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USSR: Goals of the 11th Five-Year Plan Unattainable

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USSR: Goals of the
11th Five-Year Plan
Unattainable

Key Judgments

The preliminary goals announced last month for the Soviet 11th Five-Year Plan (1981-85) suggest that Moscow has yet to come to grips with the country's increasingly severe economic problems. Despite growing resource stringencies, the implied growth rate planned for GNP (4.0 percent per year) is substantially above that achieved during the 10th Five-Year Plan and, if attained, would mark a return to the rate of the early 1970s.

The plan places the greatest emphasis on the development of heavy industry and agriculture, with the highest growth targeted for those branches of heavy industry most closely tied to the military. Although the draft directives contain much rhetoric on the need to boost living standards, few near-term gains in consumption are likely. Whatever anxiety the leadership feels about the worsening plight of consumers has not been enough to cause a significant reallocation of resources in their favor.

In a number of key areas, the guidelines for the 11th Five-Year Plan contain considerably less statistical data—some 40-50 percent overall—than the guidelines for the previous two five-year plans. The cutback is especially pronounced in those activities most important, but troublesome, to the leadership—energy, agriculture, and transportation. Although the reduction in data is in line with the trend to curtail the volume of published statistical information evident since the mid-1970s, the absence of concrete figures for several key goals and conventional categories probably reflects delays, uncertainties, and possible conflicts in Soviet decisionmaking.

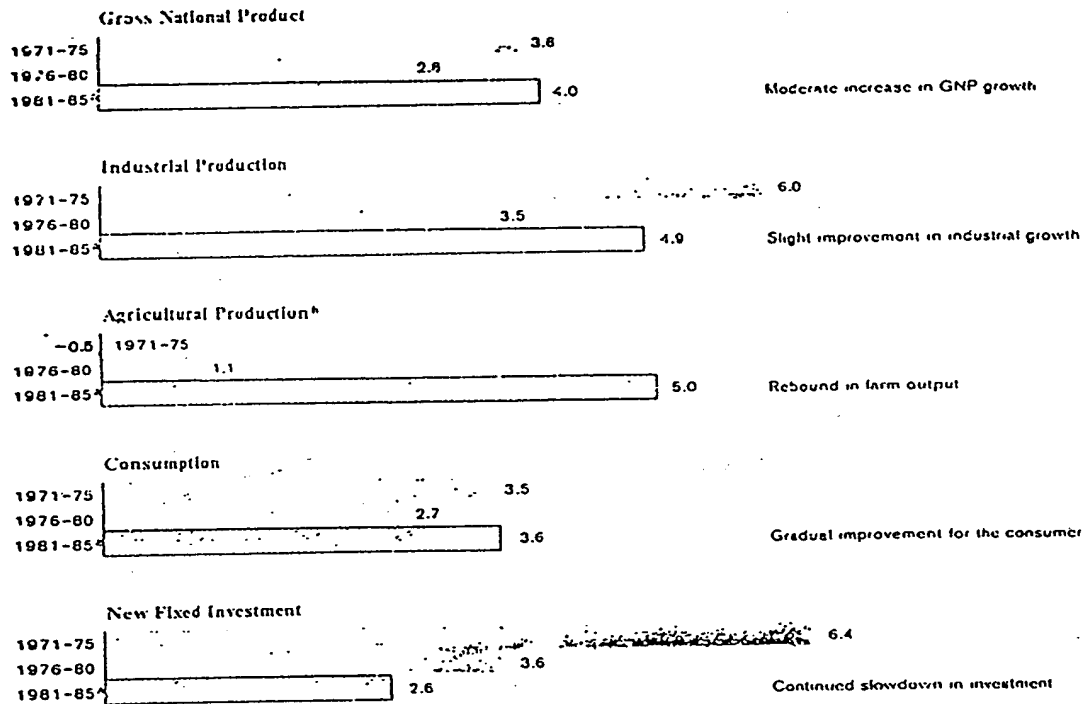
To meet the ambitious targets that have been announced, Soviet leaders are again counting on sharp increases in labor productivity. In this regard, science and technology are to be given an expanded role in boosting the productivity of labor and other resources. Previous campaigns to raise productivity have failed badly, however, and Moscow's present agenda offers little hope for changing this pattern. Without an acceleration in the growth of productivity to offset slower growth in employment, the USSR will achieve little more than half the GNP growth implied in the directives and is unlikely even to match the 2.8-percent growth rate of the last five years.

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Figure 1
USSR: Selected Indicators of Economic Performance

Average annual percent rate of growth

Plan Highlights



^a Plan.

^b Net of feed and seed.

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USSR: Goals of the 11th Five-Year Plan Unattainable

Agriculture: Hoping For the Best

Farm output is scheduled to increase an average of 5 percent per year during 1981-85, including a nearly 4.5-percent average annual jump in meat production (see figure 1). Although almost half of this increase would be a recovery from the decline suffered since 1978, the goal seems overly ambitious. To meet it, the leadership is counting on:

- Better weather over the next five years.
- Stepped-up deliveries of farm machinery and fertilizer.
- A major improvement in agricultural efficiency. (C)

It is reasonable to expect some improvement in the weather, which was exceptionally bad in the last two years. Even so, the goal for grain production, calling for a roughly 8-percent average annual increase, is almost certainly too high (see table 1). This increase is to come entirely from higher yields, and we do not believe that the Soviets are capable of either obtaining the necessary inputs or of using them efficiently. In particular, we doubt that they can increase fertilizer production and distribution as much as required, because of difficulties in constructing and operating Western-equipped fertilizer plants (see table 2)

Table 2

Percent

USSR: Average Annual Rates of Growth of Selected Inputs to Agriculture

	1966-70	1971-75	1976-80	1981-85 Plan
Tractors	5.2	3.7	-1.6	3.1
Trucks	10.7	11.5	-3.2	8.4
Deliveries of mineral fertilizer	11.0	10.1	3.0	6.2
Net additions of irrigated and drained land	0.8	5.8	4.0	2.9

Moscow hopes to raise the efficiency of farm resources through a series of organizational changes. In his speech to the party plenum last October, President Brezhnev stated that the Politburo intended to create a new agro-industrial food complex during the 11th Five-Year Plan that would integrate the planning, financing, and management of agriculture—including procurement, storage, processing, and other elements of the food industry. This idea is in keeping with the

Table 1

Million Metric Tons

USSR: Average Annual Production, Selected Commodities

	1971-75		1976-80		1981-85 Plan
	Plan	Actual	Plan	Actual	
Crops					
Grain	195.0	181.6	215-220	205.0	238-243
Cotton	6.75	7.67	NA	8.9	9.2-9.3
Potatoes	106.0	89.78	102.0	82.5	NA
Sugar beets	NA	76.0	NA	88.4	100-103
Livestock products					
Meat	14.3	14.0	15-15.6	14.9	17-17.5
Milk	92.3	87.4	94-96	92.7	97-99
Eggs (billion)	46.7	51.4	58-61	63.0	72
Wool	0.464	0.442	0.473	0.459	0.470-0.480

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repeated calls Brezhnev has made in the past to establish supraministerial bodies to coordinate the work of related branch ministries. Such organizational changes have been tried repeatedly in the past with little impact on output.

As part of this effort to boost productivity, the leadership is emphasizing the role of private plots, which currently account for roughly 30 percent of meat production. In mid-January Moscow published a decree on private plots, stressing their importance. Before the decree, the Soviet press carried a series of articles calling for state-farm officials to support local private plot activity.

Because targets for grain and other feed crops will not be met, achievement of the goals for meat and other livestock products would require large continuing grain and feed imports—probably in the range of 20-30 million tons a year.

Industry: Temporize and Modernize

The problems facing Soviet planners in the 11th Five-Year Plan are especially evident in the targets for industry. Although the overall planned growth of 4.9 percent is the lowest for any plan period, industry would have to perform considerably better than it did during the 10th Five-Year Plan to reach this goal.

Reflecting the leadership's continued emphasis on heavy industry, machinery production—the principal source of investment goods, defense hardware, and consumer durables—is scheduled to increase at a hefty rate of 7.0 percent annually. Moscow, however, will first have to overcome serious problems in the steel industry, where output, especially of high-quality products, has lagged badly in recent years. The unusual absence of a target for crude steel production in the plan directives suggests that Soviet planners themselves are unsure of this sector.* The plan also calls for increases in the production of some nonferrous metals, such as aluminum, which can be substituted for steel in many applications.

* The absence of a target for crude steel is one reflection of a general cutback on data in the 11th Five-Year Plan directives. For a comparison of data in the 11th Five-Year Plan directives with data in the 9th and 10th Five-Year Plan directives, see appendix A.

Meanwhile, the chemical industry is scheduled to grow at 5.6 percent per year during 1981-85, well above the 4.0-percent average annual rate achieved during the 10th Plan. Although the industry will benefit from previous purchases of Western equipment and technology, the 1985 goals for some key chemical products are doubtful. Production of fertilizer is scheduled to reach 150-155 million tons by 1985, with 115 million tons scheduled for delivery to agriculture. To reach this target, increases in the production of fertilizer would need to almost triple from its level in 1976-80.

Soviet Energy Production: Substituting Gas for Oil
Energy production in 1981-85 is planned to grow at 2.9 to 4.1 percent annually, compared with 4.2 percent achieved during the 10th Five-Year Plan. Slower increases in oil production are to be offset by a sharp increase in gas output, which is to account for more than one-half of the growth in total energy output. We believe that even the low end of the target range will not be achieved, largely because oil output is likely to decline and the goal for gas production is overly ambitious (see figure 2).

Oil. Planned oil production is 12.4-12.9 million b/d in 1985, compared with the 12.1 million b/d achieved in 1980. Although the near leveling off of production in the Plan indicates that Moscow now recognizes severe problems in the oil sector—a fact also indicated by the heavy emphasis on conservation in the directives—we believe that the Soviets will be able to produce only 10-11 million b/d in 1985.

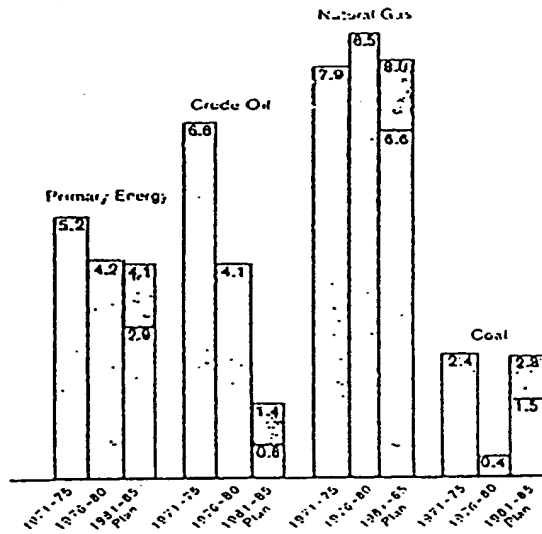
Gas. Natural gas output is scheduled to reach 21.1-22.6 trillion cubic feet (ft³) by 1985. Although the lower end of the range is attainable, everything would have to go right for the Soviets to extract and transport 22.6 trillion ft³ of gas by 1985. Output at the supergiant Urengoy field must rise by 3.5 trillion ft³ to a level of 5.7 trillion ft³ and the new, as yet undeveloped, Yamburg field would have to be producing 3.5 trillion ft³. Reaching the target of 22.6 trillion ft³ would also require that extraction in older gasfields, primarily in Central Asia and the Ukraine, be maintained close to existing levels.

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Figure 2

USSR: Primary Energy Production

Average Annual Percent Growth



We do not believe that the Soviets will be able to achieve these ambitious goals. Production growth at the Urengoy field is being held back by inadequate infrastructure, a 70-percent annual labor turnover, poor drilling technology, and Arctic temperatures. Conditions will be worse at the Yamburg field farther north, once it opens. Consequently, drilling targets for West Siberian gas, which will increase substantially from 1976-80, probably will be unfulfilled.

Coal. Coal production is to increase from 716 million tons in 1980 to 770-800 million tons in 1985. We believe that production could at best reach the lower end of the range. Even this degree of success would involve an annual increase of about 11 million tons annually during 1981-85—far more than the 3-million-ton average growth each year in 1976-80. Σ

Production at 770 million tons depends on obtaining more coal from the open-pit deposits in Kazakhstan and Siberia to offset sagging output in the Ukraine. This feat would entail solving chronic equipment, transportation, and labor problems in these areas. The Soviet coal industry, however, continues to be hampered by inadequate past investment, a lag in commissioning new capacity, and a sharp rise in mine depletion. At present, about 75 percent of the annual gross additions to plant and equipment must be used to offset depletion.

Electricity. The Soviets plan electricity output of 1,500-1,600 billion kilowatt-hours (kWh) by 1985, a task requiring about a 4-percent growth annually during 1981-85, compared with 4.6 percent in 1976-80. Production at the lower end of the range probably can be achieved. Within this context, nuclear power will account for a much larger share of electricity production. Although nuclear power output will fall short of the goal of 220-225 billion kWh because of numerous equipment and labor problems, the share of electricity produced by nuclear plants will increase from about 5 percent currently to about 13 percent in 1985.

Squeeze on Investment

Reflecting slower growth in machinery output, stagnating production of construction materials, and a continuing rise in unfinished construction, the plan envisions investment growth of only 2.6 percent per year, a postwar low. The Soviets hope to compensate for the decline in investment growth by concentrating on finishing projects already under way and by expanding and modernizing existing facilities, rather than constructing new ones. In this way they hope to generate a much larger increase in the stock of plant and equipment than otherwise would occur. This policy has never been successful in the past, and there is little reason to believe it will succeed now. The types of investment projects planned—especially in energy sectors—have heavy construction components (relative to machinery), long leadtimes, and limited immediate payoffs.

Although few details are available, the leadership has indicated that investment will be concentrated in energy extraction and heavy industry. Development drilling for oil and gas, for example, is scheduled to double during the period of the 11th Five-Year Plan compared



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with that of the 10th. In addition, exploratory drilling for oil and gas in western Siberia is to be expanded from about 5 million meters in 1976-80 to 12.5 million meters during 1981-1985.

The machinery industry also will receive a large share of investment allocations in an attempt to modernize the industry and increase its ability to supply the rest of the economy with modern high-technology equipment. Renovation and replacement of existing equipment also will be stressed in the vital transportation sector—where, with the exception of completing the Baikal-Amur Mainline (BAM), the plan stresses upgrading existing facilities

Because of the expected low rate of investment growth and the continued emphasis on heavy industry, the share of investment going to light industry and other consumer-related sectors probably will decline. No investment figures for these areas were announced

Raising Labor Productivity: Key to Growth
Moscow is counting heavily on large gains in labor productivity to meet its output goals. Indeed, the plan directives stipulate that 90 percent of the growth in industry and all of the growth in agriculture must come through increases in labor productivity.

The need to raise labor productivity is more critical now than ever before. Because of declining birth rates in the 1960s, only half as many new workers will join the labor force in 1981-85 as in 1976-80. On top of this, falling growth of machinery output and continued large increases in defense programs are restricting the growth of investment goods

To counter these trends, the plan calls for an expansion of the role of science and technology in improving the productivity of labor and other resources.² Moscow's track record in stimulating labor productivity, how-

² The higher priority given science and technology is also reflected in the structure of the directives themselves. The title of the section on the "development of science" has been expanded to include the phrase "acceleration of technological progress," reflecting the directives' new emphasis on practical application rather than pure research. This section also has been moved to the front of the guidelines so that it now precedes the sections devoted to industry, agriculture, transportation and communications, and capital construction. Moreover, the theme of integrating science policy with economic development is contained in each of the other sections of the plan to a degree not evident previously.

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Table 3

Percent

USSR: Average Annual Growth in Labor Productivity

	1971-75	1976-80	1981-85 Plan
Total	2.1	1.0	3.4
Of which:			
Industry	4.5	1.9	4.5
Construction	2.4	1.2	2.5
Transportation	3.5	1.3	2.1

ever, has been terrible, and its current emphasis on science and technology as the new panacea is unlikely to turn this around (see table 3). Growth in labor productivity has fallen sharply in recent years—even in industry, the source of most new technology. Because of the spate of problems just ahead, the USSR will do well just to halt the decline in productivity growth. A continuation of the recent downward productivity trend during 1981-85 could push GNP growth below 2 percent per year

Planning and Management

Despite the emphasis on productivity, the directives contain no new major policy initiatives or reform schemes for raising efficiency. For the most part, the section on planning and management simply repeats the general policies set forth in the July 1979 decrees on this subject. Much like the decrees, the basic thrust of the recommendations listed in the guidelines is that of tinkering at the margin—improving financial levers and seeking organizational solutions—rather than moving toward any fundamental change in the system. The fact that a separate section on planning and management was included on this topic, in contrast to the guidelines for the 10th Five-Year Plan, however, may signal that the subject of economic reforms is back on the political agenda for the 1980:

Consumption: Few Gains Likely

The 11th Five-Year Plan does little to meet the expectations of the Soviet consumer. Despite President Brezhnev's recent promise to improve food supplies, the plan makes only a guarded reference to a "gradual



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solution of the food problem." In fact, the only step listed in the directives for easing the food situation in the immediate future is an expansion of hot meals at work sites and schools, a move that parallels other recent actions to increase special food distribution systems to reduce worker discontent.

In other consumer-related areas, output of the food processing industry is to increase at an average annual rate of 4.5 percent (5.1 percent this year) - a totally unrealistic goal because of the last two poor harvests. The high goal for durables, 7 percent per year, is also probably beyond reach, despite the call for a number of defense-related industries to increase their output of consumer durables. Similar campaigns in the past have met with little success because of the reluctance of enterprise managers to risk shortfalls in weapons production. Overall, retail trade is scheduled to grow at 4.3 percent annually, while money income is slated to rise at an annual rate of less than 3 percent, reflecting the continuing but so far unsuccessful effort to alleviate the pressure of demand on supply.

The stepped-up promises notwithstanding, several aspects of the guidelines suggest that the leadership is also not confident that it can fulfill its pledges to consumers. First, for all their importance, consumer-related industries (including the light, food, and consumer durables industries) are discussed with fewer details and fully 50 percent less coverage than in the 10th Five-Year Plan. Secondly, although the leadership is counting on heavy industry to increase its production of consumer goods, the assignments for individual branches are lower than before (see table 4).

The fact that Soviet consumers can expect little relief in the near future was also underscored by Vasily Selyunin, economics editor of *Sotsialisticheskaya Industriya*. Selyunin told that realistically a significant increase in consumer welfare could not be expected until the mid-1980s, because investment funds are simply not available. He further opined that even if the funds were available, plans for rapidly increasing production of consumer goods have not been made.

Table 4 Percent

Selected Heavy Industry Targets for Increased Output of Consumer Durables

Ministry	9th FYP	10th FYP	11th FYP
Aviation	80-100	50	40-50
Chemical	80-100	80	40-60
Timber and wood processing	50-70	40	30-40

Trade With the West: Cautious Signals

The directives provided little specific information on foreign trade plans. According to a senior Soviet foreign affairs analyst, the fact that no target for foreign trade turnover was announced for the 11th Five-Year Plan largely reflected considerable uncertainty among Soviet planners over what role to assign US suppliers. Gosplan Chief Baybakov struck a similar tone in his address to the Supreme Soviet in October. Moreover, in sharp contrast to the 10th Five-Year Plan, which called for developing trade with the West on a "long-term basis" to take advantage of the "current relaxation of international tension," the new plan calls only for trade "with the developed capitalist countries that show an interest in cooperation with the Soviet Union."

Despite the harsh language, the Soviets are sending other signals - as they did throughout 1980 - that they seek a "normalization" of trade ties with the United States. Last month, for example, an economist with the CPSU Central Committee implied that Moscow would look favorably upon a renewal of the long-term grain agreement. In addition, Deputy Foreign Trade Minister Sushkov recently expressed the hope that a full meeting of the US-USSR Trade and Economic Council could be held perhaps as early as this spring. Increasingly, the Soviets seem to be concerned that the United States has not sent strong signals about future economic ties.

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Appendix

The guidelines for the 11th Five-Year Plan contain some 40-50 percent less statistical data than the two previous plans. Although the reduction in data is in line with the trend since the mid-1970s to curtail the volume of published statistical information, it also probably reflects a higher than normal degree of indecision and/or disagreement at the policymaking levels.

All portions of the guidelines are affected by the omission of many targets heretofore available. Yet, as shown below, the cutbacks seem especially pronounced in those activities most important but troublesome to the leadership—for example, energy, agriculture, and transportation:

Branch-Sector	Comment	Key Data Missing from 11th FYP*
Transportation	Although transportation bottlenecks have worsened over the past decade, the 11th FYP directives devote about 20 percent less attention to this subject than the preceding plan and only slightly more than the 1971-75 plan.	Pipelines for oil, gas, and oil products Paved highways (new and modernized) Diesel locomotives Freight cars Passenger cars
Energy	The 11th FYP devotes slightly less attention to the production of energy—oil, gas, coal, nuclear, and hydroelectricity—than did the two earlier plans. There is scant indication from the format of the guidelines to indicate that the USSR faces serious energy problems in the 1980s.	Productivity targets for the petroleum, petroleum refining, and coal industries Additions to electric power station capacities
Agriculture	The coverage of agriculture in the 11th FYP remains extensive—just under one-half the attention allocated to industry, for example—but still slightly less than in either of the earlier plans.	All procurement targets (grain, vegetables, fruit, milk, for example) Tractor trailers Excavators and bulldozers
Machine building	Although some branches received extra attention in the 11th FYP, on balance the machine-building group received roughly 20 percent less coverage than before. The same subjects are covered, but in much less detail.	Chemical and petrochemical machine building Instruments and means of automation Machine building for light and food industries Agricultural machinery for live-stock and fodder production
Consumer-related industries	Despite increased rhetoric by Soviet leaders on consumer welfare, the 11th FYP's treatment of consumer-related industries—including the light, food, and consumer durables industries—is 56 percent shorter than in the 10th FYP and even slightly less than in the 9th FYP.	Meat and dairy products Textiles Knitted goods
Construction materials	Discussion of this branch fell by 50 percent, to the level of that in the 9th FYP.	Prefab steel structures Prefab ferroconcrete structures Plywood structures
Ferrous metallurgy	Although fewer production targets were announced, the overall coverage of ferrous metallurgy was roughly the same length as in the two previous plans.	Crude steel

* Refers to output data unless otherwise stated.

