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NAVAL POSTGRADUATE SCHOOL
Monterey, California



THESIS

**TAX REFORM IN TRANSITION ECONOMIES AND ITS
IMPACT ON ECONOMIC PERFORMANCE**

by

Slawomir P. Walenczykowski

June 2002

Thesis Advisor:
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**TAX REFORM IN TRANSITION ECONOMIES
AND ITS IMPACT ON ECONOMIC PERFORMANCE.**

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Submitted in partial fulfillment of the
requirements for the degree of

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from the

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ABSTRACT

Starting with Hungary in 1984 and followed thereafter by other countries in Eastern Europe and former Soviet Union, the process of transition from centrally planned socialist economies to market oriented economies has been characterized by uneven performance. Poland, Hungary, Czech Republic, and Slovenia have each made significant progress in economic, political and judicial reforms while Russia, and many other countries of the former Soviet Union have lagged in implementing broad economic and political reforms and their economic performance has suffered as a result. Other countries from Central and Eastern Europe are placed between those two extremes.

The objective of my thesis is to examine the development of effective and efficient tax systems in the transitional economies and the influence of tax reform on economic performance. We believe, a priori, that the development of a modern tax system is a crucial element in the transition process. Without an effective tax system the state is unable to collect revenues for financing government expenditures; "gray zones" develop in the economy, which discourage investors and private entrepreneurs; and the rule of law diminishes over time. Without systemic tax reform, we argue, economic growth will slow or decline; the social costs of reform will increase; and political pressure will mount to slow or reverse reforms. In this case, the government may come to crossroads where the option to abandon reform is very tempting.

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EXECUTIVE SUMMARY

The objective of my thesis is to examine the development of effective and efficient tax systems in the transitional economies and the influence of tax reform on economic performance. Through a review of literature and accessible databases (EBRD, OESD and World Bank), we will review and summarize the first decade of transition experience in tax reform paying special attention on the scope, pace and stability of the process. We will then attempt to evaluate impact of different approaches of tax reform on economic performance. To examine the influence of tax reform we will construct an index of tax reform effectiveness for 15 Central and Eastern European countries in transition. The purpose of the index is to investigate how important tax reform was during the first decade of the transition process. The index, while subjective, can provide some insight into the impact of tax reform on the process of economic transition.

We believe that by comparing tax reform index with other economic development indicators we will find that effective tax reform has positive impact on the economic performance of the countries in transition. Our hypothesis is that the economic performance of advanced tax reformers is superior relative to slow reformers. Based on an analysis we will provide policy recommendations on the scope and pace of tax reform in developing and transitional countries.

I - INTRODUCTION

A. THESIS OBJECTIVE

The legacy of central planning continues to haunt the countries of Central and Eastern Europe and the former Soviet Union. While tremendous progress has been made in the first decade of transition in liberalizing markets and rationalizing economic policies, tax system reform continues to lag behind other reforms (Martinez-Vazquez & McNab, 2001). Delay in tax system reform decreases the government's ability to generate sufficient resources, significantly slowing down development in other areas of transitional reforms. Whether the poor progress of the countries in transition (CIT) tax system reform has hindered economic performance is largely an unanswered question.

The main goal of this thesis is to examine the development of effective and efficient tax systems in the transitional economies. We examine the links between fiscal policy and economic transformation to ascertain the influence of the tax reform on economic performance. In conclusion, we define objectives for tax reforms and policy recommendations on the pace and scope of the reform¹.

To examine the influence of tax reform on economic growth, we construct an index of tax reform effectiveness for the CITs. The purpose of the index is to investigate the importance of tax reform during the first decade of the transition process. The index, while subjective, can pro-

¹ While the main focus of this thesis is on transition process in Central and Eastern European countries, as well as on former Soviet Union republics, we are aware of Southeastern Asian countries where that process is also ongoing. Comparisons between those two sets of countries are beyond the scope of this thesis.

vide some insight into the impact of tax reform on the process of economic transition. Our hypothesis is that the economic performance of the advanced tax reformers is superior relative to that of the slow reformers. When comparing the tax reform index with other economic development indicators, we find that effective tax reform positively influences economic performance in the CITs.

B. MOTIVATION OF THESIS

Starting with Hungary in 1984 and followed thereafter by other countries in Eastern Europe and the former Soviet Union, the process of transition from centrally planned socialist economies to market-oriented economies has been characterized by uneven performance. Poland, Hungary, the Czech Republic, and Slovenia have each made significant progress in economic, political, and judicial reforms, while Russia, and many other countries of the former Soviet Union, have lagged in implementing broad economic and political reforms. Other countries from Central and Eastern Europe can be placed between those two extremes.

While economic transformation has impacted every sector of the economy, the process was not as smooth and rapid as was initially expected, resulting in recession and severe economic dislocations in CITs. Several arguments have emerged about which policies would have been most effective in reestablishing economic growth. The Central European countries, encouraged by International Monetary Fund (IMF) policy, preferred rapid economic liberalization; whereas, in countries where former Communist leaders remained in

power, reforms have been slower² (de Melo, Denizler & Gelb, 1996).

We believe, a priori, that the development of a modern tax system is a crucial element in the transition process. Taxpayers and budget beneficiaries expect stability in their fiscal systems. Tax system distortions can undermine the state's trustworthiness, create budget deficits, and inflation and promote capital flight. Without an effective tax system, the state is unable to collect revenues for financing government expenditures, especially to support other economic reforms (Gandhi, Mihaljek, 1995); and "gray zones" develop in the economy, discouraging investors and private entrepreneurs causing the rule of law to diminish over time. Without systemic tax reform, we argue, economic growth will slow or decline; the social costs of reform will increase; and political pressure will mount to slow or reverse reforms. In this case, the government may come to crossroads where the option to abandon or slow down reform is very tempting. In such conditions, new initiatives will be considered as politically risky and economically uncertain.

C. STRUCTURE OF THESIS

The rest of the thesis is organized as follows. In Chapter II we briefly examine the tax system in centrally planned economies, focusing on the environment in which tax reforms had to take place. In Chapter III we evaluate the constraints inherited from a previous system, since many problems of tax reform have a direct relation to the past.

² Examples are the Ukraine, Kazakhstan, Turkmenistan and Uzbekistan.

Additionally in that Chapter we consider two possible strategies faced by policy-makers in reforming the tax system. In Chapter IV we analyze the current tax systems in CITs and attempt to assess the impact of different approaches to the tax reform on the economic performance of transitional economies. In Chapter V we summarize the lessons from the tax reform in CITs. Based on the analysis we provide policy recommendations on the scope and pace of the tax reform in developing and transitional countries.

II - REVIEW OF THE TAX SYSTEM IN CENTRALLY PLANNED ECONOMIES

A. INTRODUCTION

After the breakdown of the Soviet system, the countries in Central and Eastern Europe were left with the heritage of a socialist state, including internal distortions and external imbalances. Each of the countries in transition (CITs) had to recover from a centrally planned economy. One of the biggest challenges faced by the transitioning countries was reform of their tax systems. In fact, we argue, no tax system existed in the normal sense. Moreover, the old tax systems were insufficient in the rapidly changing environment at the beginning of transition (Gandhi & Mihajlek, 1995).

Two major periods can be identified for taxation systems in centrally planned economies. We focus on the period named by Kornai (1992) as "reformed socialism". We believe that this focus is justified due to the proliferation of reforms at the beginning of the transition period. All socialist countries had been at different stages of economic reforms. Nevertheless, throughout the chapter we compare, when relevant and possible, the role of specific taxes in different periods of socialist taxation.

The objective of the chapter is to evaluate the environment in which the transitional reforms had to take place. We first examine the history of taxation in the centrally planned economies. We believe that this discussion is important because many Central and Eastern European countries had similar tax systems at the beginning of transition (Ebrill & Havrylyshyn, 1999). While each tax system

had its own, unique characteristics, they were, in fact, derivatives on the Soviet Union tax system. We then evaluate the tax structure in centrally planned economies focusing on the role of different taxes in the socialist budget. In the last section of the chapter, we analyze role of the tax administration in the centrally planned economy.

B. HISTORY OF TAXATION IN CENTRALLY PLANNED ECONOMIES

Two major periods are distinguishable for tax systems in centrally planned economies (Wanless, 1985; Martinez-Vazquez & McNab, 2001). For each of these periods, taxation played a slightly different role. In the first period, described by Wanless (1985) as the "command economy," the primary role of taxation was to collect funds for financing the non-productive sectors and dividing national income among all economic segments. The private sector was marginal or non-existent in some cases and prices were administratively set, thus taxation could not be the main allocative force.³ Moreover, taxes could not realistically affect market prices due to absence of a market in centrally planned economies. In such circumstances, taxation was not an instrument of social policy, but merely served to collect revenues for the state budget. The socialist state used other tools to influence retail prices and the structure of consumer demand.⁴

In the "command system", budget revenue came from two primary sources: sales taxes (mainly the turnover tax on

³ The term "allocative force" defines an instrument of allocating resources from the private sector to the governmental sector, providing the government means to conduct a limited range of economic functions.

⁴ In a socialist centrally planned economy, the state had more extensive control over resources than in a free market economy.

consumption goods and services), and profits of state owned enterprises (SOEs). The state administration did not classify revenues from SOEs as profit taxes, but rather as a deduction of surplus product, which already belonged to the state (Wilczynski, 1977). The state, as the owner of the means of production and the final product, could subtract any available resources. As a result, the profits of SOEs were subject to marginal tax rates equal to or, in some cases exceeding 100 percent.

The rigid "command system" created several inefficiencies, especially in providing incentives to the management of SOEs. In fact, the entire period, starting in 1968 with Hungarian reforms until the start of perestroika, was filled by new initiatives to reform the socialist system.⁵ Changes in the tax system, however, were only part of broader reforms.⁶ With the introduction of other, market-oriented reforms, the tax system started to play a greater role in the economy. New taxes were introduced, to include capital charges (1960's), taxes on the wage fund (payroll tax - 1970's) and the profit tax. As a result of these and other reforms, the tax system started to influence production decisions, and introduced a new system of dividing profits between the state and the enterprise, allowing the latter to retain part of the profit.

⁵ For details about those initiatives see Lavigne (1995) and Wanless (1985)

⁶ In summary, they involved greater decentralization of decision-making, greater reliance on profit incentives, and greater reduction of administrative intervention into economy (Wanless, 1985).

C. TAX SYSTEMS IN CENTRALLY PLANNED ECONOMIES

Tax revenues in centrally planned economies came from the turnover, capital, payroll and profit taxes levied mainly on SOEs.

1. The Turnover Tax

The turnover tax was a single-rate tax on SOE sales of specific products to the retail market. The turnover tax was introduced as an instrument of pricing policy⁷ and as a means of increasing budgetary revenues. Normally, the turnover tax was imposed only on domestic and imported consumer goods. Exported goods, production inputs, and materials purchased by state bureaus were usually exempt from the turnover tax (Wanless, 1985). In some cases, however, producer goods were also subject to the tax, such as oil, electricity and metalware in the USSR (Wilczynski, 1977).

The turnover tax was calculated on an ad valorem basis, as a percentage of retail prices, or on a specific basis, such as fixed amount per unit of product. The base of taxation was usually producer prices rather than consumer prices. With reforms of the "command economy", responsibility for collecting the turnover tax shifted from producing to trading entities (Wilczynski, 1977).

Turnover tax rates were extremely low, or even negative (subsidies) on basic products while exceptionally high on luxury goods.⁸ Normally only a single rate existed on a specific product, though there were some variations of that

⁷ The turnover tax regulated the purchasing power of consumers and served as a residual wedge between producer and retail prices.

⁸ Intended as an instrument of market clearance and pricing policy, turnover tax rates in fact did not have any input from consumer demand. Adjustments were made infrequently and mainly to increase budget revenues.

system. In Poland, after 1973, products defined as "high-quality" bore a reduced turnover tax rate, so the SOE could keep a larger share of profits. This method of taxation was introduced to improve the quality of produced goods and to encourage product innovation.

In the centrally planned economies, turnover taxes provided a significant portion of the state income. For example, in 1981 turnover taxes accounted for the following proportions of state income (Wanless, 1985):

- 31.1% in USSR
- 28.5% in Czechoslovakia
- 27.6% in Poland
- 22.5% in GDR
- 14.8% in Hungary
- 12.5% in Romania

Countries like the USSR, Czechoslovakia and Poland were highly dependent on profits from turnover taxes. This dependence meant that these countries needed to find alternative revenue sources at the start of the transition process. In most cases, these CITS adopted Value Added Tax (VAT). Countries like Hungary and Romania, less dependent on profits from the turnover taxes, could avoid transitional distortion during the process of adopting VAT.

2. Capital Charges

Capital charges were established to stimulate the rational use of capital assets and to increase efficiency in allocating investments. Levied on fixed and working capital, capital charges were supposed to refine investment planning and financing. In fact, however, they increased prices in capital-intensive relative to labor-intensive in-

dustries. The book value of the asset was used as the tax base; however, without clear rules on asset depreciation, the tax liability was subject to manipulation.

In a socialist economy, investments were largely centrally planned. After transforming into a "reformed socialism", managers were able to use their own discretion in making unplanned investments on a small scale (with no strategic importance). In the absence of capital charges, socialist economies lacked rationality in planning investments. Plan targets for investments were specified in expenditure terms without accounting for the profitability of new investments. Central planning was not able to account for the opportunity cost of capital⁹ and the SOE managers were interested in pressing planners to provide the maximum possible amount of investment rather than focusing on the cost of investments.

Capital charge rates depended upon the age of an asset, which was intended as a mechanism against over-investments, common in socialist economies. Theoretically, an older asset bore a lower tax rate than a new one, so an investment would be made when the new asset was more profitable than the older one. In reality, capital charges equalized the costs of assets, because even if capital charges declined with the age of an asset, maintenance costs increased, and thus discouraged new investments.

Revenues from capital charges ranged from 9 to 11% of the national income (Wanless, 1985). In some countries capital charges were levied only on fixed assets (Poland before 1982) or even abolished (Hungary 1980 and Poland

⁹ "In market economy the opportunity cost of capital is indicated by the market rate of interest" (Wanless, 1985; p. 107)

1982). Central planners in Hungary and Poland appeared to recognize restraints imposed by capital charges and replaced them with real estate taxes.

3. The Payroll Tax

The tax on the wage fund was a general payroll tax levied as a percentage of the wage bill. The wage fund tax was designed to increase the effective price of labor, thereby motivating SOE managers to use laborsaving techniques. Additionally, the tax was introduced to encourage innovation in production.

Social security contributions were paid by employers, as a straightforward payroll tax, except for German Democratic Republic (GDR) that used both employer and employees contributions. Those funds provided incomes for short-term disabilities due to illness or pregnancy, as well as for long-term disabilities due to old age and chronic illnesses. In 1981, revenue generated by these taxes ranged from 4.7% of national income in the USSR to 15.3% in Hungary (Wanless, 1985). Most countries used the pay-as-you-go system. One result of the pay-as-you-go system was that any changes in population growth, over the long term, created funds shortages in the pension system.

4. The Profit Tax

As noted previously, the state retained all profit from SOE operations in the "command economy". With the change in philosophy to "reformed socialism", SOEs began to pay taxes on their net-profit. After deducting the tax portion of the profit, SOEs were allowed to use the remaining profit (if any) for financing employee's bonuses, wage increases, and for small investments. The profit tax enabled employees to benefit from increased productivity by provid-

ing incentives for economic efficiency. Profit tax rates generally varied from 50 to 60%. In some countries, however, the system's progressive structure increased the marginal tax rate to 100%. Again, as with capital charges, without strict rules describing deductible production costs, total tax liability was often subject to negotiation.

5. Personal Income Tax

Personal income taxes (PIT) did not play a significant role in centrally planned economies (Wanless, 1985; Kolodko, 1999). From the socialist viewpoint, it was considered undesirable to tax workers directly (Wilczynski, 1977). As a result of that policy, budgetary revenues from direct taxation ranged from 0.6% in Czechoslovakia to 4.3% in the GDR (in 1981, Wanless, 1985).

However, some form of personal income taxes did exist, to include taxes on earned rents, interest on savings, and incomes from sources abroad. Other sources of revenue from personal income taxes came from schedular taxes paid by artists, sportsmen, and writers (with an extreme degree of tax progression - Wilczynski, 1977). On the other hand, earnings outside the state sector and in self-employment were, to some extent, outside of state control (Wanless, 1985). Some countries, however, had a more complex taxation system on personal income. For example, Poland taxed income from a second or third job, from the private sector and from property.

The socialist state used personal income taxes differently than free market governments. The state did not consider the PIT as a tool to raise budget revenues; the PITs were just another barrier on the growth of the private sec-

tor. Taxation at any given point varied substantially, providing an additional tool keeping private initiatives under the state's control (Kornai, 1995).

6. Tax Administration

Tax administration was generally underdeveloped in centrally planned economies (Vazquez-Martinez & McNab, 2001; Lazear, 1995). A small number of taxpayers accounted for almost 100% of the taxes collected. The state played a dual role in the system as a tax collector and the owner of corporations. Moreover, the state owned, the centralized banking system, which allowed the tracking every transaction conducted by SOEs. The problem of tax evasion under these conditions was insignificant, despite norms that tax liability was the product of negotiation. In this case, the state was able to arbitrarily adjust the tax structure and administrative procedures to meet budgetary requirements.

D. CHAPTER SUMMARY

Under the "command economy", in the early stage of socialist's economies, taxes provided revenues for governmental expenditures. With attempts to reform the system, starting in Hungary in 1968 and followed by Poland in 1972 and thereafter by other Central European countries, the authorities introduced new taxes, increasing their ability to influence economic decisions. This provided input signals for the economy. Central planning could not provide these input signals, as opposed to the free market system.

States relied on revenues from socialized enterprises and state-owned corporations, which provided more than 80% of state revenue (Wanless, 1985).¹⁰ Payments from profit

¹⁰ In some countries it was almost 90%, like GDR in 1981.

taxes generated the most significant revenues, but that portion varied from case to case. For example, in 1981 the profit tax payments ranged from 20% in Poland and in the USSR to 51% in Hungary (Wanless, 1985).

Tax systems in centrally planned economies showed substantial similarities, but details varied from country to country.¹¹ The scope and pace of reforms transforming "command economy" to "reformed socialism" diverged. Hungary started its "market socialism" in 1968, on the one end of spectrum while the USSR was considered highly centralized, "command economy" up until 1987. Another dissimilarity comes from different terminology used in data sources. In reporting income items, the terms "tax", "levy" and "payment" are often used interchangeably.

The Soviet model of taxes proved to be insufficient. With negotiable payments, the system was far removed from modern tax systems.¹² Economies in transition needed immediate tax reform. On the other hand, these economies were anchored by the legacy of the previous system. Details of that heritage are discussed in Chapter III.

¹¹ Tax systems of South Asian centrally planned economies were also similar to this model.

¹² Which is characterized by: equity, neutrality and simplicity (Gandhi & Mihaljek, 1995)

III - LEGACY OF TAXATION IN PLANNED ECONOMY

A. INTRODUCTION

The reform of tax systems was one of the significant challenges facing the post-socialist countries. As a result of the turbulence during the structural transformation, budget revenues decreased, while governments simultaneously faced increased demands on the expenditure side of the budget. Inevitably output fell due to macroeconomic stabilization and the reallocation of resources (Fisher & Sahay, 2000). Increasing budget revenues became vital in providing funds for financing other reforms. Consequently, reforming tax systems became a crucial element of the transition process.

The objective of this chapter is to evaluate constraints faced by countries in transition (CITs) in the beginning of transitional process. We believe that the legacy of the socialist state fundamentally influenced initial choices and direction of tax reform during the transition process. Some of the failures during the transition process were the result of wrong choices; others came from indecisiveness and weak policy influenced by increased demands from the population. Many of the failures in transforming the tax systems were traceable to the past.

The tax systems inherited from the centrally planned economies (CPEs) were unable to provide sufficient revenues at the start of the transition process. Moreover, practices of state interventionism, tax negotiation, tax evasion, and an underdeveloped tax administration put the fiscal stability of the CITs at risk.

This chapter starts by analyzing the constraints on the tax systems inherited from the CPEs. The economic environment at the beginning of the transition influenced the choices made by policy-makers, altering transitional strategies. We then examine two principal paradigms for reforming tax systems. Many failures in reforming tax systems can be attributed to initial choices. These choices were: immediate adoption of a pro-Western, modern tax system; or gradually evolving the previous system, recognizing the constraints inherited from the past within a particular country.

B. PROBLEMS INHERITED FROM THE PREVIOUS SYSTEM

Several limitations of the previous tax system influenced policy-makers in CITs. Tax systems in CPEs allowed the state to use taxation as a tool to intervene in the economy while imposing control over the economy. Negotiable taxes, lack of strict, transparent rules and a relatively small number of taxpayers resulted in a largely underdeveloped tax administration.¹³ Because private ownership was marginal, or in some cases non-existent, state owned enterprises (SOEs) were main objects of taxation. In sum, these practices resulted in decreased budget revenues and undermined trust in governmental institutions. At the start of the transition process, these institutions were simply insufficient for the free market. Such limitations significantly limited the pace and scope of reforms, especially at the beginning of the transition process.

¹³ The small tax administration was all that was needed in the socialist economy due to the small number of taxpayers.

1. State Interventionism

In CPEs, taxes were part of the system of control imposed by the state on the economy and society. The arbitrary use of taxation reflected the economic policy of the state and provided revenue to support the monetary side of the planning procedure. The state intervened in the economy via taxation to raise budget revenue, influence economic decisions, and give incentives for SOE management.

2. Negotiable Tax Liability

Tax systems in CPEs lacked strict rules and relationships between statutory tax bases and the tax liabilities. Negotiable tax rates were used by the socialist state for financial control over the means of production. The state was able to adjust the tax structure to meet its perceived budgetary needs. Moreover, negotiable tax liabilities allowed the state to protect SOEs from bankruptcy. For example, an SOE in trouble was able to request tax relief from state officials. These practices, nonetheless, provided another disincentive for SOE management.

3. Underdeveloped Tax Administration

The underdeveloped tax administrations of the CITs were not prepared to implement taxes in transitional conditions. Centralization, administratively imposed prices, and a lack of tax deductible costs in CPEs eased audits, allowing the tax administration to focus on a relatively small number of taxpayers. The high reliance on the state banking system, which tracked every cash flow in the CPEs, failed with the emergence of decentralized banking systems. To create further problems, interventionism and negotiable tax liabilities also affected tax administration, creating "gray zones" in negotiations. Dependence on personal judg-

ment increased the possibility of bribery and inefficiency. The popular perception of corrupted state officials undermined public trust in tax procedures, creating a tradition of tax evasion.

4. Lack Of Transparency

In the CPEs, the SOEs were the main subjects under taxation (Wilczynski, 1977; Wanless, 1985). The negotiable tax liabilities created lack of transparency within the system. Even the SOE management did not know what others paid in taxes. The population was unaware of tax procedures or even of tax burdens. Only a small percentage of citizens paid personal income taxes based on very steep progression rates. The lack of voluntary compliance affected the process of implementing personal income taxes, which increased problems with tax evasion.

5. No Influence On Income Distribution

Tax systems in centrally planned economies did not influence income distribution. Direct taxation played an insignificant role in that process. The dominant state position and "collective" ownership of the means of production minimized the role of taxation in income dispersion (Kolodko, 1999).

The state redistributed income in other ways. Centralized wages and prices created a view of equality in income distribution. In fact, formal income equality did not reflect equal access to goods and services. Chronic shortages, especially on luxury goods, made these goods available only for a small percentage of people. In the situation of selective access to goods, connections were more important than disposable income.

C. REFORM STRATEGIES

The fall of socialism in Eastern and Central Europe created new challenges for policy-makers. The task of transforming centrally planned economies into free market economies had no place in previous history. The pressing economic situation forced policy-makers to make difficult decisions without waiting for the outcomes of academic debates. The initial conditions included:

- Rising pressure from the expenditure side of the budget,
- A shrinking traditional tax base, consisting of state owned enterprises (SOEs), due to privatization,
- A decline in budget revenues, due to the fall in production in restructured economies,
- And advice and recommendations from external organizations (International Monetary Fund, World Bank).

Early proposals about transitional strategies, in sum, can be described by two approaches.

1. Radical Approach

The "big-bang" or the "radical" approach assumed an early and rapid move towards reforms, implementing a modern tax system modeled on one of those functioning in the Western democracies (Wolf, 1999; Gabrish & Laski, 1991). This method was especially tempting for countries aspiring for early access to the European Union.

The first problem faced by policy-makers favoring this approach occurred when selecting a Western country's system as a model for transformation. Moreover, raging inflation, deficits in the trade balance, and the fall in industrial output did not increase their ability to implement rapid

reforms. The tax administration system, inherited from the socialist state, was unable to effectively collect taxes in the changed free market environment. Implementing the Western model also involved the risk of adopting a system designed for different economic environments, where advanced tax administration and modern accounting practices allow fully implementing tax law.

2. Gradual Approach

Critics of rapid reforms favored a more gradual approach. They assumed there was no place for rapid liberalization due to the absence of market and market-supporting institutions. Instead of waiting on an "invisible hand of the market" to correct the situation, they postulated an active process of developing institutions and market infrastructure. Without proper institutions, liberalized markets would create the danger of monopolies by strong corporations that emerged from previous SOEs.

Some foreign advisors, recognizing institutional constraints, favored a more gradual, evolutionary approach to reforming tax systems. Since standardizing tax systems across transitional countries was unnecessary, each country needed to develop a tax system allowing it to meet its specific needs (Bird, 1992; Wolf, 1999). Moreover, the newly developed system needed to guarantee tax enforcement, despite the inefficiency of the tax administration.

A gradual approach also involved some risks for the transition process. Slow and continuous changes in the tax system would decrease the stability and confidence required to attract foreign investors. Furthermore, different interests groups would oppose implementing fundamental reforms, which might slow down or even block transition.

D. CHAPTER SUMMARY

Central and Eastern European CITs inherited several constraints decreasing their ability to move rapidly towards a modern tax system. The lack of transparency, interventionist traditions and negotiable tax liabilities influenced the tax administration resulting in its inability to enforce taxes in the transitional environment. Inefficiencies in collecting taxes were accompanied by a decrease in output as well as high inflation and unemployment, which contributed to budget revenue problems.

With such a background, some foreign experts did not advise completely adopting the Western tax system. Instead, these experts favored a more gradual approach, which recognized constraints facing particular countries.

Several countries moved quickly towards the Western model of the tax system.¹⁴ However, since the tax systems introduced in those countries were modeled on the tax system existing in the European Union, each country adjusted its system to reflect its individual country's circumstances. On the other hand, reform of the tax policy was not accompanied by reformed accounting systems nor modernized tax administrations. In response, tax officials had to face the challenges of using obsolete procedures.

¹⁴ Examples are: Hungary, Czech Republic, Poland and the Baltic States.

IV - CURRENT TAX SYSTEMS AND ECONOMIC PERFORMANCE

A. INTRODUCTION

The process of transforming centrally planned economies to free market economies has been characterized by uneven performance, to include the area of tax reform. The pace and scope of tax reform has differed from country to country, depending on the initial choices made by policymakers in the CITs. Poland, Hungary, and the Czech Republic rapidly adopted Western-oriented tax systems, while countries like Belarus, Armenia and Tajikistan continue to postpone reforming governmental institutions. Without modern and unpoliticized organizational structures, those countries have problems in implementing advanced reform programs.

The objective of the chapter is to evaluate the progress in reforming tax systems in CITs and ascertain the impact of existing tax systems on economic performance in transitional countries. Whether slow progress in reforming tax systems has undermined economic growth is still largely an unanswered question. To investigate this issue we have developed an index of the tax reform effectiveness for 24 CITs covering the period from 1989 through 2000. By comparing the index with the other development indicators, we want to evaluate links between fiscal policy and the economic performance of CITs.

To begin, we evaluate the general features of current tax systems in CITs. Then we examine the development of tax administration. We believe that this discussion is important because many of CITs encountered several problems with

tax law enforcement, tax evasion and underreporting, which can be directly associated to the status of tax administration. Finally, we compare progress in reforming tax systems with economic performance of CITs in order to assess the importance of effective tax reform in the transition process.

B. CURRENT SYSTEMS OF TAXATION

At the beginning of the transition process, the legacy of planned socialism obscured the process of tax reform. Moreover that process was hindered by uncertain positions and policies of ministries of finance. This problem was solved gradually as the ministries of finance took a leading role in creating fiscal policy.¹⁵

Additional problems arose with the perceived increase in tax effort. As described in Chapter III, most taxes were hidden from the population in CPEs. In such a situation, implementing PITs created the impression of increased tax burden on the population. Under these conditions, governments in CITs had difficulty in gaining popular support for tax reforms.

1. Direct Taxation

Almost all CITs have based their tax system on three pillars of modern systems of direct taxation: an enterprise profit tax (EPT), an individual income tax, and a social security or payroll tax.

a. Enterprise Profit Tax

In 1989, the first countries, which reformed post-Soviet EPT, were Hungary and Poland. The process of

¹⁵ In CPEs fiscal policy was a part of the planning process.

reforming this tax was considerably slowed by two major factors. First, governments in CITs tried to use this tax for promoting investment activities through tax holidays and different tax rates. Second, the governments of these CITs created a conflict with state enterprises by cutting subsidies, decreasing protectionism,¹⁶ and restricting deductible costs.

The EPT tax rates are moderate; comparable or often below Western tax systems. The highest rate is 40 percent in the Slovak Republic and the lowest is 18 percent in Hungary (World Bank, 2001; EBRD, 2001). Out of 24 Eastern European and former Soviet Union CITs; ten have EPT rates 30 percent and higher. Nevertheless, the most recent trend has been to lower the EPT rates.¹⁷ Even the highest tax rate of 40 percent in the Slovak Republic is significantly lower than the old enterprise tax rates in CPEs, which normally ranged from 50 to 60 percent, sometimes amounting up to 100 percent or even more in some cases. In comparison, the EPT rates in Western countries range from 28 percent in Canada and Scandinavian countries, to 56 percent in Germany (Lennain & Bartoszek, 2000).

At the beginning of transition, CITs mostly limited the use of deductions from enterprise revenues to preserve the revenues generated by that tax in the previous system. This norm was gradually reduced in the last decade;¹⁸ however, some countries still limit the deduction of conventional expenses. Many of the CITs still try to en-

¹⁶ To include negotiation of tax liabilities and protection from bankruptcy.

¹⁷ For example: Albania, Azerbaijan, Bulgaria, Poland, Romania and Russia Federation (EBRD, 2000; EBRD, 2001).

¹⁸ For examples see Ebrill & Havrylyshyn (1999) and EBRD (2000).

courage investments through tax holidays or preferential tax rates; nevertheless, in many cases, governments have attempted to reduce those incentives¹⁹ or even to completely eliminate them.²⁰

Another notable tax widely implemented at the beginning of transition was the excess wage tax (EWT), which widened the base of the standard EPT. This tax was implemented to prevent managers from paying excessive wages and to limit wage disparities. Although easy to administer, EWTs discouraged innovation and productivity growth. For that reason, the excess wage tax was abandoned by all the CITs, except Belarus and Turkmenistan.

a. Personal Income Tax

Hungary was again the forerunner in reforming the personal income tax (PIT) in 1988, followed by Lithuania in 1990, Latvia in 1991 and Poland in 1992 (EBRD, 2001). Most of the other CITs reformed their systems in 1993 and 1994. The inspiration for this process came from different sources, such as International Monetary Fund and World Bank, as well as Hussey and Lubick's *Basic World Tax Code* (1992). The most common tendency was to adopt PITs similar to those existing in the Organization for Economic Cooperation and Development (OECD) and in the European Union (EU). Countries aspiring for early access to the EU made the strongest efforts in that process. Without strong and well developed tax administration, however, such structures were poorly executed. Some countries relied on a schedular structure instead.

¹⁹ For example: Estonia, Russia, Slovenia, Armenia and Georgia (Ebrill & Havrylyshyn, 1999; EBRD, 2001).

²⁰ For example: Poland, Romania, Czech Republic, the Ukraine, and Latvia.

Most of the CITs have a progressive tax rate schedule. The trend over the transition has been to decrease the number of brackets towards a simpler three-bracket structure.²¹ Estonia, Russia and Turkmenistan, however, have only one bracket and Latvia, Moldova and Croatia have two brackets. Additionally countries like Hungary and Czech Republic still have six and five brackets, respectively (Lenain & Bartoszuk, 2000). The common highest marginal rate is 40 percent, although the rate is as high as 50 percent in Slovenia and as low as 13 percent in Russia²² and 20 percent in Georgia. The latest trend is to lower the highest marginal tax rate, for example from 40 to 35 percent in Azerbaijan, from 40 to 38 percent in Bulgaria and from 42 to 40 percent in Hungary (EBRD, 2000). In comparison, the highest marginal tax rate in Western countries range from 13.2 percent in Switzerland to 60 percent in the Netherlands (Lenain & Bartoszuk, 2000).

The tax base contains all types of labor income, including bonuses, allowances and other forms of non-cash incomes (Martinez-Vazquez & McNab, 2001). Practically all CITs exempt income from pensions, with some allowing joint taxation of husband and wife, and additional deductions. Recently some CITs imposed taxes on interest income, as a remedy for revenue difficulties, like Poland in 2000.

c. Social Security Taxes

Payroll taxes or social security contributions still generate a significant proportion of tax revenue in CITs, amounting to 44 percent of revenue in the Czech Re-

²¹ For example Bulgaria lowered the number of brackets to 6 (Hassan & Bogetic, 1997). Attempts to lower number of brackets started in Romania in 2000 (EBRD, 2000).

²² As a result of new tax code implemented in 1999 and 2000, effective January 2001 (EBRD, 2000).

public (World Bank, 2001). From the beginning of the transition almost all CITs had social security funds exclusively financed by the employer. That tendency was reduced in some countries by incorporating partial financing by the employee. Nevertheless, in most cases, employees' contributions do not amount to more than 5 percent, except Latvia with 9 percent of the wage employee contribution (Ebrill & Havrylyshyn, 1999).

Another trend throughout the last few years has been the reduction of the payroll tax rates. For example, Poland reduced the payroll tax rate by 7.4 percentage points, Georgia by 2 percentage points, Tajikistan by 8 percentage points and Ukraine by 3 percentage points. In some cases this reduction was accompanied by an increase in the employee's contribution (Ebrill & Havrylyshyn, 1999; Lenain & Bartoszek, 2000).

The high marginal rate of the payroll tax increases the cost of the labor in CITs, damaging the international competitiveness of transitional economies. Moreover, high labor costs reduce the amount of foreign investments in CITs. The social security system inherited from CPEs has proven to be ineffective, thus providing incentives for reforms, such as those recently attempted in such countries like Poland in 1998, and Russia and Latvia in 2001 (EBRD, 2001).

2. Indirect Taxation

At the beginning of the transition process, CITs inherited complex turnover taxes from the previous system. The policy-makers in Central European CITs faced two choices: introducing retail sales taxes or value-added taxes (VAT). Two main approaches are apparent in reforming

the turnover tax. The first was an early introduction of VAT, as in Hungary and post-Soviet Union countries. In the second approach, many CITs simplified existing turnover taxes to prepare for implementing a VAT in the future. In other areas of indirect taxation, CITs enforced excise taxes and taxes on international trade.

a. Value-added Tax (VAT)

The first countries implementing the VAT were Hungary in 1988, and the former-Soviet Union countries in 1992. The next in line were the Czech Republic, Poland and Romania, which introduced a VAT in 1993. At the present time, all the CITs have implemented a VAT with the exemption of the FR Yugoslavia.²³

All the post-Soviet Union countries adopted the Soviet VAT model in 1992. This model, characterized by a high single rate, was expected to generate approximately the same revenue previously provided by the turnover tax. Another commonly used feature of the Soviet VAT was using the origin principle for trade within the Commonwealth of Independent States (CIS). Under the origin principle, exports were taxed and imports from other CIS countries were not. Under the destination principle, commonly used in other systems, imports from other countries are taxed, while exports are exempt from the VAT.

The original Soviet VAT system was reformed throughout the transition process, however with uneven results. Three important trends are recognizable in the transition process. First, countries like Azerbaijan, Belarus, Ukraine, Moldova and Tajikistan tried to broaden tax coverage by eliminating or reducing exemptions (Ebrill &

²³ Serbia plans to introduce VAT in 2003 (EBRD, 2001).

Havrylyshyn, 1999). At the same time, even under the new tax codes, a large number of exemptions still exist in some countries. Second, some countries started switching from the origin principle to the destination principle in trade within the CIS. The first countries that broke rank were Armenia and Moldova in 1997, and to some extent Kazakhstan, Kyrgyz Republic and Georgia. Third, the original 28 percent rate was lowered and at this time the common tax rate is 20 percent. Most of the CIS countries have maintained a single VAT rate except Russia, Belarus and Uzbekistan.

The Central and Eastern European CITs opted for adopting a VAT based on the EU model. The VAT rates are similar to those in other Western European countries, which are typically around 20 percent (Lenain & Bartoszuk, 2000). The exception is Hungary with a 25 percent rate, making it one of the highest rates in OECD. The general trend has been to adopt a two-rate system, which allowed a lower number of exemptions and broader tax coverage than in the CIS countries. Countries like Bulgaria, Estonia and Latvia enforced a single rate VAT. Poland is the exception to this tendency, with three rates. The attempt to reduce the number of rates from three to two was reversed in 2000, by introducing a 3 percent rate on agricultural goods resulting from access negotiations with the EU. Another feature distinguishing VAT systems in non-CIS CITs compared to CIS CITs is the well defined level of business activity under which businesses are not obliged to register under the VAT.

The VAT remains one of the most significant sources of tax revenue for CITs generating more than 50 percent of the tax revenue in Moldova, Kyrgyz Republic, Ka-

zakhstan and Georgia. In most cases, however, the revenue ranges from 30 to 40 percent (World Bank, 2001).

b. Excise Taxes

Excise duties are usually charged on products such as liquor, tobacco or motor fuels. In some CITs, other activities like gambling or additional goods are also liable for excise taxes. All CITs adopted Western-style separate excise taxes, however, these are usually below the EU standards. Even though the EU standards require calculation on an ad-valorem basis, most CITs switched to specific rates as a countermeasure for tax evasion problems.

Recent reforms are aimed at reducing the number of taxable goods and simplifying procedures. Moreover, cross-border contraband forced the CITs to harmonize excise tax rates between imported and domestic goods. This process is moving slowly forward, and at this time half of CITs do not have harmonized rates. In some countries, excise taxes are adjusted frequently to meet perceived budgetary goals.

c. Custom Duties

Taxes on international trade were designed to protect domestic markets from international competition. The CIS countries initially adopted high tax rates with a wide tax base dispersion compared to the other CITs. This trend, however, was reversed in some countries, like Ukraine, Kazakhstan and Armenia. At the beginning of the transition, many CITs introduced export duties that were abandoned, in most cases, during the transition process. Some countries, however, reinstated those duties in the case of budgetary shortages. Import duties remained except in Estonia, which abolished them in 1996, and in Turkmenistan. The importance of custom duties decreased throughout

the transition process, especially in Central European and Baltic CITs, which are at different stages in the EU accession negotiations process.

C. STATUS OF THE TAX ADMINISTRATION

While the governments of CITs quite easily implemented new tax codes, nothing or very little was done to reform tax administration. As a result, at the beginning of transition, tax administrations in CITs were unable to enforce tax laws, resulting in a fall in tax revenue performance. Several other factors influenced the slow and uneven progress in reforming tax administration, including highly politicized administration, constant changes in the tax law, obsolete accounting systems, the common use of non-cash transactions, and the lack of well trained cadres.

Many CITs, aided by international organizations, started several programs to improve tax administration. Those reforms were focused on four areas:

- Implementing tax administration regulations to adapt to the new market-oriented environment.
- Reforming managerial and organizational structure.
- Developing tax procedures and improving information subsystems.
- Developing systems of tax law enforcement (Ebrill & Havrylyshyn, 1999).

In recent years, several CITs introduced comprehensive tax administration laws. Substantial progress has been made in organizational reforms, taxpayer registration, and sanctions and penalties. The most recent attempts to reform tax administration occurred in Azerbaijan (2000), Albania (2001), and Georgia (2001) (EBRD, 2001). Despite these at-

tempts, several inefficiencies have remained and require additional reform.

From the beginning of the transition process, all the CITs encountered falling tax revenues. At present, many CITs, especially in Central Europe and the Baltic States, seem to have improved revenue performance when compared to the mid-nineties. On the other hand, many CIS countries, especially in Asia and the Caucasus region, generate tax revenue well below 20 percent of GDP (EBRD, 2001).²⁴ Details of tax revenue performance are presented in Table 1.

Poor progress in tax revenue can be associated not only with tax administration but also economic factors, such as a general fall in output at the beginning of the transition. This partially explains the fall in tax revenues. Moreover, rapid and frequent changes in the tax law confused administrators and taxpayers. In many cases, new taxes were introduced without proper preparation of the tax administration, decreasing their ability to enforce the new law.

Almost all CITs encountered growing problems of tax evasion. This problem can be associated with several factors, including:

- Unclear tax laws;
- Lack of tradition of voluntary compliance;
- Distrust of governmental institutions, inherited from the previous system;
- Corruption of the tax administration; and
- Arbitrary tax enforcement.

²⁴ For example: Tajikistan - 12.9%, Georgia - 14.0%, Azerbaijan - 14.5% (EBRD, 2001)

Poorly developed, or in some cases non-existent, taxpayers services and the tradition of the tax administrator helping fill out and review tax returns, spread the scarce tax administration resources, increasing the administrative and compliance cost.

The organizational structure of the tax administration has also generated problems in implementing tax policy. There is no clear distinction between the roles and responsibilities of local and central authorities, which has made it easier for local authorities to influence tax administrators. In some cases, CITs developed a tax policy to improve tax law enforcement. However, without a clear distinction of responsibilities and with parallel organizations, tax policy often duplicates the role of tax administration, increasing the perception of arbitrary enforcement. In many CITs, tax administration still is organized along type of taxpayer or type of tax rather than by functions or along large taxpayers units.²⁵ This situation often creates conflicting responsibilities.

Most CITs have made only marginal progress in reforming auditing processes. As a result, field offices do not have clear plans of audits with a limited number of auditors performing that task. Without modern, analytical methods for selecting taxpayers to audit based on their compliance history, offices audit each taxpayer in the same time interval. With scarce resources, offices are unable to track unreported activities, thus they focus rather on reviewing reported incomes. As a result, gains from that pro-

²⁵ Large taxpayer units are a type of division of tax administration where each unit is responsible for all aspects of activities including audit, collection and enforcement for taxpayers representing tax revenues over certain threshold (Ebrill & Havrylyshyn, 1999)

cedure are insignificant while the cost of conducting audits and loss of unreported revenues increase.

Tax administrations in CITs still have problems deterring increasing tax arrears. The most common procedure is to issue payment orders instead of seizure and sale of property, settlements and installment. For that reason, tax arrears in some countries exceed 20 percent of the GDP, despite established institutions designed to countermeasure such situations, like the Creditor's Council in Moldova (EBRD, 2001). In some cases, even if administrators have appropriate tools to fight tax arrears, they do not use them (Ebrill & Havrylyshyn, 1999).

D. IMPACT OF TAX REFORM ON ECONOMIC PERFORMANCE

The choice of the tax structure and tax policy influence several economic decisions. Too high tax rates and frequently changing tax policy create an unstable investment environment resulting in a lower level of investment and new economic activities. However, largely unanswered is the question whether it is possible to directly link the progress in reforming the tax system with overall economic performance.

To examine the influence of the tax reform on economic growth, we construct an index of tax reform effectiveness for 24 CITs. As a time framework for developing this index, we cover the transition period from 1989 through 2000. Comparing the tax reform index with economic development indicators, we attempt to identify the influence tax reform has on the economic performance of CITs.

The index, while subjective, can provide some insight into the impact of tax reform on the process of economic transition. Being aware of data availability and the subjectivity of our estimates, we recommend that findings in this section should not be directly transformed to situations in individual countries, but rather interpreted as general trends and patterns.

The overall tax reform index is calculated from six measures of tax reform effectiveness. Each of those measures has been given a score ranging from zero, for most effective, to three, for least effective.

Constructing the index we used the following measures:

- Timing of the Tax Reform - the period of time from the start of the transition process to the implementation of a tax reform program that included a modern VAT;
- Preparation for the Tax Reform - the average period of time given for preparing legislation and implementation;
- Stability of the Tax System - the frequency of changes in the tax laws since the initial reform program;
- Tax rates - a deviation of the maximum rates for the primary revenue sources from the average maximum rate for the primary revenue sources of all CITs;²⁶
- Existence and range of Tax Holidays - the significance of special treatments and exemptions used to guide the economic activities;
- Effectiveness of Tax Administration - revenue generated by taxes as a percent of the GDP.

The scores from all measures generate a "cumulative reform index" (CRI), which is the sum of all scores. Based

²⁶ This include: VAT, Enterprise Profit Tax and Social security contributions

on CRI, we group CITs in four categories from "advanced tax reformers" to "slow tax reformers," assigning to each group a single score from zero to three - "overall reform index" (ORI).

The possible empirical linkage between progress in the tax reform and economic performance is explored in Table 2, where we list several economic indicators comparing them with the tax reform index. The general trend is that with minor exceptions "advanced" and "high intermediate" tax reformers perform significantly better than "low intermediate" and "slow" reformers. Foreign direct investment as a percent of the GDP is generally higher in the "high intermediate" and "low intermediate." The correlation coefficient between the tax reform index (CRI) and foreign direct investment as a percent of the GDP takes expected sign and is statistically significant at the 40 percent level (The correlation coefficients of CRI with foreign direct investments and other development indicators are presented in Table 3). In recent years, some of the "advanced" reformers noted a significant fall in foreign investments as a percent of the GDP. For example, in Hungary this fall ranged from 10 percent in 1995 to 2.6 percent in 2000; in Estonia from 11.2 percent (1998) to 6.4 percent (2000) and in Latvia from 9.2 percent to 5.6 percent. This situation can be explained by improvements in the tax law, resulting in elimination of tax holidays and exemptions, which were mainly focused on attracting foreign investors. On the other hand, a relatively high level of foreign investments in case of "low intermediate" reformers may have two explanations: first, close links to neighboring countries, especially in case of CIS countries, like Moldova, Armenia and

Georgia; the second, still present strong tax incentives to attract investors.

The overall performance of CITs, as measured by annual inflation and growth in the GDP, appears to be on average better among "advanced" and "high intermediate" tax reformers. Higher average inflation in "high intermediate" group comparing to "low intermediate" is result of 45.7 percent inflation in Romania (Table 2). Excluding that country, average inflation in "high intermediate" group is 6 percent, which is significantly lower than in "lower intermediate" group. The correlation coefficient between the tax reform index (CRI) and the average annual growth is negative. This suggests that slower reformers grew slower over time.

"Low intermediate" and "slow" tax reformers are still not able to recover from the fall in GDP that took place at the beginning of the transition process. The only exception in that trend is Albania, which was able to maintain an average 2.2 percent growth of the GDP throughout transition process. At this moment, Albania is one of five countries, which reached or even exceeded the level of its GDP from 1989. The correlation coefficient between the tax reform index (CRI) and the level of the GDP in 2000 compared to the level of the GDP in 1989 is negative at the 34 percent level. This suggests that countries that made slower progress in reforming their tax systems slower recovered from the fall of the GDP during the transition.

E. CHAPTER SUMMARY

While significant progress in reforming tax systems has been made, many aspects of reforms lag behind, hinder-

ing the overall tax revenue performance in CITs. We believe that poor progress in reforming tax systems in CITs has significantly influenced economic growth in those countries. On the other hand, "advanced tax reformers" perform better and have recovered faster from transitional distortions.

Most of the CITs have adopted three pillars of modern systems of direct taxation: the EPT, PIT and social security taxes. Moderate EPT tax rates and eliminating EWT is on the positive side of the transition process. On the other hand, high rates of social security taxes with small share of employees' contributions create additional burdens on businesses, decreasing their competitiveness.

The reform of indirect taxation has been characterized by uneven performance. Most CIS countries still maintain the obsolete VAT. Moreover, unharmonized excise taxes between imported and domestic goods increase problems with cross-border contraband, especially from the former Soviet Union. Governments of CITs still maintain protectionism of domestic markets through high tariffs.

While progress in changing tax laws was rather smooth and fast, very little was done so far in improving tax administration. Obsolete accounting systems, underdeveloped taxpayer services, archaic audit plans and not clear organization, undermined progress in reforming tax systems. As a result, most of the CITs encountered problems of tax evasion and tax arrears.

We recognize that effective tax reform in CITs was accompanied by overall liberalization, stabilization, privatization and legislative reforms. After all, tax reform is

only part of a broader reform package. We believe, however, that even partial analysis can provide useful information about the impact of tax reform on economic performance in the CITs.

Table 1. Tax revenue performance as a percent of the GDP

Country Name	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Albania	n/a	20.5	18.8	16.3	14.1	12.4	14.8	n/a	16.5	19.3
Armenia	n/a	28.9	27.6	19.9	17.1	19.8	19.5	n/a	22.6	17.7
Azerbaijan	n/a	40.5	25.6	18.0	13.1	14.2	18.0	19.0	15.3	14.5
Belarus	30.6	36.8	32.8	29.6	29.4	31.8	28.7	27.8	22.7	43.9
Bulgaria	27.5	25.1	29.9	27.6	24.3	25.2	27.0	26.8	30.8	43.2
Croatia	31.6	33.7	40.1	41.4	41.5	40.3	43.3	40.4	42.9	40.6
Czech Republic	n/a	35.1	33.3	32.3	32.0	32.3	32.0	33.0	35.7	37.1
Estonia	21.3	28.0	33.9	31.5	29.7	30.5	29.9	28.5	33.2	38.3
Georgia	n/a	3.4	7.7	7.1	9.4	10.1	9.8	10.2	14.0	14.0
Hungary	38.8	39.2	37.6	35.6	33.8	32.6	31.9	33.6	40.0	42.0
Kazakhstan	n/a	21.1	18.5	16.9	13.2	13.7	10.9	8.3	16.1	16.1
Kyrgyz Republic	n/a	14.9	14.7	15.1	12.6	12.5	14.2	10.1	18.6	17.6
Latvia	n/a	36.4	24.0	24.5	24.9	28.6	29.5	29.3	36.1	31.4
Lithuania	..	20.2	22.6	22.5	21.7	25.4	25.4	24.6	30.5	29.0
Moldova	n/a	22.8	31.3	23.9	22.2	26.5	26.6	21.6	19.7	19.7
Poland	n/a	45.8	35.3	34.3	34.0	33.1	32.5	29.0	34.7	34.7
Romania	33.0	29.6	26.4	26.2	24.4	24.4	35.0	n/a	33.7	31.5
Russian Federation	n/a	35.5	19.4	18.4	31.0	30.7	17.4	19.0	22.4	22.4
Slovak Republic	n/a	44.3	46.3	47.7	35.6	33.6	32.1	30.7	37.1	34.2
Slovenia	37.7	39.1	38.9	38.6	37.6	37.0	37.2	38.3	41.0	39.5
Tajikistan	n/a	27.1	44.5	15.2	12.1	12.6	9.0	12.0	13.1	12.9
Turkmenistan	n/a	22.6	10.4	12.5	16.9	29.2	17.2	n/a	22.5	25.8
Ukraine	n/a	42.8	41.9	37.8	36.7	38.4	37.8	n/a	24.4	29.2
Uzbekistan	n/a	36.0	29.2	34.3	34.3	30.5	33.5	n/a	30.0	30.0

Table 2. Tax reform, Investment, Inflation and Growth in Transition

Country	CRI	ORI	Foreign		Average		Fiscal Balance as a percent of 2000 GDP	Level of GDP in 2000 (1989=100)	Inflation in 2000
			Direct investment as % of GDP (2000)	Annual growth in GDP 1989- 2001					
Advanced Tax Reformers									
Estonia	4	0	6.4	-0.7	-0.7	-0.7	83.0	4.0	
Latvia	4	0	5.6	-2.0	-2.0	-3.3	64.0	2.8	
Croatia	5	0	4.3	-1.1	-1.1	-6.9	80.0	6.2	
Hungary	5	0	2.6	0.9	0.9	-3.5	104.0	9.8	
Average		4.5	4.73	-0.7	-0.7	-3.60	82.8	5.7	
High Intermediate									
Czech Republic	7	1	9.1	0.3	0.3	-4.9	98.0	3.9	
Poland	7	1	5.9	2.1	2.1	-3.2	127.0	10.1	
Romania	7	1	2.7	-2.0	-2.0	-3.7	77.0	45.7	
Lithuania	8	1	3.3	-1.2	-1.2	-2.8	65.0	1.0	
Slovak Republic	9	1	10.7	0.7	0.7	-3.6	103.0	12.0	
Slovenia	9	1	0.6	1.2	1.2	-1.3	114.0	8.9	
Average		7.8	5.38	0.2	0.2	-3.25	97.3	13.60	

Table 2 (continued)

Country	CRI	ORI	Foreign Direct investment as % of GDP (2000)	Average annual growth in GDP 1989- 2001	Fiscal Balance as a percent of 2000 GDP	Level of GDP in 2000 (1989=100)	Inflation in 2000
Low Intermediate							
Turkmenistan	10	2	4.4	-1.2	0.4	75.0	8.3
Bulgaria	10	2	8.3	-2.0	-1.1	71.0	9.9
Kazakhstan	11	2	6.8	-2.7	-0.8	69.0	13.2
Georgia	12	2	5.1	-6.5	-4.6	34.0	4.1
Armenia	12	2	5.4	-0.9	-4.9	63.0	-0.8
Moldova	12	2	7.1	-6.2	-4.0	33.0	31.3
Kyrgyz Rep.	12	2	2.2	-1.6	-9.6	66.0	18.7
Average	11.3		5.61	-3.0	-3.51	58.7	12.10
Slow Tax Reformers							
Ukraine	13	3	1.8	-5.6	-1.3	42.0	28.2
Uzbekistan	14	3	1.2	0.4	-1.2	98.0	24.2
Azerbaijan	14	3	2.2	-4.7	0.4	52.0	1.8
Tajikistan	14	3	2.2	-4.8	-0.6	47.0	32.9
Russia	14	3	-0.1	-2.8	3.0	63.0	20.8
Albania	15	3	3.8	2.2	-9.1	103.0	0.1
Belarus	15	3	0.7	-0.2	-0.6	85.0	169.8
Average	14.3		1.69	-2.2	-1.34	70.0	39.69

Table 3. Correlation coefficients of cumulative tax reform index (CRI) with other development indicators

Foreign Direct Investment as per- cent of the 2000 GDP	-0.40
Average annual growth in the GDP 1989 - 2000	-0.32
Fiscal Balance as a percent of the 2000 GDP	0.15
Level of the GDP in 2000 (1989 = 100)	-0.34
Inflation in 2000	0.35

V - LESSONS AND POLICY RECOMMENDATIONS

A. INTRODUCTION

The progress of transforming tax systems in CITs differs significantly, especially between "advanced" and "slow" tax reformers. The transitional strategies implemented by tax reformers range from the case of Estonia, which adopted a modern tax structure in 1994 and maintained it throughout transition period without significant changes; to Belarus, which still preserves a tax system mainly inherited from the former Soviet Union. Belarus, along with maintaining this old system, continuously changes tax laws to meet budgetary needs. Despite these differences in tax reform strategies, several general lessons can be drawn from the transition process.

The main objective of this chapter is to extract general lessons from the transition process in CITs. We believe that the lessons from the past can provide insight into the direction for future reform and identify possible problems that could undermine process of tax reform in the following years. We first evaluate the lessons learned from the experience of reforming tax systems in CITs. Based on this analysis, we recommend changes for consideration on the scope and pace of reforms.

B. LESSONS FROM TRANSFORMING TAX SYSTEMS

We believe, that despite a wide diversity of transitional policies and strategies, the general lessons from

transforming tax systems in CITs can be grouped in the five following areas.

1. Initial Conditions

At the beginning of the transition process each of the CITs inherited a tax system from the previous socialist system. In the CPEs, the private sector was insignificant or non-existent. With the absence of well-defined markets, prices did not significantly influence the allocation of resources. A large, subsidized and ineffective state sector consumed most, if not all, of state revenues. The tax systems and, especially, tax administrations of the CPEs were unprepared to operate in the transitional environment.

The Central European countries were in a more favorable position relative to the countries emerging from the collapse of the former Soviet Union. First, on average, the private sector was larger in the Central European countries than in the Soviet Union. Second, some countries, like Hungary and Poland, had already started the selective reform of state enterprises and procedures, with the intent of transforming their economies into "market socialism."

The legacy of CPE tax systems played an important role in hindering the process of reform and influencing the choices made by policy-makers. Tax systems in CPEs were primarily used by the state to influence economic decisions. The revenue-raising purpose of taxes was not as important as profits could be extracted from SOEs through a variety of means other than taxation. Examples of the CPEs legacy haunting transitional economies include: an underdeveloped tax administration; the lack of transparency in tax

systems; and the lack of a tradition of voluntary compliance that created problems of tax evasion.

The tradition of state interventionism has created additional problems. Many CITs still use tax systems to promote certain economic activities through tax holidays and preferential tax rates. This results in a perception of inequality and lack of fairness in tax systems, which hinders economic activity.

2. Tax Law Enforcement

In the CPEs, tax administrators dealt with a relatively small number of taxpayers. The centralization of the banking system, administratively-imposed prices for productive inputs and outputs and the lack of tax deductible costs eased audits, allowing the control of cash flows in the economy. Negotiable tax liabilities and the dependence on personal judgment undermined common trust in governmental institutions, creating a tradition of tax evasion.

While most of the CITs easily adopted new tax codes, very little was done in adjusting tax administrations to the new market-oriented environment. Without the ability to enforce new tax laws, the simple adoption of new rules did not provide expected outcomes. As a result, tax revenues fell, primarily due to tax evasion and increasing tax arrears.

Tax administrations in many CITs still lack modern programs for registering, collecting and auditing. Moreover, the organizational structure of many tax administrations is not functional, which spreads the scarce resources of tax offices. The constant problem of lack of sufficient resources decreases the ability of tax administrations to

develop quickly, restructure, and attract well-trained cadres.

3. Lack Of Stability

Many CITs were unable to prepare comprehensive programs of reforming tax systems at the beginning of the transition. Pressure from the population to reform forced policy-makers to adopt ad-hoc programs, without systematic evaluation of future performance. As a result, many reforms did not comply with standard objectives of the modern tax systems, including equity, economic neutrality and simplicity.

In most cases, these ad-hoc tax codes created inefficiencies and loopholes resulting in confusion among tax administrators and taxpayers, while simultaneously increasing the scale of tax evasion. Attempts to eliminate ambiguities only increased the complexity of the tax systems. In the case of year-by-year adjustments in tax laws, domestic and foreign investors were unwilling to undertake significant new investments.

During election campaigns, pressures from different groups often facilitated unprepared and administratively unfeasible programs. In case of repeated changes in power, the temptation to abandon programs, which were implemented by predecessors from different political group, arose, thus increasing the pace of changes in the tax system.

Tax systems in CITs, for the most part, still lack stability in the tax structure and tax institutions. The constant changes in tax laws increases administrative and compliance costs, creating incentives for tax evasion and insufficient tax revenues. In some countries, which tried

to adapt tax systems to their unique transitional environment, pressures from the expenditure side of the budget increased pace of continuous changes in tax laws. These changes created even more instability and ambiguity into the transition process.

4. Support Of Other Reforms

Tax reforms cannot improve overall economic performance without support from other reforms. These reforms include the enforcement of bankruptcy laws, concessions, secured transactions and financial regulations, such as accounting systems. The CITs that rapidly restructured their economic, political and legal systems, apparently performed better than countries that slowed implementation of broad reforms.²⁷

5. Structure Of The Tax System

In most CITs, the structure of tax systems still needs adjustment. Social security taxes with large employer contribution increase labor costs, decreasing competitiveness of local enterprises opened to foreign markets. Very little has been done to increase employees' contributions or to change the pension system. At present, most CITs maintain pension systems inherited from CPEs; only in a few cases, have governments introduced a system based on personal savings²⁸ rather than traditional social security tax used to finance a pay-as-you-go system. However, the transitional period requires maintaining state funded social security systems to finance people who are already pensioners or those with remaining work time is

²⁷ For detailed comparisons see: EBRD (2000).

²⁸ For example Poland in 1999, Bulgaria and Latvia in 2001, Croatia and Russia in 2002 (EBRD, 2001)

those with remaining work time is insufficient to generate adequate savings.

In many cases, especially in the CIS countries, governments continue to maintain an obsolete VAT system. In these systems, the origin principle, the narrow taxable base, unclear taxpayer registration procedures and outdated accounting methods decrease the ability to control taxable incomes, therefore creating tax evasion problems.

Personal income taxes, in many cases, give too many debatable income deductions and tax credits. As a result, only the wealthiest taxpayers can benefit from such exemptions. Constant changes in the tax code, poorly prepared modifications and poorly developed taxpayers' services have a regressive impact on income distribution. In such a case, perceived inequity in the system creates distortions and raises the "gray zone" in the economy.

C. POLICY RECOMMENDATIONS

Regardless that the process of transition has lasted over one decade, many CITs appear not to have internalized lessons from the experience of other CITs or from experiences of Western countries. Consequently, in such cases, CITs have followed the same pattern of mistakes, which resulted in complicated and ad-hoc adjusted tax systems. In the following paragraphs we list our recommendations grouped into six areas.

1. Reconstruction Of The Tax Structure

Decreased social security tax rates would reduce the tax wedge and improve competitiveness, giving incentives for creating new workplaces. Widening the tax base should

offset losses from lowered tax rates. Additionally, eliminating existing loopholes and introducing a more realistic assessment of social security contributions from the self-employed²⁹ would increase tax revenues.

Eliminating exemptions from the VAT would increase tax revenues and facilitate the decrease of an unofficial economy. This would affect areas currently exempt from VAT or subject to reduced tax rates, such as building materials, new apartments, products for children, books, magazines, legal and cultural services. A wider tax base would allow a reducing standard tax rate. CIS countries should shift towards the destination principle of VAT instead of maintaining the origin principle.

Several CITs still have not harmonized excise tax rates between domestic and foreign goods, which result in an increasing problem of contraband. Use of excise taxes should be limited to a few specific goods, which is similar to practices in Western countries. Moreover, CITs should move towards calculating on an ad-valorem basis, especially those aspiring to early accession to the EU.

2. Improvement Of Tax Administration

The tax law is as good as the enforcement of the tax law. To start with, CITs should revise and re-write unclear parts of tax codes in close cooperation with groups of taxpayers. After that revision, tax laws could avoid imprecise and vague situations, which would decrease possibility of arbitrary decisions and the temptation of bribery. Tax ser-

²⁹ In many cases social security contributions from self-employed are calculated on the existing low presumed income rather than on actual income.

vices should be organized alongside functional lines, thus decreasing the possibility of duplicated responsibilities.

Use of modern information technology, improved accounting systems and precise annual audit plans would increase the effectiveness of the tax administration. With these tools, the tax administration would be able to track unreported incomes and prevent tax arrears. Very useful in that process would be elimination of tax offsets, barter and other non-cash payments.

3. Simplification Of Tax Codes

Simplified tax codes would increase transparency in the tax system. A lower number of brackets in PIT and EPT and a lower number of exemptions would widen the tax base and increase tax revenue. Moreover, by eliminating special treatments, preferential tax rates and tax holidays tax systems would be clearer while horizontally and vertically equal. In such situations, enterprises could start making decisions based on economic factors instead of on fiscal opportunities.

4. Consensus Around Tax Reform

The governments of CITs should prepare long-range plans of tax reform built on a consensus of all major political forces. These plans should include specific goals and objectives with the means to achieve them. Implementing reforms in all areas as quickly as possible would be most favorable. However, with the permanent scarcity of resources in transitional economies, plans should prioritize specific areas that include sequencing of reforms.

Nation-wide consensus around reforms would increase stability and reduce the temptation of changing tax policy

with every change in power. In such situation, alternate tax policies will be appropriately prepared and analyzed in case of their potential effects on revenues and tax burden distribution.

The governments of CITs should calculate and publish tax expenditure budgets. Identified costs created by losses of tax revenues from exemptions, tax evasion and tax credits would increase public awareness of revenue shortfalls. This strengthens support for tax reforms while building a culture of voluntary compliance.

The reform of tax systems should be accompanied by other reforms. Without clear and modern accounting standards, banking laws, and bankruptcy laws, framing effective tax systems is difficult.

D. SUMMARY

Reforming tax systems inherited from CPEs is one of the significant challenges facing CITs. Without clear and simple tax systems, tax revenue declined, while governments faced increased demands from the expenditure side of the business.

Analyzing the process of transition we have found that the "advanced" tax reformers recover faster comparing to "slow" tax reformers. We are aware, however, that tax reform cannot influence the economy alone without support of liberalization of markets, rationalization of economic policies, privatization, and legal reforms.

On the other hand, interventionist traditions, which use taxes to guide and promote specific economic activities, the lack of voluntary compliance, the lack of trans-

parency and little progress in reforming tax administration destabilize fiscal systems. As a result, transitional distortions undermine state trustworthiness, create budget deficits, discourage investors and increase social costs of reforms.

In many cases CITs have made significant progress in reforming their tax systems. On the other hand, even within the most advanced tax reformers, several areas require attention and feasible and achievable plans for the future. The immediate future will show, which countries are able to accelerate their reforms and access the EU, or, in case of post-Soviet Union CITs, reform the obsolete in most aspects CIS.

LIST OF REFERENCES:

- Abed, G. & Davoodi, H. (2000). Corruption, Structural Reforms, and Economic Performance in the Transition Economies. Working Paper No. 132. Washington DC: International Monetary Fund.
- Berglof, E. & Bolton, P. (2002). The Great Divide and Beyond: Financial Architecture in Transition. In Journal of Economic Perspectives vol.16, Number 1 (pp.77-100).
- Bird, R. (1992). Tax Policy and Economic Development. Baltimore and London: The Johns Hopkins University Press.
- Ebril, L & Havrylyshyn, O. (1999). Tax reform in the Baltics, Russia, and other countries of the former Soviet Union. Washington DC: International Monetary Fund
- European Bank for Reconstruction and Development (2000). Transition report 2001. Author
- European Bank for Reconstruction and Development (2000). Transition report 2000. Author
- Fisher, S. & Sahay, R. (2000). The Transition Economies After Ten Years. Working Paper No 30. Washington DC: International Monetary Fund
- Gabrish, H. & Laski, K. (1991). Transition from command to market economies. Boulder: Westview Press.
- Gandhi, V. & Mihaljek, D. (1995). Scope for reform of socialist tax systems. In V. Tanzi (Ed.) Fiscal policies in economies in transition (pp. 142-165). Washington DC: International Monetary Fund.
- Gelb, A. (1991). The transformation of economies in Central and Eastern Europe. Washington DC: World Bank
- Hassan, M. & Bogetic, Z. (1997). Personal income tax reform and revenue potential in transitional economies: Bulgaria. Washington DC: World Bank.

- Hussey, W. & Lubick, D. (1996). Basic World Tax Code and Commentary. Harvard University International Tax Program.
- Killer, R. & Hanousek, J. (2002). Data Watch - Research Data from Transition Economies. In Journal of Economic Perspectives vol.16, Number 1 (pp.225-240).
- Kolodko, G. (1999). Equity issues in policymaking in transition economies. In V. Tanzi (Ed.) Economics policy and equity. Washington DC: International Monetary Fund
- Kornai, J. (1995). Highway and byways. Studies on reform and post-communism transition. Cambridge: MIT Press.
- Lazear, E. (1995). Economic reform: appropriate steps and actual policies. Stanford: Hoover Institution Press.
- Lavigne, M. (1995). The Economics of Transition, from socialist economy to market economy. New York: St. Martin's Press.
- Lenain, P. & Bartoszek, L. (2000). The Polish Tax Reform. Paris: Organization for Economic Cooperation and Development.
- Martinez-Vasquez, J. & McNab, R. (2001). Tax Reform in Transition Economies. Georgia State University.
- Organization for Economic Cooperation and Development (2000). Fiscal design across levels of government, year 2000 surveys. Country reports. Paris: Author
- Roland, G. (2002) The Political Economy of Transition. In Journal of Economic Perspectives vol.16, Number 1 (pp.29-50).
- Schaffer, M & Turley, G. (2001). Effective Versus Statutory Taxation: Measuring Effective Tax Administration in Transition Economies. Working Paper No. 62. Paris: European Bank for Reconstruction and Development.
- Spulber, N. (1957). The economics of communist Eastern Europe. London: Chapman & Hall.
- Wanless, P.T. (1985). Taxation in centrally planned economies. New York: St. Martin's Press.

Wilczynski, J. (1977). The economics of socialism. London:
Allen & Unwin.

Wolf, H (1999). Transition Strategies: Choices and Out-
comes. Princeton: Princeton Studies in International
Finance.

World Bank (2001). World Development Indicators.

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