

Response

Gary Krueger

My response reviews and extends slightly the work of Dr. Vladimir Popov on Russia's unique transition to market economy. Using Russia as an example, my hope is also to shed light on important areas of economics in general, especially as they relate to the social and legal infrastructures that form the basis of what I term "pathological" economic systems.¹ At the outset, it is important to note that I have no fundamental disagreements with the conclusions and basic viewpoints of Dr. Popov. As is typical of academics, however, I do not necessarily concur with the course he pursued to reach those conclusions. The following represents an alternative and, hopefully, illuminating path to arrive at a somewhat different diagnosis of Russian economic maladies, as well as a similar, but not identical, prescription.

Dr. Popov begins by assessing the initial conditions inherited by the transition countries of the former Soviet Union, Eastern Europe, and Southeast Asia, and finding that the countries of the former Soviet Union tended to have the worst performance, measured in terms of total decline in output, among the transition economies. He also measures, and then assesses, the role of the legacies of central planning in affecting variations in transition outcomes. Popov then makes the noteworthy conclusion that the institutional structure of transition economies appears better able to predict transition performance than the rate of liberalization.² This important finding elevates the debate from the level of an overly simplistic and unproductive argument concerning the merits, or lack thereof, of shock therapy versus some undefined gradual alternative. Not only is this a valuable contribution, but the author also makes his point directly and clearly.

In the second part of his essay, Popov links poor Russian economic performance during the transition to an inability to increase exports, pointing out that export-led growth—as demonstrated by the transition economies of China and Vietnam and earlier by the market economies of Japan, Korea, and other Asian economies—can place a country on the road to sustainable development. Additionally, Popov identifies the key role of exchange-rate policy, and explains how Russia's decision to maintain its exchange rate at levels that were above purchasing power parity was a serious policy mistake. Also, he cites

the failure of the Yeltsin government to support key sectors of the economy, especially aerospace and energy.

II. Analysis and Suggested Extension

The evidence for the main conclusion—that the rate of liberalization is less important than the institutional structure shepherding the move away from central planning—is, however, a bit suspect. The leading witness is figure 3 which plots the decline in the share of government revenues from 1989–91 to 1993–96 as a variable that explains the decline in output from 1989 to 1996. Figure 3 shows that countries with larger declines in the shares of government spending as a percentage of GNP tended to have larger declines in total output from 1990 to 1996. Of course, Popov uses this variable as a proxy for the institutional strength in these countries, but it is a problematic variable to use in a regression. As government spending was a large share of total production in centrally planned economies, the fact that declines in government spending correlate with declines in GNP is not altogether startling. The reason is, of course, seen directly from basic macroeconomics as $GNP = C + I + G + X - M$, where GNP is gross national product, C is aggregate consumption, I is domestic investment, G is government spending, and $X - M$ is net exports (crudely put as trade balance). In other words, a decline in one of the components of an aggregate statistic correlates with the decline in that statistic.³

Popov's other primary finding is that Russian policy-makers failed because they did not strategically target investment to export sectors of the economy, and they pursued a policy of an overvalued exchange rate. The conclusion—prescription really—is that export-led growth, which was successfully implemented in Asia, is the best approach for alleviating Russia's transition depression. The evidence that Asian growth was based on exports is, however, not conclusive.

For much of Japan's post-war history, Japan had either no surplus on current account or only a small surplus. Not until the early to mid-1980s did Japan begin to run significant surpluses, by which time it had already achieved its stature as a world economic leader. Moreover, exports as a share of GNP in Japan in 1980 were 14 percent, while in 1994 they had fallen to only 9 percent, according to the World Bank Development Report of 1996. These percentages are low enough to suggest that most economic activity in Japan was domestic, although at the margin, exports were highly beneficial. China initially (after the

implementation of Dengism in 1979) appeared not to rely on exports but, rather, on increased productivity in agriculture and rural enterprises. Only in the later 1980s and early 1990s do we see the large surpluses on external account. In sum, I believe it is not clear that (a) Asian economies were exceptionally dependent upon exports as a source of growth or (b) this prescription is suitable for a large continental, resource-rich country such as Russia.

III. An Alternative Diagnosis

In order to better understand the situation in Russia, we need some basic macroeconomics, or just about everything you might need to know if you worked for the IMF or World Bank in the Applied Macro Division.⁴ An analysis of the basic components of GNP, and the associated accounting rule, provide some insight into Russia's transition recession. More formally, these components can be expressed as:

$$Y = C + I + G + X - M \quad (1)$$

Y = GNP (gross national product)

C = consumption by private citizens of goods and services

I = domestic investment (purchases of durable goods — plants, equipment, etc.)

G = spending by government on goods and services (excludes transfer payments to pensioners, etc.)

X = exports (sales of goods and services abroad)

M = imports (purchases of goods and services from abroad)

X - M = balance on current account, also called "external balance"

$$Y = C + S + T \quad (2) \quad (\text{Accounting Rule})$$

Y, C as defined above

S = personal savings by individuals plus retained earnings by businesses

T = taxes collected by government

Equation 2 is referred to as an accounting rule because all income must either be spent, saved, or taxed.

Equations (1) and (2) can be easily shown to imply the following relationships:

$$(S - I) + (T - G) = (X - M) \quad (3)$$

$S - I$ is the balance between savings and investment, or the private sector balance. $T - G$ is the balance between taxes and government spending, or the public sector balance. The private sector surplus or deficit will influence the external balance, as will the public sector surplus or deficit. Countries with deficit on current account may have them for numerous reasons. One may be that the public sector is imbalanced ($G \gg T$); another is that $I \gg S$ (where " \gg " is read as strictly greater than).

Finally, we should note the following identity from international balance of payments accounting:

External balance on current account = opposite balance on capital account + changes in holdings of reserve currencies

Countries with surplus on current account run deficits on capital account; that is, they import more assets from abroad than they export, and vice versa. Since 1981, the United States has run current account deficit and capital account surplus: we sell more assets (T-bills, stocks, corporate bonds, land) to foreigners than we buy from abroad. In other words, the United States is a net debtor, while Japan is in the exact opposite position, a net creditor.

The situation in Russia throughout the transition has been unique: declines in GNP of upwards of 50 percent since 1990, accompanied by a decidedly negative public sector balance on the order of -8 percent of GNP, a very large percentage.⁵ The large public sector imbalance would suggest that the current account also ought to be negative, yet the Russian economy has consistently run surpluses on current account since 1992. Obviously, the only source of surplus on current account must be very large surpluses in the private sector. In other words, Russian savings must be significantly larger (by approximately 10 percent or so) than investment.

Recent data from the Organization for Economic Cooperation and Development (OECD) shows that investment declined by 75 percent from 1990 to 1996, considerably more than the total decline in output of roughly 40 percent.⁶ Admittedly, the figure from 1990 represents

investment levels that were excessive by international standards; nevertheless, the declines in investment appear to have “led” declines in GNP. The question then is: Why are investment levels so low in Russia?

Popov’s figure 3 may not be very useful for causal inference. But if we turn the causality around and posit that the decline in output led to the decline in government spending (as governments facing declining output and tax receipts were forced to cut back expenditures) and, additionally, if we examine the Russian government’s peculiar response to the situation, we have insight into the large decline in investment.

Local and federal government agencies in Russia issue budgetary authority; that is, they write a contract with a private or semiprivate organization for some good or service based on anticipated budget revenue. During the budget period, it is invariably discovered that tax revenues are lower than expected. Lower tax revenues risk upsetting fiscal balance (the relationship between tax receipts and government expenditures), which threatens to re-ignite high inflation.⁷ In order to reduce the risk of inflation, government agencies delay payment of contractual obligations for months or sometimes years at a time. Thus, the government reneges on its own declared budgetary (presumably) contractual obligations. Throughout history, there have been instances of government default on securities, and there have been hyperinflations — which amounts to the same thing — but rarely has there been systematic and sustained contractual recklessness comparable to that demonstrated by the current central government in Russia.

Why is the emphasis on contracts so important and how does it relate to investment? The late Mancur Olson, in analyzing economic development, asked the question: If almost everyone now has a market economy, and if markets are so good, then why isn’t everyone wealthy? His inquiry led him to consider the institutional framework that supports market transactions. Most interestingly, he considered the institutional “requirements” necessary for supporting two types of transactions. Type I transactions are those in which the “quid” (money) is exchanged simultaneously for the “quo.” Examples of Type I transactions are everyday purchases of groceries and beer at the kiosk, or even drug deals on the west side of Chicago. The latter example illustrates the fact that the institutional infrastructure necessary to support Type I transactions may be very meager (i.e., total lawlessness); furthermore, highly risky Type I transactions, in which both par-

ties desire to exchange, are very common throughout the world. The key to Type I transactions is that they do not require external, or third party, enforcement. Because they are, in principle, self-enforcing, it is a relatively simple matter to ensure that the quid and the quo are both genuine and delivered. Equally important, because they are simply reallocating preexisting production, they are not wealth creating, although they are pareto improving.

Consider now an alternative type of transaction, the Type II, in which the exchange of the quid and the receipt of the quo are separated in time—specifically, a transaction in which one receives the quo prior to paying the quid. Generally, the quo may be paid for over time as, for example, when one buys a house or a car (in developed market economies, that is). The key to these Type II transactions is that they are relatively more complex to effect and generally are based on very explicit written or oral contracts/agreements.

Additionally, Type II transactions are capable of generating wealth (in other words, a “stream” of additional income that lasts for considerable periods of time). An example would be college loans, of which I am a past expert. The loan allows the recipient to avoid a pay-as-you-go approach to getting an academic degree, thereby reducing the total time necessary to get that degree. This permits more years of additional earning power at the educationally augmented level, hence creating wealth.

Mancur Olson’s insight into understanding problems of development, particularly those plaguing the Former Soviet Union (FSU), is based upon consideration of the institutional infrastructure necessary to support Type II—wealth-creating—transactions. The key to effecting Type II transactions is third-party enforcement, especially as it relates to ensuring that the recipient of the quo pays back the quid. It is possible, I believe, to generally classify economic systems, or economies in particular, based upon the dominant type of enforcement of contractual arrangements. In the United States, we seem to prefer courts stuffed with lawyers. In Japan, there are, of course, lawyers, but there is also a premium placed on trust inherent in long-standing relationships.

In the current Russian economy, there is considerable competition for the rights to enforce contracts — especially within the mafia. Although economists generally regard competition as a good thing, when it comes to the right to enforce contracts, it is better to have a monopolist—the government. However, the Russian government is so

**Table 1 Commercial Bank Credit in Transition Economies:
Credit to the Nonfinancial Sector as Percent of GDP**

	1993	1994	1995	1996
Russian Federation	20.4	19.6	12.0	10.4
Poland	21.3	19.8	19.7	22.1
Hungary	28.4	26.5	23.0	22.9
Czech Republic	73.1	72.9	63.8	61.1
Slovakia	71.5	60.4	59.2	62.4
Romania	24.4	19.0	22.7	24.6
Slovenia	22.2	22.9	27.5	28.7
Bulgaria	67.8	51.0	41.3	69.5

Source: OECD Economic Surveys (1997), p. 92.

weak, partly because of its own actions and partly because of the upheavals during the past decade, that it lacks the ability to secure a monopoly position in contract enforcement. When contractual rights are impossible to guarantee and enforce, potential lenders — that is, savers — hide their capital either under the proverbial mattress (one of my Russian friends has \$20,000 in his garage wall) or send it abroad. As a result, very few wealth-creating Type II transactions are taking place in Russia, although lots of pareto-improving Type I transactions are happening.

One indicator of the severity of the current situation in Russia is contained in the preceding Table, which provides data on nonfinancial commercial credit as a percentage of GNP in Russia. If lots of Type II transactions were occurring, we would expect a sizeable amount of credit to the private sector as a percent of GDP. But the figures in the Table reveal that Russia ranked far below other transition economies in 1996, and my guess is that figures for 1998 will show further reductions. Of course, it is possible to have too much of a good thing, and the high percentages of credit relative to GDP in Bulgaria and the Czech Republic were inflationary. But the levels of credit in Russia were undeniably well below the more “normal” levels of Poland and Hungary.

IV. Conclusion

Finally, I want to repeat that my analysis and that of Dr. Popov lead us to the same basic conclusions. In short, Russia’s transition recession was exacerbated by government policies — specifically, its exchange-

rate policy and fiscal irresponsibility. And Russian institutions have proved themselves woefully inadequate to sustain a well-functioning market economy. In six years of transition, the Russian political and economic elite have failed to create institutions that support Olson's Type II transactions. The almost total absence of capital markets has had disastrous consequences for what remains of Russian industry. Firms that make and sell durable goods find that their potential customers can only purchase durable products from cash on hand, while the funds to restructure production in durable-goods industries (and hence increase Russian competitiveness) are virtually unavailable. Because Russia is a market economy without a capital market, it has become a unique economic subspecies: a noncapitalist market economy.

Notes

1. The numerous works of the late Mancur Olson, especially on the relationship between forms of government and economic prosperity, are enlightening.
2. This conclusion appears, however, to assume that these countries will indeed liberalize and not revert to central planning or some other statist policies.
3. In addition, these data should also be adjusted for differences in starting points for the transition; after all Poland and other Central European countries began the transition roughly two to three years before the countries of the former Soviet Union.
4. The following material represents the first time since conducting a review session as a teaching assistant at the University of Wisconsin-Madison in 1984 that I, an applied micro-economist, have performed public macroeconomics!
5. For example, at the peak of the U.S. government deficit in the late 1980s, the public sector deficit was on the order of -3 percent of GNP.
6. There is some controversy in measuring the decline in output during Russia's transition. Original Goskomstat data suggest a decline of 50 percent from 1990 to 1996, while a recent revision in their calculations places the decline in total output at 37 percent. Of course, none of these estimates captures the large share of production taking place in the underground economy.
7. In the early phase of the transition (1992-94), Russian inflation was typically in the range of 20-40 percent per month!

Bibliography

- Lincoln, Edward. *Japan: Facing Economic Maturity*. Washington, D.C.: Brookings, 1988.
- McQuire, Martin, and Mancur Olson. "The Economics of Autocracy and Majority Rule." *Journal of Economic Literature* (March 1996): 72-96.
- OECD Economic Surveys. Russian Federation. Paris: OECD, 1997.
- Olson, Mancur. "Big Bills Left on the Sidewalk: Why Some Nations Are Rich and Others Are Poor." *Journal of Economic Perspectives* 10, no. 2 (Spring 1996): 3-24.