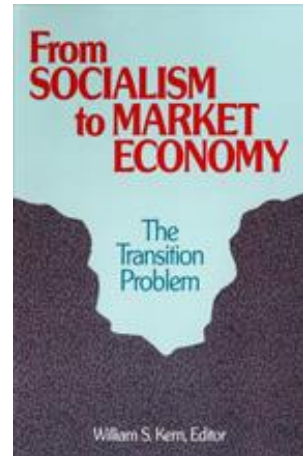




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Reconstructing the Soviet Planned Economy

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Six years ago the Soviet Politburo chose Mikhail Sergeyeovich Gorbachev to lead the Communist party and the country. He must have been regarded by his colleagues as a firm and decisive political leader committed to the system he was selected to lead. He must also have been congenial to the wing of the party leadership that felt a profound dissatisfaction with the performance of the economy and was open to new ideas, even radical ideas, for changes that might improve its performance. There is nothing in the record, however, to suggest that Gorbachev himself had any particular conception of what those changes ought to be.

The one idea he had been associated with for a long time was the so-called "brigade method" of production organization. The idea was to organize the workforce in each farm and factory in such a way that each group of workers, called a brigade, would be responsible for a clearly defined production task from beginning to end. For example, instead of paying some workers for plowing a field, others for planting it and others for harvesting it, one brigade would have the responsibility for all three tasks. The brigade would then be paid on the basis of the final quantity harvested. The workers would therefore have a material interest in seeing to it that the plowing and all the other operations were done well; this is in contrast to the traditional method in which tractor drivers were paid for plowing a piece of land and could not be held accountable if poor plowing were responsible for a poor harvest. Gorbachev was a great promoter of the brigade method, both as party

leader of his province of Stavropol, and later as a Politburo official in charge of agriculture.

The language of economic management at the time distinguished two methods of organizing economic activity. One was the “administrative method,” in which people were told what job to perform and how to perform it by a manager or planning official. The other was the “economic method,” which was designed to provide direct material incentives in a way that would motivate workers to do what the planners wanted them to do without having to be monitored at each stage. To be a radical in those days was to be a supporter of economic methods, stressing individual incentives over planning directives. The brigade method is an example of an economic method, and Gorbachev, as a promoter of economic methods, must have represented the enlightened radical wing of the party leadership.

This background is useful as a benchmark from which to judge the distance that the Soviet economic debate has progressed in those six years. Only in a few abstruse economic journals did the term “market” appear from time to time, and the term “privatization” was not to be found at all. Neither of those concepts could have been in the minds of the Politburo when the vote on the new General Secretary was taken. The man they elected must have distinguished himself not by a vision of a radically different Soviet economic system, but by his bold expression of dissatisfaction with the performance of the economy and by his advocacy of economic rather than administrative methods, which was the mark of a farseeing party leader of that time.

The reasons for the leadership’s dissatisfaction with the performance of the economy are well known and need little elaboration. The primary reason was the relative decline of the USSR in the economic-growth competition since the Second World War. In the late 1950s, the Soviet growth rate was more than twice that of the United States, and it exceeded all the Organization for Economic Cooperation and Development countries except West Germany and Japan. Those were the years in which the Soviet leadership confidently believed that it was only a matter of time before their country would surpass the United States and outdistance the entire capitalist world. In the subsequent decades, the

growth rate declined in many countries, but the decline was more rapid in the USSR. Consequently, by the end of the 1970s the Soviet growth rate was exceeded by the United States and by more than half of the OECD countries.¹ Moreover, the capitalist countries of the Pacific Rim were growing at such phenomenal rates that their *per capita* incomes were likely soon to overtake those of the USSR. The Soviet leadership no longer contemplated the gratifying prospect of surpassing the capitalist world, but instead now faced the dismal possibility of losing the economic capability of maintaining all the foreign and domestic commitments undertaken in support of their superpower status in the past.

The leadership also shared a certain view about why the growth performance of the economy had deteriorated so badly. Soviet economists had developed a mode of analysis of the sources of growth similar to the analysis of factor productivity that was developed in the West in the 1960s.² The Soviet analysis distinguished between “extensive” and “intensive” growth. The principal source of extensive growth is a growing stock of capital (as well as labor and land), while the principal source of intensive growth is the improved quality of the capital stock deriving from technological progress. The comparative analysis of economic growth in these terms showed that while the growth of the capitalist countries was primarily of the intensive kind, deriving from technological progress, Soviet growth was primarily of the extensive kind, deriving from heavy investment in increasing the capital stock. The meaning of this result was that the USSR had missed the boat of modern technological progress, and that was the major cause of declining growth performance relative to other countries. This line of analysis was eventually accepted by the top leadership of the country, and the acceleration of technological progress had become a major theme in high-level government reports.

These were the economic concerns of the Communist party leadership in 1985. They elected a General Secretary who looked as if he could shake the economy up in ways that would restore the high growth rates of the past and would accelerate technological progress to a rate appropriate for a great power.

Soviet Economic Performance

The poor performance of the Soviet economy has been widely reported and is well known in the West. This, however, is only one side of the story. If this side of the story says that things were pretty bad, there is another side of the story that says things weren't all that bad. This second side has not been widely reported in the press, perhaps for the same reason that lawful behavior is not widely reported but criminal behavior is. In both cases the preoccupation with pathology can give a distorted impression of the state of the society. In the Soviet case, the persistent reporting of the bad news, unrelieved by any good news, led to such hyperbolic expressions as "crisis" and "basket case." In the early 1980s, for example, there were reports that the new Reagan administration believed the Soviet economy to be so close to collapse that the need to respond to the Strategic Defense Initiative would be enough to push it over the edge.

That view lacked a sense of perspective. Things can be tough without being ready to fall apart. In fact the Soviet economy in 1985 was still reasonably productive and stable, despite its poor record relative to the leading economies of the world. One need only look at the USSR today to recall how stable and productive it was six years ago. Two pieces of evidence may be cited.

Professor Abram Bergson calculated Soviet labor productivity to be 58 percent of that of the United States in 1975. This compares with the United Kingdom at 75 percent, Spain at 68 percent, and Japan at 64 percent of the United States. Some portion of the Soviet lag is due to the fact that the capital per worker is smaller in the USSR than in the other countries. Drawing on the experience of a group of capitalist countries, Bergson estimated Soviet labor productivity at about 73 percent of that to be expected in a capitalist country that had the same capital per worker as the USSR.³ The finding is consistent with the common view that the Soviet economy's performance is significantly inferior to that of the capitalist economies, but on the other hand it does not depict an economy that is headed for disaster.⁴

With respect to technological attainment, the most authoritative study is that of a research group of engineers and economists at the University of Birmingham, in England. Their study covered a range of industrial products such as chemical engineering, steelmaking, and computers. They found that in most fields of technology the USSR lagged behind the West, with the largest lags in the most rapidly advancing technologies like microelectronics. However, there was no evidence that the gap widened during the period 1956-1976.⁵ During those years technology was advancing very rapidly in the West, and since the Soviets managed to keep the gap from widening, their rate of technological progress must have been substantial. That is not a satisfactory performance from the perspective of the Soviet leadership, for at those relative rates of technological advance the USSR would remain forever behind. There is also some evidence that the gap did widen somewhat after 1976, particularly in the crucial field of microelectronics. Yet the picture is one of a country with substantial technological capability, though not in the major league of world technological advance.

The significance of this second side of the story is that the Soviet leadership did not launch this massive economic transformation out of dire necessity. It was not an economy in shambles, and they were not under siege by hungry masses demanding change. It was not like China after Mao, where actual starvation occurred in parts of the country and the desperate peasants themselves dissolved the communes and divided the land into family farms. It was not like Poland in 1989 with inflation running at 1000 percent a year and the shops bare of many foodstuffs. Unlike those countries, the decision to undertake a radical change in the economic system was motivated by the conviction of the leadership that the continuation of business as usual would cause the USSR to fall continuously behind the rest of the world. By the end of the century, it was increasingly said, the Soviet Union would have become a Third World country.

Gorbachev's policy is therefore properly viewed as a "revolution from above," in the tradition of Peter the Great three hundred years

earlier. That perspective—that it is a revolution from above—explains a great deal about the way in which the transition has evolved.

First, it explains the extensive resistance, both active and passive, to the program of economic restructuring. The old system still delivered on some of its original promises, such as the elimination of capitalist-type unemployment. Virtually no factory had been closed down in the USSR since its inception, and no Soviet worker knew what it was like to “lose a job.” Earnings were low, but bread and meat prices and apartment rents were also extremely low, so that everybody could afford them. Quality and availability were poor, but no one starved or went homeless. It was not a hungry population clamoring for a new system that, for all its promises, would bring unemployment and an end to the low prices on bread and housing. Gorbachev did succeed in marshaling the support of like-minded political and military leaders, and he kindled the enthusiasm of liberal intellectuals; but there was no large constituency demanding change, and there were large social groups, such as workers and bureaucrats, who felt threatened by radical change.

Second, it explains why the new government, committed to radical economic change, had only the vaguest idea of what kinds of changes it wanted to bring about. Past governments had encouraged research on ways of improving the operation of the economic system, but never having doubted the fundamental soundness of that system, they had not authorized research on alternative systems. If there was a desert in the USSR, it was not in the economy or in the technology, but in the stock of economic ideas. The most radical ideas that had appeared in print were recommendations for making greater use of such economic methods as price and profit incentives, instead of administrative methods. No doubt many economists secretly harbored more radical ideas than that, but they were not part of the open economic discourse.

Third, and perhaps most important, it explains the other major component of the transformation—democratization; particularly it explains *glasnost*, or freedom of expression. Gorbachev has sometimes been criticized for having weakened central political controls before economic decentralization had been accomplished. The example of post-

Mao China, as well as South Korea and Taiwan, is thought to demonstrate that the combination of tight central political control with extensive individual economic freedom is the best formula for rapid economic transformation.

Gorbachev believed, however, that that formula would not work in the USSR. For generations the party had preached the superiority of the Soviet socialist planned economy, the wisdom of the party's leadership, the correctness and necessity of Stalin's heritage, and the freedom of Soviet citizens from the evils of unemployment and exploitation that plagued the capitalist world. With that history, it was impossible to announce one day that the system was now to be totally dismantled and replaced by one suspiciously similar to capitalism in many ways. The people had to be convinced that they had been lied to all these years—that Stalin had been a tyrant, that the system he introduced had destroyed rather than released the creative energies of the masses, that the Soviet people had fallen in lethargy and moral decay, and that the capitalists do a lot of things right and it was necessary to learn how to do them, even if the learning will be painful.

This is why *glasnost* was thought to be necessary. If Gorbachev had sought to undertake a radical change without loosening the political and ideological reins, he would have had to rely on the existing instruments of power, the party and the economic bureaucracy. These organizations had proven to be largely reform-resistant in the past, even to the modest within-system reforms introduced by past General Secretaries. In no way could they be counted on to execute the directives of a new General Secretary whose slogan was not simply the improvement of the traditional economic system, but the complete reconstruction—*perestroika*—of that system into a new system that would have little use for planners and ministries.

I think Gorbachev was right. In the USSR at least, there could be no economic transformation without weakening the power of the party and the ministerial bureaucracy, without liberalization of personal expression, and without coming to terms with the past.

Glasnost has been politically costly. It has released powerful forces of nationalism, separatism, xenophobia, and reaction. Nevertheless,

without that political liberalization it would not have been possible to have gotten to the point today where a popularly elected Soviet Parliament is debating not *whether* to introduce private property and markets, but the *speed and extent* of privatization and marketization.

The proposals now before Parliament are so radical that the restructuring efforts of the past six years look like ancient history. They were of crucial importance, however, in bringing the economy, and the debate about the economy, to the point it has reached today. I would like to discuss two developments that are fundamental in the restructuring of the economy: first, changes in the rules of property ownership; and second, changes in what the Soviets call "the economic mechanism" referring to planning or markets. I will then conclude with a brief discussion of two other developments that have greatly complicated the transition to a restructured economy and may possibly bring the process to a halt. They are the onset of inflation, and the political conflict between the national and the republic governments.

Legalization of Private Property

The first significant break with the past under Gorbachev was the legalization of certain limited forms of private ownership of productive property. The most widespread form is the cooperative, in which two or more persons form an enterprise that operates much like our partnership. Individual persons and their families are also permitted to engage in economic activity, but the cooperative has become the dominant form of the new private enterprise.⁶

Cooperatives are permitted to buy and own productive equipment, to hire wage labor, to produce and sell goods and services, and to determine their own prices rather than sell at the low state-controlled prices. The cooperators may retain the profit as their private income after paying taxes. They are typically engaged in such activities as the production of clothing, restaurant services, small-scale construction, taxis, and repair services for automobiles, plumbing, consumer durables, and so forth.

Cooperatives have encountered intense hostility from many sections of the public. Part of the reason is a general antipathy toward the economic activities conducted by persons who are thought of as middlemen, speculators, merchants, exploiters, and capitalists—sentiments long cultivated by Soviet propaganda but having deeper roots in traditional Russian culture. But there are more specific reasons.

The prices charged to the public are substantially higher in the cooperatives than in state stores. One reason is that their costs are higher. Cooperatives have to pay higher prices for their own supplies because they provide higher-quality goods and services. They also pay higher prices for many of the supplies they need than state enterprises have to pay.

In addition to higher costs, cooperative prices are higher because they often sell in markets where state-supplied products are sold at controlled prices far below market-clearing price levels. Cooperative prices, which have to cover costs, must therefore be sold at prices that are well above those in state stores. To the Soviet public, however, the cooperators are simply price gougers, and the growing shortages of goods in the state shops are thought to be due to the cooperatives that buy the goods cheap and sell them dear in their own shops. The income of cooperators are also much higher than the average, and they are not shy about flaunting their new wealth in conspicuously high living.

In addition to a hostile public, the cooperatives also face hostile local government officials who see in them a threat to what was formerly their monopoly of power. These officials have waged an effective rear-guard battle against the cooperatives, by denying them licenses, raising their tax rates, and impeding their access to supplies and to building space in which to conduct their business. Inevitably, relationships of this sort spawn corruption, including payoffs to political and police officials and protection money to ordinary hoodlums, all of which further increases the cost of doing business and therefore the prices that cooperatives charge.

After this litany of obstacles, one might guess that very few cooperatives have succeeded. On the contrary, despite these handicaps, the cooperative movement has grown dramatically. The number of people

employed in cooperatives grew from a few thousand initially to about 4.5 million people last April. They are now reported to be producing almost 5 percent of the gross domestic product. There is no doubt that the consumption levels of many Soviet citizens is significantly higher because of the co-ops, although higher-income citizens have benefited more than the less well-off. The movement also gives reason to believe that there are substantial untapped entrepreneurial talents in the Soviet population, contrary to the opinion of some Soviet observers that 70 years of socialism has destroyed that talent.

More significant than the growth in the number of cooperatives is the accumulation of experience. Millions of Soviet citizens have learned how to figure out what other people want to buy, how to acquire materials, equipment and labor, and how to figure costs. They have learned how to borrow from the State Bank, and some cooperatives have banded together to form their own cooperative banks. Some have learned how to attract and work with foreigners in joint ventures; it was a cooperative that almost pulled off the notorious export of military tanks that created something of a sensation last year.⁷ The quiet and steady accumulation of business experience by the cooperatives may in the long run prove to be the major development during these six years in preparing the country for the move to a market economy.

Until last year, the legalization of cooperative and individual enterprise was the major change in the property ownership rules of the economy. There was little echo in the USSR of the tempestuous movement in Eastern Europe to proceed with the privatization of the huge sector of state-owned enterprises. That has now changed. The so-called "500-day plan" proposed to change the ownership forms of almost all of the state-owned enterprises. Smaller workshops and retail stores were to be auctioned off, to be run as private enterprises. Larger state enterprises were to be converted to joint stock companies, the shares to be transferred eventually to citizens. State ownership would continue only in defense industry and in natural monopolies such as railways and electric grids.⁸

The 500-day plan was adopted by the Russian republic, but only a considerably watered-down form of it was adopted by the USSR

Supreme Soviet. Privatization is becoming a major issue dividing the liberals from the conservatives. In light of the conservative swing in Soviet politics at present, clearly supported by Gorbachev, privatization does not have a bright future at this time. Barring a radical shift in political power, the legalization of private enterprise rather than privatization of state enterprise is likely to be the extent of the restructuring of ownership rules in the Soviet economy for some time to come.

The 1987 State Enterprise Law

The second fundamental feature of an economic system is the mechanism employed for coordinating the transactions of the millions of enterprises and economic agents. Modern history knows only two mechanisms of this kind—markets and planning. Before the Russian Revolution, markets were the predominant mechanism in modern economies. Economic planning was the great Soviet contribution to the repertory of economic institutions.

For 70 years, Soviet ideology had preached the evils of capitalist markets and the superiority of socialist planning. Again, it took the policy of *glasnost* to launch the debate in which many people learned for the first time how badly the planning mechanism had in fact operated, and how and why markets do many things better than planning. The growing pressure for marketization finally bore some fruit in the crucial State Enterprise Law of 1987.

The law declared that state-owned enterprises should thereafter decide for themselves what to produce, rather than be directed by the planners on what to produce. They should also negotiate with other enterprises for their supplies, rather than have their supplies allocated to them by the planners. They should compete with each other for sales, and in making their production and supply decisions they should seek to maximize their profit. If fully implemented, those provisions of the law would have the effect of substantially replacing the central planning mechanism by a market mechanism.

That was July 1987. Marketization has proceeded to some degree, but Soviet economists are uniformly agreed that it has not proceeded very far. The reasons may be seen in two of the many problems encountered in the implementation of the law.

First, to protect the economy against the possibility that the new and untried market system might fail—not an unreasonable precaution—the planners were given the right to issue to enterprises plan directives of the old kind—now called “state orders”—if in their judgment the new and untried system might not produce the required quantities of all commodities.

In fact, many enterprises felt unready to take the plunge. On the production side, they were used to producing what they were told by a ministry to produce, with the ministry then arranging for the sale of their products. Now they were told to figure out for themselves what and how much to produce. What if they produced too much and could not sell it? They were used to the ministry informing them how much fuel, iron and other supplies they were to receive, and who their suppliers would be. Now they were told that they must find their own suppliers, in an economy where everything was in short supply. What if they could not find suppliers willing and able to sell them as much as they needed?

To protect themselves from such pitfalls, many enterprises pleaded with their ministries to issue them state orders for as much of their production as possible. Producing in response to a state order guaranteed that the ministry would accept responsibility for the sale of the product and also arrange for the required supplies to be made available. The ministries, in turn, were happy to issue state orders liberally because the new law placed them in an administratively impossible situation: they continued to be responsible for the performance of their enterprises, but they were deprived of the power to tell their enterprises what to do.

The result was that in the first year in which the new law was in operation, state orders—which are equivalent to the old central planning—accounted for a huge proportion of industrial output, ranging from 90 percent to 100 percent in some industries.⁹ Despite the criti-

cism of reformers, most output continues to be produced under central planning rather than market conditions. Former Prime Minister Ryzhkov expressed the hope that production under state orders could be reduced to 40 percent by 1991,¹⁰ but there seems little likelihood that so sharp a decline in central control will be brought about so rapidly.

The story reflects the anxieties and the conflicting forces associated with the transition from planning to markets. But such anxiety ought to be expected in the circumstances. It is indeed something of an achievement that many enterprises are now operating without state orders for some or all of their output and are evidently learning how to market their products and how to contract for the delivery of their material supplies. Auctions, bazaars, fairs and barter trade are some of the spontaneous developments of new institutions that may prove to be the forerunners of genuine markets.¹¹ This part of the story of the 1987 law is one of an initial setback, but also of the beginnings of a gradual accommodation to the needs of a market system.

The second problem of the 1987 law derives from the fact that during the transition the economy is neither fully marketized nor fully planned, but is some combination of the two. Under such circumstances, some highly undesirable phenomena can occur.

For example, in response to the law's instruction to enterprises to maximize profit, managers set about seeking the most profitable items to produce, and dropping the production of items that yielded losses or very little profit. As a result, some products began to disappear from the shops, with unfortunate consequences. The saddest case occurred when hospitals suddenly discovered that they were unable to obtain disposable hypodermic needles. It turned out that the director of the only enterprise producing syringes, wishing to be a good citizen under *perestroika*, found that they were not profitable and switched to the production of more profitable items. Similar sudden shortages occurred in the case of soap, matches, aspirin, cigarettes and other items.

The reason for these episodes is that the state still controls most prices, of which there are many millions. It is impossible for the state price controllers to set all prices at the levels that will induce profit-maximizing managers to produce just those things that consumers

most desire. Under central planning, the inability of the price controllers to set such prices was of little importance, because the ministry would simply order its enterprises to produce soap and syringes, regardless of their profitability. But when the ministry no longer has that right, production can go badly awry if prices do not respond quickly to shortages.

The lesson of the State Enterprise Law is that before markets can be expected to work well, a great many different institutional arrangements must be in place: legal institutions for enforcing contracts, banking and credit institutions, accounting and auditing institutions, price determining arrangements, and so forth. If some of them are not yet functioning, the market system can perform very badly; indeed an incomplete market system might perform worse than a coherent central planning system.

Some disruptions of these kinds are an unavoidable cost of transition. It is for this reason that some people advocate a very rapid transition from planning to markets—the faster the better—to minimize these costs. Too rapid a transition has its own costs, however, for it leaves too little time to prepare the ground for markets to work properly. Unfortunately, there is very little experience in this type of transition from which informed judgments may be made. In 1917, Russia was the guinea pig for testing the world's first transition—from markets to planning. Today, the USSR is again a guinea pig, this time for testing the world's first reverse transition—from planning to markets.

Inflation

Under the best of circumstances, the story of the progress of *perestroika* should end here, with an account of changes in the two fundamental features of an economy—ownership rules and the economic mechanism. Unfortunately, other changes have occurred in the country that have greatly complicated the transition. The two that are of greatest significance are the onset of inflation and the conflict between the union and the republics.

Before 1985, Soviet fiscal and monetary policy had been extremely conservative. The government budget was roughly in balance from year to year, and wage payments were under tight control.

Around 1987, things began to come apart. Government expenditures continued to rise while revenues began to decline. Some of the causes were beyond the government's control, such as the Chernobyl nuclear plant accident and the Armenian earthquake. Others were the consequence of ill-advised government policies, such as the fervent anti-alcoholism campaign that sharply reduced government revenues from the alcohol tax. The State Enterprise Law, which permitted enterprises to retain a larger share of their profits, resulted in a further reduction in government revenues.

The consequence was a rapidly increasing government budget deficit, which amounted to about 10 percent of the gross national product in 1989.¹² Unable to finance the deficit by domestic or foreign borrowing, the government did what beleaguered governments often do in such straits—it printed new money.

As a result the money incomes of the population increased more rapidly than the production of the consumer goods and services. In a market economy, that would have led to price increases—open inflation. Marketization of the Soviet economy, however, has not yet extended to the determination of retail prices by market forces. Prices are still set by the government and remain fixed for long periods of time. The rising money incomes of the population are then expressed in the form of repressed inflation. The weekly delivery of meat to the state store, which formerly may have lasted for six days, is now all sold out after five days, then after four days. The population soon learns to shop early in the week, the queues grow longer, and eventually the week's delivery is sold out the day it arrives. That is the dynamic that has led to the grim phenomenon of empty shelves in the state stores while the unspent cash balances in the hands of the population continue to rise.

These effects of repressed inflation have been disastrous for the progress of *perestroika*. It has led to a declining sense of consumer welfare, which many people blame on the abandonment of tight central

planning in favor of markets and cooperatives.¹³ It has reduced consumer resistance to the evasion of price controls by profit-seeking state enterprises. It has fostered the expansion of the black market. The declining value of a ruble of wages had eroded labor discipline and work incentives. It has aggravated the hostility to the cooperatives whose market-based prices diverge more and more from the fixed subsidized state-store prices.

The opinion is universal that the restoration of macroeconomic equilibrium is an absolute precondition to any further progress in *perestroika*. The government has, in fact, set forth a program for reducing the deficit, consisting primarily of a reduction in expenditures, but with some increases in revenues. Despite this broad agreement, it is difficult to be sanguine about the prospect for arresting the inflationary pressures for two reasons, both political.

First, no government finds it easy to eliminate a budget deficit, especially when it involves political commitments to expenditures that entail a deficit as high as 10 percent of GNP. Even strong governments find that difficult, and the Soviet Union's government is particularly weak at this time.

Second, all the plans for *perestroika*, even the radical 500-day plan, exclude so-called "essential consumer goods" from the list of commodities whose prices are to be set free to reach market levels. The government is to continue to fix the prices of foodstuffs and housing, presumably at the same low levels that prevailed in the past. Those low prices, which the population has long grown to regard as one of the few benefits of socialism, are maintained by government subsidies. The subsidies on agricultural products alone are now roughly equal to the entire budget deficit.¹⁴ Neither the government nor its principal critics are prepared to bit the bullet of food price increases. Gorbachev himself remarked that such price increases "would make the whole people take to the streets and topple any government."¹⁵ Indeed, the loudest protest against one timid attempt to raise food prices came from Boris Yeltsin, who represents himself as being impatient with the slow pace of *perestroika*.

One can only conclude that the political leadership across the entire spectrum is scared to death of the popular reaction to an increase in basic consumer prices. They do not have the confidence of the Solidarity-based government in Poland that they could persuade the people of the necessity of bearing the hardships that would be involved in such measures as the introduction of a market-pricing system for all commodities and the restoration of a balanced budget. As long as these conditions prevail, the prospect of any significant expansion of market relationships seems quite remote. It is ironic that this monetary problem, which has nothing to do with *perestroika* itself, has mushroomed into a major obstacle to its further progress.

Political Legitimacy

One of the fruits of political liberalization is the intense conflict between the national government and the member republics. The conflict is a compound of a number of elements, including ethnic violence in places like Armenia and Azerbaijan, separatist forces in places like the Baltic republics, and demands for sovereignty in such republics as Russia and the Ukraine.

There can be no more fundamental requirement for a stable society than general agreement on who has the legitimate right to govern. In the absence of such agreement the society is prey to chaos or civil war as contending groups struggle for power, each in the conviction of the rightness of its cause. As the political conflict ripens, it takes its toll on economic activity. An order from the national government that prices on luxuries be raised was not enforced in the Russian republic by order of its government. An increase in the price of meat in Russia caused a flurry of shipments of meat from the Ukraine to Russia. The Ukrainian government responded by forbidding the export of meat to Russia. Ukrainian officials claim that Russia then retaliated by cutting off shipments of oil supplies to the Ukraine.¹⁶ Similar protectionist skirmishes have been breaking out all over the union. Foreign investors have already acknowledged increased uncertainty in business dealings

because one cannot be sure that the Soviet signatory of a delivery contract will be sustained as having had the lawful right to sign it.¹⁷

Neither Soviet history nor world history offers much hope that the deep problem of political legitimacy will be easily solved. One must expect very turbulent times ahead, perhaps for many years. Until that issue is somehow resolved—if only provisionally—the prospect is for little further progress in economic transformation and further deterioration in economic performance.

Conclusion

After six years in office, the Gorbachev government has made a modest start in the transition from the central planning to the new economy of the future. Instead of universal state ownership of enterprise, a lawful place has been made for private enterprise. Instead of total central control over the output of state enterprises, some portion of that output is now produced by the decisions of the enterprises themselves, not bound by “state orders.”

To those Soviet citizens who saw the election of the new General Secretary as the beginning of a truly radical transformation of the economic system, the results thus far are disappointing. Moreover, the economy today is in a much poorer condition than before 1985. Total output and consumption *per capita* are in fact higher than in 1985,¹⁸ but because of the disorder in consumer goods markets, there is a general feeling of being worse off than before.

If one is of an optimistic disposition, there are some signs of things happening that may help the transition move forward. Several million people in the new private sector are learning the managerial and financial skills of business enterprise. Thousands of others have engaged in joint ventures with foreign capitalist firms and are absorbing the techniques of international management and finance. Profits are being earned and private money capital is accumulating that may one day serve to purchase the assets of some privatized state enterprises. Managers of some state enterprises are learning how to do business with

each other, instead of taking orders from their ministries, and the rudiments of market relationships are spreading. Some republican governments are seeking to curb protectionist impulses, and tentative accommodations are sometimes arrived at even between such contenders as the national government under Gorbachev and the Russian republican government under Boris Yeltsin.¹⁹ Historians may some day conclude that while the country was absorbed in the dramatic turmoil of high politics, these grassroots developments were quietly forming the foundation for a subsequent major transformation of the economy.

While the optimist can find some encouragement in this perspective, there is little prospect for a sharp resumption of the transition process in the next year or two. Among the principal reasons are the difficulty of dealing with the inflation and with the union-republic political conflict. The latter problem in particular has caused the sharp reversal in the process of political liberalization that Gorbachev has been leading in the last few months. This conservative reaction may well lead to a complete halt or even a reversal in the economic process of *perestroika*, although that is by no means foreordained. Should such a reversal occur, the old central planning system, perhaps somewhat modified, may gain a new lease on life. While it may endure for a period of time, however, there is no reason to expect that the restored planned economy would perform significantly better than it did in the past. A reaction of that sort would therefore only postpone the date on which some future General Secretary will be called on to lead a new effort at economic *perestroika*.

NOTES

1. U.S. Congress, Joint Economic Committee. *USSR: Measures of Economic Growth and Development, 1950-1980* (Washington: Government Printing Office, December 8, 1982), p. 20.

2. Among the pioneering works on the theory and measurement of factor productivity were Robert Solow, "Technical Change and the Aggregate Production Function," *Review of Economics and Statistics*, vol. 39, August 1957, pp. 312-320; and John Kendrick, *Productivity Trends in the United States* (Princeton: Princeton University Press, 1961). Among the first applications of factor productivity analysis to the Soviet economy were Joseph S. Berliner, "Static Efficiency of the Soviet Economy," *American Economic Review*, vol. 54, no. 3, May 1964, pp. 480-489; and Bela Balassa, "Dynamic Efficiency of the Soviet Economy," *ibid.* Sometime afterward, Soviet

economists began to apply the method to Soviet data. At the time it was politically awkward for Soviet economists to employ the methods of "bourgeois economics," so they invented the new terms "intensive" and "extensive" growth.

3. Abram Bergson. *Planning and Performance in Socialist Economies* (Boston: Unwin Hyman, 1989), pp. 13, 20. The coefficient of -.320 for the USSR is equivalent to output per worker 73 percent below that of the capitalist countries. The calculations are all made in U.S. prices. Because of the index number effect, if the calculations were made in the prices of the other country, Soviet output per worker would be somewhat lower.

Between 1975 and 1985, the rate of productivity growth declined in the major capitalist countries as well as in the USSR. The relative position of the USSR on the eve of Gorbachev's election may therefore have worsened somewhat but probably not significantly.

4. Because of the high rate of investment and of defense expenditures, the Soviet lag in relative *per capita* consumption was larger than the lag in labor productivity. Soviet *per capita* consumption was calculated to have been 42.5 percent that of the United States in 1976 when measured in U.S. prices, and 27.6 percent when measured in Soviet prices. Gertrude E. Schroeder, "Consumption," in Abram Bergson and Herbert S. Levine (eds.), *The Soviet Economy: Toward the Year 2000* (London: Allen and Unwin, 1983), p. 318.

5. Ronald Amman, Julian Cooper and R.W. Davies (eds.). *The Technological Level of Soviet Industry* (New Haven: Yale University Press, 1977), p. 66.

6. The following discussion is based on Anthony Jones and William Moskoff, *Ko-ops: The Rebirth of Entrepreneurship in the Soviet Union* (Bloomington: Indiana University Press, 1991).

7. James H. Noren. "The Soviet Economic Crisis: Another Perspective," *Soviet Economy*, vol. 6, January-March 1990, p. 27.

8. Philip Hanson. "Property Rights in the New Phase of Reforms," *Soviet Economy*, vol. 6, April-June 1990, pp. 111-118.

9. Marshall I. Goldman. "Gorbachev the Economist," *Foreign Affairs*, vol. 69, no. 2 (Spring) 1990, p. 39.

10. Foreign Broadcasting Information Service, SOV-90-102, 25 May 1990, p. 52.

11. Y. Chernisheva and M. Rozhkov, "The Beginnings of Producer Goods Auctions in the USSR," Berkeley-Duke Occasional Papers on the Second Economy in the USSR, Paper No. 22, September 1990.

12. Noren. "The Soviet Economic Crisis," p. 14.

13. In fact the production of consumer goods and services has not declined appreciably, nor has actual *per capita* consumption. The disorder in consumer goods markets caused by repressed inflation, however, has reduced the level of satisfaction derived from the given volume of real consumption. See Gertrude E. Schroeder, "'Crisis' in the Consumer Sector: A Comment," *Soviet Economy*, vol. 6, January-March 1990, pp. 62-63. Real consumption has also been redistributed from the poorer to the wealthier population who are able to pay the higher prices prevailing in the "second economy" and in other nonstate distribution channels.

14. Prime Minister Ryzhkov reported that food subsidies amounted to about 100 billion rubles in 1990. Foreign Broadcasting Information Service, *ibid.*, p. 45.

15. *Pravda*, November 6, 1989, p. 11.

16. *The New York Times*, October 22, 1990, p. A6.

17. Dresser Industries of Dallas has been negotiating for four years on a proposal to build two oil equipment factories in the USSR. The negotiations have bogged down in a "tense tug-of-war

between Moscow and the republics" over who has the right to sign the contract. *The New York Times*, February 4, 1991, p. A1.

18. GNP has increased every year between 1985 and 1989. Preliminary results for 1990, however, suggest that production may have fallen last year. Noren, "The Soviet Economic Crisis," pp. 9, 40.

19. After a tense conflict over the size of the Russian republic contribution to the Union budget in 1991, an agreement was finally worked out. *The New York Times*, January 10, 1991.