Some Lessons of Soviet Economic Reform

Kent Osband [1]

The progress, or lack of it, in Soviet economic reform is by now broadly familiar to every student of socialist and formerly socialist economies. In addition to the nearly daily discussions in the press, two comprehensive surveys, including assessments of alternative reform strategies, have been published within the last nine months--one by the

EC [2] and one jointly by the IMF, IBRD, OECD, and EBRD. [3] In search of a comparative advantage, I shall in this paper neither review Soviet economic development systematically nor forecast future developments, but will instead try to extract some lessons for market-oriented reform.

The basic problem with Soviet economic reform is very simple: there has not been enough of it. There are noble visions, debates galore, swarms of Western well-wishers flying in and out of Moscow, and reform legislation by the bucket, but not much in the way of implementation. What makes this especially tragic, albeit darkly ironic, is that a more successful path was and is so near. Its cornerstone is less a determination to do than a willingness to let happen. Let people trade, let them produce, let them move, let them own property and let them sell it. Let them hire and fire and be hired and be fired. In short, let the Soviet economy rise or fall with the initiatives of a couple of hundred million individuals. This path will succeed as no other path will.

In saying this, I am not suggesting that reform is easy, that concerted action by the state is unnecessary, or that ideals of social justice must be abandoned. On the contrary, a thorough transformation in the Soviet Union, even under the most radical variant, will take decades. The material infrastructure must be thoroughly overhauled and modernized. More importantly, a new legal, commercial, financial, and social security infrastructure must not simply be built--in some respects from scratch--but also must become sufficiently routine and traditional that people can and will rationally plan on its continuation. In this process of construction and reconstruction, there is a chance to create societies that more fundamentally equal, more harmonious, and more protective of the environment than any that exist today. But if they are to endure--much less to respect other human values--these societies must work with the market and not against it. They must safeguard property rights, and through the very design of their institutions assure that commitments made today, whether to their own citizens or to foreigners, will not lightly be breached tomorrow.

The Primacy of Reform

Having sketched the ethereal grand picture, I shall now draw specific lessons from Soviet experience. The first concerns the primacy of reform. When Gorbachev came to power, he and his colleagues were less concerned about reform than about modernization, which they saw as essential both to civilian economic development and to long-term political and military strength. To this end they planned, under the banner of "acceleration", for large investments in engineering and machine-building, strict quality control, and better labor discipline. Reform was secondary. [4]

On virtually all important counts, the modernization program was a failure. Quality control caused bottlenecks, and foundered on the lack of market assessments of quality. Investment targets in machine-building in effect assumed the productivity improvements they were supposed to foster. They could not be met, and thereby added to unfinished construction and other structural imbalances in the economy. Surprisingly, the labor discipline campaigns, which were thought to be harmless, caused perhaps the most damage. Clampdowns on speculation and other "non-labor" income chilled legitimate private production. Worse still, the prohibitionist campaign against alcohol cost the budget 1-2 percent of GDP, exacerbated shortages of other goods through diversion of consumer expenditures, and encouraged massive bootlegging and corruption, without delivering more than a transitory shock to alcohol consumption. Failure was sealed by the slide in world market prices for Soviet oil, the nuclear disaster at Chernobyl, and, especially, the destabilization ensuant on *glasnost* and political liberalization.

The Market as Organizing Principle

Open discussions and setbacks in modernization quickly brought market reform to the fore. However, the market was still seen primarily as an adjunct to state planning, as a tool for improving plan design and implementation, rather than as the basic organizing principle of the economy. This was a second mistake.

The intended centerpiece of reform, the Law on State Enterprises, was adopted in June 1987 for implementation in January 1988. Enterprise managers were given wide-ranging autonomy, and mandatory output targets were abolished. Direct government needs would be met through procurement contracts ("state orders"), while central planners and the ministries would concentrate on long-term strategy.

In practice, state orders extended far beyond direct government needs, embracing over 80 percent of output in 1988. On the one hand, planners and ministries sought through state orders to ensure the production of unprofitable items; on the other hand, enterprises clamored for state orders to improve their chances of receiving centrally-allocated supplies. The Law on State Enterprises also failed to clarify enterprise rights vis-a-vis the ministries or to set up procedures for enforcement. It did, however, loosen controls over input and output mixes and leave a greater share of profits with enterprises to use as they wished. Uncertain about future policy, enterprises sought to convert their monetary windfall into immediately tangible benefits. Average wages and salaries, which traditionally increased about 2-3 percent per year, rose by over 8 percent annually in 1988 and 1989. The number of new construction projects rose by 40 percent in 1988 alone.

With prices controlled and budget constraints soft, greater autonomy did not yield the hoped-for improvements in productivity. On the contrary, bottlenecks spread in production, while consumer goods shortages disheartened workers. In 1989, the rise in "above-norm" unfinished construction absorbed close to the entire officially-recorded increase in national income. [5]

Price Reform

Shortages could have been eased by freeing prices or--if liberalization was too frightening--by raising prices administratively. Retail prices for food staples, which had been frozen since 1962, had fallen far below their opportunity costs, as had the wholesale prices for fuel and raw materials. By 1988, direct subsidies of meat and dairy products amounted to 5 percent of GDP, and indirect subsidies for perhaps another 3 percent. Domestic oil prices were less than one third of world market prices, even at the overvalued official rate.

The authorities repeatedly balked at price reform. This was a third mistake, although at the time it may have seemed politically wise. Unquestionably, price reform was and is unpopular. Low fixed prices had over the years acquired a moral symbolism, allegedly reflecting both victory over market volatility and social commitment to the poor. Perhaps more important, various groups had privileged access to deficit goods, and were as reluctant to relinquish their *de facto* property right as any other property owner would be. For example, subsidized meat is distributed exclusively in the cities, especially the main cities, and much of it is channeled to the elite through closed distribution systems. [6] With fuels and raw materials, first claim has traditionally gone to heavy industry. As late as spring 1990, as then-Prime Minister Ryzhkov discovered, to advocate price reform was to court political suicide. Nevertheless, price reform could not be postponed indefinitely: wholesale prices were raised in late 1990, and retail prices in April 1991. As a result of the delay, the economy is weaker; the transition, still incomplete, must be harsher; and public confidence in the government is even lower.

Unleashing the Private Sector

The growing imbalances in state production and pricing had their bright side. They offered fantastic opportunities to private entrepreneurs. With or without a crisis, unleashing the so-called "Second Economy" would have been a sure economic winner, as the experiences of every single centrally-planned economy attest. Indeed, the non-state sector has grown markedly under Gorbachev. However, it could have grown much more--and in more aboveground, tax-bearing channels--if the authorities had let it. This was a fourth mistake.

The legal high point was the Law on Cooperatives of May 1988. It accorded cooperatives, defined broadly enough to embrace both giant collective farms and three-person families, equal status with state enterprises. Coops could lease property, subcontract to other coops or individuals, hire outside labor, and raise capital from banks and outside shareholders. At reformers' insistence, clauses were inserted to simplify registration, prevent arbitrary closure, and limit state regulation of production and sales. By October 1990, over 200 hundred thousand cooperatives had been registered, employing 5 million people, or 3.5 percent of the labor force. Yet the Law fell far short of its promise, in part through its own loopholes, in part through unpunished violations, and in part through subsequent amendments.

Private business continues to face a public resentful of high markups, state enterprises hostile to competitors, planners anxious about erosion of price controls and tax revenues, and corrupt officials, not to mention outright gangsters, eager for spoils. Not surprisingly, many private businesses do evade taxes, pay off criminals, link up with monopolies, and charge high markups. However, the main policy response should be more liberalization, not less. Reducing entry barriers and providing private entrepreneurs better legal protection would stimulate competition, limit criminal opportunities, and lead to lower markups. While policies have generally improved over the last year, the overall regulatory environment recalls the pre-reform Peru described in The Other Path [7] more than it does any OECD country.

Unbundling Property Rights

The impact of small-scale private enterprise would be greatest in trade and services. Without "marketizing" the state sector, however, improvements in agriculture and manufacturing will be slow. Unfortunately, in complete contrast to the liberalization of the private sector, reform of the state sector in socialist or formerly socialist economies has nowhere yet been a major success. The core problem is the failure to unbundle property rights. A typical socialist enterprise is not simply a business under state ownership, but also an administrative department, a jobs scheme, an apartment builder, a landlord, a provider of day care, an operator of recreation centers and vacation resorts, and a sponsor of public works. To provide the right incentives--both internally and to potential competitors--the enterprise must become, at the very least, an independent public corporation, with clearly-specified assets and liabilities, clearly-defined public responsibilities, and clearly-limited claims on or from the budget. [8] This is a fifth lesson of reform.

While the Soviets are moving in this direction, they are not moving nearly rapidly enough. Shortcomings of the Law on State Enterprises were mentioned above. In addition to state orders and overbearing production ministries, enterprises face a bewildering and ever-changing array of taxes, rents, and other levies. Tax reform is hampered by the instability of authorities and jurisdictional struggles between them, as is the enforcement of commercial contracts. Western-style balance sheets often cannot be calculated, for lack of knowledgeable accountants or because state agencies cannot agree on who owns what. Responsibilities for employee benefits or public works are left hanging.

Except in the Baltic republics, there is not a strong constituency for restoring expropriated property to its former owners or their heirs, and hence, little need to separate old value from new value. Unfortunately, this blessing is more than offset by competing national and regional claims on assets. For the Soviet Union as a whole, the crucial contest involves some partly-frozen real estate in northwest Siberia, under which happens to lie some of the world's largest deposits of oil--at least half a trillion dollars' worth, at current prices--and about 30 percent of the world's confirmed natural gas reserves. Currently, ownership is being ceded to the Russian republic, but the Union government claims the oil wells, the pipelines, and hefty royalties. Local authorities have staked claims too, partly on behalf of minority native peoples but mostly on behalf of the two-million-plus European migrants. The latter tend to be highly paid by Soviet standards but poorly housed and starved for modern amenities.

Ownership rights are difficult to clarify even at a local level. Privatization of housing in Moscow, for example, has been mired in disputes over rights of disposal, not only between the city government and higher authorities, but also between the city government and neighborhood councils.

However property rights are allocated, it is important to give the new owners the right to sell or lease long-term to others, independently of their other activities. [9] Paradoxically, the right to sell property encourages owners to invest in it. Also, a market in property encourages more efficient owners to buy out less efficient ones. Many of the vaunted union and republican proposals for turning over land to the peasants suffer from exactly this defect: the peasant who stops cultivating the land must surrender it to the collective farm or local authorities.

Political Stability

In any event, property rights are only as good as the expectations of their enforcement. For foreign businessmen, enforcement is much less certain now than it was before *perestroika*. Then, the authorities looked after whatever foreign economic ties they deigned to permit. Now, the authorities hustle foreign investment, but no one knows whether agreements will be followed through. For example, the Chevron Corporation, which thought it had negotiated a long-term share in the Tenghiz oil fields of Kazakhstan, now finds itself assailed both by old-guard foes of Western investment on any terms and by free-market democrats convinced the bidding was bungled. This brings us to a sixth lesson of Soviet economic reform, regarding the need for stability.

Disunion

Instability in the Soviet Union reflects the heritage and decay of Communist Party rule, and of the tsarist rule that preceded it. At risk now is not simply the political or economic stance of the Union but its very existence as a multinational state. The various republics and ethnic groups differ vastly in language, demographics, religion, education, economic activity, and political perceptions. [10] *Glasnost* gave vent to long-standing resentments, and in the process inadvertently helped kindle new ones. Political decentralization is inevitable.

As the Western studies of the Soviet economy point out, political decentralization need not rule out economic integration. The latter should be encouraged. Realistically, however, the trends are not auspicious. The existing interregional division of labor, while extensive, rests on a central administrative fiat that has become increasingly difficult to sustain. The alternative is voluntary exchange, but shortage makes producers reluctant to sell at official prices, and local authorities naturally try to prevent the export of deficit goods. Labor mobility is severely constrained by housing shortage and by the *propiski*, or permits, required for residence in large cities. Voluntary capital flows across regions are discouraged by fear of seizure--indeed, foreign investment is better protected than interregional investment.

Another challenge of economic union is to delineate budgetary authority between different levels of government, lest each government be excessively tempted to spend at the others' expense. [11] Years ago the Union officials had worked out an effective though extreme solution: the republican budgets were line items in the unified union budget approved by the center. Now that independent budgets are allowed, some other controls must be found. Also, more explicit transfer mechanisms must be devised--in particular, for subsidy of Central Asia, whose population is growing 1-3 percent faster per year than the population of the European republics, and whose near-term economic prognosis is poor. At stake are republics' wealth and power, relative to the center and to each other, so agreement will not be easy.

In short, an economic union cannot simply be preserved, but to a considerable extent must be recreated. Given the present tensions, attempts to recreate it through central decree may be counterproductive. Local leaders will be tempted to portray the center as carting off domestic products, fostering the immigration of outsiders, and asserting claims on local property. References to past behavior could lend credence to such claims.

Also, although an economic and monetary union is often described (e.g., in the Soviet presidential guidelines of October 1990) as being compatible with considerable republican discretion over the forms and pacing of economic reform, in fact it is not. A republic raising or decontrolling the price of deficit goods would tend to draw in rubles and supplies from the other republics. Republics losing supplies would presumably respond with direct export controls, while the reforming republic would probably restrict purchases by nonresidents. Similar considerations would apply to privatization. Already there is much evidence of this. Russia's 1990 hike in procurement prices for meat prompted the Ukraine to restrict meat exports to Russia. Proofs of local residence have been imposed at various times for purchase at official stores in the Ukraine, Estonia, Leningrad and Moscow. Internal customs barriers are proliferating.

Under those conditions, separate currencies might offer better prospects for reform, with less distortion of trade and greater incentives for fiscal discipline. The key problem would be to assure the credibility of the currency, first as a means of exchange and second as a store of value. The Ukraine's introduction of the *kharvonets* (soon to be superseded by the *griven*) illustrates these issues. Technically, the *kharvonets* was not a currency but a coupon issued for use with rubles. Many purchases inside the Ukraine required equal numbers of *kharvontsy* and rubles, but the former was the binding constraint since there are fewer of them. Their introduction reportedly caused an immediate recovery in state retail trade. However, methods of distributing alternative monies, regulating their supply, and ensuring their acceptability as payment are still being ironed out.

If republics or groups of republics issued new currencies, the ruble overhang would resolve itself. What would happen next is unclear. On the one hand, a hardened Russian currency might quickly supplant the rest, with less turmoil than if rival currencies had never been tried. On the other hand, rival currencies might encourage autarky and discourage external investment. In any event, separate currencies are at best an aid to market reform, and not a substitute for it.

Indecisiveness

Soviet instability has been exacerbated by a vacillating, indecisive economic policy. The main hallmark of "Gorbonomics" seems to have been the search for a happy medium between the old system and a normal market economy. [12] To what extent this search has been voluntary, and to what extent it has been forced by political struggle between reformers and conservatives, is difficult to judge. From a political standpoint, the search has not been completely fruitless. Early in *perestroika*, deferring economic choices may have facilitated ideological and political liberalization, because interest groups hurt by those choices might otherwise have thrown in their lot more forcefully with political conservatives. Equivocation also may have helped Gorbachev portray himself domestically as an indispensable moderator between extremes.

From a purely economic view, however, equivocation has done little

good. First, as we have seen, the resulting measures do not add up to a coherent reform program. Second, the ebb and flow of schemes encourage low-level officials--who may be hostile to reform to begin with--not to enforce them, or to enforce them arbitrarily. Third, people and firms are reluctant to invest for the long term, because they do not know where policy is heading.

While such difficulties are not peculiar to the Soviet economy, they are vastly more serious than in developed market economies, in large part because of the design of Soviet government. There are relatively few legal restraints on state institutions, jurisdictional boundaries between insitutions are fuzzy, and the judicial system is unreliable. These characteristics are not oversights, but reflect a conscious decision to increase the power of the top leadership and let the Communist Party mediate disputes. While the top leadership could and did change course, the edifice as a whole suffered less from wobbliness than from rigidity, but only as long as the Party was hegemon.

Some people, both Soviets and non-Soviets, think that substituting majority decisions for Party decisions would suffice to restabilize the government. Unfortunately, it would not. Majority rule, when unrestrained by constitution or tradition, tends to be cumbersome, fickle, and predatory. Hence, a stable and growth-promoting democracy figures ways to tie its own hands. It may require super-majorities on certain issues, prohibit action on others, and delegate still other issues, such as enforcement of contracts or regulation of the money supply, to quasi-independent authorities. [13]

Creating a Constituency

Economic reform would have been more popular in the Soviet Union, and the political situation less precarious, had more people been offered a tangible opportunity to prosper from reform. In China, for example, the *de facto* redistribution of collective farm lands created an enormous constituency to stick with reform and extend it. In the Soviet Union, by contrast, there has so far been no mass privatization. New businesses still employ but a small percentage of the work force. Higher wages and social benefits, the real value of which have been eroded through shortage, provide few incentives to work harder or better. The need to actively create vested interests in reform, instead of simply searching for pre-existing ones, is a seventh lesson.

A quick expansion of private plots would have been very popular among both farmers and customers in private food markets. Admittedly, however, land redistribution would not have had the same impact in the Soviet Union as it did in China. Less than 20 percent of Soviets work in agriculture, and farming is more dependent than in China on state-controlled industrial inputs, storage, or processing.

For a bigger reform boost in the cities, state-owned apartments could be turned over free, or at very low cost, to their tenants. Private housing arouses little antipathy, partly because Marxism tended not to treat owner-occupied housing as capital (although it did consider resale for profit to be exploitative), and partly because the interiors are hidden from public view. Hence, housing is a convenient shelter for wealth. Relaxing the restrictions on private resale or lease would let the existing housing stock be used more efficiently and reduce constraints on labor mobility.

Privatization of housing would break the state monopoly (albeit a monopoly riven by competing republican, municipal, and enterprise jurisdictions) over the lease of commercial space. The difficulty cooperatives have in securing legal accommodation often serves as a pretext for denying licenses or forcing their subordination to state officials.

Privatization of housing would, furthermore, increase employment opportunities in the repair and refurbishing of the existing housing stock. Legal and underground employment of private craftsmen is already widespread, but the average volume of activity per housing unit is much greater for private housing (e.g., summer cottages in the countryside).

Even where businesses have nothing to do directly with housing, privatization of housing can assist their development by providing entrepreneurs with potential collateral for loans.

One objection to giving tenants title is that some people will benefit considerably more than others. However, differential benefits are common to any mass privatization. In any case, it is difficult to define a completely fair allocation, much less enforce it. Depending on the context, better-than-average housing could be a form of wage payment in kind or recompense for years in below-average housing, or it could have been purchased at high prices on the black market. Assessments of fair value, in the absence of a history of market prices for similar property, would be extremely crude.

Another objection to housing giveaways is that the state allegedly needs the revenues from sales. However, mass auctions would be impossibly unwieldy. People would grumble, with justification, that the authorities had broken yet another implicit contract (low charges for housing), while evictions would grab unfavorable media attention. Scarce managerial expertise would be diverted from the more demanding task of restructuring and/or privatizing state enterprises. Finally, current rents are so low as to fall below maintenance costs, so even turning properties over free would save the state money.

The Role of Culture

The eighth lesson concerns the role of culture. It is often alleged that Soviet citizens as a whole are too inured to the old system to respond flexibility and rapidly to market incentives, or to put it another way, that the entrepreneurial stuffing has been kicked out of them. Most of the evidence is strongly to the contrary. To begin with, one can simply observe the sharp contrast between the goods at citizens' disposal and the (lack of) goods in state stores. The contrast suggests that Soviets are very enterprising, but that the market incentives favor socially wasteful shopping over production. One should also note the explosion in cooperative membership since entry was eased.

A joint Soviet-American team recently tried to compare popular attitudes to free markets in the Soviet Union and the United States. [14] Administering identical telephone surveys in Moscow and New York, the researchers concluded that the two groups were basically very similar in their attitudes towards fairness and income inequality and in their understanding of how markets work.

While culture does not seem to strongly influence receptivity to markets, it is crucial to economic development in another way; namely, the thirst for skills and knowledge. Here the Soviet record is mixed. The Russians, for example, have made a determined effort to absorb Western technology and arts. Russian mathematics, physics, literature, and ballet, each of which has drawn heavily on others' contributions, is justifiably world-renowned. Unfortunately, in the social sciences, the dominant Soviet ideology held for most of this century held that Soviet organization was so advanced that the rest of the world had little to offer. With hindsight, shamefully, Soviet scientists concede they may have traveled up a historical dead end. Still, they are only just emerging from their isolation, and remain sketchily informed even of experiences in other socialist countries. In this respect the past does indeed die hard.

Foreign Aid

The ninth lesson concerns appropriate foreign aid. Foreign training and technical assistance can speed up the transfer of knowledge and skills. It is relatively inexpensive, easy to administer, and, for the donor, essentially risk-free. The international financial institutions and Western statistical agencies are experienced in training officials, while Soviet students would be welcome in Western universities. A few hundred million dollars annually in Western government aid--a pittance compared to the credits already being extended to the Soviet Union and the much larger credits being discussed--would suffice to train tens of thousands of bankers, managers, accountants, economists, and corporate lawyers. In addition to the immediate benefits to the Soviet Union, the training offers diplomatic returns to the donors in terms of good will and improved communication. To facilitate training and make sure it reaches those who need it, technical assistance should be extended to republican levels as well as to the center, and at times even to municipal levels.

The wisdom of large-scale economic aid is less obvious. In the press, and even among some economists, the question is typically posed as follows: Is a guarantee of radical, whole-hearted Soviet reform worth, say, 100 billion dollars? Considering the political and military stakes, presumably the answer is yes. The question is fundamentally misleading, however. No guarantee is for sale, because short of occupying the Soviet Union militarily and/or rebuilding the political and legal institutions--as was done in post-war Japan and Germany, with which the Soviet Union today is often, though wrongly, identified--no guarantee could be enforced.

Criticisms along these lines prompt the aid question to be reformulated: How much is an extra x percent probability of radical, whole-hearted Soviet reform worth? However, this version is also disconcerting. The number symbolized by "x" is rarely, if ever, specified. It is not even clear that large-scale aid will raise the probability of economic reform. Indeed, what little evidence we have suggests the contrary. Why, for example, did the Soviet Union, in contrast to China, Hungary, and Poland, not embark on economic reform in the 1970s? A crucial differences seems to have been the foreign exchange cushion provided by Soviet oil reserves.

Even now, future claims on Soviet natural resources could easily be sold in international markets for hard currency, provided these claims were secure. The Soviet inability to offer this security is simply the flip side of its unstable commitment to reform. Also, large-scale economic aid could take pressure off the Soviet Union to seek out and encourage private investment.

Hence, it would appear wiser to defer consideration of large-scale economic aid, as the Group of Seven did, pending sturdier assurances of Soviet dedication to reform.

Conclusions

The main conclusions of this paper, lessons drawn from Soviet experience, are summarized below:

-- Reform takes precedence over modernization.

-- The basic organizer of the economy should be the market.

-- Price liberalization is deferred at great peril.

-- Unleash the private sector, quickly.

-- Property rights in the state sector must be unbundled.

-- Political stability should be encouraged through delegation and demarcation of authority.

-- Mass constituencies for reform should be actively fostered, by giving people tangible stakes in its continuation.

-- Cultural attitudes to markets do not matter much, but cultural attitudes to human capital do.

-- Foreign technical assistance is invaluable, but large-scale foreign economic aid is double-edged.

These lessons are very elementary, and address only the initial questions of reform. Tomorrow the Soviet Union will face more advanced questions, of the sort that much of Eastern Europe faces today. How to privatize? What should be done with the industrial behemoths, and how quickly? How can budget constraints be tightened without strangling credit? What are appropriate social safety nets and environmental safeguards? What is the best path to convertibility? Neither Soviet nor East European experience as yet offers clear answers, or more precisely, whatever answers are there we do not yet clearly see.

I continually feel that the economic policy needs in reforming socialist countries far outstrip our profession's current technical capacity. It is as if we economists were 19th century biochemists learning about microbes, or 19th century physicists learning about electricity, who are asked to advise on major surgery or light bulb production. From tomorrow's perspective, we will surely not have worked very efficiently. Let us hope we can at least be useful. Most of the lessons drawn above concern basic hygiene and safety, on the order of "wash your hands and knives before you cut" and "don't stick your fingers in the socket". Sadly, in the present context such advice still bears repeating.

[1] International Monetary Fund, Washington, D.C. 20431. The views expressed are those of the author and do not necessarily represent those of the Fund. This paper was written before the recently-foiled coup.

[2] "Stabilization, Liberalization, and Devolution", European Economy,

No. 45, December 1990.

[3] International Monetary Fund, The World Bank, Organization for Economic Cooperation and Development, European Bank for Reconstruction and Development, A Study of the Soviet Economy (3 Volumes), Paris: OECD, February 1991. The main findings are summarized in The Economy of the USSR: Summary and Recommendations, Washington, D.C.: The World Bank, December 1990.

[4] It has been argued that reform was always high on some leaders' agenda but had to be promoted slyly and in piecemeal fashion against conservative resistance. See, for example, Anders Aslund, Gorbachev's Struggle for Economic Reform, Ithaca, New York: Cornell University Press, 1989. The present analysis is less concerned with an individual leader's psychology than with the policy choices made, for whatever reasons, by the leadership as a whole.

[5] Soviet investment trends under *perestroika* are analyzed in Boris Rumer, "Investment Performance in the 12th Five-Year Plan", Soviet Studies, Vol. 43, No. 3, 1991, pp. 451-472.

[6] According to the government newspaper Izvestia of November 19, 1987, meat, on average, was almost 50 percent more expensive for relatively poor families (per capita earnings of less than 50 rubles per month) than relatively rich ones (per capita earnings of more than 150 rubles per month). When differences in amounts purchased were taken into account, relatively rich families received three times more meat subsidies than relatively poor ones.

[7] Hernando de Soto, The Other Path, New York: Harper & Row, 1989. The regulatory environment varies greatly by republic and sometimes even by region within republics. The Baltic republics are approaching the standards of, say, Poland or Hungary in the 1980s. The least restructuring has occurred in Central Asia, but there the "Second Economy" has long thrived with official complicity.

[8] Some would argue that enterprise property rights cannot be effectively unbundled short of a mass transfer to private ownership. Soviet experience as yet neither confirms nor refutes this. It does show--although less vividly than does, say, Polish experience--that debates about the proper forms and scope of privatization can be used to postpone needed layoffs and other aspects of unbundling.

[9] For example, it is fine to give workers shares in their enterprises, provided workers can dispose of the shares without regard to labor status.

[10] For a survey of ethnic and republican issues bearing on economic reform, see A Study of the Soviet Economy, Volume I, Appendix II-4, pp. 185-234.

[11] Presently the various fiscal authorities quarrel over not simply how the tax revenues will divided, but who will collect them, because the collectors of taxes cannot be trusted to hand them over.

[12] This aim is clearly spelled out in Abel Aganbegyan, The Economic Challenge of Perestroika, Bloomington, Indiana: Indiana University Press, 1988. Aganbegyan was Gorbachev's chief economic advisor in the early stages of *perestroika*.

[13] These issues are discussed in more depth in Dennis Mueller, "Choosing a Constitution in East Europe: Lessons from Public Choice", Journal of Comparative Economics, Vol. 15, 1991, pp. 325-348.

[14] Robert Shiller, Maxim Boycko, and Vladimir Korobov, "Popular Attitudes Toward Free Markets: The Soviet Union and the United States Compared",

American Economic Review, Vol. 81, No. 3, June 1991, pp. 385-400