

4 Economic growth in the 1980s

Grigorii Khanin

Soviet economic growth in the 1980s was the result of both long-run and short-run factors. In my opinion, long-run factors played the main role. Short-run changes in economic and general policies only modified the long-run trends, strengthening them in some periods and weakening them in others.

The roots of the sharp deterioration of the Soviet economy in the 1980s, and also those of the political crisis, are located in an earlier period. It is not just a matter of the fundamental inefficiency of the command economy. The 1950s saw acceptable economic growth and an improvement of the consumer situation, in terms of both quality and choice, even if these were much less than in most market economies. The inherent inefficiency of a command economy has been aggravated by a number of other, non-economic factors, and by certain features of the economic policies of the government.

The most important long-term factor has been the radical deterioration of the moral (broadly understood), professional, and physical characteristics of the labour force. At the outset of perestroika, this was reflected in calls for giving a larger role to the 'human factor'. The idea that the population has been degraded by repression and totalitarian rule is currently popular in the Soviet media and scientific literature. This idea arose, however, in scholarly publications long before perestroika. This also shows the deep roots of the phenomenon.

It is not a new idea to search for the underlying cause of the decline of civilizations and states in the degradation of the people in one way or another. This approach has been used to explain the decline of the Roman empire, and of England and France. In the last two cases this has been ascribed to heavy population losses, particularly from their educated stratum, in the First World War. The problem is to support this argument with statistical data, which may be unavailable either because of intentional concealment, or because no research has been done on this topic. The difficulty is especially great with respect to the USSR, where both these obstacles are more applicable than in democratic countries. However, there is now enough data to comprehend the direction of the process, if not its precise dimensions.

Pitirim Sorokin was the first to discuss the long-term negative impact of

the First World War and the 1918–20 civil war on the development of Soviet society, in an article published in 1922 in the journal *Economist*. (This journal was closed down soon after that, for, among other things, publishing Sorokin's piece.) The prominent Soviet geneticist N.K. Kol'tsov actively advanced the same argument in the 1920s and 1930s. Criticism of this aspect of his work was among the main accusations against him in the 1930s and was also the main reason both for his failure to get elected to the Academy of Sciences in 1939, and for his death soon afterwards. It is clear that this issue was taboo in Soviet scholarly publications for a long time. It re-emerged only during perestroika, mostly in the mass media. A team of scholars headed by B.I. Iskakov at the G.V. Plekhanov Institute of the National Economy is currently conducting research on this topic. The results of their work are used here.

From the First World War onwards, the Soviet population has suffered from tremendous and almost continuous losses. Direct losses alone are estimated at 60–70 million people, or over 40 per cent of the population of pre-revolutionary Russia. Yet it was not only the magnitude of these losses, on a scale almost unprecedented in world history, that had an impact on the economy. The losses were borne disproportionately by the most creative, active strata of the population. Already, in the course of the First World War, a large part of the professional officer corps was obliterated. During the civil war, Russia was deprived of a significant part of its intelligentsia, skilled workers, well-to-do peasants, landed gentry, and entrepreneurs as a result of combat, repression, epidemics, and emigration. Losses from the Russian intelligentsia (since it was small compared to the intelligentsia in other countries) were particularly painful. To illustrate the scale of losses among the top ranks of the intelligentsia, suffice it to say that out of forty members of the Russian Academy of Sciences, ten died of starvation and disease, and several more emigrated.

In the 1930s, heavy blows fell on the most skilled and productive segment of the peasantry, the wealthiest of whom were almost completely destroyed. The intelligentsia, especially its most highly qualified members, again became the target for severe persecution. For example, no less than 80 per cent of the best economists were murdered at this time. Even the repression of 1937, directed at the imaginary opposition within the party, hit the professional and artistic strata the hardest.

Huge losses were caused by the Second World War, a second wave of emigration, and post-war repression. The heaviest losses were sustained by men of working age, living in areas with literacy above the national level, and the intelligentsia. Significant losses were caused by the third and fourth waves of emigration in the 1970s and 1980s, and by the persecutions of the 1960s–1980s, when many talented individuals were imprisoned, confined to psychiatric asylums, or barred from working in their fields.

The practice of negative selection predominated in the society. For a long time, individuals with non-proletarian origins, with relatives abroad, and with

other characteristics of which the authorities disapproved, faced restrictions in college admission and in their further careers. The reign of mediocrity in leading positions in society and in science was especially detrimental to the education of the younger generation. Without adequate teachers, little in the way of professional knowledge and moral values was imparted to the young. For instance, the effect of the degradation of education on Soviet science can be seen from the following example. Only two of the nine Soviet Nobel prize winners (Basov and Prokhorov) received their education in the 1930s and 1940s. (All the others were educated before the mid-1920s.) No Nobel prize was won by a Soviet scientist for work done in the 1960s and after. The final deterioration of Soviet science began in the mid-1960s, when the older generation of scientists began to retire. The atmosphere of fear and lies in the society had a corrosive influence on the morals of the Soviet people. People learned to lie, to hide their thoughts, and to dissimulate. The atmosphere encouraged the success of the worst elements of society.

The loss of social ideals and the impossibility of self-realization in the 1960s–1970s caused an increase in alcoholism, making the USSR the world leader in this respect. Alcoholism, environmental pollution, poor diet, and poor health care resulted in a sharp deterioration of the health of the population, including its moral, intellectual, and psychological, as well as its physiological components. According to B.I. Iskakov (who used data from the Ministries of Health and Education), more than half of the population comprises people who are weak and predisposed to illnesses.¹ Various estimates hold this figure to be between 53 per cent and 60 per cent. This is evidence of genetic deterioration. The share of those who are weak and predisposed to illness among children and young adults is between 53 per cent and 70 per cent, indicating continued genetic deterioration. Among children born in Moscow in the early 1970s, 55 per cent were weak, while in the early 1980s this share was 70–90 per cent (of those born in the early 1980s 20–25 per cent were mentally retarded).

Economic growth under the command economy has been extensive in nature. My estimates of the rate of growth in the USSR in 1928–85 and its sources, based on alternative methods, show that for the whole period, with the exception of the 1950s, economic growth was propelled predominantly by increasing the volume of resources. Moreover, the growth of the volume of natural resources and fixed capital stock was significantly faster than that of the national income. An increase in the number of persons employed played a much greater role in economic growth than the growth of labour productivity. Therefore, within the old economic and political model, it was possible to have significant economic growth only by increasing the volume of resources used. Yet this has become progressively more difficult since the mid-1950s. The rate of growth of employment was falling, for well-known reasons. After the release of the bulk of political prisoners and the reduction of prison terms for criminals, the number of labour camp inmates declined sharply.² Military construction units could only partially substitute for forced

labour in projects in remote areas and with tight deadlines. The share of the southern regions, whose educational and skill levels are below the national average and which have low labour mobility, in the growth of the labour force was increasing. By the end of the 1970s, the decline in available labour began to create serious problems for agriculture in some rural areas of the Russian republic. The slower growth of labour influenced the growth of fixed capital in two ways. Growth of employment in production of investment goods and services slowed down. Demand for new investment also grew more slowly, because of the increasing excess of the number of workplaces over the number of workers. The growth of the investment sector was also retarded by a shortage of materials (especially new ones, such as plastics) and low efficiency of resource use in the sector. In the 1960s and 1970s, the efficiency of resource use in the investment sector fell. This was especially true for construction, where in some periods labour productivity declined, and material intensity increased sharply. The growth of the investment sector was also retarded by competition from the defence industry. This industry grew especially fast in the 1960s and 1970s. It pre-empted the best equipment and materials, and the most skilled workers.

The slowing growth of the investment sector and the misallocation of its output (predominantly for new construction) influenced the growth and renewal of fixed capital. Fixed capital, especially equipment, was ageing. In some sectors, structures and equipment were kept beyond their normal useful life, because by the end of the 1970s, the volume of newly commissioned fixed assets at best barely equalled the volume of assets scheduled for retirement. This was true for power generation, ferrous metallurgy, railroads, the fuels industry, some sectors of non-ferrous metallurgy, construction materials, light industry, and the food-processing industry. The ageing of fixed capital resulted in a lower quality of output, an increase in industrial accidents, and the mushrooming of repair services. The slow-down in the growth of fixed capital retarded the growth not only of traditional sectors, but of new ones as well. This in turn slowed down technological progress and structural change in the economy. The slow-down in the growth of capital retarded economic growth mostly in conjunction with the extreme inefficiency of the economy. Even partial improvement in the efficiency with which land, labour and capital were being used would have allowed for steady growth even with less capital. But the economy increasingly fed on itself in the 1960s and 1970s, and the demand for more new capital increased accordingly.

The wasteful use of materials caused difficulties in providing enough of them to meet the needs of the economy. These difficulties were worsened by the fact that raw materials were also the country's chief export—manufactured goods and services being unable to withstand international competition. The depletion of the richer deposits was uneven. It first constrained the raw-materials supply of such sectors as steel, chemicals, and paper and pulp. As late as the 1970s, the oil and gas industry was booming with extremely rich fields in West Siberia coming on stream. However, rapacious use of these

fields made it difficult to increase the production of oil in the early 1980s, and had a similar effect somewhat later on natural gas. In agriculture, expansion of sown areas stopped, and some land had to be abandoned because of the high cost of farming it. Poor use of land resulted in the decline of fertility, loss of humus, increasing saltness of soil, etc.

The stress on heavy industry and lack of attention to environmental problems resulted in increasing pollution in the 1960s and 1970s. Ecological ignorance and a lack of economic responsibility provided breeding grounds for environmentally damaging projects—such as the canal from Siberia to Central Asia and the water projects in the Central Asia and Volga regions. Poorly designed nuclear and chemical plants, with faulty equipment and poorly trained personnel, presented increasing threats to the population.

After the removal from office of N.S. Khrushchev, the quality of management declined and discipline grew lax. An administrative structure characterized by a relatively high level of responsibility of managers and officials to their superiors, and of production discipline, which had been shaped during Stalin's time, grew ever shakier. Corrupt individuals with low professional skills were promoted. Discipline among workers and white-collar employees was also declining, while absenteeism and drunkenness at work were on the rise. The falsification of reporting and hidden inflation of wholesale prices were increasingly used to paper over the deteriorating performance of the economic units.

A certain stability of the economy in the 1970s was maintained mainly thanks to the rapid increase of production of hydrocarbons in West Siberia's rich oil and gas fields, and skyrocketing prices of these commodities on the world market. A significant increase in hard-currency export earnings made it possible to increase the import of consumer goods and modern equipment, so that living standards improved somewhat and some sectors of the economy were modernized. Sooner rather than later, the exhaustion of these sources of growth was bound to put the economy on the verge of collapse.

In 1980, the present author forecast a 20 per cent decline in national income and a 30 per cent decline in the standard of living over the 1980s, based on the analysis of long-run economic and social trends and certain complicating circumstances bound to arise in the 1980s (such as the changes in world market prices for raw materials and the levelling off of petroleum production). That is to say, Soviet economists were aware of looming danger. The country's leadership, however, with its low intellectual level and irresponsibility, did not make any serious efforts to improve the economic situation (even though the gravity of the situation was dawdling on some party and state officials). No significant changes could take place before Brezhnev's death.

The growth rates of the main economic indicators of the Soviet economy in 1981–90, calculated by the author using alternative methods, are presented in Table 4.1. It will be seen that Table 4.1 also divides the decade into several sub-periods, with different characteristics of development. At the time of writing, complete data for 1989 has not yet been published, and

even sparser data are available for the first 7 months of 1990. Therefore, the numbers for 1989-90 are preliminary. Estimates of the growth of fixed capital have been revised, compared to those published earlier.

Table 4.1 Indices of the main economic indicators of the Soviet economy, 1981-90^a

	1981-2	1983-8	1989-90	1981-90
1. National income (net material product)	0.96	1.11	0.91	0.97
2. Stock of fixed capital (residual value)	1.03	1.12	0.99	1.14
3. Average capital productivity (1 : 2)	0.93	0.99	0.92	0.85
4. Employment in material production	1.01	1.03	0.99	1.03
5. Average labour productivity (1 : 4)	0.95	1.09	0.92	0.95
6. Material intensity	1.05	1.04	1.07	1.17
7. Commissioning of fixed productive capital	0.96	1.01	0.79	0.77

Note: ^aThe figures in this table are indices, with the previous year taken as 1.00 in each case. For example, the figure of 1.07 for material intensity in 1989-90, means that in 1990 material intensity was 7 per cent higher than in 1988. Similarly, the figure of 0.97 for national income in 1981-90 means that national income in 1990 was 3 per cent less than in 1980.

It should be noted that my estimates pertain to national income in the sectors of 'material production' (i.e. net material product) and not to GNP, which also includes service sectors. Also, for lack of reliable data, no account was taken of the growth of the 'shadow economy'. It is likely that in the period in question, both the service sectors and the shadow economy were growing somewhat faster (or declining somewhat more slowly) than material production. This means that my numbers underestimate the growth of GNP somewhat. On the other hand, there are grounds to believe that in the 1980s there were especially large distortions in the reporting of economic data, including data in physical units. This was due to the worsening economic performance in the early and late 1980s, and to the struggle for 'acceleration' of economic development, which caused many managers to increase report falsification. In my opinion, these biases in the opposite directions approximately cancel out.

As one can see from Table 4.1, the slow-down of economic growth which started in the late 1950s continued through the 1980s. The qualitative difference of the 1980s compared with the entire preceding peacetime history of the Soviet economy is the decline in the level of the national income. Taking into account the growth of the population by about 10 per cent, this meant a decline in per capita national income produced of 13 per

cent. The main cause of the decline of the national income has been the sharp (comparable to that in the 1930s) decline in the efficiency of production. In this period, average productivity of capital declined by 15 per cent, material intensity increased by 17 per cent, and labour productivity fell by 5 per cent. The slow-down, and in some cases cessation, of growth of factors of production also contributed to the decline of the national income, although much less than the decline in efficiency. The growth of labour in material production was negligible, and in some periods even negative. Capital stock was growing more slowly, and by the end of the period began to decline. We have already mentioned general causes for the slow-down of the growth of capital. Its absolute decline must be attributed to the necessity of maintaining, or only reducing slightly, the existing living standards under conditions of sharply falling national income produced per capita (and an even greater decline for national income used). Investment in fixed capital, which in the last 2 years has declined by almost a quarter, has been sacrificed for the sake of maintaining social stability.

Production and use of materials in this period has been growing much more slowly than earlier. Nevertheless, until the last 2 years of the decade, this growth was still quite significant. By the end of the decade, even this area showed a decline.

It is interesting to compare Soviet economic development in the 1980s with that in the 1930s, another period of great difficulties in the economy. In both decades, indicators of efficiency declined at comparable rates.³ Only labour productivity, which grew somewhat in the 1930s, differs across the two periods. However, the general nature of growth in the two periods is radically different. In the 1930s, significant economic growth resulted from large increases in labour, capital, and land. This growth produced structural shifts in the economy, resulting in higher labour productivity due to a reallocation of labour from old to new sectors. In the 1980s, the picture was fundamentally different. The sources of growth of factors of production were totally exhausted, and though the efficiency of their use changed in similar ways to those of the 1930s, the economy sank into stagnation, and then into crisis.

In the early 1980s, the steady decline of economic growth rates - that has been continuing for over 20 years - turned into an absolute decline of national income. The scale and speed of the decline bore out the forecast made earlier about the threat of a deep economic crisis in the 1980s. Aside from the long-run trends, the economic decline of the early 1980s reflected the complete corruption of the Brezhnev administration by that time. Party and state organs were near paralysis, and transmitted this condition to the rest of society. Those at the top were enriching themselves, those at the bottom were stealing from the state and drinking. Despair and apathy reigned in the society.

The main source of decline of national income in this period was the extremely severe drop in the efficiency of resource use. In just 2 years,

average productivity of capital fell by 7 per cent, material intensity increased by 5 per cent, and labour productivity fell by 5 per cent. Declines of such magnitude in a post-war period would normally occur only over 5 years. Soviet labour productivity fell for the first time after the Second World War. The only analogous period in Soviet history, in terms of decline in efficiency, can be found in 1931–2, when efficiency declined even more because of the collectivization of agriculture and the chaos of industrialization.

Factors of production in this period were increasing more slowly than in previous periods. The slow-downs in the production of materials and in the growth of fixed capital, due to the declines in efficiency in the mining and investment sectors, were especially significant.

Despite the decline of the economy, the real incomes of the population did not decline much (though there were increasing shortages of some goods). Since earnings from the export of hydrocarbons increased again in the early 1980s, as prices on the world market rose, it was possible to increase the import of consumer goods.

Brezhnev's death and Andropov's accession to power arrested the development of the crisis. Moreover, the volume and efficiency of production improved significantly. Andropov's line of renewal of the command economy was continued by Gorbachev in the first years of perestroika.

The policies of 1983–8, and especially of 1983–6, were aimed at repairing the old system of governing the society. The most egregious cases of corruption were attacked. 'Remedial' policies included the following: labour discipline was strengthened energetically, and managers' responsibility for meeting plan targets was increased; many corrupt officials were arrested, and others became frightened, at least for a while; there was a significant turnover of top management, with many elderly and inept individuals being replaced; the decline in the sale of alcoholic beverages and other anti-drinking policies initially provided a boost to labour productivity and utilization of capital.

Sectors such as railroads, the steel industry, coal, and oil – which were in a very difficult situation in the early 1980s – improved significantly under these policies for strengthening the administrative system.

The revival of the economy in response to these policies demonstrates that there is some scope for improving the administrative system. (It should be noted that not all the conceivable policies for repairing the system were actually implemented.) At the same time, by the end of the period, the impact of these policies on the economy was diminishing. In 1987, the last year when this impact was still felt, economic growth had become negligible. It was clear that the obvious policies for improving the administrative economy had been exhausted. The idea that reform of the economic system was necessary, became popular not only among progressive economists but also among the national leadership.

National income grew by 11 per cent in 1983–8. Such an increase after a long period of declining growth rates and the absolute decline in the early 1980s was a notable achievement. The main source of growth was

the increase (or the slow-down of the decline) in the efficiency of use of factors of production. Labour productivity increased substantially, which is especially impressive considering its decline in the previous period. The decline in the average productivity of capital practically came to a halt. Growth of material intensity slowed down considerably, to 0.6–0.7 per cent a year – from 1 per cent a year in the 1960s and 1970s, and 2.5 per cent in the early 1980s.

Yet in this period lay the roots of the subsequent sharp deterioration of the economy. The Soviet political and economic leadership in this period exhibited a complete inability to develop a well-founded strategy of economic change. In fact, there has been no strategy at all. Even the effective policies in the beginning of the 1983–8 period were only instinctive reactions to the obvious social disintegration. These policies were obvious from the point of view of common sense and the logic of the system.

The economic policies of the perestroika period comprised, with rare exceptions, an unbroken chain of errors. It is difficult to find parallels to such a large number of errors even in Soviet economic history. It is difficult to resist the thought that these errors were not due just to incompetence.

One of the first errors was the simultaneous adoption of policies of acceleration and perestroika in the twelfth 5-year plan and the decisions of the twenty-seventh party congress. Increasing quantitative indicators of 'economic growth at any price' conflicted with the goals of: structural change; improving the quality of output; changing the product mix in favour of the consumer; and economic reform. For the sake of fairness, it should be noted that official science (i.e. the Economics Section of the Academy of Sciences) shares the blame for this error with the economic and political leadership. In the process of preparing the twelfth 5-year plan, the Economics Section strongly promoted 'accelerated economic growth based on technological modernization of production' as the strategic objective of the plan.

The source of this and other errors was the lack of informed analysis of the actual state of the economy. Policies developed by both the government and academic experts were based on the official data of the State Committee for Statistics for the level and rate of change in economic activity.⁴ For this reason, they missed the true nature and scale of the economy's problems, and the location of bottlenecks.

The anti-alcohol campaign, which initially brought about gains in labour productivity and utilization of fixed capital, also contributed to an increase in the government budget deficit and to an increased production of moonshine (i.e. illicit home-produced alcohol). The negative aspects rapidly cancelled out the positive ones, and the disequilibrium in the economy worsened.

At the outset of perestroika, economic officials were busy implementing changes characteristic of command economy, such as state quality control (*gospriemka*) at civilian industrial plants and in construction, and the increased use of two- and three-shift operating regimes. Both these policies failed to bring any pay-off. The fight against so-called unearned incomes,

begun in 1986, hurt the small private sector of the Soviet economy.

The belated economic reform of 1987, while correctly moving in the direction of greater decentralization, in its very concept was a half-way solution. It did not touch at all, or touched only slightly, many areas of the economy. By that time, the long experience with half-way reforms in eastern Europe suggested that such reforms not only fail to improve the situation, but in fact make things worse. The flaws of the original concept of the reform were aggravated by detailed decisions on its implementation (the infamous package of decrees of June–July of 1987). Each of these decisions contained a ‘bomb’ that would destroy the positive elements of the decisions.

Government financial policy was completely irresponsible. No effort was made to cut the budget deficit, which grew in the beginning of the twelfth 5-year plan, as revenues from alcohol sales and foreign trade declined. Moreover, the increased deficit was projected and passed by the Supreme Soviet without a word of objection. The acceleration of inflation, mostly due to the growth of the budget deficit, further devastated the consumer market and weakened incentives for labour. For a long time, the Soviet leadership did not perceive the deterioration of the economy, which started to happen at the end of 1987. The leadership was lulled by the lies of official statistics, which became ever more distorted because of accelerating inflation. It took a long period of time for the leadership to wake up to the economic reality. This explains why military expenditure and foreign aid were kept at unsustainably high levels for so long.

Only in the summer of 1989, facing the social explosion of the general coal-miners’ strike, did the political leadership begin to realize how bad the economic situation was. Even then, it acted hastily and unwisely. The proclaimed policy of reorienting the economy towards the needs of the population was not accompanied by radical change in the economic mechanism and significant cuts in the military budget and foreign aid. Therefore, it only accelerated the growth of money incomes and spurred on inflation, without having any impact on the production of consumer goods.

The beginning of democratization in a society lacking democratic experience contributed further to the disorganization of the economy. The wrongheaded 1987 law to have enterprise managers elected by their employees led to the decline of managerial authority, and the removal of many strong and demanding managers. Discipline in production declined as a result of democratization. It suffered most strongly in the aftermath of the miners’ strike in the summer of 1989. The economy was also hurt by ethnic conflicts, especially in Armenia and Azerbaijan, which started in 1988. Justified protests against environmental pollution led to the shut-down of many industrial plants and halted construction of nuclear power stations.

The disintegration of the administrative system in 1989–90 was caused by a number of factors: elections for national and local legislatures; the miners’ strike; suggestions for the abolition of the ministries; decline in state orders; and the party’s withdrawal from economic management unaccompanied by

the creation of a market system. All this made for chaos in the economy. The system of material supply was disorganized. The execution of the state orders gave way to barter, returning the economy to its most primitive form.

Not only was the twelfth 5-year plan’s target of accelerating technological change not met, but the reverse took place. New objectives of the enterprises, and the general economic climate, made technological change an even lower priority for the producers than it was before. The transfer of R&D institutions to self-financing has led them to choose small projects with a fast pay-off. Institutions of the Academy of Science, charged with basic research, increasingly engage in applied work. Scientists leave for co-operatives (not necessarily engaged in R&D), because of the higher pay there. The decline in productive investment makes it impossible to implement many innovations that have already been developed.

New economic institutions – co-operatives, self-employed individuals, joint ventures, leasing, and others – could not prove their efficiency under the reigning administrative system. The absence of reliable data makes it difficult to establish their true efficiency. If we ignore the extreme positive and negative cases, the benefits brought by the new forms and the harm they cause, at best, approximately cancel out. It would not be surprising if, on balance, the new forms harm the economy, because in many cases they are on a lower level of production (less mechanized, less well supplied, with poor organization of work, etc.).

In the latter half of the 1980s, the Soviet economy also suffered from external factors: the decline in world prices of raw materials and fuel, eating into hard currency export earnings; the Chernobyl’ disaster and the tremendous costs of coping with it; and the earthquake in Armenia, and the expense of rebuilding.

It is hard to resist the impression that many of perestroika’s problems resulted not only from the long-run trends and the traditional incompetence of the Soviet leadership, but also from conscious efforts to make things worse. This is suggested first and foremost by the explicit hostility of the administrative apparatus towards perestroika. Knowing the moral and political convictions of these people, it is hard to imagine that they would not use all means at their disposal to abort perestroika. The idea of plunging the economy into chaos and catastrophe to pave the way for changing the political direction would be natural in such a context.

It is difficult to detect economic sabotage, because it can be easily represented as just another case of the general inefficiency of the command economy and incompetence of its managers. It is also clear that the agencies charged with maintaining law and order are closely related to the administrative system and not interested in uncovering economic sabotage. Even with the best of intentions, in most cases it is difficult to prove that economic sabotage is occurring, over and above simple mismanagement.

Such well-known and respected authors and economists as S. Andreev and T. Kariagina have written that economic sabotage of perestroika exists. At

the end of 1989, the term 'sabotage' was used for the first time by Gorbachev, who had previously avoided even the much milder description of resistance to perestroika.

Direct evidence of economic sabotage is scarce. However, Leningrad TV in 1990 showed trenches where many tons of salami, a good in extremely short supply, were buried. I think that the most important form of economic sabotage is the intentional procrastination over taking the obvious steps to solve economic problems; drafting inconsistent economic documents; keeping supplies of consumer goods at storage facilities to make shortages worse; planning for the huge deficit of the state budget; delaying drafting documents on economic reform and presenting them to the legislature; and drafting economic decisions that are calculated to provoke popular anger, to create panic in the consumer-goods market, and thereby to delay radical economic reforms.

As a result of long-run economic trends, errors in economic policy, the unavoidable consequences of the transitional period in the economy and politics, and intentional economic sabotage, the USSR entered the second economic crisis of the decade in 1989-90. It turned out to be much deeper than that of the early 1980s. The average annual decline of national income in 1989-90 was 4 per cent compared to 2 per cent in the early 1980s. The main cause of the decline was the fall in the efficiency of production. In just 2 years, average productivity of capital fell by 8 per cent and material intensity went up by 7 per cent. Labour productivity declined by the tremendous rate of 8 per cent. Only in the early 1930s was there a similar decline in all the indicators of efficiency. The decline of efficiency was larger than at the lowest point of degradation of the Brezhnev regime in the early 1980s.

What makes the economic crisis of the late 1980s different from that of the early 1980s is the larger role played by the decline in the quantity of factors of production. For the first time, employment in material production, and the fixed capital stock, are declining. The output of raw materials is declining more than it did in the early 1980s. Suffice it to say that in the first 6 months of 1990, production of coal declined by 6 per cent, oil by 5 per cent and timber by 10 per cent. The output of steel and most non-ferrous metals, almost all chemicals, and construction materials all declined. Decline in the production of materials, together with increasing material intensity and decline in the import of materials, has led to the rapid depletion of their inventories. Inventories of many materials have dropped below the minimum level, causing the shut-down of blast furnaces and open-hearth furnaces, chemical plants, a number of machine-building plants, and disruption of work in agriculture.

An exceptionally important characteristic of the crisis of the late 1980s is the worsening labour shortage in a number of areas which produce a significant share of agricultural output: the non-black-earth central areas of the Russian republic, the Volga region, Siberia, and the Urals. The labour available in these regions is not sufficient even for the minimum

of necessary agricultural work. With the weakening of the administrative system, urban dwellers are less willing to help out with agricultural work. This disrupts cultivation and harvesting, as occurred in 1990.

Another complicating factor is the deterioration of the external financial situation. With hard-currency export earnings declining, the country had to increase borrowing to avoid a large cut in imports. This led to a tremendous increase in hard-currency debt (a twofold increase in gross debt and a threefold increase in net debt). At the same time, gold and hard-currency reserves have been declining. Their exact magnitude is unknown, but we can assume that western estimates of the reserves are too high. Only this can explain such massive delays in payments to foreign suppliers in the early 1990s; amounting, in essence, to a default on external payments. An increase in foreign debt and a depletion of gold and hard-currency reserves had long compensated for the decline in export earnings, but this is no longer possible, and imports began to decline, causing shut-downs of some enterprises.

The decline in living standards, most visible in 1989-90, fuelled popular discontent. The miners' strike in the summer of 1989 was the first symptom of this discontent. Public opinion surveys show that the unhappiness is quite widespread and growing. A package of reforms that would require sacrifices from the people, will almost inevitably lead to an explosion, possibly even a general strike, further hurting the economy.

In 1990, the Soviet economy entered a catastrophic state. If not counteracted, the crisis may exceed in scale the Great Depression of 1929-32 in the capitalist world, and will become permanent. Any comparison with the recovery after the Great Depression is unfounded. Deep-seated diseases of the whole society and degradation of the population are unique and have nothing in common with the developments in the capitalist world. Only a unique package of policies can prevent an economic collapse in the USSR. So far, no such policies have been suggested either in the USSR or abroad, which makes the possibility of recovery very doubtful.

NOTES

1. *Iunos'*, 1989 no. 9, p. 88.
2. In the mid-1950s (eds).
3. Data on Soviet economic growth in the 1930s appear in the author's article 'Ekonomicheskii rost: al'ternativnaia otsenka', *Kommunist*, 1988 no. 17.
4. The reliance on official statistics was complete in the case of the government, but only predominant in the case of academic experts.