The Revenue Decline in the Countries of the Former Soviet Union

ADRIENNE CHEASTY

In almost all the countries of the former Soviet Union, severe revenue losses have complicated stabilization efforts. The situation can be alleviated by measures to broaden tax bases and improve tax administration.

IN 1989, general government revenue in the Soviet Union was 41 percent of GDP—not far from the average for member countries of the Organization for Economic Cooperation and Development (OECD). But by 1995, revenues in the countries of the former Soviet Union were down to an average of 25 percent of GDP. (See chart and Table 1.)

The revenue decline was not the result of decisions by reform-minded governments to withdraw from intervention in the economy. Rather, it came at a time when they urgently needed resources to finance economic restructuring and a social safety net to cushion the impact of falling living standards. Because spending pressures have been hard to resist, revenue losses have made stabilization considerably more difficult, contributed to high inflation rates, and caused governments to delay structural reforms.

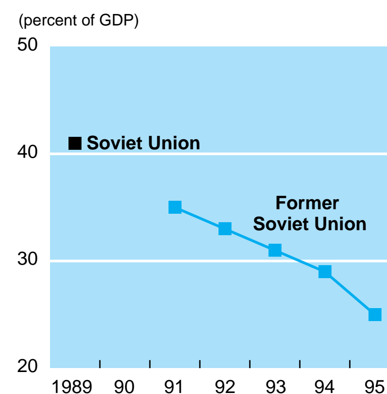
Main causes

In the general upheaval of the transition, some decline in revenue was to be expected. Since much of the revenue decline could be blamed on decreasing output, the revenue-GDP ratio was expected to remain stable. In fact, the decline has been sharper and deeper than predicted. Some causes are

- Many system-wide changes created a more difficult environment for revenue collection than had existed during the 1980s.
- Traditional tax bases (state industrial production, retail turnover, and wages) all shrank faster than GDP, while agriculture and the private sector—which were more or less untaxed—did relatively well.
- Many market-oriented tax reforms were revenue-losing, largely because the Soviet tax system had been heavily distortionary, and establishing market incentives would have been impossible without lower tax burdens.
- The legitimacy of the new governments is being tested by the growth of the gray economy, by powerful interest groups exerting pressures for tax exemptions, by tax competition among regions, and by various types of civil unrest that limit the reach of the tax authorities.

System-wide influences. Regional wars and civil strife clearly explain some of the more extreme cases of revenue loss in the countries of the former Soviet Union. Also, some countries lost important intergovernmental transfers that had boosted

Falling revenues in the countries of the former Soviet Union [1]



Source: International Monetary Fund.

[1] General government revenue as a percentage of GDP (unweighted average).

Adrienne Cheasty,
a national of Ireland, is Deputy Division Chief of the Fiscal Operations Division I of the IMF's Fiscal Affairs Department.

tax bases; in the Central Asian countries, for example, transfers had amounted to 20 percent or more of GDP toward the end of the 1980s.

Two reform-related systemic shocks also had a notable impact on revenues. (See Table 2.) The first was the decentralization of foreign trade. Trade-related levies had provided the Soviet Union with 15 percent of its revenue (more than 6 percent of GDP). Since much of this trade was in energy, this should have been by far the most buoyant revenue base after energy prices were liberalized. But trade tax revenues fell below 2 percent of GDP in all but three countries, and trade taxes on energy brought in only a small share of total revenues. This outcome reflected both a policy choice—reforming governments opted for extremely open trade regimes—and a pragmatic decision—the countries had few border controls and no customs mechanisms.

The second shock was the 1991 overhaul of the former Soviet pension system, which raised payroll tax rates from 9 percent in 1989 to an eventual 36 percent in most countries. This complicates the interpretation of movements in individual taxes, since, by reducing profits and equilibrium wages, the overhaul was partly responsible for the sharp decline in enterprise and individual income tax receipts.

Declining tax bases. The most significant part of the fall in revenue ratios can be explained by a sharper decline in taxed activities than in the untaxed part of the economy—notably the earnings of agriculture and small private businesses. Systemic shocks, price liberalization, the elimination of most producer subsidies, and tight monetary programs hit industrial production and official retail sales particularly hard. These developments forced real wages down, which eventually lowered revenue from both production- and consumption-based taxes.

The impact of the loss of traditional tax bases was most pronounced in the first two years of transition. In 11 of the 15 countries, the decline in enterprise taxes during 1991–93 could be completely accounted for by the fall in industrial production or enterprise profits. In all countries, more than two-thirds of the decline in domestic indirect taxes could be explained by the drop in retail turnover from state stores. Plummeting real wages and the (minor) impact of emerging unemployment fully explained the erosion of personal income taxes and payroll taxes in 10 of the 13 countries for which data were available.

The shrinking of traditional tax bases was accompanied by an expansion of private activity. Even in Ukraine, a slow reformer, the officially measured private sector grew to 20 percent of GDP in 1995 from 6 percent in 1993. Since small enterprises are hard to tax and new firms typically take some time to recover start-up costs, this transformation would have implied some revenue loss even if output had not fallen.

The decline in tax bases was exacerbated by interenterprise arrears. Taxes were, in almost all cases, levied on a cash basis. Enterprise output that was consumed, but not paid for, was not taxed. Since arrears could be sizable (for example, they amounted to 100 percent of GDP in Russia in the first four months of 1992), the erosion of the true tax base (as opposed to recorded production) was considerable. Moreover, high inflation rates meant that even if arrears were eventually paid, the real value of tax revenue was seriously eroded.

Revenue-losing tax reform. Many of the tax reforms undertaken by transition countries have been revenue-losing—an outcome that is not surprising considering that, as late as 1990, the top marginal income tax rate was 90 percent. Revenue-losing reforms included the dismantling of the trade revenue regime and the narrowing of the enterprise tax base to reflect a more economic definition of profits, by eliminating the taxation of wages and other cost elements. The average effective profit tax rate was an estimated 55 percent in 1990; now, the central rate in all countries of the former Soviet Union is 35 percent or less.

Many countries, and particularly slow reformers—such as Belarus, Tajikistan, and Ukraine—sustained their high effective yields by reincorporating cost elements

Table 1

Varying severity of the revenue decline in the countries of the former Soviet Union, 1991Ð95

(percent of GDP)

	1991	1992	1993	1994	1995	Difference 1991Ð95
Georgia	34	15	2	4	5	-29
Turkmenistan	38	42	19	10	9	-29
Tajikistan	33	36	36	54	14	-19
Azerbaijan	36	48	41	26	19	-17
Armenia	26	27	24	16	14	-13
Moldova [1]	32	20	17	17	20	-12
Russia	46 [2]	46	41	37	36 [2]	-10
Kyrgyz Republic [1]	22	16	15	19	15	-7
Kazakhstan [1]	21	23	22	17	16	-5
Lithuania	41	34	28	25	24	-18
Latvia	37	28	36	36	36	-1
Estonia	41	33	40	41	41	0
Belarus	48	46	52	48	44	-4
Ukraine	38	44	44	46	41	3
Uzbekistan [1]	31	32	42	36	35	4
Average	**35**	**33**	**31**	**29**	**25**	**-10**

Sources: IMF, Economic Reviews, various countries of the former Soviet Union; and *World Economic Outlook*, various issues; World Bank, 1992, *Statistical Handbook: States of the Former USSR*; and 1996, *Fiscal Management in the Russian Federation.*

[1] Does not include all payroll taxes.

[2] Estimates.

(mainly wages or “excess wages”) into the profit tax base. However, as the output decline has spread, enterprises have clamored for lighter tax burdens. Belarus and Ukraine have responded by granting wider exemptions, Tajikistan by increasing bank credit so that enterprises can meet their obligations. But even in some of the faster reformers, costs are taxed in the sense that depreciation allowances remain significantly below industrial country norms, and enterprises remain decapitalized.

The introduction of the value-added tax (VAT) also led to a net loss of revenue for half of the countries in the region, compared with the previous turnover tax regime, which had levied (tax-exclusive) rates of several hundred percent on some goods. Moreover, to cushion businesses against the effects of price liberalization, several countries subsequently cut their VAT rates.

Part of the revenue loss from the VAT arose from defects in the former Soviet Union countries’ versions of the tax, compared with industrial countries’ VATs. The former Soviet Union countries’ VATs were levied partially on a cash basis and in an asymmetric way that exacerbated the revenue losses from arrears described earlier. Also, in sectors where accounting practices were not sufficiently developed to include the use of invoices as payment records, the VAT was often levied on a fixed markup over cost rather than on actual prices. This meant that value added higher than the markup—an amount that could be large when prices were rising rapidly and unpredictably—remained untaxed. Further, because borders were not well established within the former Soviet Union, VATs on mutual trade were levied on an origin basis—with exports subject to VAT while imports were not taxed—while the customary destination basis (with imports taxed, exports not) was (with some delay) applied to VAT levied on trade with the rest of the world. This dual system created incentives and opportunities to divert and misrepresent trade flows and values, and resulted in a low compliance rate for VATs on trade.

Table 2

Which taxes have been most affected?

	Soviet Union 1989	Unweighted average 1994 [1]	Decline 1989Ð94 [2]
		(percent of GDP)	
Total	**41.0**	**28.7**	**-12.3**
Taxes on wages	8.0	8.2	0.2
Personal income tax	4.4	2.6	-1.8
Social insurance	3.5	5.6	2.0
Taxes on enterprises [3]	12.3	7.1	-5.2
Taxes on consumption	12.0	9.0	-2.9
Foreign activity	6.3	1.7	-4.6
Nontax revenue	2.5	2.7	0.2
		(percent of total)	
Taxes on wages	19.0	28.0	-1.7
Personal income tax	11.0	9.0	14.9
Social insurance	9.0	19.0	-16.6
Taxes on enterprises [3]	30.0	25.0	42.2
Taxes on consumption	29.0	31.0	23.7
Foreign activity	15.0	6.0	37.5
Nontax revenue	6.0	9.0	-1.7

Sources: IMF, Economic Reviews, various countries of the former Soviet Union; and *World Economic Outlook*, various issues; World Bank, 1992, *Statistical Handbook: States of the Former USSR;* and IMF, World Bank, Organization for Economic Cooperation and Development, and European Bank for Reconstruction and Development, 1991, *A Study of the Soviet Economy* (Paris).

[1] Countries of the former Soviet Union.

[2] The calculation of the decline is included for illustrative purposes only; the USSR figures and the average figures for the former Soviet Union are not strictly comparable because the 1994 average is unweighted.

[3] Miscellaneous “other taxes” have been added to “taxes on enterprises.” In all countries where they could be identified, they were property taxes or taxes on natural resources.

Deficiencies in governance. Some of the teething troubles of the countries’ new governments have added to their difficulties in collecting taxes. Much of the new private sector activity has disappeared into the shadow economy, and tax administrators are finding it difficult to capture it in the tax net—partly because much of the trade is very small scale and partly because of the activities of criminal elements. A survey conducted in Ukraine (Kaufman (1994)) suggested that 75 percent of private traders’ activity was carried on outside the official economy.

The uncertain allegiance of some regions to their national governments has also limited the scope for those governments to raise taxes. In Russia, for example, the fear that energy-rich regions might secede has reportedly made the government reluctant to increase energy taxes. Moreover, in some areas, unrest has made it physically impossible to collect taxes at all. Tax collection has also been affected by inadequate tax administration.

Lessons and policy directions

A successful revenue turnaround in the countries of the former Soviet Union will be intimately linked to success in other aspects of reform. The recovery of output should help recapture at least some of the lost tax bases—though the shift of activity into the private sector means that more dynamic collection procedures will have to be put in place. Likewise, the imposition of hard budget constraints on enterprises and the consequent dampening of arrears will help boost the effective tax base—as will taming inflation. This does not mean, however, that policy improvements should not be made to help reverse the revenue decline. The main feature distinguishing industrial countries from countries with low revenue ratios is the breadth of the former’s domestic tax bases: exemptions and preferences are relatively few and compliance is relatively high.

Recapturing the tax base. Several policy initiatives need to be taken to broaden existing tax bases.

• Significant exemptions should be eliminated in the core taxes—enterprise profit taxes, VATs, and excises. In most countries of the former Soviet Union, exemptions benefit agriculture and new technology, but these tend to be so broadly defined that many unrelated activities can qualify for them. Other central government exemptions are designed to favor energy—in producer countries by encouraging the development of the sector, and in consumer countries by cushioning the impact of the immense energy price rises seen since 1991. Another important group of exemptions worth considering for elimination are preferences for foreign investors, which may have been necessary to attract venture capital to risky regions but should now be scaled back.

• The lost revenue from trade should be reclaimed. This should not have to be done by raising tariff walls and obstructing structural reform. Rather, efforts should be focused on ensuring that traders’ transactions are fully captured in the domestic tax net. Exporters and importers must pay income tax, and imports must be fully liable for VAT, as well as for excises on some groups of goods (notably energy, tobacco, alcohol, and perhaps vehicles). As an interim measure (where trade arrangements permit), a modest but broad-based uniform tariff would ensure that traders paid at least some tax and would provide the information basis for ensuring that traders were eventually incorporated into domestic tax registers. As the domestic tax administration becomes more sophisticated

and comprehensive in its coverage, the tariff can be phased out. Where depletable natural resources are being sold, the payment of royalties is an appropriate way for energy producers to compensate the state for the loss of national wealth.

• Finally, taxes should be extended to the private sector.

Institution building. Successful taxation of the private sector is one of the main challenges facing policymakers. New income earners need to be identified and their incomes measured, and they need to be persuaded to pay taxes. This requires the reform and development of many kinds of institutions, ranging from tax administrations to accounting procedures and legal systems, as well as the solidification of governments' legitimacy. Resources need to be devoted to registering taxpayers, improving audits, educating the public, removing red tape, and designing and imposing realistic and effective penalties for noncompliance. Governments also need to hire enough competent tax officials and insulate them from corruption.

Supporting reforms should include developing good accounting standards, eliminating inconsistencies and loopholes in legislation, providing adequate enforcement powers, and establishing trust in government through the consistent, strict, and fair application of a transparent set of tax rules—which should change as infrequently as possible once the basic reforms have been put in place. These reforms, of course, will take time. As an interim measure, levying simple presumptive taxes such as small-business license fees might be considered, both for revenue reasons and—as is true of tariffs—because it is an easy way to bring new taxpayers into the net and to compile information that will eventually allow them to be transferred to the standard tax system. F&D

This article draws on an earlier study by Richard Hemming, Adrienne Cheasty, and Ashok K. Lahiri, 1995, "The Revenue Decline," in Policy Experiences and Issues in the Baltics, Russia, and Other Countries of the Former Soviet Union*, ed. by Daniel A. Citrin and Ashok V. Lahiri, IMF Occasional Paper No. 133 (Washington). The material in this article covering 1994–95 was researched by Jitendra Modi.*

Suggestion for further reading:

Daniel Kaufman, 1994, "Diminishing Returns to Administrative Controls and the Emergence of the Unofficial Economy," Economic Policy*, Supplement to Issue 19 (December), pp. 51–70.*

Just Released—Nineteenth Edition

WORLD DEVELOPMENT REPORT 1996: FROM PLAN TO MARKET

World Development Report 1996: From Plan to Market steps back from the extraordinary array of recent events and policy changes in 28 former centrally planned economies—in particular, those in Central and Eastern Europe and the newly independent states of the former Soviet Union, along with China and Vietnam—to ask what we have learned about the ingredients of any successful transition and how they should be pursued.

The *Report* addresses the initial challenges of transition, how they have been met in different countries, and how they may be met in others. It also looks beyond the early reforms and analyzes the longer-term agenda of consolidating them by developing the institutions and policies which will help new systems to develop and prosper over time.

One of the *Report's* key messages is that consistent policies, combining liberalization of markets and trade, new entry, and reasonable price stability, can achieve a great deal—even in countries lacking clear property rights and strong market institutions.

Available June 28, 1996. Published for the World Bank by Oxford University Press. Stock no. 61107F (ISBN 0-19-521107-3) $22.95. Softcover. Stock no. 61108F (ISBN 0-19-521108-1) $45.95. Hardcover. Translations forth-coming: Arabic, Chinese, French, German, Japanese, Portuguese, Russian, and Spanish.

World Bank

For payment in local currency, contact your World Bank Distributor. In the U.S. contact: The World Bank, P.O. Box 7247-8619, Philadelphia, PA 19170-8619. Phone: (202) 473-1155, Fax: (202) 522-2627. Shipping and handling: US$5.00. For airmail delivery outside the U.S., add US$8.00 for one item plus US$6.00 for each additional item. Payment by US$ check drawn on a U.S. bank payable to the World Bank or by VISA, MasterCard, or American Express.

1206

Visit the World Bank's Internet Home Page! http://www.worldbank.org Click on Publications