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Russia 1998 Revisited: Lessons for Financial Globalization

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In 1998, the Russian Federation experienced one of the most severe emerging market crises of the 1997–2001 period. It occurred less than six months after the attainment of single-digit inflation, which was supposed to launch the economy onto a sustainable growth path. This note sets out why that occurred and discusses the lessons learned.

The Russian crisis of 1998 is yet another instance of financial globalization contributing to an emerging market crisis instead of better resource allocation and faster growth. External financial liberalization took place in the presence of weak country fundamentals, with financial globalization eventually amplifying the vulnerability from the Russian Federation's combination of a fixed exchange rate and unsustainable government debt dynamics. In particular, external portfolio investors-motivated by the expectation of a big official bailout-continued to finance the government's debt build-up after mid-May 1998, even though it was obvious by then that a fundamentals-based crisis à la Krugman-Flood-Garber (Krugman 1979; Flood and Garber 1984) and Sargent-Wallace (1981) was unavoidable. As a result, Russia ended up with a much bigger external debt burden when the crisis eventually hit that August.

By February 1998, Russia had both achieved single-digit inflation and substantially completed its privatization program. Yet it endured a massive exchange rate/banking/public debt crisis just six months later, in August 1998. This meltdown, which we shall refer to as "Russia 1998," was probably the most serious emerging market crisis witnessed over the 1997–2001 time frame, a turbulent period bookended by the crisis in East Asia and those in Argentina and Turkey. Russia 1998 threatened to bring down the U.S. financial system via the hedge fund managed by Long-Term Capital Management. That threat prompted the New York Federal Reserve to persuade 14 banks to pump \$3.6 billion into the fund while the Federal Reserve's Board of Governors aggressively eased monetary policy by cutting interest rates thrice in quick succession (see Dungey et al. [2006]).

Although the contagion effects of Russia 1998 have been studied extensively (in Dungey et al. [2006], for example), the country crisis itself has received scant attention—with Russia probably seen as too oil driven and geopolitical to have broad appeal. However, lessons on financial globalization from Russia 1998 are of general applicability. Indeed, paying more attention to Russia might have had a beneficial impact on the design of the rescue package for Argentina in 2001.¹

Country Fundamentals

Russia was going through two transitions: one from more than 70 years of central planning to a market economy; the other from triple- to single-digit inflation and considerably lower fiscal deficits, a quest that began in earnest as part of a three-year stabilization program launched with International Monetary Fund (IMF) support in July 1995.² But even though inflation came down rapidly, the fiscal deficit targets were significantly exceeded. As a result, even though the nominal exchange rate was fixed (or managed with narrow bounds) to lower inflation, interest rates on ruble Treasury bills (GKOs) stayed at exceptionally high levels, averaging 56 percent in real terms between May 1995 and July 1997. The real effective exchange rate appreciated some 55 percent over the same period, a more or less inevitable arithmetical consequence of the exchange rate–based stabilization: the exchange rate was fixed, but inflation came down only gradually (a point made earlier by Dornbusch and Werner [1994]).

The persistently high real interest rates and large real appreciation made it all but impossible for enterprise managers to operate profitably. At the same time, privatization did not yield the improvements in corporate governance and productivity one might have expected. The process was marred, resulting either in control going to insiders as part of mass privatization; or valuable companies in oil, metals, and telecommunications going to the powerful Moscow banks as part of the opaque "loans-for-shares" auctions carried out in late-1995.

Why did the adverse economic outcomes not prompt a mid-course correction? For two reasons, in our assessment: First, there was a deeply entrenched belief that lowering inflation would lead to fast, sustainable growth—and inflation was coming down quickly.³ Second, the debt dynamics of the government seemed under control. Table 1 shows that despite significant primary fiscal deficits, high interest payments, and small or negative growth rates, the debt-to-GDP ratio remained more or less constant over the period 1995–97. Based on standard debt dynamics, one would have expected the debt-to-GDP ratio to have been on an explosive path.⁴

The explanation for the constancy of the debt-to-GDP ratio is to be found in the real appreciation of the ruble: for example, in 1996, the dollar-denominated share of govern-

Table	1. Public	Finances	and	Economic	Growth	, 1995-	-98
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	Primary deficit	Interest (oayments	Governm	ent debtª	Real GDP growth		
Year	(percent of GDP)	Percent of GDP	Percent of revenues	US\$ billions	Percent of GDP	(precent annually)		
1995	2.2	3.6	28	170	50	-4.0		
1996	2.5	5.9	47	201	48	-3.4		
1997	2.4	4.6	38	218	50	0.9		
1998 ^b	1.3	4.6	43	242	75	-4.9		

Source: Pinto, Gurvich, and Ulatov 2005, table 9.1.

a. Domestic plus foreign, end of period.

b. Does not capture the subsequent debt renegotiation.

ment debt was about 70 percent, and the dollar-ruble real exchange rate appreciated by some 22 percent. That alone would have reduced the debt-to-GDP ratio by some 8 percentage points and would have served to offset the impact of high fiscal deficits and disappointing growth.

In addition to the inhospitable macroeconomic environment and weak corporate governance, a free-for-all atmosphere developed as widespread barter, noncash settlements, and arrears of all types ("nonpayments") took hold. Ironically, the government itself became a prime instigator of nonpayments, resorting to giving various forms of quasi-monies and IOUs to its suppliers to economize on the use of cash because of the astronomically high real interest rates (Pinto, Drebentsov, and Morozov 2000; Commander and Mumssen 1998). The private sector retaliated by becoming delinquent on tax payments; and that culminated in elaborate offset schemes whereby tax arrears were settled, in effect, at a hefty discount. Nonpayments thus turned into a web of hidden subsidies. Added to explicit budgetary subsidies, total subsidies were estimated at 15-20 percent of GDP in 1996 and 1997, leading to ingenious forms of asset stripping instead of enterprise restructuring, and contributing directly (if opaquely) to the fiscal crisis via the need for increased debt issuance as taxes fell short.

Financial Globalization

The liberalization of foreign portfolio investment in early 1997 swelled reserves to record levels of \$25 billion by midyear and pushed the stock market to new highs, while interest rates on GKOs came down. That situation coincided with falling inflation, which ignited hopes that growth was about to take off. In addition, political certainty was firming, with Boris Yeltsin's reelection and the appointment of an economic "dream team" consisting of high-profile reformers. But, by that time, nonpayments had become deeply entrenched, with cash tax shortfalls a chronic problem. The East Asian crisis spilled over in October 1997, leading to the first of a series of speculative attacks on the ruble. That November, the central bank spent \$6 billion (out of its reserves of \$23 billion) defending the ruble's peg to the dollar; but, eventually, it was forced to raise interest rates.

The final attack on the ruble began in mid-May 1998. By then, with single-digit inflation having been attained and the real exchange rate holding steady, the government's debt dynamics were visibly unsustainable. Instead of abandoning the peg, however, Russia decided to mount a last defense with the help of a \$22.6 billion international rescue package, led by the IMF and including the World Bank and the government of Japan, that was announced in mid-July.

Advised by Wall Street, the government also dabbled in financial engineering, deciding to swap its short-term, costly

GKOs for long-term, Eurobonds yielding 12–15 percent a year. The logic was seemingly unimpeachable: the swap would start a virtuous cycle by lowering interest payments and rollover risk. That, plus the rescue package, would raise market confidence and buy time for the government to raise primary fiscal surpluses and at last resolve the nonpayments problem that was finally recognized as a crippling impediment to revenue mobilization and faster growth.

Ironically, the economic and financial situation unraveled soon after the swap was completed. Less than four weeks later, Russia abandoned the ruble peg and defaulted on a substantial portion of its ruble-denominated debt on August 17, 1998, plunging its banks (which were heavily exposed to sovereign debt) into a crisis as well. Including the GKO-Eurobond swap, the government's dollar-denominated debt increased by more than \$16 billion between June 1 and the meltdown (in excess of 8 percent of postcrisis GDP). Paradoxically, the amounts lent to Russia grew as the fundamentals worsened and even as market investors themselves were signaling exceptionally high levels of default and devaluation risk. Table 2 shows how the risk premia demanded by the market evolved after mid-May.

Lessons

The behavior of the private investors shows that moral hazard is alive and well, and sheds light on the "allocation puzzle." Gourinchas and Jeanne (2007) argue that not only does capital tend to flow from developing to developed countries, in line with the Lucas paradox; but within developing countries, poorer performers (in terms of growth and productivity) receive the bulk of the capital flows—contrary to the predictions of the neoclassical growth model. But Russia 1998 shows that if investors care only about short-term gains and are driven by moral hazard, one is likely to see capital flows in line with what might appear to be an allocation puzzle. That is the only reason one can offer to explain why Russia was able to increase its external debt so significantly after mid-May 1998, when it became crystal clear that the fiscal situation was unsustainable. Investors clearly wanted to have their cake (charge interest rates reflecting high default and devaluation risks) and eat it (exit with 100 percent of ruble proceeds at the *precrisis* exchange rate when a large official bailout package arrived).

Instead of averting a crisis when fiscal fundamentals are weak, financial engineering actually may trigger a crisis, as

able 2.	GKO	Yield	and	Sovereigi	and	Devaluation	Risk	Premia	tor Ke	ey Dates,	1998	
Percent a	nnua	lly										

Date and e	event	GKO yield	Sovereign (default) risk premium	Devaluation risk premium
May 15:	Fiscal sustainability clearly in question.	39.3	4.8	23.0
July 13:	Announcement is made of IMF-led \$22.6 billion rescue package and GKO-Eurobond swap.	102.3	8.5	82.3
July 14:	(day following rescue announcement)	58.2	8.1	38.6
July 20:	IMF board approves package. Disbursement is reduced from \$5.6 billion to \$4.8 billion as parliament stalls on key expenditure control and tax measures.	51.6	7.8	32.3
July 23	(day preceding GKO-Eurobond swap completion)	54.2	8.2	34.4
July 24:	GKO-Eurobond swap completed. GKO yields return to "crisis" levels of mid-June, sovereign risk premium jumps.	66.4	10.0	44.9
August 6:	World Bank board approves crisis package-related loan, and disburses \$300 million.	77.7	12.0	54.1
August 10	(Monday, one week before the meltdown)	99.0	20.0	67.5
August 14	(Friday preceding meltdown): \$1.7 billion in reserves is lost as portfolio investors exit, bringing total loss from July 10 to August 14 to \$4.5 billion. Russia's central bank bails out SBS-Agro bank with a \$100 million loan.	144.9	23.8	109.5
August 17	(meltdown Monday): Devaluation and default.			

Source: Pinto and Ulatov forthcoming, table 4.

Note: If the yield on the one-year U.S. Treasury bill is 5 percent and the ruble/dollar target rate of depreciation is 6 percent, then the one-year GKO yield should be 11 percent (based on interest parity). If the yield is higher, the excess is the sum of the sovereign (default) risk premium and the devaluation risk premium (or the compensation for depreciation greater than the target of 6 percent). The sovereign risk premium was proxied by the spread on a short-maturity Russian government dollar borrowing, relative to the U.S. government; and the devaluation risk premium then was obtained as a residual. See Frankel and MacArthur (1988), who first used such a decomposition; and Pinto and Ulatov (forthcoming).

shown by the GKO-Eurobond swap. By its nature, a marketbased, voluntary swap cannot be expected to lower the present value of the government's debt obligations, along the lines of the Modigliani-Miller theorem. But a swap may backfire and precipitate a crisis when fiscal solvency problems are present, as in Russia 1998. If the present value of future primary surpluses is less than outstanding debt, one way for the government to restore intertemporal budget balance is to let the nominal exchange rate depreciate-thereby lowering the real value of its domestic currency obligations. When a swap out of local currency debt into dollar-denominated debt occurs, however, it lowers the outstanding stock of domestic currency obligations (the *tax base*), calling for an even larger depreciation (the *tax rate*).⁵ This recognition could spur a speculative attack on foreign exchange reserves, triggering a crisis. Financial engineering definitely is not a free lunch, and the hidden tab may be surprisingly high!

Similarly, implementing a successful official bailout is extremely hard when fiscal solvency problems are present. In Russia's case, the liquidity injection to reserves financed by implicitly senior debt from the rescue package would demote the claims of GKO holders and become the perfect time to exit, with the liquidity injection providing the means of escape. Together with the GKO-Eurobond swap, the international rescue package itself helped trigger the 1998 crisis.

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Notes

1. More generally, Russia 1998 demonstrates the perils in official bailouts when fiscal fundamentals are weak (illustrated in 2010 by Greece). On June 8, 2010, when the European Union put finishing touches on a \in 440 billion package to help Greece and curb contagion, the 10-year Greek/German sovereign bond yield spread was 560 basis points. On October 11, 2010, it was much higher: 700 basis points!

2. This section is based on Kharas, Pinto, and Ulatov (2001); and Pinto and Ulatov (forthcoming).

3. The then first deputy managing director of the IMF, Stanley Fischer, was quoted as follows in the final report of the January 9–12, 1997, U.S.–Russian Investment Symposium held at Harvard University: "Russia, he said, has achieved macroeconomic stabilization.... The IMF is virtually certain, he declared, that real growth is underestimated and will soon show up in official figures..." (p. 3).

4. Neither privatization proceeds nor seigniorage explains the constancy of debt-to-GDP over the 1995–97 time frame. As shown in table 1, there was a sizable increase in nominal debt—some \$50 billion—between 1995 and 1997.

5. A formal analytical statement of this argument can be found in Aizenman, Kletzer, and Pinto (2005). For more on the Russian swap and why it failed, see Pinto and Ulatov (forthcoming).

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