

Payroll taxes or social security contributions are invariably high in CITs even when compared to those prevalent in OECD countries (Tanzi, 1994). This is despite recent reforms that have strived to reduce contribution rates. These changes are likely to continue as CITs proceed with deeper reforms in their pension, disability, health insurance, and unemployment compensation systems. Although it is generally not possible simply to add rates paid by employees and employers, the outlier in terms of high rates is Hungary, with a combined employee/employer contribution of 58.5 percent. As of 1996, eight CITs have combined employer/employee contributions between 40 and 50 percent. The lowest combined rates are just above 30 percent (Table 2). Note, however, that to find full disincentive effects it would be necessary to add income tax rates.

Although payroll taxes may be more or less linked with benefits to employees, there is rightly a widespread concern among CITs that they may introduce an important antilabor bias in the choice of production technologies and damage international competitiveness. The high burden on labor employment represented by payroll taxes in combination with the personal income tax withheld on wages also creates significant incentives to shift jobs to the underground economy McLure, Martinez-Vazquez, and Wallace (1997). A more optimistic view of this issue is that the interaction between the benefits of old-age pensions, health, and unemployment insurance on the one hand, and the individual income tax on the other, could help secure greater compliance with the latter (Hussian and Stern, 1993). The link between benefits and better compliance with payroll taxes and ultimately income taxes, however, is often weak or broken because eligibility and benefit levels are only loosely linked to individual contributions. Often, as we see below, there are no employee contributions at all.

The general view of payroll and social security taxes differ among western countries. Some of these countries lump revenues from these levies with other types of taxes and they are taken as one of several general sources of funding for social welfare expenditures. Other western countries view payroll and social security levies as specific contributions earmarked to well-defined welfare programs. Most CITs appear to have adopted this latter model, but with modifications. Without exception, CITs inherited comprehensive old-age pension and health insurance systems from the previous regime. In most cases, the previous systems were almost entirely financed by employers. At the present time, all FSU countries, including the Baltics, still have systems that are 100 percent (or near that) employer-financed. This is also currently the situation in Poland, Romania, and Bulgaria. The CITs spawned from the disintegration of Yugoslavia inherited a system with mixed employer-employee contributions. Hungary, the Czech Republic, and the Slovak Republic also have mixed contributions systems.

In theory, the economic incidence of payroll taxes is not affected by the division of charges between employers and employees, however, the use of explicit employee contributions together with employer contributions offers several potential advantages: it is more transparent, thus dispelling the misconception that benefits are free goods, and it may get employees more interested in the overall management of the funds. A split payment system also offers the possibility of tailoring contributions and benefits to individual circumstances.

G. VAT and Other Indirect Taxes

The task for indirect taxation reform was clear from the start of the transition. There was a need to replace the complex turnover taxes prevalent in the previous regime, which, as we saw, at times had thousands of rates. The basic choice for reform was between a single-stage retail sales tax with wide coverage and only a few rates and a conventional invoice-credit VAT.⁸⁷ To a large extent, a retail sales tax can be more difficult to administer and enforce than a

credit-invoice-type VAT. The VAT facilitates collection at the early stages of production or at importation, allows effective exemption of capital goods and intermediate goods, and provides easy adjustment of indirect taxation for cross-border trade. On the minus side, the VAT can present problems in its extension to the retail level, and the crediting process for intermediate payments of the tax can be easily abused. Many CITs opted for the adoption of VAT early in the transition. In particular, those desiring to enter the EU adopted EU-style VATs, however, several CITs used an intermediate strategy of simplifying and refining their existing turnover taxes for a number of years in preparation for the introduction of a VAT. Hungary, Russia, and the rest of the CIS countries went cold turkey from turnover taxes to VAT. All other CITs had a shorter or longer adaptation period. In some cases (e.g., Bulgaria and Croatia) VAT laws were approved by the parliament but their implementation was postponed several times.

The current system of indirect taxation in CITs is similar to that in western and most developing countries, and it consists of a VAT or a general sales tax, a system of excises, and taxes on international trade.

H. Value-Added Tax (VAT)

By now all CITs except four have introduced a VAT. The four countries yet without a VAT are Croatia, Serbia, Slovenia, and Albania. The three former Yugoslavian republics rely on general sales taxes at the retail level as the main form of indirect taxation. These sales taxes are still characterized by multiple rates and some degree of cascading, but they represent significant improvements on the old turnover taxes. The introduction of a VAT has been discussed in all four of these countries, and Croatia, at least, plans to introduce a VAT in January 1997.

For those CITs that already have a VAT, two basic models were originally followed in its adoption, although over the years almost every one of these countries has continued to reform its VAT and some convergence has taken place. The first is the Russian model, which was adopted in all CIS countries. This was a peculiar VAT system with many problems, as we discuss below. The second is the European or the EU model, which was adopted with variations by the rest of the Central and Eastern Europe CITs. Because of the significant differences between the VATs in the two groups of countries, they are discussed separately below.

1. The VAT in Russia and Other FSU Countries

Russia introduced a VAT in January 1992 patterned after the VAT approved by the Supreme Soviet of the Soviet Union on December 6, 1991, just before the dissolution of the USSR. With the exception of the three Baltic countries, all other former Soviet republics also adopted a VAT patterned after the Soviet Union VAT. Because of the economic and political weight of Russia among CIS countries, they often followed Russian reforms, at least until recently. 91

The VAT systems originally adopted in Russia and the rest of the CIS are extensively reviewed in Summers and Sunley (1995) and Shome and Escolano (1993). Two positive aspects of the "Russian model" VAT were that it had a single rate, albeit high at 28 percent, and it had a fairly broad base covering most goods and services. However, the Russian model also presented many peculiarities and problems, some of which have been addressed over the past few years, but others of which still remain. One problem that Russia tried to address in 1996 is the accounting of tax liabilities for sales on a cash basis. The cash method is fundamentally incompatible with the effective application of the invoice-credit system, the cornerstone of most modern VAT systems. The revenue consequences of cash accounting for liabilities were aggravated (and perhaps encouraged) by the high level of interenterprise arrears existing in Russia and the rest of the CIS. The revenue performance of the VAT in these countries also suffered, because despite the use of a cash basis for liabilities, credit for the VAT paid for inputs was allowed at the time inputs were put into production.

A second problem with the Russian model VAT is that the credit-invoice method was only used in most of the CIS for calculating tax liabilities at the manufacturing level. Liabilities

at the wholesale and retail levels, in most service sectors, and in some countries at the manufacturing level as well, were calculated using a subtraction method VAT on the basis of taxpayers' gross margins.93 This practice is still in effect in some CIS countries. It is also one reason that VAT laws in many CIS countries, as we will see below, still do not have a minimum threshold level of business for registration as a VAT taxpayer. A third problem with the original Russian model VAT was that it denied credits for the VAT paid on capital inputs, which amounted to 28 percent tax on investment.94 This practice destroyed the consumption basis of the VAT and it introduced cascading elements in the tax, thus penalizing exports, among other things, even if they were zero-rated. There were also problems of identifying creditable and noncreditable taxes on business. Most of the countries in the CIS now allow either a delayed credit over a period of several months or an instantaneous credit for capital purchases, and have clarified crediting rules.

Another important peculiarity of the Russian model VAT is that it applies the origin method for trade among CIS countries. Exports within the CIS are treated as domestic sales, so they are subject to tax, while imports are exempt from tax. In contrast, most countries with a VAT use the destination method for international transactions with third countries. 95 Under the destination method, exports are zero-rated (exempt and given a credit for the tax on purchases), and imports are subject to tax. The application of the origin method can cause significant distortions and redistribution of revenues, especially when trade among the countries is not balanced and the rates and base of the VAT differ. For example, at the present time Katakstan pays a VAT on imported capital goods to Russia and Ukraine, but as Summers and Sunley (1995) point out, ultimately the question of which method (origin or destination) to apply for the taxation of mutual trade depends on how these countries organize economic cooperation among themselves. This difficult issue has not been resolved for trade within the EU, either. The adoption of the destination method within the CIS would require the introduction of more effective border controls.

Also peculiar to the original Russian model VAT was the fact that imports were not covered by tax. This has been reformed. At present, imports from outside the CIS are always subject to VAT, but the base still differs. 6 The prevalent structure of the VAT in CIS countries is reviewed below using the most current information available, but this and all other aspects of the tax structure, of course, are continuously subject to change and revision.

a. Exempted Commodities. From the time of the original adoption of the VAT there has been a significant increase in the number of exemptions and special treatments across most of the CIS countries. This has led to a significant narrowing of the tax base. 97 The activities or commodities deemed desirable for exemption vary by country, but they typically include basic foods, medicines and health services, education services, and public transport. Also exempted are those difficult-to-tax sectors, including banking and insurance, farming, and housing. Many CIS countries also exempt some professional services such as legal and translation services,

presumably because of the difficulty of enforcing the tax in some areas.98

b. Scope of the Tax. A hard decision for all CITs upon the introduction of a VAT was whether or not to extend the tax to the retail level. As we saw, the CIS countries did extend it, but with liabilities calculated on gross margins. A related decision involved the proper treatment of small businesses: how to avoid overburdening the system with small taxpayers that could not be expected to carry the books of accounts necessary to enforce the tax. The original Russian model VAT had no registration limit threshold, and many of the CITs in this group, including Russia, still do not have a specified threshold. Kazakhstan, Georgia, and Turkmenistan have introduced thresholds that are defined in terms of minimum salaries or their equivalents.

Tax Rates. All CITs in this group have a single rate for the VAT, except for Russia, which applies a lower rate of 10 percent to medicines and basic foods (Table 3). This is an especially important positive design feature, given the current weakness of the tax administrations in these countries. Also important, given the application of an origin principle for trade within the CIS, is that all these countries but two have the same VAT rate of 20 percent. The

Table 3 Value Added Tax

20%	Not applicable	Residential rents, insurance and bank- ing services, passenger transport,	Importation of goods from outside CIS is	Customs value
		municipal services, most social ser- vices, legal services, copyrights and licenses	subject to VAT	
20%	Not applicable	Residential rents, insurance and bank- ing services, legal services, copy- rights and licenses, certain food- stuffs, educational services	Importation of goods from outside CIS is subject to VAT	Customs value
20%	Not applicable	Public transport, postal, health, edu- cational, financial, and legal ser- vices, security operations, munici- pal services	Importation of goods from outside CIS is subject to VAT	
18%	Not applicable	Financial, insurance, educational, health, and gambling services, land sales, leasing of land and buildings	Goods passing customs frontier into rest of country	Customs value plus cus- toms duties, excise du- ties, and import fees
22% (5%)	Basic foodstuffs, oil products, pharmaceuticals, all services except those specifically taxed at 22%	Postal, financial, educational, health, insurance, social and gambling services, radio and tv services, transfer of land and buildings (after minimum 2 year holding requirement)	Goods cleared for free circulation in country	Customs value plus cus- toms duties and fees and excise duties
18%	Not applicable	Banking and insurance, residential lets, newspapers and periodicals, medical equipment and services, state postal, educational, and funeral services, gambling and lottery tickets	Importation of goods from abroad	Customs value plus cus- toms duty
	18% 22% (5%)	18% Not applicable 22% Basic foodstuffs, oil products, (5%) pharmaceuticals, all services except those specifically taxed at 22%	rights and licenses, certain food- stuffs, educational services Public transport, postal, health, educational, financial, and legal services, security operations, municipal services 18% Not applicable Public transport, postal, health, educational, financial, and legal services, security operations, municipal services Financial, insurance, educational, health, and gambling services, land sales, leasing of land and buildings Postal, financial, educational, health, insurance, social and gambling services, radio and tv services, transfer of land and buildings (after minimum 2 year holding requirement) Not applicable Rotational services Financial, insurance, educational, health, insurance, social and gambling services, radio and tv services, transfer of land and buildings (after minimum 2 year holding requirement) Banking and insurance, residential lets, newspapers and periodicals, medical equipment and services, state postal, educational, and funeral services, gambling and lot-	rights and licenses, certain food- stuffs, educational services Public transport, postal, health, educational, financial, and legal services, security operations, municipal services Not applicable Not applicable Pinancial, insurance, educational, health, and gambling services, land sales, leasing of land and buildings Postal, financial, educational, health, insurance, social and gambling services, radio and tv services, transfer of land and buildings (after minimum 2 year holding requirement) Not applicable Not applicable Rasic foodstuffs, oil products, pharmaceuticals, all services except those specifically taxed at 22% Not applicable Basic foodstuffs, oil products, pharmaceuticals, all services except those specifically taxed at 22% Not applicable Basic foodstuffs, oil products, pharmaceuticals, all services except those specifically taxed at 22% Basic foodstuffs, oil products, insurance, social and gambling services, radio and tv services, transfer of land and buildings (after minimum 2 year holding requirement) Banking and insurance, residential lets, newspapers and periodicals, medical equipment and services, state postal, educational, and funeral services, gambling and lot-

Table 3 Continued

Country	Rate (reduced rate; %)	Goods and services taxed at reduced rate	Exemptions	Definition of importation of goods	Taxable base of imported goods
Georgia	10%	Not applicable	Residential lets, public transport, cer- tain basic foodstuffs, financial, medical and educational services	Importation of goods from outside CIS is subject to VAT	Customs value
Hungary	25% (12%)	Household energy, medial instruments, basic foodstuffs, agricultural, transportation	Financial (excluding leasing), health, educational, postal, radio, television, and gambling services	Importation of a prod- uct in any manner	Customs value plus cus- toms duties and fees plus additional costs incurred before prod- uct reaches first do- mestic destination
Kazakstan	20%	Not applicable	Financial, postal, scientific, and edu- cational services, lease of land and buildings under certain condi- tions	Importation of goods from outside CIS is subject to VAT	Customs value or value equal to import lev- ies, duties and taxes multiplied by 1.2
Kyrgyzstan	20	Not applicable	Financial and banking services, postal, educational, and cultural services, public transport and utilit- ies, some copyrights and patents	Importation of goods from outside CIS is subject to VAT	
Latvia	18	Not applicable	Financial service, medicine and health services, entertainment, resi- dential accommodations	Importation of goods from abroad	No provision
Lithuania	18% (9% until 1/1/97)	Certain food products	Basic foodstuffs, insurance and bank- ing services, medicines and medi- cal equipment, newspapers, books, and postal services	Importation of goods from abroad	Customs value plus cus- toms duty
Moldova	20	Not applicable	No information	No information	No information

Poland	22 (12, 7)	Agricultural machinery, medical instruments, unexempted food- stuffs, hotel services, building materials, passenger transport, medical services; 12% rate ap- plies to fuels and energy	Agricultural, financial, educational, cultural, postal, and public admin- istration services, milk and dairy products, poultry and fish	Entry of goods from abroad to customs ir- respective of manner of entry	Customs value plus customs duties, excise duties, and import tax of 3%
Romania	18 (9)	Basic foodstuffs and medicine	Financial services, leasing of land and buildings, health, educational, cultural, and sporting services	Entry of goods from abroad	Customs value plus customs duties and excises
Russia	20 (10)	Basic foodstuffs and pharmaceuticals	Residential lets, banking and insur- ance, capital contributions, gam- bling, sale of assets during privati- zation, financial, educational, postal, cultural, and sports services	Importation of goods from outside CIS is subject to VAT	Customs value plus import duties and excises
Slovak Re- public	23 (6)	Basic foodstuffs, oil products, pharmaceuticals, paper prod- ucts, all services except those taxed at 23%	Financial, educational postal, cultural, insurance, social, gambling, radio, and television services, transfer and lease of land and new building (2 years after acquisition)	Goods cleared for free circulation in country	Customs value plus cus- toms duties, excise taxes, and import sur- charge of 10%
Tajikistan	20 (3% special tax)	Not applicable	Sale of assets during privatization, fi- nancial, educational, postal, cul- tural, translation, postal, and legal services	Importation of goods from outside CIS is subject to VAT	Customs value plus import duties and excises
Turkmenistan	20	Not applicable	Foodstuffs and children's goods, banking and postal services, health care, pharmaceuticals, fur, hides, raw cotton, and construc- tion materials	Importation of goods from outside CIS is subject to VAT	
Ukraine	20	Not applicable	Transportation, financial, insurance, postal, interpretation, cultural, and educational services, public utilities, pharmaceuticals, medical services	Importation of goods from outside CIS is subject to VAT	Customs value plus cus- toms duties
Uzbekistan	17	Not applicable	Exports, financial, cultural, and educa- tional services, public transport, pub- lic utilities, construction materials	Importation of goods from outside CIS is subject to VAT	Customs value plus cus- toms duties, excises

Note: Most CIS countries use a subtraction method for traders, use a restricted origin principle, and restrict for disallow credit for capital goods. *Source*: International Bureau of Fiscal Documentation (1996).

exceptions at the present time are Georgia, with a rate of 10 percent, and Uzbekistan, with a rate of 17 percent.

2. The VAT in Other CITs

Hungary was again the front-runner in the reform of indirect taxation by replacing its turnover tax with a VAT in 1988. The desire to join the EU weighs heavily in this decision. Next in line were Poland and Romania, which introduced a VAT in the summer of 1993.

- a. Exempted Commodities. Because many of these countries have a lower VAT tax rate for certain commodities, such as food and medicines, the list of full exemptions is generally smaller. Typically, health and educational services are exempt, as are hard-to-tax activities such as banking and insurance. The trend has been toward expanding the tax base by reducing exemptions, especially for services. Exports in this group of CITs are zero-rated, so that they are not only exempt, but there is a credit for VAT paid in the intermediate steps of production. In the early stages of the reforms, several countries made more liberal use of zero-rating. For example, in the reform of 1988 Hungary applied a zero rate to food and many other basic goods, representing up to 40 percent of the tax base. Later reforms eliminated the zero rate status for all goods with the exception of exports and medicines.
- b. Scope of the Tax. All CITs in this group have extended the coverage of the VAT to the retail level using the invoice method, however, small businesses are exempted from registering for the VAT. Unlike CITs in the CIS group, all CITs in this group have a well-defined limit (an absolute money amount) for the threshold or minimum level of business activity under which businesses are not required to register under the VAT.
- c. Tax Rates. Most of the countries in this group have adopted two rates for the VAT (Czech Republic, Hungary, Romania, Slovak Republic, and Lithuania) or a single rate (Bulgaria, Estonia, and Latvia). The exception is Poland, which has three rates. The lower rates are used for commodities such as food, medicines, or transportation, which in other countries may be exempt. Several countries in this group have experienced rate changes. For example, Romania started with a single rate and later switched to two rates, and Estonia and Latvia started with relatively low rates and later increased them.

The top tax rates for the VAT in this group of CITs tend to be higher than those in Western VATs. This has been explained as due to the fact that tax bases in CITs tend to be narrower both statutorily and economically and perhaps also by CITs' high revenue requirements. Hungary levies the highest rate at 25 percent, followed by the Slovak Republic at 23 percent, and Poland and the Czech Republic, both at 22 percent. All other CITs in this group have a top rate of 18 percent (Table 2).

Other Indirect Taxes

Other forms of indirect taxes in CITs, such as excise taxes and taxes on international trade, have received much less attention in the literature, perhaps signifying their smaller importance in overall revenues. 100

a. Excise Taxes. Hungary was the first CIT to adopt western-type separate excise taxes. These were adopted with the new VAT in 1988. Most CITs also introduced separate excise taxes when they introduced their VATs or earlier in the transition when the old turnover taxes were simplified in preparation for the adoption of a VAT. With few exceptions, CITs levy excises on the traditional commodities: tobacco products, alcoholic beverages, and petroleum products. In some CITs the list of excisable commodities is augmented by several "luxury goods." This category, not surprisingly, varies across countries. There is also a variety of rates. Specific rates are used in some CITs for petroleum, alcoholic beverages, and tobacco products, but ad valorem rates are much more common.

In the CIS countries that adopted the Russian model VAT, excise goods imported from other CIS are exempt from domestic taxes. This is in harmony with the origin method used for the VAT for transactions within the CIS, however, imports of excise goods from non-CIS countries

are subject to excise taxes. Because excise rates can differ significantly within the CIS, it appears there has been a considerable increase in trade within the CIS to arbitrage these differences. Contraband coming through some of these countries also appears to be on the rise.

b. Customs Duties. As we have seen, taxes falling on imports were not an important part of the revenue systems of planned socialist economies. For example, imports in the Soviet Union were not subject to the 5 percent multistage sales tax (known as the Gorbachev tax) covering many goods and services, but rather were taxed separately. The separate import levy fell exclusively on consumption goods and primarily attempted to tax the windfall profits from conversion to rubles at the official exchange rate. Some CITs did not tax imports in any way in the earlier years of the transition. At the present time, all CITs have adopted a customs duties.

While some Central and Eastern Europe CITs have acted wisely by introducing modestly protective tariffs with low rate dispersion, the norm among CITs that are part of the CIS has been to put into place high tariff rates with wide dispersion, thus succumbing to pressures for the protection of domestic activities and for using import levies as a significant source of tax revenue. In particular, the taxation of consumer goods and the exemption of imported inputs are likely to lead to high and variable rates of effective protection across economic sectors. Collapsing employment and economic activity in many sectors, the lack of quality of domestic products, and the availability of cheaper better-quality imports have added to protectionist pressures in many CITs. Some of these countries, it appears, are embarking upon the protectionist and import-substitution policies that until recent years had entrapped Latin American countries. These policies will lead to the misallocation of domestic resources, lend an antiexport bias to production activities, and retard economic growth.

I. The Modernization and Reform of Tax Administration

Whether or not the tax reform effort ultimately succeeds in economies in transition depends upon the strength or lack thereof of the tax administration system. Governments have adopted western-style tax structures with relative ease, yet have struggled with low rates of revenue mobilization and increasing rates of tax evasion. The modernization and structural reform of tax administrations in CITs has lagged behind other reforms, including price liberalization and privatization. The relative lack of attention paid to tax administration issues early in the transition is a legacy from the unimportant role played by the tax administration in CPEs, ¹⁰² but without comprehensive modernization and reform of their tax administrations, the tax reform effort in CITs will continue to face an uncertain future.

1. Decreased Revenue Mobilization and the Economy

Tax revenues in Central and Eastern Europe CITs plunged in the years immediately following the early reforms. ¹⁰³ The Baltic countries, Russia, and the rest of the CIS also experienced a significant deterioration of tax revenues in real terms and for most of them also as a percentage of GDP since 1991 (Citrin and Lahiri, 1995; Hemming, Cheasty, and Lahiri, 1995). This decline in revenues is due in large part to economic factors, not the least of which is the collapse of economic activity in the traditional sectors of the economy. ¹⁰⁴

Specific economic features of transition economies may have also contributed to the poor revenue performance. High rates of inflation could have contributed to revenue erosion. Most CITs have been subject to spurts of high rates of inflation, especially in the earlier years of the transition. Other economies around the world experiencing high inflation have seen an erosion of real tax revenues because of the lag between the time when income is generated or the economic transaction takes place and the time when taxes are actually paid (a phenomenon known as the Tanzi effect). In many CITs, however, collection lags have been relatively short by international standards. The general lack of indexation of tax structure probably had a mixed impact on revenue performance. The depreciation of capital at historical costs and in some cases bracket creep in the individual income tax helped increase tax revenues. Other

features of the tax structure, such as the use of historical costs for the calculation of the VAT at the retail level in CIS countries or the exemption of interest income and full deduction of interest costs led to losses in revenues. The different composition of tax bases in CITs may also have had an impact on revenue performance. For example, the exemption from VAT of basic commodities such as food, medicines, transportation, or housing consumption in CITs likely represents larger foregone revenues than is the case in western economies because of the differences in household budget composition in the two groups of countries.

2. Impact of Policy on Tax Administration

A commonly aired criticism of tax policy in CITs has been its rapid change and instability (McLure, Martinez-Vazquez, and Wallace, 1997; Khankevich, 1996; Bahl and Wallich, 1995; Bogetic and Hillman, 1994). The scope and frequency of changes to the tax system cannot be accurately measured by changes to the tax code. Frequently presidential decrees, administrative orders, and instructions are used to modify the tax code. The continuous process of change reduces the transparency of the tax system, inhibits the ability of tax administrators to correctly ascertain individual tax liabilities, and tends to overwhelm honest taxpayers. Rapid policy changes lead to either perceived or real opportunities for tax evasion and avoidance, and therefore to an increased perception of unfairness in the tax system. Taxpayers, faced with a rapidly evolving tax code, often unilaterally decide liability issues in their favor. Tax administrators must decide between what is an incorrectly calculated tax liability due to the vagueness in the tax code and what is a genuine attempt to evade some part of an individual taxpayer's liability. Instability of the tax structure can also discourage investment, especially by foreign companies (Riordan and McLure, 1993).

A troubling factor from the policy side is that substantial tax changes have been systematically introduced with little or no preparation and education of tax administrators and taxpayers. Commonly, tax policy reform in CITs has been divorced from the necessary complementary legislation reform on the tax administration side. ¹⁰⁹ The most important example is provided by the VAT, which was introduced in most CITs with no adequate preparation and led to unexpected decreases in revenues. ¹¹¹

Tax administration has been made more complex and the revenue streams to the state treasuries reduced by CIT government and ministries' continued issuance of ad hoc exemptions and tax holidays. ¹¹² As we discussed in our review of enterprise profit taxes, the consequences of these policies go beyond administration and collections. The issuance of exemptions, tax holidays, and ad hoc adjustments are based upon the perception that certain sectors, such as agriculture or energy, are more "important" or that government bureaucrats can improve on the resource allocation by markets, but a more likely outcome is that these policies result in a misallocation of resources in the economy, leading to lower potential GDP, increased horizontal inequities, tax evasion, and reduced incentives for market reform.

A different type of policy in CITs impinging on the effectiveness of tax administration is the emerging use of "tax offsets." Using tax offsets, government agencies pay for their purchases with tax exemptions, which enterprises may then submit in lieu of cash in the settlement of the tax bill. In Russia during early 1996 a sharp increase in the fiscal deficit occurred as over 50 percent of enterprises used tax offsets to settle the tax accounts in June and July (Ministry of Finance of the Russian Federation, 1996). A variant of this system has been used in Kazakhstan, in which the government established a clearinghouse of tax and payment arrears. Enterprises that were owed money by the government could "swap" these liabilities for tax liabilities, effectively settling the existing arrears.

Other aspects of institutional reform have an impact on the effectiveness of tax administration. An important handicap for effective tax administration in CITs has been the incompatibility of old accounting systems with the western-type taxes these countries have adopted. A conspicuous example of this incompatibility has been the use of cash accounting and the invoice method for the VAT in Russia and other CIS countries. 113 Over the years, many CITs have started adopting

new accounting systems (e.g., Kazakhstan in 1995 and Russia in 1996), but their implementation will be a long-term effort.

J. Tax Evasion and the Integrity of Tax Administration

No formal studies, to our knowledge, exist on the extent and level of evasion in CITs, however, an increasing number of informal estimates seem to confirm that there is a considerable degree of tax evasion in these countries. A recent Russian Federation Ministry of Finance report estimated that the compliance rates for the VAT and enterprise profit tax fluctuated between 50 and 60 percent in 1995 and 1996. In Latvia it has been estimated that the informal economy outside the tax net represents between 30 and 50 percent of all economic activity. The existence of widespread tax evasion is also confirmed in a number of taxpayer surveys, however, it is not uncommon for tax officials to be unaware of or deny the existence of tax evasion in their countries (Martinez-Vazquez, 1995; Bird and Tsiopolous, 1994).

Often these estimates of evasion make no distinction between underreporting and nonfiling. Extrapolating from the experience with tax evasion in industrial and developing countries, nonfiling should be the more important phenomenon among smaller private businesses. Tax administrations in CITs have had to cope with a rapid increase in the number of private entities. Khankevich (1996) reports that during 1995 total tax payments of unincorporated private entrepreneurs in Belarus increased by 575 percent after the intervention of tax inspectors. Underreporting, through underinvoicing, transfer pricing, and the like, should be a more important source of evasion among traditional state enterprises and larger new businesses. Khankevich (1996) also reports that during 1995 commercial enterprises in Belarus concealed approximately one-half of their taxable income and that 93 percent of total tax payments occurred only after the intervention of tax inspectors. A practice of manipulating enterprise accounts in Russia reported by the OECD (1995a) may be symptomatic of the scale and sophistication of underreporting in CITs. The opportunity for evasion will be increased with the introduction of tax holidays and other special tax treatments.

High taxpayer compliance costs can also be a significant factor in tax evasion. Compliance costs are higher if taxpayers have to wait in line for a long time to pay their taxes, forms are not available or lack instructions, or if the laws are complex and vague, requiring taxpayers to hire expert advice to complete their tax returns. These conditions are descriptive of the present conditions in many CITs. Additional filing requirements are also part of compliance costs. For example, in Russia and other CIS countries, taxpayers are required to file balance sheets and income statements on a quarterly basis, despite the fact that much of this information is hardly used by the tax administration.

Corruption and bribery of tax officials, made easier by low wages, is often mentioned on an informal basis as a growing cause of increasing evasion in CITs. A milder version of questionable practices is moonlighting by tax officials who give tax advice to private taxpayers. As the tax code has become more complex in CITs, the need for professional skills and specialization in tax laws has increased, and in some countries tax officials have been all too happy to fill the vacuum of expertise, 117 however, some countries have introduced strong conflict-of-interest laws to deal with this problem. 118

Several other practices of tax administrations in CITs are likely to affect tax evasion. One of them is to permanently assign tax inspectors to particular enterprises, thus opening the possibility of corruption and other problems. The random assignment of audit cases to tax inspectors, as is done in most western countries, is an effective way to reduce opportunities for corruption. A second practice has been to earmark a share of tax penalties and additional assessments from audits to the tax administration. The "rewards" are typically divided among the local and central offices and in some cases a small portion goes as financial incentive to the tax inspector. While most tax administrations are in need of additional funds, it is clear that this practice is vulnerable to abuse.

Despite these problems and other organizational and procedural shortcomings of transi-

tion tax administrations (discussed below), it would be all too easy to blame the increases in tax evasion in CITs exclusively on weak tax administrations. There are other aspects of the tax systems, such as high and cumulative marginal tax rates, ambiguous or poorly drafted tax laws, and repeated changes in the laws that are also likely to bear on this issue. Also unrelated to the tax administration per se, and much harder to overcome, is the legacy of distrust of the state and the lack of a tradition of voluntary compliance in CITs (Kornai, 1990; Tanzi, 1994; Bogetic and Hillman, 1994; Summers and Sunley 1995; McLure, 1995b).

K. Tax Administration Organization and Procedures

Technical assistance, principally from the International Monetary Fund (IMF), but also from the World Bank, United States Agency for International Development (USAID), and the EU, have all contributed significantly to the process of modernizing tax administration in many CITs. The organization and the operating procedures of many transitional tax administrations, however, still remain woefully inadequate to the task at hand. We review some of the remaining problems below.

1. Organization Issues

The tax administrations in Russia and the rest of the CIS countries for the most part still have the same territorial and organizational structure they inherited from the Soviet Union. Most collection and enforcement activities are carried out at the lowest level (territorial inspectorates in Russia). The regional offices supervise and coordinate the efforts of the local offices and report collections and other information to the central office. In CIS countries, the power and control exerted by the central office over the regional offices varies, but are considerably weaker than those found in western tax administration systems.¹¹⁹

The organizational structure of the territorial tax offices is by type of taxpayer (e.g., individuals and enterprises) or by type of tax (e.g., VAT), which leads to the duplication of tasks and to a lack of specialization in the more demanding areas of tax enforcement, such as field audits. Western tax administrations have functionally based organizations with specialized offices for the major tasks of registration, collection, audit, computerization, and so on. Although some eastern European countries have adopted functionally based organizations, the process has been slower in CIS countries. ¹²⁰

2. Registration Issues

The challenge in this area is for transition tax administrations to be able to monitor nonfilers and stop-filers. A unique and well-designed taxpayer identification number (TIN) is one key for carrying out these tasks properly. Most CITs have such a system or are developing one, however, there are problems with the design of the system and in many cases the TINs are not unique (Karnite and Dovladbekova, 1995). Although there is concern in many CITs about the increasing ranks of nonfilers in the private sector, few coordinated efforts are being put into place to address this problem.

3. Collection Issues

Tax arrears represent a constant or increasing problem in many CITs. There are multiple causes for these arrears, including the existence of governmental arrears with enterprises. The monitoring of collections is in many cases still carried out manually on ledger cards, and many CITs lack coordinated plans and procedures to detect and collect arrears. On the other hand, several CITs' tax administrations appear to make effective use of legislation that allows them to garnish or seize bank deposits from delinquent taxpayers.

The practice inherited from the past of setting quotas or revenue targets by local office may have contributed to a lackluster performance. Once revenue targets are satisfied, there is

less motivation to vigorously pursue collections of arrears. Revenue forecasting using modern techniques is rarely performed. Poor forecasts have also led on some occasions to unrealistic collection quotas. Failure to meet these quotas has been at times indiscriminately interpreted as flagging tax enforcement. Local tax offices have developed an array of techniques, such as pleading with taxpayers to prepay their taxes, to satisfy the official quotas.

4. Audit Issues

This key area of tax enforcement has been slow to develop. Most CITs have no tradition in modern audit techniques. In the past, enterprises were restricted to a single bank account and state banks were used to monitor tax compliance. Currently audit work consists of office audits using the returns and financial statements submitted by taxpayers. Office or "cameral" audits often are perfunctory. Field audits and the use of third-party information remains rare. Audit plans and audit selection programs are also rare.

In Russia and other CIS countries the norm inherited from the Soviet Union was to audit 100 percent of all taxpayers at least every two years. Managers still remain focused on reconciling 100 percent of tax declarations instead of concentrating on those accounts with the greatest revenue potential, but it has become clear that full audits are no longer possible with any reasonable level of resources. Neither are they necessary. A self-assessment system for the most important taxes combined with well-targeted and publicized audit programs of sample taxpayers and presumptive taxation methods for nonfilers, can be much more effective enforcement tools. In Russia and other CIS countries penalties are harsh and rules for their application inflexible. A penalty of up to 50 percent of the omission is routinely applied to taxpayers who have made honest mistakes. In addition, interest rate charges compounded daily make it necessarily impossible for many taxpayers to pay their liabilities, driving them down into the underground economy.

Taxpayer Services

This area of tax administration, part of the "methodology" section in CIS countries, is extremely weak. Taxpayer services were unknown under the previous system and are emerging slowly. Taxpayer familiarity with taxes remains low; often taxpayers do not have access to tax regulations or even tax forms, and very rarely are these forms accompanied by adequate filing instructions. Often, taxpayers have to pay to get instruction booklets and tax forms. On top of everything, taxpayer services also have to combat the confusion introduced by rapid changes in the tax code and the deep-rooted general distrust of government institutions.

6. Resource Availability

Practically speaking, all transitional tax administrations must attempt to collect taxes with inadequate resources. A prime problem is that tax administrators are unable to retain skilled personnel due to the higher wages in the private sector. The high rate of turnover at times has worked in fact as a deterrent to aggressive training programs in computerization and accounting.

Although there is little disagreement about the importance of training, most CITs still need to develop a structured long-term training program for tax officials in modern tax administration and accounting practices.

Until now the lack of financial resources has prevented the creation of information systems that facilitate many tasks, such as registration, collections, monitoring, auditing, and billing of taxpayers. Some computerization of tax administration services is taking place, but often this is not adequately preceded by clearly designed procedures and systems. Often there is a lack of coordination of these efforts in different parts of the country, which is likely to lead to significant problems of data compatibility and administration in the future.

L. Future Dilemmas in Tax Administration

The transition to market economies and the reform of other areas of the public sector have presented tax administrations in CITs with several additional dilemmas; including the following.

1. Is There a Need for Regional and Local Government Tax Administrations?

Tax administration used to be a local and regional function in most CPEs. Early in the transition, most CITs nationalized and centralized their tax services. Former local and regional tax officials become employees of the national tax service. The elevation of the tax administration to national status did not generally result in a single subordination structure, however. In practice, if not de jure, the system of dual subordination, in which tax administrators answered to central or federal authorities and to local authorities, remained. In some CIS countries, subnational government authorities still have the right to approve key appointments in the territorial offices of the state tax administration. The distribution of resources in many cases has not adapted to a more centralized tax administration system. ¹²¹

The importance of dual subordination is highlighted by the reliance of local tax inspectorates on local governments for the provision of housing, medical, and other social services. This reliance has given leverage to local governments to pressure tax administrators to ensure that local governments are the first to receive revenues, to collect and audit those taxes in which local government sharing is most important even if they have a lower revenue potential, and to go easy at times on enterprises deemed important by the local authorities. When local taxes exist, local authorities can exert pressure to see that these taxes are given priority. A different view, and often a complaint of local and regional officials, is that the national tax service has much less of an incentive to allocate scarce resources to the collection of local taxes. Most CITs rightly have opted for the time being to concentrate on the development of the national tax administration, but there seems to be some consensus across CITs that in the longer run it will be desirable to develop local or regional independent tax administrations that would be exclusively in charge of administering subnational taxes.

2. Tax Administration and Tax Police

It has been quite common in CITs to introduce an organization parallel to the tax administration that is charged with the investigation of tax fraud and other illegal activities such as illicit hard currency dealings. In some CITs this organization has been staffed by the former secret police as part of an entirely separate organization or attached to the tax administration but with separate status and rules and regulations (Bird and Tsiopolous, 1994; Martinez-Vazquez, 1995). Although specialized officials concentrating on criminal investigation issues related to tax compliance are badly needed, this problem appears to have been approached in many CITs in a heavy-handed way. The concern is that this approach may actually backfire, given the lack of trust in government institutions. In addition, the duplication of functions of the tax administration and the tax police may be inconsistent, is a waste of resources, and may penalize taxpayers unduly.

3. Should the Tax Administration Be in Charge of Social Security Contributions?

Many CITs are also struggling with decreasing compliance rates for social security contributions or payroll taxes, whose revenues are earmarked to extrabudgetary funds. In many of the CITs the typical arrangement is that collection and audit of payroll taxes are carried out by inspectors of the extrabudgetary funds. These inspectors are generally fewer in relative terms and less well trained than those of the regular tax administration. The self-enforcement element for social security contributions expected from the link between contributions and benefits is in many cases weak. Benefits may not be related to contributions or, when they are, the link involves only the last years of employment.

To confront the problem of declining compliance, CITs would need to invest heavily in programs to modernize and strengthen the enforcement of social security contributions, but given that public resources are very scarce and that similar resource investments are needed for the general tax administration, the question is whether or not economies of scale can be realized by integrating the collection and enforcement of social security contributions into the regular tax administration. Those that answer yes argue that a smaller investment and a strengthened collection and enforcement mechanism for both social security contributions and taxes are possible. The economies of scale come from the fact that much of the work extrabudgetary fund inspectors need to do in collections and audit duplicates the work of the regular tax administration for enforcing the withholding tax on wages and salaries.

International practice in western countries in the organization of the enforcement of social security contributions is varied. In some countries, the tax administration may be responsible for collecting and enforcing social security contributions. In other countries, there may be a specialized agency separate from the tax administration for collecting and enforcing all types of social security contributions. Still a different model puts each social security agency, such as the pension fund and the health fund, in charge of collecting and enforcing its respective contributions.

If CITs do decide to integrate collections of social security contributions and all other taxes, care is needed to address an incentive problem. Regular tax administration may not always have the same incentives to collect contributions as to collect taxes. A solution may be to "lease" the services of the tax administration to collect and enforce contributions, making sure that the agreement is incentive-compatible on both sides of the bargain.

V. CONCLUSION

The last five to six years of fiscal reform in CITs have provided a formidable economic experiment in tax policy design and practice. Given the diversity of countries involved, it is not easy, and indeed in some cases it may be misleading, to arrive at general conclusions and lessons from this experiment. The paths and strategies for fiscal reform followed by CITs differ considerably, as, not surprisingly, do the outcomes. The experiences range from the case of Estonia, for example, which adopted a clean modern tax structure in 1993, with wide bases and single rates and has barely changed since then, to the case of Belarus, for example, which has not changed the substance of the tax system it inherited from the Soviet Union and yet has undertaken a myriad of continuous changes in the tax laws. Despite the caveat on the diversity of experiences, several general conclusions emerge from CIT experiences with fiscal reform.

First, it is well known to practitioners that the reform of tax systems never takes place on a clean slate. The legacy of the philosophy and practices of tax systems under centralized planning has played a significant role in all CITs.

Tax systems in CPEs had markedly different functions from those in market economies. Tax systems in CPEs focused on cash management and balancing demand with available supply. These tax systems dealt with a relatively small number of state enterprises with a focus on heavy industry, and used customized, discriminatory, and at times retroactive measures to promote priority areas in the central plan and penalize economic activity that was viewed as socially unproductive. There was much less concentration on using tax systems for the more conventional purposes such as income distribution or even revenue adequacy, since governments had the ability to syphon out profits from state enterprises in a variety of ways other than taxes and were free to set wages.

Tax administration in CPEs was made easy by the pervasive presence of the state in the economy. Tax administrators could use the state banking system to track all sorts of payments so that tax enforcement was an issue in applying proper accounting procedures. At the same time, tax administrators had extraordinary powers to negotiate tax liabilities and even to adjust

tax rates retroactively. In sum, CPEs had few reasons to develop tax administrations with many of the features that exist in western countries.

The ability to shake off the legacies of the past has varied among CITs. In those countries with stronger ties to Western Europe (e.g., the Baltics, the Czech Republic, and Poland), the philosophical shift has been accomplished more rapidly than in Belarus, Bulgaria, Romania, and many of the CIS countries, but at any rate, the lesson is that there can be no good understanding of the current problems of tax systems in CITs without deep knowledge of the institutional and behavioral legacies inherited from the previous regimes. For example, the central authorities in all CITs have created de novo national tax administration systems. The traditional attachment of tax administrators to regional and local authorities, however, makes many of these national tax administrations very different institutions from the centralized tax administrations in western countries. National interests or a national perspective in many CIT tax administrations are still secondary to local ones.

Second, tax systems are as good as their enforcement. Effective tax reform cannot be accomplished in isolation from the current capabilities of the tax administration systems and taxpayers' culture. In retrospect, the most serious mistake CITs collectively made was to focus primarily on modernizing tax policies and relegating tax administration and taxpayer issues to a remote second place. Scant attention and fewer resources were dedicated early on in the transition to reforming and strengthening tax administration and preparing taxpayers for the new taxes and procedures.

This happened despite the almost universal recommendation from the international advisors of giving first priority to the restructuring and modernization of the tax administration systems in CITs. There were abundant warnings early on about the substantial investments in the time and resources needed to modernize tax administrations. The advice for the most part was not heeded. Because the time required for these efforts to take effect was measured in years, the focus shifted to tax policy reform, albeit in many cases without considering the legacy of the previous system or the limited capacity of the current administration. The results have been in many cases lagging collections and increased tax evasion.

Of late, there has been wide explicit recognition in CITs of the need to improve tax administration systems, but still there is often no priority given in the allocation of resources devoted to this effort. Fundamental problems still remain. Tax administrations in many CITs are still not functionally organized and they lack adequate programs for registration, collection, and auditing. There is also a lack of human and physical capital resources to handle the increased number of taxpayers. Addressing the resource constraint will not solve all the tax service problems, but it needs to be a starting point. In order to ensure that resources are available to the modernization of the tax service some extraordinary measures may be required. CIT governments could divert a fixed portion of increases in real revenues to the improvement of the tax administration service. The fixed percentage of revenues could exclude fines and penalties and would be enacted with the sunset provision that the legislature must review and reapprove the fund after a specified period of time.

Third, tax policy reform need to carefully assess different options against explicit economic objectives, to be comprehensive, and to be swiftly enacted and left unchanged for some time. In practice, the experience of most CITs did not meet these standards.

A good portion of the tax reform process in CITs has been carried out without an explicit evaluation of how well the different proposals would perform against standard objectives, including revenue performance, economic neutrality, tax burden distribution, and simplicity and administrative feasibility. Shortchanging the preparation stage led inevitably to ad hoc continuous patching of the system, creating confusion among tax administrators and taxpayers alike and creating uncertainty for domestic and national investors.¹²⁴

The two main choices for tax policy reform in transitional economies were to immediately replicate a model western tax system or to develop a tax system that, while modern, would take the realities of the transitional environment into account. In practice, there was a varying mixture of the two approaches and rarely with the right balance. Countries that immediately adopted western-designed taxes often encountered significant problems because of the incom-

patibility of these taxes with accounting practices or the lack of familiarity of tax administrators and taxpayers with the new taxes. Some of these problems should have been expected, but they were aggravated by the lack of preparations for the reform or the failure to implement other supporting reforms, such as accounting or ownership titling. On the other hand, those countries that tried to adapt the tax system to their unique transitional structures often ran into the problem of continued change under different pressures, bringing more instability and uncertainty into the transition process.

With hindsight, the report card on tax reform is one of missed opportunity. Ideally, CITs should have adopted a tax structure that was simple and well adapted to the institutional and administrative constraints of the transition environment. Then they should have kept these systems stable for several years and used that time to modernize and upgrade their tax administration systems and educate their taxpayers. In many cases the reform of the tax structure replicating "best practice" in western market economies came too soon.

The report card on tax reform efforts in CITs comes up short against many of the standard objectives of tax reform. Although there are exceptions, most CIT tax systems have not accomplished the objective of simplicity. Often there are unnecessary taxes, and the standard taxes are too complex. Simplicity will require that taxes have fewer rates and the broadest possible base, eliminating many exemptions and deductions. Simplicity will also require getting rid of nuisance taxes and other taxes with low revenue potential, making tax declarations simple and clear, and demanding only from taxpayers information that is relevant to tax enforcement.

Tax systems in CIT also come up short against the objective of economic neutrality. Here, many CITs appear not to have learned the lessons from their own past or even those from western countries. Many CITs have continued their interventionist legacies, and the trend would appear to have worsened in recent times. Special treatment leads to distortions, abuses, increased compliance and administrative costs, and taxpayer inequities and resentment. CIT tax systems, for the most part, have not provided the desired level of stability in tax institutions. Continuous changes in the tax structure have contributed to increased administrative and compliance costs, have facilitated tax evasion, and have discouraged economic activity. The tax system must retain some measure of stability in order to create a positive climate for economic activity and to allow tax administrators and taxpayers to adjust to the new system. CITs also need to lower compliance costs for taxpayers. This goal will depend to a large extent on keeping the tax laws simple, but also on eliminating unnecessary requirements, such as filing balance sheets and income statements every quarter or physically queuing for a long time to pay taxes.

The new tax systems in CITs have not been particularly successful in generating adequate revenues either, however, here it is all too easy to be inappropriately harsh given the extraordinary circumstances of prolonged and significant declines in real economic activity during the transition.

It is too early to judge the impact of CIT tax systems on income redistribution. On the whole, early fears on aggressive use of the tax system to accomplish income redistribution objectives have not materialized. Despite their cultural legacy, or perhaps in reaction to it, CIT policies in this area have been moderate. Nevertheless, widespread tax evasion is likely to make CIT tax systems inequitable in both a horizontal and a vertical sense.

Finally, the success of tax reform has depended to a large extent on institutional and structural reform throughout the economy. The evidence seems to indicate that CITs that moved quickly to restructure their economies have fared better over the past five years than countries that have been slow to implement reform (World Bank, 1996). Too often CITs that have been less successful in the tax reform arena adopted a strategy of approving the new tax laws and waiting for the new system to operate by itself. These countries have been slower in modernizing their accounting systems, strengthening and enforcing bankruptcy laws, and reforming their entire legal systems.

NOTES

CITs refers to all previous centrally planned or socialist countries in Central and Eastern Europe
and in the former Soviet Union. This chapter does not address the cases of China, Vietnam,

North Korea, Cuba, or Mongolia. A distinctive feature of this group of countries is that with the exception of Mongolia the varying degrees of economic and fiscal reform are taking place in the context of authoritarian regimes.

- 2. This chapter focuses on tax policy and tax administration and does not address intergovernmental finance issues. This is done to keep the chapter to a manageable length. This is an important omission because in many cases the shape and impetus for tax policy in CITs has come from intergovernmental tensions. In addition, important tax administration issues in CITs are closely intertwined with the structure of intergovernmental relations.
- We use this label to designate the same group of countries now in transition from their former regimes.
- 4. Also see Kopits (1991b) and Owens (1991b) for additional cross-country comparisons. The comparison of tax revenue structures in CPEs and western market economies can be misleading because of the much larger role played by state enterprises in CPEs.
- 5. Bird and Casanegra (1992) have usefully termed this "boutique" tax administration (in contrast to "mass" administration).
- 6. These taxes were not like a western-style turnover (gross receipts) tax.
- 7. Revenues collected from wage and payroll taxes were used to fund social expenditures, housing, education, culture, health care, and pensions (Gandhi and Mihaljek, 1992).
- 8. However, workers in the Soviet Union, for example, received payroll slips biweekly on which both gross and net salaries were reported.
- 9. This argument is made by Bogetic and Hillman (1994). See also Blejer and Szapary (1991) and Bakes (1991).
- The wage fund was one of several institutionalized vehicles for the distribution of enterprises' net profits.
- Poland, for example, set the rate of return on the "founding fund" at 32 percent. The founding fund was defined as the net book value of the enterprise in 1983, inclusive of any subsequent capital transfers (Gray, 1991).
- This point is emphasized in many studies of taxation in socialist planned economies. See, for example, Gandhi and Milhaljek (1992).
- Government revenue from "financial repression" has also been a common phenomenon in developing countries. See Giovannini and M. de Melo (1990).
- An often cited example: until recently Romania and Bulgaria imposed income taxes on childless persons, purportedly in an attempt to promote higher birth rates.
- 15. The public sector importance of these activities was evidenced during the transition as firms began to divest these responsibilities and increased pressure on government budgets. See Bird, Ebel, and Wallich (1995).
- 16. Kornai (1986, 1992) called CPEs' taxes "soft taxes." See Owens (1991b).
- 17. There are no exact figures on the composition of these different items. Kodrzycki (1993) reports that in the late 1980s, nontax revenues accounted for 8 percent of GDP on average, twice the corresponding level for western economies during the same period.
- 18. The Chinese have carried the negotiation approach one step further with the use of formal contracts. The provincial government negotiates a tax contract with state-owned enterprises, usually stating a quota amount of tax to be paid, but offering lower marginal tax rates to enterprises that exceed the quota amount. Though the contracts were supposedly limited to the enterprise income tax, they were also used widely for the value added tax. The practice of tax contracting was eliminated by the 1994 reform (Bahl, 1997).
- 19. The absence of conventional tax distortion in CPEs did not mean, of course, that these countries escaped economic inefficiencies. In fact, the inefficiencies associated with the pervasive interference of the state in the allocation of resources throughout the economy were quite extensive. In addition to the inefficiency of decisions, central planning eroded incentives to innovate, work, and save. The common state of affairs was an economy with excess demand controlled by physical rationing and shortages in production (Kopits, 1991b; Kornai, 1990).
- 20. Controlled prices meant that enterprises could not alter prices or wages to shift the burden of payroll, profit, or turnover taxes onto consumers or workers. Labor supply could hardly

be affected by taxation due to restrictions on labor mobility and monetary and most in-kind compensation, however, higher enterprise taxes could have been shifted to labor if they reduced the size of the wage fund. Also, the high rate income taxes imposed on some professionals were probably successful in discouraging "undesirable behavior."

- 21. Nevertheless, personal savings accounts were common in many CPEs, and a substantial portion were voluntary savings. An important reason was the incompleteness of the social safety net, including low pensions, and the lack of efficient insurance mechanisms. Savings accounts also existed in part due to shortages in consumer products. These unspent balances led to the monetary overhang in Russia and other countries in transition prior to the liberalization of prices. This overhang was later eliminated by inflation and also, in Russia, by reneging on large denomination ruble bills.
- Estimates from a number of studies suggest that from 15 to 30 percent of the labor force in CPEs was hoarded labor (Gora, 1991). The impact of excess-wage taxes is discussed in Section V. The overemployment associated with labor hoarding resulted in low labor productivity in CPEs (Ray, 1991).
- For example, Party members and the Nomenklatura were frequently granted access to western products and other goods in short supply.
- 24. One of the primary arguments for the retention of the EWT in Russia in the recent past was that it compressed the income distribution and limited the growth in disposable income (Tait and Erbas, 1995). See also Marrese (1994).
- The unofficial economy in the Soviet Union apparently grew significantly over a period of the last thirty years.
- 26. For a discussion of the strategies and problems related to transitioning fiscal and economic policy, see Shome and Escolano (1993), OECD (1991a, b), Tanzi (1992), and Go (1994).
- 27. These choices at the beginning of the transition might be categorized by what Feldstein (1976) calls "tax design," or instituting a system from scratch with no regard for the preexisting conditions, and "tax reform," which does take into account historical conditions.
- 28. A distinguishing characteristic of most CITs has been the relative importance in the economy of large, state-owned conglomerates inherited from the previous regime. The size and importance of these conglomerates have steadily shrunk as conversion and privatization have proceeded. The presence of these large conglomerates, on the one hand, has dampened the supply response to tax policies relative to that expected in market or even developing economies (Kolodko, 1993). On the other hand, state enterprises have been more compliant (although considerable arrears have commonly occurred) than the rapidly growing private sector, thus providing an element of stability and continuity. It has been argued that this may not have been totally negative during the transition. Successful tax enforcement of the most dynamic sector could slow private initiative and growth. See Bogetic and Hillman (1994). Bahl and Martinez-Vazquez (1992) raise similar issues for the case of developing countries.
- A modern western-style global personal income tax should be introduced much later in the reform process.
- McLure (1991b) also advocated the adoption in CITs of the simplified alternative tax (SAT), a form of cash-flow tax.
- 31. See, for example, Boskin and McLure (1990), Owens (1991b), and Tanzi (1994).
- There was also an evolution of emphasis on equity in the 1960s to neutrality in the 1980s (McLure 1989).
- 33. For example, Hussain and Stern (1993) make the point that the taxation of intermediate goods may be temporarily desirable in CITs to compensate for existing distortions and as a way to bring into the tax net self-employed and small firms, which might otherwise escape taxation. We have also seen that in the same vein Shome and Escolano (1993) recommended the temporary use of EWTs and export duties or high import tariffs.
- 34. For a discussion of tax policy in developing countries, see Bird (1992), Boskin and McLure (1990), Burgess and Stern (1993), Khalilzadeh-Shirazi and Shah (1991), Thirsk (1990), and Newberry and Stern (1987). For a review of tax administration issues in developing countries, see Bird and Casanegra (1992).

- Property and natural resource taxes are not included in the discussion due to the lack of sufficient information across CITs.
- 36. State enterprises also had access to other funds, in particular off-budget accounts. See, for example, Le Houerou, Gold, and Katash (1994).
- For a discussion of the role of property rights in transition economies, see Shleifer and Vishny (1993).
- 38. These taxes are discussed below.
- 39. See, for example, McLure (1995b) for a critical look at Poland, Hungary, and the Czech Republic.
- 40. Actually the general tax rate in Hungary is 13 percent, but an additional 23 percent is levied on distributed profits. This reverses the normal use of split rates to achieve dividend relief, such as in the case of Germany.
- 41. Three countries (Bulgaria, Poland, and the Slovak Republic) have a general rate of 40 percent.
- 42. Multiple tax rates differing by type of enterprise and economic sector were not uncommon until recently. For example, in Bulgaria in 1993, state (controlled by the central government) enterprise profits were taxed at a rate of 52 percent and municipal enterprises were taxed at a rate of 42 percent (Bogetic and Hillman, 1994). Additional levies existed on profitable enterprises. Commercial banks, all state owned, were taxed at a rate of 50 percent, except for the State Savings Bank, which was taxed at a rate of 70 percent. Private enterprises and foreign ventures were generally taxed at lower rates, and rates vary with the level of profit and with ownership composition. In Uzbekistan, until recent reforms, while the rate was officially set at 18 percent, it varied from 3 percent to 60 percent, depending on the economic sector and the decision of the Cabinet of Ministers.
- 43. In a few areas, the enterprise profit tax in CITs can be more generous than is common in western countries. For example, it is common in CITs to allow enterprises a deduction for reserves against bad debts and other contingencies for all types of enterprises and not just insurance companies and other financial institutions as is more commonly the case in western countries. These more generous provisions may be justified by the much higher incidence of bad debts in CITs, however.
- 44. Croatia appears to be the only country that allows the adjustment of loss carry-forward for inflation. In the case of assets, losses can be reevaluated each year at the industrial inflation rate plus an opportunity cost of 3 percent.
- 45. Romania has been considering the introduction of a Chilean-type system of inflation adjustment.
- 46. Croatia's "protective interest deduction" is similar to the "allowance for corporate equity" (ACE) proposed by Devereux and Freeman (1991). In Croatia, interest and dividend income are exempt, and no other adjustments for inflation are provided in the enterprise income tax. The reforms in Croatia were spearheaded by a team of German advisors led by Manfred Rose. See Martinez-Vazquez (1995).
- In reality, many countries allow a variety of methods, and several restrict them to historic costs and/or weighted average costs.
- 48. See Shome and Escolano (1993) for a discussion of early depreciation measures, at times rather unconventional, in the Central Asian CITs. McLure (1995a) reports that Kazakhstan adopted a pooled asset account system for depreciation. There are concerns over whether or not depreciation allowances on these bases (historic costs and straight line) have been adequate for capital replacement (Tanzi, 1994).
- 49. The extent of tax incentives and special provisions, of course, varies across CITs. Hungary still has the most complex system, leading some observers to call it a "Swiss cheese tax" (McLure, 1995b).
- 50. See Shah (1995) for a review of these experiences.
- 51. Examples are Estonia, Romania, and to a lesser extent, Slovenia.
- Countries with this type of provision include Georgia, Russia, Serbia, Slovenia, Kyrgizstan, Tajikistan, and Uzbekistan.
- 53. This is practiced in Croatia (Martinez-Vazquez, 1995).
- 54. Up to 1995, presidential decrees were often used in the Russian Federation to grant tax benefits

- to entire sectors (e.g., the energy sector) and specific individual enterprises (e.g., the Zil automobile company in Moscow, OECD, 1995b).
- This has been the case in Ukraine, Latvia, Slovak Republic, Bulgaria, Czech Republic, and for the most part Kazakhstan.
- These general tax holidays are more costly and not more effective than targeted investment incentives. See, for example, McLure (1997).
- 57. For an excellent discussion of this issue, see Slemrod (1995).
- The taxation of foreign income made by nationals abroad is a less important question for CITs for the time being.
- 59. If the home country employs a territorial system (it taxes only income earned at home) tax incentive to foreign investors in the host country can be as effective as those offered to domestic investors. If the home country taxes global income but gives a credit for foreign taxes, CIT incentives to foreign companies are equivalent to a transfer of CIT funds to foreign treasuries. This transfer does not occur, however, if the foreign investor is in an "excess credit" position (foreign credits exceed the tax that would be paid on the same income in the home country). It is not uncommon for corporations in countries subject to a universal taxation to be in an excess credit position in their home country. Tax incentives offered to foreign investors from home countries with worldwide taxation may also be effective if the home country allows the "deferral" of repatriation of profits or has signed a tax treaty with the host country with a "tax sparing" clause. This latter allows credits for the taxes that would have been paid if the host country did not provide the tax incentive. See Slemrod (1995).
- 60. The exceptions are Croatia, Lithuania, and Albania.
- See Tait (1988) and Flanagan (1992). Many CITs have experimented with other forms of TIPs to control the internal wage bill of state enterprises.
- 62. The United States ratified a tax treaty with Kazakstan in late 1996. This would not have happened with the EWT in effect, since an income tax that does not allow deduction for wages is not eligible for foreign tax credits in the United States.
- 63. An EWT in combination with the standard profit tax can approximate the base of the VAT levied upon the full income of the enterprise. Tanzi (1991) makes this observation with respect to the Russian EWT, which was repealed in 1996.
- 64. The transition problems associated with the introduction of a cash-flow income tax would have been less pronounced in CITs because of the smaller amount of undepreciated capital in the economy and less outstanding debt. The less pronounced differences in the distribution of income may also have been a positive factor for the adoption of a consumption approach to income taxes in CITs, however, CITs still would have been subject to the uncertainty of whether the United States, and perhaps other countries with global income taxes, would have allowed foreign tax credits for cash flow taxes paid in CITs. For a discussion of the general issues, see McLure (1992), and of the crediting issue, see McLure and Zodrow (1995, 1996b).
- 65. Latvia and Lithuania also exempt all capital gains. Croatia only exempts capital gains from immovable property held for over three years, and Albania has no provisions concerning capital gains.
- 66. The failure to mesh individual and company taxes creates significant opportunities for tax arbitrage. This is the case, for example, when there is no tax on interest income and interest costs are allowed as a deduction.
- 67. This has been a repeated prescription for income tax reform in CITs. See, for example, McLure (1991a) and Tanzi (1991).
- 68. CITs with final withholding taxes on dividend income include Belarus, Czech Republic, Hungary, Kazakhstan, Kyrgyzstan, Romania, Slovak Republic, and Turkmenistan. The use of final withholding taxes is less common for interest income (Czech Republic, Kazakhstan, Slovak Republic) and for some types of interest (Poland and Estonia) and royalties (Albania).
- 69. Such is the case, for example, in Bulgaria, Armenia, Azerbaijan, or Russia.
- The inspiration for the new legislation came from multiple sources, not the least of which is Hussey and Lubick (1995).
- 71. There may have also been an incentive during the transition to switch compensation from

money wages to fringe benefits because of the high burdens on labor income implied by "excess wage taxes" and rather steep payroll and social security taxes, discussed below. Le Houerou, Gold, and Katash (1994), however, found little evidence of this type of switching in the Russian Federation up to the end of 1993.

72. Hungary taxes cash fringe benefits at the individual level, but all fringe benefits are taxed at the company level at a rate of 44 percent. The highest individual marginal rate in Hungary is

48 percent.

73. This is an approach openly used in Bulgaria and Poland. Most CITs also disallow or limit travel and entertainment expenses and other selected categories of expenses which can possibly be used to the nonbusiness-related benefit of employees and managers.

74. It is common not to allow as a deduction the contributions to pensions or the payroll taxes

paid by employees.

- 75. Personal and dependent allowances are defined in some CITs in terms of monthly minimum wages, such as in the case of the Central Asian CITs, Lithuania, and Moldova, or in terms of personal allowances, as in the case of Croatia. In Poland, children's allowances are paid directly to mothers and there is no provision in the personal income tax (PIT) code for this deduction.
- In Latvia, taxable income up to 60,000 lats (approximately \$115,000) is subject to a single rate
 of 25 percent, and income over that amount is subject to a rate of 10 percent.

77. Over one-third of the CITs have this top rate.

78. No information is available on what percentage of taxpayers is subject to the top rates. In most OECD countries only a small percentage of taxpayers is subject to the top rates.

- 79. In the early years of the transition, observers feared that inherited socialist values would lead CITs to put undue emphasis on the goal of equalization and distribution. Even though many CITs first introduced substantially higher marginal rates, the trend in the continued reforms has been toward more moderate rates.
- 80. The use of minimum wages for this purpose has been a common practice in many Latin American countries which have been subject to rapid inflation over the past two decades and decided not to use a full indexation approach for inflation. There is no uniform practice in OECD countries with respect to the automatic (full or partial) indexation for inflation of personal allowances, minimum exempt thresholds, or tax rate brackets. There are countries that have used both indexation and ad hoc discretionary changes, and some have switched from one system to the other.
- 81. See, for example, U.S. Department of the Treasury (1992) and Messere (1995). To avoid double taxation, measures can be taken at the individual taxpayer level or at the company level. At the individual taxpayer level shareholder relief may be granted by exempting or partially exempting dividends or by attempting to integrate both taxes. This latter approach involves imputation methods that tax the dividends at the personal level but give full or partial credit for the tax that give relief at the company level are less commonly used because company income taxes are used as withholding taxes for the harder to tax individual incomes. Relief at the company level can be provided by granting lower tax rates for distributed profits or by granting a deduction (partial or in full) for the distributed profits. One of the advantages of consumption-based cash-flow taxes is that they generally do not require integration because dividends are exempt.
- 82. This is the case in Russia and smaller FSU countries, including Armenia, Azerbaijan, Georgia, Moldova, Tajikistan and Uzbekistan, and Bulgaria.
- 83. This is the case of Belarus, Hungary, Kazakhstan, Kyrgyzstan, Poland, Romania, Slovak Republic, Turkmenistan, and Ukraine.
- 84. This is the case in Serbia and Slovenia.
- 85. These are Czech Republic, Slovak Republic, Serbia, Poland, Bulgaria, Croatia, Moldova, and Albania.
- Lithuania and Turkmenistan with 31 percent, Kazakhstan with 32 percent, and Estonia with 33 percent.
- 87. Other choices of sales taxes, such as a multiple-stage turnover tax or even a single-stage sales

tax at the production and wholesale levels, probably were inferior choices because of the arbitrary effective taxation across sectors and their undesirable economic effects. These general issues are discussed in many sources; Shome and Escolano (1993) and Summers and Sunley (1995) provide the most extensive discussions of indirect taxation and the VAT in CITs.

- 88. It is necessary, however, to have effective border controls at least for products that can be consumed by households. As we see below, the lack of border controls within most of the FSU has heavily influenced the nature of the VAT adopted.
- CIS stands for the Commonwealth of Independent States, which comprises Russia and all other former Soviet republics except for the Baltic countries.
- 90. See International Bureau of Fiscal Documentation (1996).
- 91. Some CIS countries have in the recent past embarked upon comprehensive independent reform efforts; this has been the case, for example, in Kazakhstan (McLure, 1995a).
- 92. The choice of this high rate of 28 percent was driven by the short-term objective of matching the revenues collected with the old turnover tax. This may say, if computations were correct, that the rates of the old turnover tax were quite high or that there was some degree of cascading associated with the old turnover tax. After a few months, a lower rate of 15 percent was introduced in Russia for most foodstuffs. Uzbekistan originally adopted a rate of 30 percent.
- 93. Belarus used a subtraction method VAT at all levels (Bird, 1995). In all CIS countries, there were problems with the definition or measurement of the margin. Supposedly, the margin is the firm's markup or the difference between the price paid for the goods and the price at which they are sold. The practice in CIS countries at the beginning of the transition is reviewed in Shome and Escolano (1993).
- 94. This presumably encouraged self-construction.
- Russia and the rest of the CIS countries also use a destination method for trade outside the CIS.
- 96. The common base for imports for VATs in the EU is customs value plus the tariff plus any excises that may apply. This is the base for imports commonly adopted in CITs in Central and Eastern Europe. Some CIS countries use a base that includes only customs value (e.g., Georgia and Azerbaijan), customs value plus tariff (e.g., Ukraine), or customs value, tariff, and excises (e.g., Russia and Uzbekistan).
- Tait (1988) provides an interesting discussion of the difficult choices to be made by CITs concerning VAT exemptions.
- The effect of preretail exemptions, including those for small businesses, differs under the credit method and the subtraction method. Taxes are higher under the credit method. See, for example, McLure (1987).
- 99. However, there is less clear justification for taxing other commodities at these lower rates. For example, Poland, Hungary, and the Czech Republic all tax hotel services at reduced rates.
- 100. Other forms of indirect taxation exist, but they are not reviewed here. For example, Kazakhstan levies a securities transaction tax on new issues of nongovernmental securities, including stocks and bonds, and on secondary transactions of these same securities (McLure, 1995a).
- 101. For example, a presidential decree in Belarus in August 1996 raised levies on all imports from 10 to 150 percent and established that 75 percent of the goods on sale in Belarusian stores must be domestically produced goods (*Tax Notes International*, 1996).
- See Section III and also Tanzi (1993, 1991); Bakes (1991); Gray (1991); and Bahl and Wallace (1995).
- 103. Go (1994) reports decreases as percentages of GDP from 60.2 percent (1987) to 34.2 percent (1991) in Bulgaria, from 61.5 percent (1988) to 52.9 percent (1991) in Hungary, from 48.0 percent (1988) to 29.2 percent (1991) in Poland, and from 51.1 percent (1989) to 40.1 percent (1991) in Romania.
- 104. These declines in revenues continue in many of these countries in more recent years. See, for example, Khankevich (1996) and Hemming, Cheasty, and Lahiri (1995).
- Some of these issues are discussed in Hemming, Cheasty, and Lahiri (1995) and Shome and Escolano (1993).

- 106. For example, Khankevich (1996) estimates that there were ten major structural changes and over 100 modifications to the Belarusian tax system between 1992 and 1996.
- 107. See McLure (1995b) for surveys of taxpayers.
- 108. The Ministry of Finance of the Czech Republic acknowledge that deliberate and inadvertent tax evasion may occur in 20 to 25 percent of all cases. See McLure (1995b) and Summers and Sunley (1995).
- 109. The new tax code for Kazakhstan, which contained both tax policy and tax administration measures, is an exception to this pattern. Even in this case, however, there was little or no preparation for tax administrators or education for taxpayers (McLure, 1995a) McLure, Martinez-Vazquez and Wallace (1997).
- 110. Typically, a preparation of twelve to eighteen months is the minimum recommended for a new VAT. See, for example, Tait (1988). The following anecdote provided by McLure (1995b) illustrates this point. "In early 1992 a prominent member of the Russian Parliament told Dr. McLure that Gaidar had told him at a reception one night in late 1991 that the VAT was going to be introduced. The member asked Gaidar if the tax administration could handle it. Gaidar responded affirmatively. Later the same night Lazarev (head of the tax service) told the member that Gaidar had subsequently asked him whether the tax service could implement the VAT. Even though Lazarev responded negatively, the VAT was introduced."
- 111. This is in contrast to the experience of nontransition countries, which typically have experienced unexpected increases in revenue as a consequence of the introduction of the VAT (Tait, 1988).
- 112. In Hungary, the ratio of profits tax relief to collected profits tax revenues rose from 17 percent in 1989 to 26 percent in 1991 and reached 36 percent in 1993 (Semjen, 1995). During 1994, it was estimated that the Russian Federation did forego up to 2.5 percent of GDP in tax expenditures (OECD, 1995a).
- 113. Such countries as Belarus that lagged behind in tax reform and insisted on the applicability of the old accounting system may have had the advantage of avoiding the confusion and revenue consequences of adopting new taxes without having changed the accounting systems (Bird and Tsiopolous, 1994).
- 114. See Karnite and Dovladbekova (1995).
- 115. See McLure (1995b) for surveys in Poland, Hungary, and the Czech Republic, and de Melo and Ofer (1994) for Russia.
- 116. The practice has been for enterprises to set separate trading firms and then use appropriate pricing to transfer most profits to the artificial firm, which may not be registered at all with the tax authorities. This practice is a version of western practices of shifting income to tax haven countries and similar to what is known in U.S. interstate corporate income taxation as the "Delaware company" avoidance problem. This involves attempts by corporations to shift their profits to artificial or shell companies in states in which these companies are lightly taxed, such as Delaware, or to companies in states with no corporate income tax, such as Nevada. Many states eliminate this problem by combining the income and apportionment factors of related corporations deemed to be engaged in a unitary business.
- This appears to be happening in Russia. Semjen (1995) indicates this is also a practice in Hungary.
- 118. In Kazakhstan the new tax code prohibits tax administration staff to work for other organizations and to carry official duties for taxpayers about whom a conflict of interest may arise McLure, Martinez-Vazquez and Wallace (1997).
- 119. Dual subordination of tax officials and other issues related to the control of employees in deconcentrated offices are discussed below.
- 120. With international technical assistance, Russia, Belarus, Kyrgyzstan and others have ongoing pilot projects for the reorganization of the tax administrations along functional lines.
- For example, in 1994, the main office of the Belarusian state tax inspectorate had only 135 employees, of whom forty-four were in separate investigative services (Bird and Tsiopolous, 1994).
- 122. In Russia and other CIS countries, taxpayers still write separate checks to each level of government sharing revenues of a particular tax. Often, there are differences in the rate of payment

- to each level of government, but sometimes what appears to be better collection rates for local and regional governments is simply due to the fact that taxpayers can more easily afford to pay the lower rates they owe to local governments. The practice of writing separate checks increases the compliance costs for taxpayers, but it endures because subnational governments mistrust the central government's willingness and ability to hand over funds once it has them.
- 123. These issues have been discussed frequently in the literature on intergovernmental fiscal relations in CITs. See Bird, Ebel, and Wallich, 1995; Wallich, 1994; Martinez-Vazquez and Boex, 1996b) McLure, Martinez-Vazquez, and Wallace (1997).
- 124. There have been exceptions to the lack of adequate preparation, such as Kazakstan's reform in 1994 and the new tax code under preparation in Russia.
- 125. The adoption of a VAT in Bulgaria is an example.

ACKNOWLEDGMENTS

The authors are grateful to Charles McLure, Richard Bird, Emil Sunley, Roy Bahl, Sijbren Crossen and Lev Freinkman for very helpful comments. Grant Black provided significant background research and materials.

REFERENCES

- Aslund, A. (1992). The Post-Soviet Economy: Soviet and Western Perspectives, St. Martin's Press, New York.
- Bahl, R. (1997). Central–provincial–local relation: The revenue side, *Taxation in China* (D.J.S. Brean, ed.). Routledge, Inc., New York.
- Bahl, R. and J. Martinez-Vazquez (1992). The nexus between tax policy and tax administration in developing countries, *Improving Tax Administration in Developing Countries* (R. Bird and M. Casanegra de Jantscher, eds.), International Monetary Foundation, Washington, D.C.
- Bahl, R. and C. Wallich (1995). Intergovernmental fiscal relations in the Russian federation, *Decentralization of The Socialist State* (R. M. Bird, R. D. Ebel and C. I. Wallich, eds.), The World Bank, Washington, D.C.
- Bakes, M. (1991). Tax reform in Central and Eastern Europe, *Australian Tax Forum*, 8(1): 117–128. Balcerowicz, L. and A. Gelb (1995). Macropolicies in transition to a market economy: A three-year perspective, *Proceedings of the World Bank Annual Conference on Development Economics*, 1994, (M. Bruno and B. Pleskovic, eds.), World Bank, Washington, D.C.
- Bird, R. M. (1992). Tax Policy and Economic Development, the Johns Hopkins University Press, Baltimore
- Bird, R. M. (1995). Indirect taxes in Belarus: VAT by subtraction, *Tax Notes International*, 2(9): 589–599
- Bird, R. M. and M. Casanegra de Jantscher, eds. (1992). *Improving Tax Administration in Developing Countries*, International Monetary Foundation, Washington, D.C.
- Bird, R. M., R. D. Ebel, and C. I. Wallich, eds. (1995). *Decentralization of the Socialist State*, World Bank, Washington, D.C.
- Bird, R. M. and T. Tsiopolous (1994). "Taxation and the Development of Private Enterprise in Belarus," mimeograph. World Bank, Washington D.C.
- Blejer, M. I. and G. Szapary (1991). Market oriented reform of fiscal policy, *Markets and Politicians: Politized Economic Choice* (A. L. Hillman, ed.), Kluwer, Boston.
- Bogetic, Z. and Hillman, A. L. (1994). The tax base in transition: The case of Bulgaria, *The World Bank Policy Research Working Paper*, p. 1267 (March). World Bank, Washington, D.C.
- Boskin, M. J. and C. E. McLure, Jr. (1990). World Tax Reform: Case Studies of Developed and Developing Countries, International Center for Economic Growth, San Francisco.
- Burgess, R. and N. Stern (1993). Taxation and development, *Journal of Economic Literature*, 31: 762–830 (June).
- Citrin, D. A. and A. K. Lahiri, eds. (1995). "Policy Experiences and Issues in the Baltics, Russia, and Other Countries of the Former Soviet Union," occasional paper #133 (Dec.), International Monetary Fund, Washington, D.C.

- Cnossen, S. (1991). Design of the value added tax: Lessons from experience, *Tax Policy in Developing Countries*, (J. Khalizadeh-Shirazi and A. Shah eds.), The World Bank, Washington, D.C.
- de Melo, M. and G. Ofer (1994). "Private Service Firms in a Transitional Economy: Findings of a Survey in St. Petersburg," World Bank, Washington, D.C.
- Devereux, M. P. and H. Freeman (1991). A general neutral profits tax, *Fiscal Studies*, 12(3): 1–15.
- Easterly, W. and S. Rebelo (1993). Fiscal policy and economic growth: An empirical investigation. Journal of Monetary Economics, 32: 417–458.
- Edwards, S. (1992). Stabilization and liberation policies for the economies in transition: Latin American lessons for Eastern Europe, *The Emergence of Market Economies in Eastern Europe* (C. Clague and G. C. Rausner, eds.), Blackwell, New York, pp. 129–159.
- Feldstein, M. (1976). On the theory of tax reform, Journal of Public Economics, 6(1-2): 77-104.
- Flanagan, R. J. (1992). Wages and wage policies in market economies: Lessons for Central and Eastern Europe, *OECD Economic Studies*, *O*(18): 105–132.
- Gandhi, V. P. and D. Mihaljek (1991). Scope for reform in socialist tax systems, *Fiscal Policies in Economies in Transition* (V. Tanzi, ed.), International Monetary Fund, Washington, D.C.
- Giovannini, G. and M. de Melo (1990). "Government Revenue from Financial Repression," WPS 533, World Bank (Nov.) .
- Go, D. S. (1994). External shocks, adjustment policies and investment in a developing economy: Illustrainos from a forward-looking CGE model of the Philippines, *Journal of Development Economics* 44(2): 229–61.
- Gora, M. (1991). Shock therapy for the Polish labour market, *International Labour Review*, 130(2): 145–163.
- Gray, C. W. (1991). Tax systems in the reforming socialist economics of Europe, Communist Economies and Economic Transformation 3(1): 63–79.
- Hemming, R., A. Cheasty, and A. K. Lahiri (1995). The revenue decline, *Policy Experiences and Issues in the Baltics, Russia, and Other Countries of the Former Soviet Union* (D. A. Citrin and A. K. Lahiri, eds.), occasional paper #133, International Monetary Fund, Washington, D.C. (Dec.).
- Hogan, W. W. (1991). Economic reforms in the sovereign states of the former Soviet Union, Brookings Papers on Economic Activity, 2: 303–317.
- Hussain, A. and N. Stern (1993). The role of the state, ownership, and taxation in transitional economies, *Economics of Transition*, 1(1): 61–87.
- Hussey, W. M. and D. C. Lubick (1995). Basic world tax code and commentary: a project sponsored by the Harvard University International Tax Progam. Tax Analysts, Arlington, VA.
- Ickes, B. W. and J. Slemrod (1991). "Tax Implementation Issues in the Transition from a Planned Economy," proceedings of the 47th Congress of the International Institute of Public Finance, St. Petersburg, Florida, pp. 384–399.
- International Bureau of Fiscal Documentation (1996). Central and East European Tax Directory, Amsterdam.
- Jackman, R. (1994). Economic policy and employment in the transition economies of Central and Eastern Europe: What have we learned? *International Labour Review*, 133(3): 327–345.
- Karnite, R. and I. Dovladbekova (1995). Institutions of Public Finance in Latvia, Institute of Economics, Latvian Academy of Sciences, Riga.
- Khankevich, L. (1996). "Report: Taxation System: The Republic of Belarus," mimeograph.
- Khalilzadeh-Shirazi, J. and A. Shah, eds. (1991). *Tax Policy in Developing Countries*, World Bank, Washington, D.C.
- Kodrzychi, Y. K. (1993). Tax reform in newly emerging market economies, *New England Economic Review*: 3–17 (Nov./Dec.).
- Kodrzychi, Y. K. and E. M. Zolt (1994). Tax issues arising from privatization in the formerly socialist countries, Law and Policy in International Business, 25(2): 609–633 (winter).
- Kolodko, G. W. (1993). Perverse effect of fiscal adjustment in transition economies, *Economics of Transition*, 1(3): 345–355.
- Kopits, G. (1991). Fiscal reforms in the European economies in transition, in OECD, The Transition to a Market Economy, OECD, Paris.

- Kopits, G. and E. Offerdal (1994). Fiscal policy in transition economies: A major challenge, Finance & Development, 31(4): 10–13.
- Kornai J. (1986). The soft budget constraint, Kyklos, 39: 3-30.
- Kornai, J. (1990). The Road to a Free Economy: Shifting from a Socialist System, the Case of Hungary, Norton, New York.
- Kornai, J. (1992). The postsocialist transition and the state: Reflections in the light of Hungarian fiscal problems, American Economics Review, 82(2): 1–21.
- Le Houerou, P., E. Gold, and S. Katash (1994). "Budget Coverage and Government Finance in the Russian Federation (Analytical and Methodological Issues)," World Bank Internal Discussion Paper #137 (Jan.).
- Marrese, M. (1994). An incomes policy for Russia? International Monetary Fund Papers on Policy Analysis and Assessment, PPAA/94/4, pp. 20.
- Martinez-Vazquez, J. (1995). Croatia: Tax Policy and Administration, World Bank background report, World Bank, Washington, D.C.
- Martinez-Vazquez, J. and J. Boex (1996a). Tax reform in Croatia examined, Tax Notes International.
- Martinez-Vazquez, J. and J. Boex (1996b). "An Overview of Intergovernmental Fiscal Relations in the Baltic States," proceedings of the National Tax Association.
- McKinnon, R. I. (1991). Financial control in the transition from classical socialism to a market economy, Journal of Economic Perspectives, 5: 107–122.
- McLure, C. E. Jr. (1987). The Value-Added Tax: Key to Deficit Reduction? American Enterprise Institute, Washington, D.C.
- McLure, C. E. Jr. (1989). Analysis and reform of the Colombian tax system, Tax Reform in Developing Countries (M. Gillis, ed.), Duke University Press, Durham, North Carolina.
- McLure, C. E. Jr. (1990). "Taxation in Centrally Planned Economies and Private Market Economies," mimeograph. Hoover Institution, Stanford University, Stanford, California.
- McLure, C. E. Jr. (1991a). "Tax policy for economies in transition from socialism," Tax Notes International, 3: 347–353 (March).
- McLure, C. E. Jr. (1991b). Tax policy in Bulgaria, Bulletin for International Fiscal Documentation, 45(5): 235–247.
- McLure, C. E. Jr. (1991c). Alternatives for the taxation of income from capital in reforming socialist economies, *Proceedings of the National Tax Association*, Willamsburg, Virginia.
- McLure, C. E. Jr. (1992). A simpler consumption-based alternative to the income tax for socialist economies in transition, *The World Bank Research Observer*, 7(2): 221–237.
- McLure, C. E. Jr. (1995a). New tax code streamlines Kazakh tax system, Tax Notes International, 11(2): 69–70.
- McLure, C. E. Jr. (1995b). Tax impediments to business in three countries in transition from socialism, *Tax Policy in Central Europe* (C. E. McLure, Jr., A. Senijen, T. Baczko, J. Fiszer, and L. Venys, eds.), Institute for Contemporary Studies, San Francisco.
- McLure, C. E. Jr. (1997). "Tax Holidays and Investment Incentives: A Comparative Analysis," mimeograph, Hoover Institution, Stanford University, Stanford, California.
- McLure, C. E. Jr, J. Martinez-Vazquez, and S. Wallace (1997). *Fiscal Transition in Katakhstan*, Asian Development Bank, Manila, Philippines.
- McLure, C. E. Jr. and G. R. Zodrow (1995). "The Economic Case for Foreign Tax Credits for Cash Flow Taxes," mimeograph.
- McLure, C. E. Jr. and G. R. Zodrow (1996a). A hybrid approach to the direct taxation of consumption, Frontiers of Tax Reform (M. Boskin, ed.), Hoover Institution Press, Stanford University, Stanford, California, pp. 70–90.
- McLure, C. E. Jr. and G. R. Zodrow (1996b). A hybrid consumption-based direct tax proposed for Bolivia, *International Tax and Public Finance*, 3: 97–112.
- Messere, K. (1995). Taxation in ten industrialized countries over the last decade: An overview, *Tax Notes International*, 11(8): 512–535.
- Ministry of Finance of the Russian Federation (1996). "Report on Fiscal Policy," mimeograph. Moscow.
- Mutén, L. (1992). Income tax reform, Fiscal Policies in Economies in Transition (V. Tanzi, ed.), International Monetary Foundation, Washington D.C.