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Russia's Flat Tax: Myths and Facts

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Five years ago, Russia replaced its old graduated personal income tax by one with a single flat rate of 13 percent. Following the reform, compliance improved, tax revenues shot up, and GDP grew dramatically. Is it then true, as often claimed, that Russia's example testifies to the economic power of the flat tax?[1] Our short answer is "no". In this note, we examine the limited research and information available on the effects of the Russian tax reform of 2001 and present five main conclusions:

1) The change in the personal income tax was not a stand-alone reform but only one element in a comprehensive set of fiscal reforms.
2) The personal income tax component of the reform package involved more than the introduction of a low, flat tax rate. Capital income loopholes were closed, and tax rates on most capital income were raised. Radical changes were made in tax administration and enforcement.
3) The increase in compliance that followed the 2001 reform is more likely attributable to changes in the administration and enforcement of tax laws than to lower rates.
4) The tax rate reductions had little if any effect on labor supply.
5) Economic growth had begun well before the reforms were introduced. GDP grew twice as fast before the income tax reform as it did after.[2]

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[1] In the United States, these claims are most frequently heard from supporters of the Hall-Rabushka (1995) flat tax. Some assert direct causality between the introduction of the Russian tax and the improvements in the economy (Mitchell 2003). Others simply link the two repeatedly, being careful never to explicitly assert causation (Rabushka 2002, for example).

[2] In the six quarters leading up to 1 January 2001, when the "flat tax" reform came into effect, Russia's GDP grew at an average annual rate of 10.6 percent. In the six quarters immediately following the introduction of the new tax, it grew at a 4.7 percent annual rate.

The Russian tax system in the 1990s[3]

To understand the relative importance of various aspects of the 2001 reforms, it is useful to step back and examine the pre-reform situation. The Russian tax system in the 1990s was stunningly primitive. Administration and enforcement were notoriously weak. The very legal basis for tax collection and auditing was severely limited. Taxpayer IDs did not exist. Tax rates were punitively high and took particularly damaging forms, such as turnover (gross receipt) taxes that hit even those firms that were losing money.

The results are predictable. Graft, corruption, evasion, and delinquency were rampant. When they did pay at all, large taxpayers typically negotiated payments independently of their actual obligations. A common practice was to offset tax obligations against goods or services delivered to the government. Only in some cases had those goods actually been ordered in government procurement orders. Frequently the cash-strapped enterprises offered the goods – mainly goods that were otherwise unmarketable – after they had been declared delinquent.

The problems of tax collection were broadly recognized. In early 1996 President Boris Yeltsin appointed a blue-ribbon commission to investigate the largest corporate taxpayers in the country (Karpov 1997). Presenting its report after an 18-month study, the panel found that during the period of review, these large enterprises paid less than 8 percent (!) of their tax bills in actual cash. They simply did not pay 29 percent of their obligations at all, while "paying" the remaining 63 percent in the form of offsets and barter goods. The market value of the goods delivered was far below the nominal price used in the offsets, leaving the government with substantially less in real revenues than officially accounted for.

The federal government was particularly victimized by these schemes. Enterprises frequently colluded with regional and local officials to hide income and hence keep revenues away from the federal government for taxes whose revenues were split between local and national authorities. In other cases, local governments demanded that enterprises pay their taxes in the form of goods and services that could only be used locally and not be shared with the federal government (for instance, by providing road

[3] See Gaddy and Ickes (2002) and Chua (2003) for more details.

construction or repairs of buildings). Often, if the federal government received anything at all in these schemes, it was only what the regional governments did not want.[4]

As a result of these practices, the Russian budget ran massive deficits. Even using the inflated prices used in the offset deals, federal revenues plummeted – from 16.2 percent of GDP in 1995 to 12.4 percent in 1998. To finance its deficits, the government had resorted to extensive borrowing outside and inside Russia at increasing and unsustainably high costs, thus digging itself even deeper in debt. Finally, on 17 August 1998, the government defaulted on about $40 billion worth of its own ruble-denominated debt instruments (so-called GKOs), around $17 billion of which were held by foreigners.

Following the debt crisis, and a brief period of near-paralysis of the economy, Yeltsin addressed the fiscal situation with new determination. Over the next year, he tapped three successive representatives of the police and security agencies to serve as prime minister. The last of these was Vladimir Putin, then head of the Federal Security Service, successor to the KGB. In December 1999 Yeltsin announced his own retirement, to take effect on 1 January 2000, and he appointed Putin as acting president.

Under Putin the Russian government showed even greater resolve to deal with tax enforcement issues. In his first presidential state of the union message, Putin declared that compliance with the new tax law, then about to be adopted by the parliament, was a civic duty of all Russians (Putin 2000). He accompanied his moral exhortations with a high-profile public relations campaign to raise the profile, prestige, and power of tax enforcement agencies. A typical measure was his decree in early 2000, designating March 18 as a new "professional holiday": the Day of the Tax Police. At the same time, the tax police began asserting themselves with respect to both corporate and individual taxpayers. Oil companies were threatened with denial of access to export pipelines if they failed to pay taxes. In June 2000, six months before the 2001 reforms took effect, the tax police began assembling detailed personal data on taxpayers in the city of Moscow. Senior tax officials stated that the campaign was part of "an effort to clamp down on the widespread practice in Moscow of wealthy individuals sheltering income" (Jack 2000).

The 2001 reforms[5]

The new tax law enacted in July 2000 and brought into force at the beginning of 2001 changed both the structure and administration of taxes. The personal income tax (PIT), which had been a graduated tax with marginal rates of 12, 20 and 30 percent, was replaced by one with a flat rate of 13 percent. The reforms also widened the tax base by eliminating many deductions and exemptions. Prior to the reform, the average tax rate was 14 percent, so the net change in average tax rates was small.

Capital income was taxed at higher rates, though, and these rates generally *increased* in 2001. The tax rate on dividends was raised from 15 percent to 30 percent. The corporate tax rate remained at 30 percent, but municipalities were allowed to, and did, impose an additional 5 percent tax. Other forms of personal income, such as gambling, lotteries, insurance, below-market-rate loans, and excessive bank interest payments, faced tax rates of 35 percent, in an effort to shut down some particularly creative avoidance schemes.[6]

Despite the flat rate, these reforms do not add up to a Hall-Rabushka (HR) flat tax. The HR flat tax is a two-part value-added tax, in which all nonwage value added is taxed at the firm level, while wages, less personal exemptions, are taxed at the individual level. But Russia not only had the PIT, it also had a separate VAT and a separate corporate income tax. Moreover, the 2001 changes increased the taxation of capital income at the individual level, rather than setting it to zero, as under the HR tax.

[4] In one notorious case, the oblast (province) government of Samara had permitted enterprises to pay their regional taxes in the form of goods. One of the items offered turned out to be ten tons of toxic chemicals from a local chemical plant. Although the plant claimed (and was given) credit for 400 million rubles [$80,000] in taxes, auditors later determined that the chemicals were worthless (and indeed dangerous). The Samara government never suffered from this curious deal, however, since it had previously sought and received permission from the federal ministry of labor to fulfill its obligations to the federal unemployment compensation fund by delivering goods instead of money. Among the goods it offered were ... the ten tons of toxic chemicals. (Gaddy and Ickes 2002, 176).

[5] See Ivanovo et al. (2005) for details.

[6] These avoidance schemes are interesting in their own right and suggest what might occur in a system where only wages were taxed. Take, for instance, the insurance scheme. As explained to us by one Russian tax expert, a not atypical arrangement would have a firm buying an "insurance policy" that was virtually certain not to pay off, and its workers buying a different policy from the same "insurance company" – usually an entity created by the firm solely for the purpose of executing this scheme – that was almost certain to pay off. In such a transaction, the firm effectively transfers resources to the workers, just like a wage payment. Meanwhile, the firm receives a deduction for the insurance purchase (as it does for wages), while the insurance payment would not be taxed under a wage tax.

Other taxes were altered as well. Deductions and exemptions in the VAT were reduced. The tax rate on cigarettes and gasoline increased. Some taxes were reduced significantly. Before the reform, social insurance taxes were a flat 39.5 percent (combined employer and employee rates, measured on a tax-exclusive basis). After the reform, these were changed to a sharply regressive structure, with rates starting at 35.6 percent and falling to 5 percent. Also, one tax on business turnover (gross receipts) was eliminated, and another reduced (and then repealed in 2003).

Probably even more important than changes to the structure of taxation were the enforcement and administrative changes that continued the efforts noted in the pre-2001 period. First, the law provided for the introduction of a common taxpayer ID number. Second, the law allowed tax authorities to assess tax liabilities indirectly – for example, when they could not secure entry to a taxpayer's premises. Third, the law authorized tax audits when sufficient evidence of a tax or nontax crime was available.

Other administrative changes would help collect PIT revenues in particular. Taxes on all income paid to private individuals – including taxes on interest payments and dividends – were to be withheld at source.[7] Also, the revenue sharing rules were changed. By giving regional governments nearly 100 percent of PIT revenues instead of the previous 80 percent, the law removed the incentive of subnational governments to help local taxpayers hide income from national authorities.

The four different social insurance taxes whose combined rates were reduced also had their bases conformed to each other and to the measure of wages in the income tax. This likely simplified compliance and made enforcement easier.

Finally, a discussion of enforcement would not be complete without reference to the increased atmosphere of tighter control and even coercion that characterized the Putin regime from the beginning. One newspaper account told of a decision by Putin's newly appointed presidential representative in southern Russia to assign new "commissars" to sit on the boards of important local enterprises. Their task, said the Putin man, would be "to defend the interests of the state [by] pushing the enterprises to make full and accurate payment of all their obligations to the budget, above all, their taxes" (Kolbasin 2001).

In summary, to describe the 2001 reforms by saying that "Russia instituted a flat tax" grossly distorts and oversimplifies what happened. The tax rate on capital income was not zero, and in fact was higher than the 13 percent rate in the PIT. Many deductions, exemptions, and loopholes were closed. Social insurance taxes and turnover taxes, the latter a particularly damaging levy from an economic perspective, were cut dramatically. Other taxes were changed. A major effort at improved tax administration and enforcement occurred at the same time.

Revenue trends[8]

After the reforms were introduced, PIT revenue rose by just over 20 percent as a share of GDP, from 2.4 percent of GDP in 2000 to 2.9 percent in 2001.[9] While flat tax proponents are quick to attribute this change to the tax rate structure, caution is warranted for several reasons. First, personal income, as measured by the national income accounts, rose by 10 percent relative to GDP during the year. Second, the enforcement and administration measures detailed above likely reduced avoidance and evasion by substantial amounts. Third, restrictions on deductions and exclusions – broadening of the base – undoubtedly helped as well. These factors alone could explain the entire revenue change. This view is supported by the fact that revenues from a variety of other taxes also rose. Relative to GDP, revenue from the VAT rose by 14 percent (from 6.3 percent of GDP in 2000 to 7.2 percent in 2001), resource taxes rose by almost 30 percent (from 1.1 percent of GDP in 2000 to 1.4 percent in 2001), taxes on trade rose by almost 20 percent, from 3.1 percent of GDP to 3.7 percent), excise taxes rose by about 15 percent (from 2.3 percent of GDP to 2.7 percent).

By 2004, however, the PIT had grown to 3.4 percent of GDP, a more than 40 percent increase over its 2.4 percent share in 2000. Other than resource taxes, which tripled as a share of GDP from 2000 to 2004, the other taxes did not grow as significantly over the

[7] Withholding at source and using taxpayer ID numbers would be expected to improve compliance significantly. For example, in the United States, forms of income that are withheld at source and reported by third parties have enforcement rates of about 99 percent. Forms of income that are reported by third parties but not withheld at source have compliance rates above 90 percent. Forms of income that are neither reported by third parties nor withheld have compliance rates around 70 percent or less. See Gale and Holtzblatt (2002).

[8] The data in this section are taken from Ivanova et al. (2005).
[9] Real GDP itself grew at 5.1 percent in 2001, so real revenue growth in the PIT was quite remarkable — 25.8 percent.

2001 to 2004 period. Thus, a fuller explanation of revenue trends is warranted.

The macroeconomic situation

Interpretation of revenue trends is likely to depend in part on macroeconomic considerations, and two issues in particular apparently can explain much of the trends noted above.

First, beginning in February 1999, the world price of Russia's most important export commodity, oil, began a rise that would lead to its quadrupling within 19 months. Revenues from crude oil exports soared from barely $2 billion in the first quarter of 1999 to nearly $7 billion in the third quarter of 2000, to over $20 billion by the second quarter of 2005. Kwon (2003) estimates that 80 percent of the total post-1998-crisis gains (of about 5 percentage points of GDP) in the revenue of the general government came from the oil sector, with the high oil prices accounting for most of the gains. Tax reform, Kwon argues, played a secondary role and did so largely by making the tax regime more elastic to oil prices. He also shows that Russia's revenue performance in the post-crisis period did not differ from other oil-exporting countries – even without a tax reform.

Second, wages grew rapidly after the debt crisis. Ivanova et al. (2005, 19) point out that after-tax real wage income grew by more than 18 percent in 2001, while gross real wages grew at about 12 percent. Both outpaced GDP growth, which was about 5 percent. This procyclical pattern for labor is unusual compared to other countries, but not compared to earlier episodes in Russia, where real wages tend to overshoot GDP growth. Ivanova et al. conclude that "wage developments thus appear to be a large part of any explanation of the performance of PIT ... revenues."

Microevidence on labor supply

Even more compelling evidence on the effects of the tax rate changes can be obtained from microeconomic data. A study by the IMF (Ivanova et al. 2005) uses panel data for the years 2000 and 2001.[10] Employing a difference-in-differences approach,[11] the IMF authors note that the 2001 changes raised the marginal tax rate by 1 percentage point for people who were in the 12 percent bracket before reform but reduced marginal rates by 7 and 17 percentage point for those in the 20 and 30 percent brackets. If lower tax rates encourage labor supply (or other economic behavior), one should see – other things equal – an increase in labor supply for people who were originally in the 20 and 30 percent bracket and a decrease for those in the 12 percent bracket. Of course, other things may have been changing, so to account for changes over time, the authors emphasize that the increase in labor supply should be larger for those originally in the top two brackets than for those in the lowest bracket.[12]

Their results are quite straightforward: Labor supply did not change differentially across the groups. To put it differently, there was no increase in labor supply in 2001 among households that faced high tax rates in 2000, *relative to* households that faced the 12 percent rate in 2000. The results are inconsistent with the notion that the cut in tax rates raised labor supply, and thus undermine any claim that the flattening of tax rates in the PIT led to a big increase – or even any increase – in economic activity in Russia.

Microevidence on compliance

The same IMF study (Ivanova et al. 2005) does find significant evidence of an improvement in compliance. The estimated compliance rate – based on comparisons of reported income and consumption – for those originally in the 12 percent bracket was essentially constant, at 74 percent in both years. The estimated compliance rate for those in the top two brackets in 2000 rose, from 52 percent in 2000 to 68 percent in 2001.

It is possible that this change was due to the reduction in tax rates. It is also possible that the broadening of the tax base to tighten up on capital income and the avoidance schemes noted above (for example, insurance payments) could have had a significant influence as well in the higher income group relative to the lower income group. Finally, it seems likely that the efforts to crack down on evasion and

[10] The data are from the Russian Longitudinal Monitoring Survey, a household survey that provides data on income and other characteristics of about 3,500 adults for most years between 1994 and 2002.

[11] Their approach is similar to that taken by Feldstein (1995), Eissa (1995), and others.

[12] The authors also point out that including the changes in social insurance tax rates implies net marginal tax rate reductions for both groups, but the difference in tax rate changes between the two groups expands because social insurance rates were cut (much) more for high-income than low-income households. Thus, including social insurance tax rates makes the test even stronger.

to increase auditing and indirect assessment would have had differential effects by income group. As a result, it is hard to pin down why compliance rose for higher-income groups.

It is interesting to note, however, that any notion of a Laffer curve effect should be abandoned, for two reasons. First, revenues collected from taxpayers in the top two marginal tax rate groups in 2000 fell dramatically relative to revenue collected from the lowest tax group. This is true both for the PIT and for the sum of PIT and social insurance taxes. Second, Chua (2003) estimates that in the absence of macroeconomic effects and enforcement changes, revenues from the PIT would have fallen by 0.2 percent of GDP in 2001, or by about 10 percent.

Conclusion

There is no doubt that Russia has radically improved the operation and structure of its tax system in the past decade and that Russia has experienced strong economic and revenue growth since the debt crisis in 1998. Understanding the links between these two sets of events is complicated by many factors, including the complexity and wide range of tax changes introduced and the enormous number of factors that influence economic growth. While it seems clear that simple statements like "the flat tax caused significant growth in the economy and revenues" are not supported by the evidence, it is also undeniable that much additional work remains to sort out the various causes and effects of policies in the Russian transition.

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