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February 3, 1995

To: Members of the Executive Board

From: The Secretary

Subject: The Revenue Decline in the Baltic Countries, Russia, and Other Countries of the Former Soviet Union

Attached for consideration by the Executive Directors is the paper on the revenue decline in the Baltic countries, Russia, and other countries of the former Soviet Union. This subject, together with the paper on policy experiences and issues in the Baltic countries, Russia, and the other countries of the former Soviet Union (to be circulated), is tentatively scheduled for discussion on Friday, February 24, 1995.

Mr. Hemming (ext. 38543) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

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INTERNATIONAL MONETARY FUND

The Revenue Decline in the Baltic Countries, Russia, and Other Countries of the Former Soviet Union

Prepared by the European II and Fiscal Affairs Departments
(In consultation with other departments)

Approved by John Odling-Smee and Vito Tanzi

February 2, 1995

Contents | Page

Contents Page

I. Introduction

Since the dissolution of the U.S.S.R. and the beginning of the transition to market-based economies, a significant deterioration in fiscal revenue performance has occurred in the Baltic countries, Russia, and other countries of the former Soviet Union (FSU). 1/ Excluding Russia, revenue fell by an average of 5 percent of GDP between 1991 and 1993, and it is estimated that there was a further fall of about 4 percent of GDP in 1994. Revenue-to-GDP ratios have fallen in most countries, by wide-ranging degrees. 1991 data are not available for Russia, but the revenue-to-GDP ratio is estimated to have fallen by about 5 percent of GDP between 1992 and 1994.

This revenue decline has to be viewed in the context of the broader reforms in the region. In moving from central planning to the market, one objective is to reduce the all-encompassing role of government. If government expenditure was falling as a result, the revenue decline would be a concern mainly insofar as it exceeded government policy objectives for expenditure reduction and threatened stabilization objectives. Throughout the region, however, a wide range of implicit fiscal activities previously undertaken by enterprises and quasi-governmental institutions have been transferred to the budget and made explicit. Hence, government spending has in the majority of countries been rising as the role of government has been reduced. This has resulted in widening fiscal imbalances, which have made inflation difficult to control. Where monetary policy has been tightened as a consequence, growing deficits are stifling new private activity and crowding out potentially viable state enterprises.

This paper discusses the factors underlying the revenue decline and lays out policy options for coping with it. The sharp fall in output throughout the countries of the region is the immediate reason why revenues have fallen. It is not, however, sufficient to explain the alarming fall in revenue relative to GDP that has occurred in many countries. Part of the explanation can be found in the changing composition of economic activity and the erosion of traditional tax bases. But difficulties experienced by the newly independent countries in integrating the emerging private sector into the tax net, developing an appropriate framework for tax policy, and establishing an effective tax administration, have also contributed significantly to the revenue decline.

For the immediate future, an improvement in revenue performance is critical for stabilization. This can be achieved through policy and administrative measures to strengthen existing taxes and through the

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1/ The revenue decline represents an acceleration of the trend already observed in the U.S.S.R. during 1985-89 when state budget revenue as a percentage of GDP fell from 47 percent to 41 percent. This process can therefore be viewed as having started with Perestroika (IMF, World Bank, OECD, and EBRD, 1991).

introduction of more effective new taxes. Over the medium term, tax reform should be designed not only to support efficient growth, but it should also be directed toward ensuring that recovering economic activity is effectively taxed, so that the budget captures sufficient resources to finance the legitimate functions of government. A central aim, both for the immediate future and the medium term, is to impose taxes more fully on the private sector, not only with a view to raising revenue but also to secure a more equitable distribution of the tax burden.

II. Revenue Developments Since 1991

Revenue developments in the Baltic countries, Russia, and other FSU countries have not been uniform across countries. The way in which total revenue and its major tax components have behaved during the early years of transition are described in this section. While the reasons for the revenue trend in certain countries (particularly the more extreme cases) and for the behavior of some tax categories are commented upon, a full discussion of the factors explaining revenue developments is contained in the section that follows.

1. Movements in total revenue

Between 1991 and 1993, revenue declined relative to GDP in most countries of the region. 1/ For a number of countries, a contributing factor to this decline was the cessation of grants from the Union government following the dissolution of the U.S.S.R. (Table 1). Union grants--ranging from around 5-20 percent of GDP--were extended to less developed republics, and to some energy-exporting republics to compensate for taxes implicit in the U.S.S.R.'s low administered energy prices. They were discontinued in 1992, and several countries (Azerbaijan, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan) were faced with sudden cuts in revenue. 2/ The energy exporters, Azerbaijan and Turkmenistan, offset their losses through foreign exchange taxes on energy; and Kazakhstan received payments from foreign oil companies which partly covered its shortfall. The remaining countries, however, were unable to recover lost grants. 3/

1/ Revenue in this paper refers to revenue of the general government, including social security contributions and other payroll taxes. It does not take into account quasi-fiscal revenues other than profit transfers from the central bank. It should be noted that GDP estimates are of limited reliability. See the background paper on the output decline for further discussion.

2/ Donor countries--chiefly Russia--gained correspondingly.

3/ For a discussion of the tax policy response in Central Asia in 1992, see Shome and Escolano (1993).

Table 1. Baltic Countries, Russia, and Other FSU Countries: Revenue and Grants, 1991

(In percent of GDP)

	Total	Of which: Union Grants
Armenia	25.6	...
Azerbaijan	51.1	13.6
Belarus	43.9	...
Estonia	41.0	...
Georgia	33.8	...
Kazakhstan	25.0	4.5
Kyrgyz Republic	34.8	12.4
Latvia	37.4	...
Lithuania	44.0	...
Moldova	31.6	...
Russia	...	...
Tajikistan	39.2	19.0
Turkmenistan	46.5	8.3
Ukraine	36.5	...
Uzbekistan	49.1	18.5

Source: Data provided by country authorities.

Revenue excluding grants declined in ten countries (excluding Russia) by an average of 10.3 percent of GDP between 1991 and 1993, while there was an increase in four countries averaging 5.9 percent of GDP (Table 2). Owing to problems associated with the succession of the Soviet Union to the Russian Federation, no reliable 1991 data are available for Russia. In the absence of such data, it is impossible to provide a definitive accounting of revenue trends for the entire territory of what used to be the U.S.S.R. However, the revenue-to-GDP ratio in Russia has fallen since mid-1992.

Among the four countries where the revenue-to-GDP ratio increased over the two-year period, the relatively favorable outcome can be attributed to special factors. In Uzbekistan, for example, while the government raised some revenue through gold-related transactions, excise and export taxes on cotton, together with a good cotton crop, accounted for a large part of the higher revenue in 1992 and 1993. Extraordinary factors also led to some of the more drastic declines in revenue. An important sequel to the dissolution of the U.S.S.R. has been the eruption of regional wars. Armed conflicts involving Armenia, Georgia, and Moldova led to particularly serious difficulties in revenue collection. In two energy-exporting countries, Azerbaijan and Turkmenistan, revenue performance has fluctuated sharply--rallying in 1992, but then collapsing in 1993--reflecting the instability of the energy sector in response to changing relative prices and real exchange rates, and payment difficulties of trading partners.

With real output dropping sharply across the region, the deterioration in revenue is even more striking when measured in real terms. Revenue in real terms, derived using the GDP deflator, declined in all but one country--Uzbekistan--between 1991 and 1993 (Table 3). 1/ In six countries--Armenia, Georgia, Kyrgyz Republic, Lithuania, Moldova, and Turkmenistan--a decline in excess of 50 percent was registered.

By 1993, the (unweighted) average revenue-to-GDP ratio for the Baltic countries, Russia, and other FSU countries had fallen to 29 percent, with a range of 3-44 percent. It is instructive to compare these with the comparable ratios in Western Europe and Eastern Europe. In the former, the average tax-to-GDP ratio alone was over 40 percent in 1993, with a range of 23-50 percent. In the latter, the average revenue-to-GDP ratio was 41 percent, with a range of 28½-54 percent. It is also instructive to compare the revenue decline in the Baltic countries, Russia, and other FSU countries with that in Eastern Europe. Between 1989 and 1991, the revenue-to-GDP ratio fell by over 10 percent in the latter, compared with about 5 percent of GDP in the former during the first two years of transition. By 1993, the ratio for Eastern Europe had fallen by a further 3½ percent. The

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1/ The CPI could have been used to deflate revenue. While it is in many cases a better indicator of underlying inflation, the GDP deflator more closely relates to the overall resource base from which revenue is derived.

Table 2. Baltic Countries, Russia, and Other FSU Countries: Revenue Developments, 1991-93

(In percent of GDP)

	1991	1992	1993	Change 1991-93
Countries with an increase in revenue-to-GDP ratio				
Kazakhstan	20.5	22.9	22.3	1.7
Tajikistan	20.2	26.6	26.9	6.7
Ukraine	36.5	41.5	41.1	4.6
Uzbekistan	30.6	31.3	41.0	10.4
Average	26.9	30.8	32.8	5.9
Countries with a decrease in revenue-to-GDP ratio				
Armenia	25.6	26.7	23.5	-2.1
Azerbaijan	37.5	49.0	36.9	-0.6
Belarus	43.9	42.2	43.6	-0.4
Estonia	41.0	35.1	36.6	-4.4
Georgia	33.8	15.3	2.9	-30.9
Kyrgyz Republic	22.4	16.5	13.6	-8.8
Latvia	37.4	28.1	35.8	-1.6
Lithuania	44.0	33.7	27.6	-16.4
Moldova	31.6	27.0	22.9	-8.7
Russia	...	37.6	36.7	...
Turkmenistan	38.2	42.2	19.2	-19.0
Average	35.5 1/	32.1	27.2	-10.3 1/
Average for all countries	33.1 1/	31.7	28.7	-5.0 1/

Sources: Data provided by country authorities; and staff estimates.

1/ Excluding Russia.

Table 3. Baltic Countries, Russia, and Other FSU Countries:
Change in Real Revenue, 1991-93 1/

(In percent)

	1991-92	1992-93	1991-93
	Countries with no decline 2/		
Uzbekistan	-8.9	27.4	16.1
	Countries with a less than 50 percent decline 2/		
Azerbaijan	1.3	-34.9	-34.0
Belarus	-13.2	-8.8	-20.8
Estonia	-29.0	2.2	-27.5
Kazakhstan	-3.9	-4.4	-8.2
Latvia	-51.3	8.7	-47.1
Russia	...	-15.8	...
Tajikistan	1.4	-20.7	-19.6
Ukraine	-5.6	-15.0	-19.8
Average	-14.3 3/	-11.1	-25.3 3/
	Countries with a more than 50 percent decline 2/		
Armenia	-50.0	-43.1	-71.5
Georgia	-74.2	-88.9	-97.1
Kyrgyz Republic	-40.4	-30.9	-58.8
Lithuania	-52.5	-31.3	-67.4
Moldova	-36.4	-27.0	-53.6
Turkmenistan	4.6	-58.7	-56.7
Average	-41.5	-46.6	-67.5
Average for all countries	-25.6 3/	-22.0	-40.4 3/

Sources: Data provided by country authorities; and staff estimates.

1/ Derived using the GDP deflator.
2/ Over two years.
3/ Excluding Russia.

revenue decline in the Baltic countries, Russia, and other FSU countries has therefore not yet been as sharp as in Eastern Europe; however, except in a few countries, the revenue-to-GDP ratio is already comparatively low.

2. Movements in individual taxes

Total revenue can be split into five broad components: enterprise taxes; taxes on wages and salaries (comprising personal income tax and payroll taxes); value-added tax (VAT) and other domestic indirect taxes; trade taxes; and a residual category consisting of other taxes and nontax items. 1/ Table 4 presents a decomposition of the cumulative decline in the revenue-to-GDP ratio between 1991 and 1993 in terms of the contributions of these five components.

Generally speaking, each of the major taxes except trade taxes contributed to the revenue decline. Trade taxes were buoyant because tariffs replaced the wide-ranging quantitative controls of the Soviet regime. VAT and other indirect taxes were the major factor behind the decline in the revenue-to-GDP ratio in countries where the ratio declined. With the onset of reforms, all countries except Lithuania replaced the turnover tax with a VAT in 1991-92. 2/ However, as discussed below, its introduction was fraught with complications, many of which have still not been resolved.

Taxes on wages and salaries also made a significant contribution to the revenue decline. The fall in real wages observed throughout the region caused receipts from payroll and individual income taxes to be significantly eroded. But this drop was not compensated by a rise in profit taxes, because of a shrinking enterprise tax base, reductions in tax rates, and other factors discussed below. Hence, enterprise taxes also contributed to the overall decline, but they were not the overriding factor they appear to have been in Eastern Europe. 3/ The remainder of the revenue decline reflects changes in other tax and nontax items, which include natural resource taxes (the largest component), property taxes, privatization receipts, exploration fees, and transfers of central bank profit. This category made an unusually large contribution in Azerbaijan and Turkmenistan, where energy tax receipts collapsed in 1993.

3. Developments in 1994

Limited data on revenue developments during the first half of 1994 are available for ten countries. They indicate that the declining trend in revenue continued into 1994, and estimates for the full year assume no significant recovery in the second half of the year (Table 5).

1/ Enterprise taxes cover all direct taxes paid by enterprises. Trade taxes include both customs duties and export taxes.
2/ Lithuania replaced the General Excise Tax by a VAT in May 1994.
3/ See IMF (1994).

Table 4. Baltic Countries, Russia, and Other FSU Countries: Decomposition of the Change in the Revenue-to-GDP Ratio, 1991-93

(In percent of GDP, over two years)

		Of which: Contribution From				
	Total Revenue	Enterprise taxes	Taxes on wages and salaries	VAT and other indirect taxes	Trade taxes	Others
Countries with an increase in the revenue-to-GDP ratio						
Kazakhstan	1.7	-3.3	-0.9	-2.6	1.5	7.1
Tajikistan	6.7	1.3	-0.3	3.7	0.9	1.1
Ukraine	4.6	-0.2	0.5	3.2	1.0	0.1
Uzbekistan	10.4	3.1	2.0	2.0	1.4	1.9
Average	5.9	0.2	0.3	1.6	1.2	2.6
Countries with a decrease in the revenue-to-GDP ratio						
Armenia 1/	-3.1	-3.6	-3.9	-3.3	0.2	7.5
Azerbaijan	-0.6	1.7	-0.2	11.4	2.1	-15.6
Belarus	-0.4	-2.2	2.4	-0.3	4.1	-4.3
Estonia	-4.4	-4.0	2.5	-0.9	-1.8	-0.2
Georgia	-30.9	-5.7	-9.2	-9.1	-0.4	-6.6
Kyrgyz Republic	-8.8	-0.6	-1.3	-4.0	--	-2.9
Latvia	-1.6	0.8	0.9	-2.8	1.4	-1.9
Lithuania	-16.4	-1.6	-3.7	-7.3	0.8	-4.7
Moldova	-8.7	-3.1	-4.6	-0.5	0.9	-1.4
Russia 1/	-0.9	1.6	0.1	-4.7	1.0	1.0
Turkmenistan	-19.0	1.0	-1.0	-1.3	7.2	-24.8
Average	-8.6	-1.4	-1.6	-2.1	1.4	-4.9
Average for all countries	-4.7	-1.0	-1.1	-1.1	1.4	-2.9

Sources: Data provided by country authorities; and staff estimates.

1/ 1992-93.

Table 5. Baltic Countries, Russia, and Other FSU Countries: Change in Revenue-to-GDP Ratio, 1994 1/

(In percent of GDP)

	1994		
	First half	Second half 2/	Full year 2/
Armenia	-8.5	-2.9	-4.7
Belarus	...	...	-4.4
Estonia	-3.2	-0.8	-1.9
Kazakhstan	-8.0	-6.2	-6.6
Kyrgyz Republic	0.7	-1.1	-0.3
Latvia	-0.3	2.0	0.9
Lithuania	-3.9	-3.2	-3.5
Moldova	-5.0	-4.0	-4.4
Russia	-5.0	-3.1	-3.8
Turkmenistan	-11.4	-14.6	-13.0
Ukraine	...	...	1.7

Sources: Data provided by country authorities; and staff estimates.

1/ Compared to the ratio for full-year 1993.
2/ Estimates.

There were some notable changes in the revenue trend in 1994. In Kazakhstan, following a relatively modest decline in 1993, the revenue-to-GDP ratio fell sharply in 1994. The decline in 1993 reflected a reduction in the VAT rate, growing tax arrears, and a drop in foreign trade. The arrears problem worsened in 1994 and was compounded by a failure to implement budgeted revenue measures. To a lesser degree, a similar pattern has emerged in Armenia, although the deterioration in the first half of 1994--mainly due to a precipitous drop in real wages--moderated in the second half.

In Belarus and Estonia, an improvement in revenue performance in 1993 was reversed in 1994. In the case of Belarus, this reflected mainly the impact of discretionary tax exemptions and a fall in real wages, while in Estonia income tax rates were lowered, mainly with longer-term supply-side considerations in mind. For Turkmenistan, the 13 percent of GDP fall in the revenue-to-GDP ratio in 1994 has matched that in 1993, mainly reflecting a worsening problem of nonpayment for gas exports by Ukraine and Georgia. In Russia, the revenue decline of 1993 intensified in 1994, giving an overall decline of 4.7 percent of GDP between 1992 and 1994. Elsewhere, the trend observed in 1992 and 1993 has continued (Lithuania and Moldova) or the revenue-to-GDP ratio has changed only slightly (the Kyrgyz Republic, Latvia, and Ukraine).

The continuation of the revenue decline into 1994 raises the issue of whether it is likely to continue into 1995 and beyond. Eastern Europe's experience suggests that it might, although any such judgment is not independent of the sources of the revenue decline and the policy response to it. Because of data limitations, revenue developments in 1994 cannot be analyzed in as much detail as those in 1992 and 1993. However, the discussion above has pointed to some of the influences on developments in 1994. The paper now turns to a more systematic analysis of the determinants of developments in the two preceding years.

III. Factors Explaining Revenue Developments

Output in the Baltic countries, Russia, and other FSU countries declined sharply during 1991-93 in response to the disruption of interstate trade in the wake of the disintegration of the U.S.S.R., the massive adjustment problems associated with the transition from central planning to market, and, for many countries, the adverse terms-of-trade shock arising from the switch to world prices for imported energy and raw materials. Regional conflicts also contributed to the fall in output.

The way in which an output decline affects revenue reflects a number of factors. How the structure of economic activity changes is especially important. The bases of the main taxes derive from major income and expenditure components of GDP (profits, wages, and consumption). If an output decline is widespread and the tax system is broad based, real revenue will fall but the revenue-to-GDP ratio should not be significantly affected.

But if an output decline is uneven, and if revenue derives more from tax bases that have fallen relatively fast, the revenue-to-GDP ratio will decline. As will be shown below, the shrinkage of the major tax bases relative to GDP is one of the main explanations for the decline in the revenue-to-GDP ratio.

The design of the tax system is also important. If the tax system is elastic, in the sense that tax revenue increases or decreases faster than the underlying tax bases, the revenue-to-GDP ratio will tend to fall as GDP falls. 1/ Unfortunately, it is difficult to form judgments about the elasticity of a tax system when structural reform is ongoing. In addition, as the tax structure is changing, new demands are placed on tax administration. Outmoded administrative structures have come under increasing strain. However, new systems and procedures are being put in place, but they are yet to have their full impact on administrative efficiency. Finally, and of considerable importance, the tax system is having difficulty coping with the growth of private sector activity.

The remainder of this section analyzes the main causes of the revenue decline in terms of factors mentioned above--changes in the level and structure of economic activity, the design of the tax system, and the efficiency of tax administration. The impact of growing private sector activity is assessed. The crisis in governance is also discussed.

1. Changes in the level and structure of economic activity

The traditional tax bases in the Baltic countries, Russia, and other FSU countries are state enterprise surpluses, wages and salaries paid mainly by enterprises, and retail sales primarily through state stores. One of the explanations for the declining yield from the major taxes is the disproportionate shrinkage in their bases relative to GDP.

a. Declining tax bases

Recorded industrial production by the enterprise sector dropped sharply between 1991 and 1993 (Table 6). For the countries where data are available, the fall in real profits was even larger. However, except in Kazakhstan, the enterprise tax base includes some or all of the wage bill, in which case changes in industrial production probably provide a better guide to the evolution of the tax base. The fall in industrial production and profits put downward pressure on real wages, and with it on consumer demand. Unemployment also emerged. Thus, the bases of other taxes--taxes on wages and salaries, and VAT and other indirect taxes--also fell sharply.

1/ This elasticity can result from several sources, including progressivity of rates and differentiation of rates across various income classes or groups of commodities.

Table 6. Baltic Countries, Russia, and Other FSU Countries: Change in Tax Bases and Real Revenue, 1991-93 1/

(Percentage change, over two years)

	Tax Bases				Real Revenue			Memorandum Item:
	Industrial production	Real profits	Real wages	Real retail turnover	Enterprise tax	Taxes on wages and salaries	VAT and other indirect taxes	Real GDP
Armenia	-54	-98	-92	-83	-64 2/	-66 2/	-58 2/	-69
Azerbaijan	-29 √	...	-49 2/	-79	-14	-34	-15 2/	-33
Belarus	-20 *√	-52 *√	-22	-38 *√	-36	3	-22	-20
Estonia	-68 *√	...	-55 *√	-56 *√	-58	-6	-26	-19
Georgia	-60	...	-80 *	-93 *	-96	-97	-97	-66
Kazakhstan	-28 *	-90 *√	72	-50 *√	-54	-40	-47	-15
Kyrgyz Republic	-44 *√	-99 *√	-62 *	-67 *	-42	-69	-61	-32
Latvia	-54 *√	...	-23	-52 *	-38	-41	-60	-45
Lithuania	-65 *√	...	-61 *√	-70 *	-60	-61	-73	-48
Moldova	-36 *√	...	-52 2/	-66 *√	-61	-61	-40	-36
Russia	-31	...	-31	-35	2 2/	-13 2/	-46 2/	-30
Tajikistan	-39 √	...	...	-81 *√	-29	-46	-14	-40
Turkmenistan	-10	-82 *	-29 *	-46 *√	9	-62	-34	-12
Ukraine	-16	...	-61 *√	-47 *√	-30	-27	-5	-29
Uzbekistan	-17	-14	72	-40	30	46	4	-13

Sources: CIS Goskomstat; IMF Economic Reviews; and staff estimates.

1/ For countries where revenue has declined, a tax base decline greater than or equal to the fall in real GDP is indicated by a *, while a tax base decline greater than or equal to the fall in real revenue is indicated by a √.

2/ 1992-93.

The fall in tax bases was in many cases (i.e., for a number of tax categories and countries) larger than the fall in real GDP and the corresponding revenue decline. For example, shrinking tax bases are more than sufficient to explain an overall drop in the revenue-to-GDP ratio in Estonia. To varying and generally lesser degrees, declining tax bases have had a similar impact in other countries. However, the Estonia case also illustrates that there is more going on. For example, while real wages fell by 55 percent, revenue from taxes on wages and salaries dropped only by 6 percent. Clear anomalies (most notably Uzbekistan, where falling tax bases were accompanied by increasing revenue) also highlight that the decline in traditional tax bases is only part of the overall story. So do the many cases where the fall in revenue cannot be explained by declining tax bases alone. In Estonia, taxes on wages and salaries were relatively buoyant because the tax system was capable of taxing incomes outside the enterprise sector. But this has not proved to be the rule.

b. The impact of an emerging private sector

To the extent that profits and wages have fallen faster than output, other incomes must be falling less fast. National accounts data reveal that agricultural incomes have increased as a share of GDP across the region. But there has also been a large and increasing residual, which can be largely attributed to private or informal sector incomes. A significant share of output in most countries of the region has now shifted to the private sector, because new firms have been established or have emerged through privatization, and because an atomistic trade and services sector is developing rapidly. Such firms (and individuals) have not contributed significantly to tax receipts, because of weaknesses in tax policy and tax administration.

One implication of such weaknesses--which are described below--is that the shift in production to the emerging private sector would probably have reduced enterprise tax revenue even if output had not fallen. 1/ Moreover, to the extent that private firms are not captured in the tax net, both taxes on wages and salaries, and VAT and other indirect taxes, may not be fully collected from them. It is also worth noting that while private sector activity is at least partly reflected in GDP data, to the extent that it is not fully captured, the revenue-to-GDP ratio is in fact overestimated by the currently available data. In other words, the revenue decline may be larger than indicated above.

1/ This conclusion is also supported by the revenue experience of the last few years in the People's Republic of China, where the revenue-to-GDP ratio has declined despite rapid growth in GDP.

2. Design of the tax system

While the decline in the major tax bases can explain many instances of the revenue decline, revenues have also been eroded because of shortcomings in tax design. Some of these are a legacy of the planned economy tax system; others have been the unintended consequence of the reform effort.

Some general features of reforms in the Baltic countries, Russia, and other FSU countries are worth noting at the outset. First, the most significant reforms of regional tax structures took place earlier than, or at the beginning of, the period covered in this study--notably, the enterprise tax reform and the replacement of the turnover tax by the VAT. Consequently, formal tax structures in the region looked quite like those of countries in Western Europe before the onset of the revenue decline. Second, the fact that faster reformers--like the Baltic countries--have experienced revenue losses broadly similar in magnitude to those of some slower reformers in the region suggests that the pace of tax reform has not been critical. The major problem in the area of tax policy has been that recent changes to the design of taxes in some countries, rather than furthering the transformation of the tax structure, have been retrogressive.

a. Changes in enterprise taxes

The enterprise tax provides the clearest example of this retrogression. The U.S.S.R. introduced an orthodox profits tax at the beginning of 1991. It had a central rate of 45 percent and a base defined more or less in accordance with industrial country accounting principles. 1/ Since then, the base has been changed and there has been a downward drift in rates.

First, and most notably, almost every country (as already noted, the exception is Kazakhstan) has in one way or another reintroduced wages into the tax base. In some cases, this almost doubled the base. Second, and working in the opposite direction, the base has been eroded as exemptions and other tax preferences have proliferated. Third, all countries have cut the basic tax rate and many have returned to a differentiated rate system. In some countries, most notably Russia, this began in 1991 when they started to enter into tax competition with the U.S.S.R. Government; in others it came later, to compensate for the expansion of the base. In no country is the basic rate now greater than 35 percent. In some countries (Ukraine,

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1/ This reform was estimated to be revenue-losing. According to IMF, World Bank, OECD, and EBRD (1991), a 55 percent rate would have been revenue-neutral. The actual revision of accounting procedures at the enterprise level, however, has been a protracted process and is still continuing in most countries.

Uzbekistan) it has fallen to 18 percent. 1/ Finally, six countries (Armenia, the Kyrgyz Republic, Moldova, Turkmenistan, Ukraine, and Uzbekistan) reintroduced excess profit taxes or asset taxes. These are essentially taxes on capital, justified as proxy dividends paid by the state enterprises to their owner, the government.

The impact of these reforms on revenue is hard to gauge. The capital taxes and the reinclusion of wages in the profit tax base clearly boosted revenue beyond the yield of a pure profit tax. However, for those countries where the cuts in enterprise tax rates were large (such as Belarus, Kazakhstan, Turkmenistan, Ukraine, and Uzbekistan), these caused significant offsetting revenue losses.

b. From turnover tax to VAT and excises

An important reason for the underperformance of VAT has been the contraction in consumption. However, there have also been a large number of flaws in VAT design, legislation, and implementation. The choice of rates has been perhaps the single major difficulty. At the outset, it was difficult to estimate revenue-neutral VAT rates, given the many turnover tax rates and the large and staggered impact that price liberalization was having on relative prices. Hence, in 1992, half the countries of the region lost revenue when they introduced the VAT. Despite this loss, a number of countries (Armenia, Azerbaijan, Georgia, Kazakhstan, Moldova, and Russia) cut their rates and/or introduced differentiated rates in 1993, with a resulting adverse effect on VAT revenue. By contrast, Estonia increased its VAT rate, thus ameliorating the revenue decline. 2/

In addition, some particular features of the VAT system as adopted hinder timely and effective revenue collection.

(1) Cash basis vs. accrual basis. It is the general rule to allow taxpayers to use a cash rather than accrual basis for establishing VAT liability. 3/ In general, this procedure delays VAT receipts, since payments are slow. Levying VAT on a cash basis, and allowing manufacturers to claim VAT credits for materials at the time they are used in production, even if they have not paid their suppliers, is particularly costly in revenue terms when there is an accumulation of interenterprise arrears. Since suppliers are not liable until they are paid, VAT credits for materials are being taken or refunded by the government before VAT liability has arisen on purchases of inputs. Moreover, since tax becomes due when

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1/ By comparison, the OECD average basic rate is about 40 percent. Basic rates are also higher in Eastern Europe. In 1993, it was 40 percent in Bulgaria, 45 percent in the Czech Republic, 36 percent in Hungary, and 40 percent in Poland.

2/ To increase VAT revenue, Russia introduced a 3 percent surcharge for 1994.

3/ The exceptions are Estonia, Latvia, and Lithuania.

arrears are paid, the incentive for enterprises to collect receivables is correspondingly diminished. The practice of allowing VAT credit only when inputs enter into production is also a deterrent to collection because it requires a complex accounting system to monitor the utilization of inventories. 1/

(2) Markup method vs. invoice method. The nonmanufacturing sector does not use the usual invoice method to determine VAT liabilities, but rather a markup system whereby VAT is paid not on the actual price but on an estimated fixed markup over cost. Accounting methods for calculating taxable markup (especially the treatment of inventories) are subject to abuse, and their complexity makes audit difficult. There are also adverse consequences when inflation is high (see below).

(3) VAT on international trade. Turnover tax was not levied on imports or exports. Since the introduction of VAT, trade among members of the Commonwealth of Independent States (CIS) has been taxed essentially on the origin principle, that is, VAT is collected in the producing country. Initially, trade with other countries was not taxed, but provision was soon made to tax this trade on the destination principle, that is, with imports taxed and exports zero-rated. 2/ Net importers--from outside the CIS--should have benefitted from this provision. However, there are numerous exemptions for imports, and the administration of the destination principle has proved complex. Consequently, trade is taxed haphazardly and yields less VAT revenue than it should.

The introduction of excises has also been disappointing. In contrast to market economies, excises have not been a stable high-yield revenue source. Most notable is the absence of important commodities, such as gasoline for cars, car imports, and some types of alcohol, from the excise base in most countries. Also, tax rates reflect pressure from producer lobbies seeking to keep the prices of excisable goods low. At present, rates on alcohol and cigarettes are about 20 percentage points lower than in OECD countries.

c. Trade liberalization

In the U.S.S.R., revenue from foreign trade mainly came from net export profits. 3/ These have either disappeared or diminished sharply with the

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1/ See Summers and Sunley (1995).

2/ However, a number of central Asian countries (e.g., the Kyrgyz Republic and Tajikistan) did not have legal provisions for levying VAT on imports until end-1994.

3/ The state budget of the U.S.S.R. used to fully absorb the gains or fully cover the losses of state foreign trade organizations which resulted from the insulation of domestic prices from those in the world market.

liberalization of trade. 1/ It was envisaged that they would be more than made up for by the introduction of explicit import tariffs and by temporary taxes on windfall gains on exports as the ruble was being depreciated in the move to convertibility. However, though revenue from trade taxes has been growing rapidly, this growth is from a very low base, and it generally accounts for less than 5 percent of total revenue. Moreover, its potential is limited by a variety of factors.

First, the Baltics, Russia, and other FSU countries have been reluctant to impose significant tariffs on imports from outside the CIS because they see foreign competition as a central element in domestic demonopolization. Second, most countries do not levy import duties on imports from CIS countries or on personal property imported by CIS citizens. In some cases, these provisions have led to imports being almost fully relieved of duty. 2/ Third, it has also been necessary to introduce a customs service from scratch, and to patrol borders which are many thousands of miles longer than prior to 1991. Apart from the intrinsic teething problems of a new administration, the introduction of customs has also been hindered by financial difficulties. Finally, to the extent that countries were willing to tax trade, export taxes rather than import tariffs were often imposed to maximize the domestic availability of goods.

Finally, in net energy-exporting countries--notably Russia and Turkmenistan--it had been expected that the windfall gains from temporary export taxes would provide a cushion for the budget. However, these potential gains have been undermined. In the case of Russia, pressure for tax relief came not only from the oil industry, but also arose out of political tensions between the Moscow Government and oil-rich regions which threatened to secede if they were taxed too heavily. In Turkmenistan, the inability of trading partners to pay for their gas imports caused a massive decline in revenue from the gas sector.

d. Inflation

Besides eroding real tax bases, the failure of most countries to stabilize during 1992-93 left tax systems vulnerable to distortions caused by high inflation. Average inflation in the region exceeded 1,000 percent during 1991-93, though it has come down substantially in 1994. The net impact of high inflation on revenues, however, is uncertain.

On the one hand, the absence of proper inflation accounting led enterprises to book raw materials and inputs at historical costs and for

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1/ Budget revenue from profits on foreign trade in Russia, for example, did not disappear but has fallen significantly. A centralized export scheme continued to be in place into 1994.

2/ In the Kyrgyz Republic, the origin principle was interpreted to encompass any import arriving via another CIS country and the declaration of nonpersonal property was solely at the discretion of the importer.

some to report abnormally high profits. Similarly, depreciation allowances were not indexed--at least until 1993--and the enterprise tax base expanded on account of decapitalizing taxes on depreciation. Since, in the Soviet system, replenishing the depreciation fund traditionally pre-empted around 25 percent of total enterprise income, the short-run effect of high inflation could have been to increase enterprise tax receipts by as much as a quarter. A certain amount of bracket creep also occurred, particularly in 1992, although the revenue gain from this was probably minimal.

On the other hand, high inflation depresses revenue in real terms because of collection lags and the markup method of computing VAT liabilities. Despite collection lags that tended to be relatively short by international standards--reflecting the automatic collection of taxes from enterprises through the state banking sector--near hyperinflation in some countries and an inadequate payments system probably led to significant losses in real revenue. A second serious cost to the budget arises from the use of the markup method to compute VAT liabilities. When large price increases occurred between the time of purchase and the time of sale, the application of a standard fixed VAT markup on the historic purchase price implies that much value added may go untaxed.

e. Exemptions

In most countries, revenue has also been eroded by numerous exemptions from all major taxes. 1/ Much new activity benefits from exemptions, and the range of exemptions has increased as governments have tried to earn the support of powerful pressure groups. The main groups lobbying for exemptions are:

(1) Sectoral lobbies. The influence of sectoral lobbies is manifest in exemptions and preferences which benefit a whole sector (most notably agriculture), specific subsectors, or individual large enterprises. In Moldova, for example, the agricultural sector--which has the largest representation in Parliament--benefitted from exemptions on the enterprise tax that amounted to an estimated 1 percent of GDP in 1993. And in the Kyrgyz Republic, the profitable gold mining sector was exempt from the enterprise tax and VAT until 1994.

(2) Regions. Pressures from regional elites has led to "special rights" being accorded to individual regions by presidential decrees, government resolutions, and parliamentary decisions. This has been a serious problem in Russia, which has experienced a proliferation of free ports and environmentally distressed emergency zones. Territories embracing about a quarter of its area and a third of its productive capacity were functioning under highly concessional special regimes in the middle of 1993.

1/ In Ukraine, for instance, the Government estimates that the removal of VAT exemptions would raise VAT yield by more than one third.

They received, and continue to receive, exemptions from taxes and duties and from the obligatory conversion of hard currency export proceeds, as well as various other fiscal preferences.

(3) Foreign investors. Tax preferences for foreign investors abound, especially for enterprise tax and customs duties. For example, in Azerbaijan, joint ventures with at least 30 percent foreign participation are subject to a reduced profit tax rate of 25 percent; a three-year tax holiday is granted to foreign enterprises commencing activity in the country, which may also be excluded from VAT and customs duties.

3. Efficiency of tax administration

Taken together, the collapse of traditional tax bases and shortcomings in the design of existing taxes go a long way toward explaining the revenue decline. However, it has been compounded by serious weaknesses in tax administration. Under state ownership and central planning, tax collection was mainly a matter of state enterprises transferring turnover taxes and specified proportions of their profits to the budget. The tax service did not have to engage in any assessment, collection, or enforcement of taxes. Tax payments were determined by the plan and were effected through automatic transfers between accounts held with the state banking sector. The role of the Soviet tax administration was thus limited to ensuring that stipulated accounting conventions were followed and to verifying the arithmetical correctness of the bank transfers. Being directed only toward these objectives, such a system came under immediate pressure as economic activity moved significantly outside the state enterprise sector. Moreover, tax compliance by state enterprises weakened, and they have accumulated sizable tax arrears. While the elements of a modern tax administration are beginning to be put in place, shortcomings remain in basic administrative functions.

a. Taxpayer identification

In most countries, there is no system to identify taxpayers by a single taxpayer identification number (TIN). Without a system for creating and assigning TINs, the tax administration has no common identifier that ties together all of a taxpayer's records. Hence, it is impossible to correlate data with a view to detecting underreporting of income or other forms of evasion. Further, an effective system of taxpayer registration has been implemented in only a few countries.

b. Filing and payment of taxes

Administrative practices are fraught with duplication and inefficiency. For example, in most countries taxpayers separately submit tax returns to the local tax office and payment orders to the bank. The need to match tax returns and payment orders complicates the task of detecting taxpayers who fail to submit returns and to make timely or full tax payments. This matching process is particularly slow because of the lack of a TIN. In addition, too much of tax officials' time is devoted to manually checking tax returns, rather than encouraging taxpayer compliance and controlling the collection process.

c. Organization

In most countries, a single tax officer is usually assigned to handle most administrative functions for a specific group of taxpayers. Consequently, tax officers see the same taxpayers repeatedly and are responsible for several taxes. Regular direct interaction between the same tax officer and taxpayer raises the potential for collusion and consequent tax evasion. Tax officers' responsibility for a wide range of administrative functions also limits their knowledge in specific technical areas, especially accounting and audit techniques. In particular, they lack the investigative skills to conduct effective audits.

d. Audit

Audits are often conducted in a perfunctory manner, without any analysis or investigation of enterprises' business activities. An important reason for this, in addition to the lack of specialized audit skills among tax officers, is the requirement in most countries that all enterprises be audited every one or two years. The development of the private sector is making this impractical, and has led tax officers to often take an excessively formalistic approach to auditing taxpayers. Audits frequently amount to no more than determining whether the taxpayer has the correct records with the appropriate signatures and seals. Tax audits are also hindered by the requirement that they cover all taxes in depth. This made sense under planning, when the major taxes were all tied to a single accounting system, but it now precludes effective audit.

e. Taxpayer education

Across the region, taxpayer awareness remains low, and budgets for taxpayer education are almost nonexistent. In many countries, tax returns and other key forms necessary for compliance are not provided to taxpayers. Even when forms are available, there are no instructions on the form or separate document to explain how to complete it.

f. Customs

Most countries do not have adequate customs controls, either for assessing and imposing tariffs or for applying VAT and excise taxes to imports. To cope with this problem, some countries (such as Lithuania and Moldova) attempt to bypass the customs administration and have their internal revenue service collect domestic indirect taxes on imports.

However, both because it is more difficult to follow up on importers once imports have passed across the border, and because procedures for information sharing between customs and the internal revenue services are poorly defined, collection has been weak. Furthermore, as already mentioned, the application of the destination principle for VAT on international trade has posed difficulties for customs administration.

4. The crisis in governance

The legitimacy of government is also a factor in tax collection. In an unsettled political environment, many of the new governments remain weak. Their financial powers are especially limited by an inability to control local governments and a volatile policy environment.

a. Fiscal federalism

In some countries in the region, uneasy relations between various levels of government appear to have been a significant factor affecting overall revenue performance. In Armenia, Georgia, Moldova, Russia, and Ukraine, collection problems have arisen from disputes over revenue sharing and tax assignment provisions among the central, regional, and local governments. In an ideal situation, fiscal federalism should not influence the revenue position of the general government after consolidation, but several factors have tended to make the overall outcome weaker than expected.

First, legislative confusion and conflicting tax regulations at the central and regional levels in Russia, connected with the struggle of constituent republics for greater economic independence, gave enterprises an opportunity to obey "softer" tax laws or to delay payments without explicitly breaking the law.

Second, revenue underreporting by lower levels of government appears to be widespread and significant across the region. For instance, in 1992-93 commodity-producing resource-rich regions in Russia--especially those which had been net interregional donors--tended not to transfer revenue to the central budget. While some territories withheld revenue informally, several autonomous republics (Tatarstan, Chechnya, and Bashkortostan) formally declared their unilateral introduction of a "one-channel taxation system." This meant that all their taxes were to be collected by the regional authorities, and revenue sharing with the central budget was to be negotiated afterwards. Under these circumstances, the regional authorities had little incentive to report their revenue collections accurately to the central government.

And third, tax collections at the local level may not be as effective as with a unified tax administration. When Ukraine's central government tried to transfer revenue responsibilities to local governments in 1994, overall collection dropped. Officials suggested that the local governments were more vulnerable to pressure from enterprises than was the central tax service, particularly when an enterprise was a large local employer and provider of social services. In Belarus, enterprise tax collections were reported to be chaotic in 1992, because local authorities could not handle their revenue collection responsibility; now all collection has been unified under the State Tax Administration.

b. Policy environment

The abandonment of the Soviet regime was associated in most countries with political instability, frequent changes of ministers, and ambiguous policy courses. This had several implications for tax collection. First, the lack of a coherent reform strategy was reflected in frequent amendments to tax legislation, with negative repercussions for taxpayer compliance as taxpayers either delayed payments in the hope of a reversal of disadvantageous changes, or were simply unfamiliar with new requirements. More generally, the low quality of tax legislation has likely been a contributing factor to the revenue decline. With the exception of the Baltic countries and Russia, tax legislation tends to be badly drafted, is difficult to understand, and contains inconsistent and poorly thought out rules. Second, some governments, in part because of their impermanence and in part because of falling budgetary wages, have had a low degree of legitimacy with their civil service. Such disaffection has contributed to corruption and the misappropriation of revenue. In Azerbaijan in 1993, for instance, "bonus development payments" by foreign oil companies for exploration leases were never received by the budget, but were diverted to the State Oil Company (SOCAR). Third, the heavy reliance on sequestration as an instrument of expenditure control has led ministries, local governments, and enterprises to protect themselves against unexpected expenditure cutbacks by withholding revenue from the central authorities.

IV. Policy Implications and Responses

The revenue decline experienced by the Baltic countries, Russia, and other FSU countries since 1991 is a complex phenomenon. It is clearly related to the collapse in output across the region. This has affected established tax bases--that is, profits, wages, and retail sales in the traditional sectors of the economy. In many countries, these bases have fallen faster than output. Consequently, falling real revenue has been accompanied by a declining revenue-to-GDP ratio. However, the poor revenue performance cannot be blamed on the output collapse alone. It also reflects problems in the design and administration of taxes, and other factors (related to the crisis in governance).

The major tax bases traditionally derive from the activities of the state enterprises. While the enterprise sector has declined sharply, agricultural output has been fairly robust, and with price reform the importance of agricultural incomes has increased. However, such incomes are in most instances exempt from taxation. A private sector is also emerging, both through the start-up of new activity and the privatization of existing activity. Yet the private sector is not effectively taxed. It benefits from the pervasive exemptions that characterize the major taxes. A significant part of it also remains outside the reach of an outmoded tax administration. More rapid progress with tax reform might have arrested part of the revenue decline. It is necessary for its reversal, and urgently so if a further revenue decline is in prospect.

An output recovery will generate more revenue. But the heavily taxed sectors of the economy that have declined so sharply will not be the ones to lead a recovery. If economic transformation in the Baltic countries, Russia, and other FSU countries is a success, the obsolete part of the state enterprise sector will be replaced by a vibrant, but difficult to tax, private sector. 1/ To reverse the revenue decline, and especially to restore revenue-to-GDP ratios to where priority spending can be undertaken without compromising macroeconomic stabilization objectives, tax systems have to be reoriented to encompass emerging activity. Existing activity, and especially agriculture, also has to be taxed more effectively.

The rest of this section summarizes the priorities for the reform of tax policy and tax administration. These priorities reflect the advice given by FAD technical assistance missions and experts to the countries of the region. 2/ In the area of tax policy, many of the reforms can be implemented immediately, with the promise of significant short-term revenue gains. Indeed, most could have been in place already and contributed to a moderation of the revenue decline. However, for a variety of reasons--mainly related to failure to secure the necessary political consensus--much of FAD's advice has often not been followed. The most notable headway in the region as a whole has been the simplification and rationalization of customs duties and some broadening of the base of VAT and excises. Across the range of taxes, there has been progress in Estonia and Kazakhstan. In the area of tax administration, advice has been more influential, especially in connection with major projects in Russia and Ukraine. But there remains much to be done. Moreover, as with all institution building, putting in place a modern tax administration will yield results only over the medium term.

1. Immediate challenges

The most reliable short-term benefits from tax policy reform will come from improving the effectiveness of taxes on the traditional branches of the economy that are already theoretically in the tax net. These include, but are not confined to, sectors dominated by state enterprises. Since a primary medium-term reform goal is to promote growth, higher tax yields from already taxed sectors must be achieved by broadening bases and blocking

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1/ This observation is made in the context of economic transformation more generally by Tanzi (1994).

2/ Details of FAD technical assistance missions and expert assignments on tax policy and tax administration are provided in the Appendix.

loopholes--mainly through the removal of exemptions--rather than by raising tax rates. Indeed, rationalizing tax rates and reducing rate-related distortions may improve the legitimacy and effectiveness of the tax system and, by minimizing disincentives to work, save, and invest, improve growth prospects.

a. The removal of exemptions

Exemptions can usually be removed, or at least substantially reduced, immediately. While it may take previously exempt activities some time to adjust to the imposition of taxes, the response being asked of them is no more painful than for other sectors exposed suddenly to price liberalization. Experience in the region since 1991 suggests that little is gained by delaying price shocks.

There are numerous exemptions which should be removed or restricted. As regards enterprise taxes, eliminating pervasive exemptions by source of revenue and type of activity, apart from raising revenue, will create a level playing field for production. State and collective farms, small businesses, manufacturing for export, and enterprises with foreign investment unjustifiably benefit from such exemptions. Given the importance of the emerging private sector, there is an especially strong case for eliminating tax holidays for newly established businesses and replacing them by generous carry-forward of start-up losses, and/or accelerated depreciation of capital assets.

With regard to taxes on wages and salaries, the definition of taxable income under the personal income tax should be broadened to cover all forms of income, including social security benefits and payments in kind (most notably free housing). Also, tax concessions for families with children and other dependents should be replaced by family allowances paid through the social security system, to lower budgetary costs through improved targeting.

VAT exemptions beyond those justified on social or administrative grounds (education, health, financial services, etc.) should be eliminated. This would involve extending VAT to most services. In the countries of the CIS, VAT should be applied to all imports from outside the CIS at the same rate as domestic goods. VAT should also be levied on product prices inclusive of other taxes. Specifically, the VAT base should include any applicable excises. In the case of imports, VAT should be based on their landed value, plus customs tariff and excise duty, converted at the market exchange rate. Zero-rating should be restricted to exports.

b. Rationalization of tax rates

High tax rates are an obvious disincentive to economic revival, while a multiplicity of rates not only results in distortions and inequities, but also complicates tax administration and creates opportunities for tax evasion. The immediate harmonization of rates might produce some revenue gains from improvements in efficiency. But, in all likelihood, revenue needs will not permit an immediate reduction in tax rates, which will instead have to be gradually reduced as revenue collections improve.

For multiple-rate enterprise taxes, rates should be consolidated into a single standard rate, and the latter should be aligned with the top personal income tax rate. The rate structure of taxes on wages and salaries should be made less distortionary by raising the threshold and reducing top marginal rates, while increasing the basic rate, which tends to be low by international standards. VAT should also have a single standard rate. Excises should apply at the same rate regardless of origin. In particular, the failure to impose excises on imports discriminates against all domestic production. To the extent possible, the rates of excises and other duties (including import tariffs) should be converted to an ad valorem basis.

c. Disguised high tax rates

Some tax rates in the region are higher than they seem. In countries where wages are included in the enterprise tax base, the effective rate on profits is much higher than the statutory rate. Likewise, depreciation allowances based on historic cost boost the effective tax rate on true profits in countries where inflation is high. For instance, in Ukraine in 1994, the enterprise tax rate was 22 percent; adjusting for the wage component in the base, the effective profit tax was 36 percent. To remove the hidden disincentives, tax bases should be rationalized as quickly as possible. Any such adjustments can be made revenue-neutral by a corresponding adjustment to the tax rate. Most crucially, costs should not be taxed as profits. And the taxation of inflationary gains should be eliminated, since it causes the decapitalization of enterprises, thus making them more likely to fail.

d. Taxing the emerging private sector

It is hoped that a sizable share of the emerging private sector will be taxed as a consequence of the elimination of exemptions. However, some activities may remain elusive, and will have to be taxed by alternative means.

One of the main challenges faced by the region is to tax private business, much of which is concentrated in small-scale activity. Even when new taxpayers have been identified, operational means of taxing them have to be found. For this to be possible in the short term, consideration will need to be given to incorporating some presumptive elements of taxation into existing income taxes, as a way of short-circuiting difficulties in assessing tax liability. For instance, a minimum levy or low flat-rate tax based on presumed turnover of individual proprietorships could be introduced, in combination with a basic license fee. 1/ A presumptive tax could also be levied in lieu of VAT on small business. The advantage of presumptive taxes is that they broaden the tax base at relatively low administrative cost, they encourage taxpayers to move from the informal to the formal sector, and they are fairly efficient (because marginal tax rates are zero) and equitable (because they focus on those who would not otherwise pay tax).

e. Taxing agriculture

Agriculture is the largest untaxed sector in the region and has declined less than other sectors because it has benefitted significantly from price liberalization. For this reason, it is particularly important that agriculture should be brought into the tax net. The removal of agricultural exemptions from the major taxes is the most desirable way of taxing agriculture. In cases in which such an approach is not adequate, consideration should be given to finding alternative means of taxing agriculture, at least in the short run. For instance, payment of a land tax (which already exists in some countries) could be made a secondary proof of ownership or a prerequisite for the right to use land. For the immediate future, the land tax can be seen as a means of bringing farmers into the tax net, and difficulties in land valuation can be dealt with by a certain tolerance for underassessment. 2/ A land tax can also help reach new small private farmers.

Of particular concern to farmers is an appropriate treatment of losses and carryovers, since their incomes fluctuate from year to year. Hence, if agricultural profits and earnings are to be subject to tax, it may be important--not least for political acceptability--to provide for income averaging (if tax rates are progressive) and loss carryover. 3/

f. Taxing trade

A further likely source of short-term revenue is through enhanced attention to the taxation of trade. Significant revenue can be raised by the application of a broad-based simple tariff with a standard uniform rate of 10-15 percent on all ex-CIS imports. As some countries have already found, an across-the-board tariff is relatively simple to administer, and it minimizes distortions. Some countries could improve their revenue yield from trade taxes if imports were valued for tax purposes at a market

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1/ There are various ways of determining presumed turnover, such as the number of employees, the area of the business premises, and the consumption of electricity. Which to apply has to be assessed on a case-by-case basis.

2/ In the long run, cadastres should be improved, and land tax rates should be adjusted automatically each year in line with price changes.

3/ Income averaging, however, might be a complexity that for administrative reasons should not be considered, in which case tax rates should be as uniform as possible.

exchange rate rather than at an official rate. Indeed, the implied loss of revenue is one reason for unifying official and market exchange rates. Export taxation--including implicit taxes imposed through hard currency surrender requirements--should be avoided.

g. Other quick-yield taxes

Where enterprises prove difficult to tax in the short run, there may be some justification for applying an enterprise property tax of 1-3 percent to all assets of state enterprises other than financial assets and land (net of depreciation). This charge, like an obligatory dividend, is designed to compensate government for its investment, to prepare enterprises for privatization and, most important, to act as a presumptive tax prior to the introduction of a satisfactory bookkeeping system. 1/

Petroleum and other energy excises are an important source of revenue in many countries and can be quickly developed. Downstream taxes are particularly low in the Baltic countries, Russia, and other FSU countries. The Russian gasoline excise rate, for example, is 15½ percent compared with tax-inclusive excise rates on gasoline of between 25 percent and 71 percent in major OECD countries. Also, many countries of the region are major producers of petroleum, gas, and minerals, but earn little revenue from these sectors compared with international norms. More attention to taxing these products could well generate sizable revenue, as well as encourage energy conservation. In some cases, added revenue can be earned from joint venture arrangements, including up-front payments on the signing of agreements (as in Azerbaijan).

2. Short-term to medium-term priorities

The policy measures described above can, to a large extent, be introduced rapidly through changes in legislation. However, their potential revenue impact will not be fully realized unless they are supported by modern accounting practices, and unless the tax administration is able to collect revenue from activities brought into the tax net by the removal of exemptions, the introduction of new taxes, and other reforms.

a. Accounting practices

Inappropriate accounting practices have already proven to be an obstacle to increasing revenue in some countries. Their reform is a necessary complement to tax reform.

(1) Invoice-method VAT accounting. The replacement of the markup method for calculating VAT liability with the invoice method would ensure

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1/ It should be noted, however, that an enterprise property tax--like a land tax--will need to deal tolerantly with valuation difficulties because the fair market value of most property will not yet be well established.

that VAT was paid on the full price of goods sold and prevent any erosion of VAT returns on account of inflation. 1/ A shift to the invoice method would be more feasible if it were accompanied by a simplification in VAT accounting. In particular, enterprises should be permitted to claim credits in the period they have incurred VAT on their inputs, and not only when these inputs are used in production. Symmetry of treatment for inputs and outputs should be restored for taxpayers using either the cash basis or accrual basis of accounting for taxes. Specifically, taxpayers who use the cash basis should not take VAT credit for goods or services purchased until they are fully paid for.

(2) Accrual accounting. The use of cash accounting rather than accrual accounting has been costly for the budget. As discussed earlier, if tax falls due at the time payment takes place rather than at the time it accrues, an enterprise's incentive to liquidate receivables is reduced. A shift to accrual accounting would thus reduce the incentive to incur interenterprise arrears. However, it may lead to greater tax arrears, since cash-strapped enterprises would have to pay accrued VAT on sales to late or nonpaying customers. This is probably an unavoidable consequence of tightening the budget constraint on enterprises. A shift to accrual accounting would also reduce (though not eliminate) incentives for inefficient barter.

b. Tax administration

An unmeasurable but significant reason for the revenue decline has been the diminishing effectiveness of planned economy tax collection methods as the transition has progressed. Existing tax administration systems and procedures need to be overhauled and many new ones introduced if the tax administration is to handle a larger and more diverse taxpaying population. These reforms need to begin immediately, or to be accelerated where they have already started, in tandem with the policy changes described above.

(1) Registration. For emerging sectors to be captured, new taxpayers will have to be identified and registered. Local tax offices, with assistance and supervision from the central tax administration, should devote considerable resources to ensuring complete registration of all firms and individuals covered by the tax law. Moreover, upon registration, taxpayers should be given a unique TIN. The adoption of a nationwide TIN will vastly facilitate the cross-checking of information regarding taxpayer compliance (e.g., income reported by third parties such as government institutions against income reported by taxpayers).

1/ In some countries, manufacturers use the invoice system, while the liability of the nonmanufacturing sector is calculated by markup. The shift to an invoice system would in this case also remove a sectoral distortion, namely that nonmanufacturers cannot claim VAT credit for goods purchased for resale.

(2) Returns (and other documents). More generally, moving away from a tax system based on central planning accounting techniques will require the overhaul of return forms and other tax documents so that they reflect newly appropriate accounting procedures, can be used by more diverse types of taxpayers, are easy for the taxpayer to understand, and are quick to process. Shortcomings in the design of documentation are considered to have been particularly damaging to the productivity of the VAT. A single standard document should be adopted for the supplier and purchaser to record a sale and its associated VAT liability.

(3) Taxpayer education. In a system with rising numbers of taxpayers, there are likely to be important gains to revenue collection if taxpayers can pay their liabilities without involving tax administrators. In the first instance, taxpayers should be given clear and concise information describing what is taxable, when taxes apply, how to calculate their tax liabilities, and exactly what they are required to do to pay their taxes. In the long run, the goal will be for tax collection to be based largely on self assessment.

(4) Organization. The tax administrations of the Baltic countries, Russia, and other FSU countries should organize their operations according to basic functions--registration, taxpayer information, returns processing, collection enforcement, and audit. The assignment of specific taxpayers to tax officers is no longer appropriate and creates undesirable opportunities for evasion and corruption. Greater specialization and expertise among tax officials should be achieved by assigning staff to defined and limited functions.

A large taxpayers unit should be created. 1/ It would monitor collection of taxes from important taxpayers who, although not numerous, account for the major part of tax revenue. 2/ In energy-exporting economies, a few large taxpayers can account for 90 percent of total revenue. In some countries, large taxpayers engaged in cash cropping and processing account for a substantial part of revenues. A large taxpayers unit properly focuses initial efforts of tax administration reform on the adoption of more efficient procedures for the more important taxpayers, rather than on the increasing number of small taxpayers whose revenue contribution is not substantial.

(5) Audit. Taxpayers must believe that if they fail to comply with the tax law they will be caught and penalized. They also need to be assured that their competitors are paying the same taxes. Hence, an effective audit program is an integral part of tax collection and requires the setting up of an audit unit. To enhance compliance, the tax

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1/ This could be done quite quickly.

2/ If a large taxpayers unit is created quickly, and the economic structure is changing rapidly, the possibility that tomorrow's and today's large taxpayers need not be the same should be taken into account.

administration should not make its audit strategy public, nor should it disclose the number of taxpayers to be audited during a given period. Instead, it should promote the view that a variety of factors may lead to an audit and the belief that the probability of an audit is higher than it really is.

(6) Penalties. Adequate but not excessive penalties must be imposed, not only for tax evasion, but also for failure to file returns, issue and maintain appropriate tax documents, and pay full tax on time. Interest provisions for late tax payment should compensate the government for the time that the taxpayer has use of the government's revenue. To ensure that penalties remain realistic under conditions of high inflation, they should to be periodically revised.

(7) Arrears. A specific strategy for collecting outstanding tax arrears is needed. Each local tax office should carry out an analysis of its arrears, identifying them by debtor, size, time outstanding, and type of tax. This will allow administrators to set priorities for pursuing the largest and most recent debts and to eliminate those that are considered uncollectible or insignificant.

(8) Customs. For trade to be taxed effectively, countries need to strengthen their customs administration and should allocate realistic budgetary funds to do so. Besides valuing and taxing imports, customs administrations should develop and implement reliable procedures for validating exports of goods for zero-rating under the VAT, and should install safeguards against the reimporting or round-tripping of goods to and from the region. Eventually, in order to minimize leakage of revenue, customs administrations will have to assume responsibility for collecting VAT and excise taxes on imports.

3. Establishing good governance

Even the best-intended reform efforts can be undone by volatile legislation, which is a deterrent to investment and encourages short-term speculative activity at the expense of production. Therefore, governments should work toward putting in place a comprehensive permanent tax code. 1/ From then on, they should minimize piecemeal revisions to the code. More generally, successful tax reform will require an end to arbitrary governance. Two aspects of this are especially important. First, tax assignments to other levels of government, and revenue-sharing arrangements, should be objective and transparent, and not subject to bilateral negotiations. Second, governments should endeavor to draw up realistic budgets which would provide government suppliers and other agents with financial blueprints of at least one year's duration. They would also eliminate the need for expenditure sequestration, and the precautionary withholding of tax payments.

1/ A tax code combines all the general rules for taxation in one place, thus avoiding the inconsistencies typical of separate laws and decrees.

Technical Assistance on Tax Policy and Tax Administration to the Baltic Countries, Russia, and Other Countries of the Former Soviet Union, 1991-94

Technical assistance provided by the Fiscal Affairs Department:

Armenia

Multipurpose	Mission	Feb 1992
Multipurpose	Mission	May 1992
Tax policy and administration	Mission	May 1993
Tax policy and administration	Mission	Nov 1994

Azerbaijan

Multipurpose	Mission	Feb 1992
Tax policy and administration	Mission	Dec 1992
Tax administration	Mission	Nov 1993

Belarus

Multipurpose	Mission	Dec 1991
Multipurpose	Mission	Feb 1992
Tax policy and administration	Mission	Jun 1992
Tax administration	Mission	Sep 1992
Tax administration	Mission	Jan 1993
Tax administration	Expert	May 1993
Tax administration	Expert	May 1993
Tax administration	Expert	Jun 1993
Tax administration	Expert	Sep 1993
Tax administration	Expert	Nov 1993
Tax administration	Expert	Nov 1993
Tax administration	Expert	Feb 1994
Tax administration	Expert	Feb 1994

Estonia

Multipurpose	Mission	Mar 1992
Tax administration	Mission	May 1993
Tax administration	Expert	Jan 1994
Tax policy	Mission	Jan 1994
Tax administration	Expert	Mar 1994
Tax administration	Expert	May 1994
Tax administration	Expert	Sep 1994

Georgia

Multipurpose	Mission	Jun 1992
Multipurpose	Mission	Nov 1992
Multipurpose	Mission	Jul 1994
Tax administration	Expert	Nov 1994

Kazakhstan		
Tax policy and administration	Mission	Nov 1991
Tax administration	Mission	Apr 1992
Tax and customs administration	Mission	Nov 1992
Tax administration	Mission	Jul 1993
Tax administration	Expert	Sep 1993
Tax administration	Expert	Mar 1994
Kyrgyz Republic		
Multipurpose	Mission	Mar 1992
Tax policy and administration	Mission	Sep 1992
Tax policy and administration	Mission	Nov 1993
Tax policy and administration	Mission	Apr 1994
Tax administration	Mission	Aug 1994
Tax administration	Expert	Oct 1994
Latvia		
Multipurpose	Mission	Mar 1992
Tax administration	Mission	Jun 1992
Tax administration	Mission	Oct 1992
Tax administration	Expert	Sep 1994
Lithuania		
Multipurpose	Mission	Mar 1992
Tax policy	Mission	Mar 1994
Tax policy	Expert	Sep 1994
Moldova		
Multipurpose	Mission	Mar 1992
Tax policy	Mission	Nov 1992
Tax policy and administration	Mission	Apr 1994
Russia		
Tax policy	Mission	Nov 1991
Tax administration	Mission	Feb 1992
Tax administration	Mission	Apr 1992
Tax policy	Mission	Aug 1992
Tax administration	Mission	Oct 1992
Tax administration	Mission	Jan 1993
Tax administration	Mission	Mar 1993
Tax administration	Mission	Jan 1994
Tax administration	Expert	Jan 1994
Tax administration	Expert	Jul 1994
Tax administration	Mission	Jul 1994

Russia (continued)		
Tax administration	Expert	Feb 1995
Tax administration	Expert	Mar 1995
Tax policy	Mission	Dec 1994
Tajikistan		
Multipurpose	Mission	Feb 1992
Multipurpose	Mission	Feb 1994
Turkmenistan		
Multipurpose	Mission	Mar 1992
Ukraine		
Tax administration	Mission	Mar 1992
Tax administration	Mission	Jan 1993
Tax administration	Mission	Apr 1993
Tax administration	Mission	Jul 1993
Tax administration	Expert	Jul 1993
Tax administration	Mission	Sep 1993
Tax administration	Mission	Oct 1993
Tax administration	Expert	Jan 1994
Tax administration	Expert	Apr 1994
Tax administration	Expert	Nov 1994
Uzbekistan		
Multipurpose	Mission	Jun 1992
Tax policy	Mission	May 1993
Tax administration	Expert	Dec 1993
Tax administration	Mission	Dec 1993
Tax administration	Expert	Jan 1994
Tax administration	Expert	Jun 1994
Tax administration	Expert	Sep 1994
Tax administration	Expert	Sep 1994

	Person Years
Total technical assistance	21
Of which: Missions	11
Experts--long-term 1/	7.5
--short-term	2.5

1/ Longer than six months.

While FAD has provided technical assistance on tax policy and tax administration throughout the region, it is now heavily involved in only a few countries. In the area of tax policy, the initial round of diagnostic missions has elicited few requests for follow-up work by FAD. This reflects in part the mixed progress that has been made with tax reform. It also reflects the availability of alternative sources of technical assistance. The World Bank, OECD, EBRD, European Union (EU), U.S. Treasury, USAID, bilateral agencies, and private consultants are providing advice across the region, both on tax policy and on tax administration. As regards the latter, FAD has taken a lead role in the Kyrgyz Republic, Russia, and Ukraine, where the World Bank, EU, U.S. Treasury, and USAID provide financial and other support for FAD work.

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