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Soviet Economic Plans for 1976-80: A First Look

ER 76-10471
August 1976

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SOVIET ECONOMIC PLANS FOR 1976-80: A FIRST LOOK

SUMMARY

1. After the disappointments of the Ninth Five-Year Plan period (1971-75), largely caused by two disastrous harvests, the Soviets intend to use the 1976-80 plan period to get back on track and stress quality and efficiency over quantitative goals. As a result, the new plan is an unusually restrained and realistic one and will make the 1970s by far the lowest postwar growth decade. Major economic policy objectives will remain similar to those of the last five year plan period: industry and defense will be the priority sectors but agriculture and the consumer will retain a prominent place. Productivity and trade will be stressed as keys to more rapid growth. If the plan to slow investment growth is achieved, the long-term trend of a rising share of the gross national product (GNP) going to investment should be arrested.

2. Prospects for the major sectors are:

Industry—relatively rapid growth similar to that of the last 15 years with the highest rates achieved by machinery and chemicals.

Agriculture—continued firm resource commitment and ambitious grain and livestock goals.

Consumer welfare—continued oscillations in consumption caused by fluctuations in farm output and a subsequent restraint in income growth.

Investment—a program dependent on an unprecedented commitment to completing old projects and expanding existing facilities.

Manpower—slower growth of the labor force but no acute manpower shortage until the 1980s.

Foreign Trade—rapid growth of all trade—especially with the West—although financing will be more difficult.

3. Despite the moderate projected growth, major targets still seem too ambitious. Another two years of poor harvests, highly possible, would again wreak havoc on the five-year plan. Failure to achieve productivity targets would also retard

growth. The fact that the Soviets are planning no major organizational or managerial schemes bodes ill for a rise in productivity substantially above the rates achieved over the last ten years. As a result of these and other factors, we estimate that growth in GNP will proceed at an annual rate of about 4% in 1976-80 compared with the planned rate of 5%.

4. The Soviet leadership appears to view its economic prospects as troubling but manageable. They probably rationalize that their major problems—a large military burden, rising consumer expectations, and declining growth—are those of many mature economies. Their biggest headache, severe fluctuations in agricultural output, can be attributed primarily to unfavorable weather and geography. There will be little pressure for economic change as long as the Soviet economy has sufficient strength to maintain a formidable military posture, maintain its industrial might, and gradually improve consumer welfare. However, an exacerbation of economic problems is in prospect for the 1980s, which may stimulate greater changes.

DISCUSSION

Introduction

5. The "main directions" of the Soviet economy for 1976-80 were first published in draft form on 14 December 1975. They were adopted on 3 March 1976 by the 25th Party Congress with few substantive changes. The Party instructed the Council of Ministers to submit the plan to the Supreme Soviet in September. If the scenario of the last five-year plan period is followed, a book containing plan details will not be available until mid-1977.

6. The draft plan is a political as well as an economic document and is therefore long on rhetoric and short on substance. General goals are given but the means of achieving them are largely missing. Thus, resource allocational policies and economic priorities are difficult to discern.

7. Soviet planners had to contend with many complex problems while plotting economic strategy for this five-year period. Some were old ones, almost endemic to the Soviet system—declining productivity growth, lagging technology, and unsatisfied consumer demand. Other problems were relatively new or had a new urgency about them, such as the extreme fluctuations in agricultural output, the development of Siberia, and continuing large hard currency deficits.

8. Using the incomplete data released to date, this publication assesses the new five-year plan goals. Past plans and performance are reviewed in an effort to weigh the reasonableness of the targets for 1976-80 and as a clue to possible shifts in priorities. Because of the paucity of data, this assessment should be viewed as preliminary, subject to revision as more data become available.

Economic Plans and Policies

Background: The Soviet Economy in 1971-75

9. During the Ninth Five-Year Plan period (1971-75), Soviet GNP grew at an average annual rate of 3.8% (see Table 1). This compares with 5.5% achieved in

Table 1

USSR: Average Annual Rates of Economic Growth[1]

Percent

			Plan	
	1966-70	1971-75	1971-75	1976-80
GNP	5.5	3.8	5.8	5
Industrial output	6.8	6.0	8.0	6½
Agricultural output	4.5	-0.6	3.5	5½
Investment[2]	6.3	5.5	N.A.	N.A.
New fixed investment	6.8	6.4	6.7	3½
Consumption	5.1	3.8	5.0	4
Other government expenditures[3]	5.5	0.6	N.A.	8½

1. Calculated at factor cost.
2. Includes new fixed investment in machinery and equipment, construction and other capital outlays, net additions to livestock, and capital repair.
3. Estimated as a residual. Includes administration, R&D, defense, inventory change, and net exports. The rates of GNP growth shown in this report are based on an aggregation of the rates of growth for individual sectors of origin (i.e., industry, agriculture, etc.). After projected values for the principal end uses (investment, consumption) are deducted from the global ruble value for GNP derived from the sector-of-origin side, a residual for "other government expenditures" remains. Since no capital repair plan for 1976-80 has been published, "other government expenditures" also includes capital repair.

1966-70 and 5.0% in 1961-65. Set in a world context, however, Soviet GNP growth in 1971-75 looks relatively good, as it was largely insulated from the effects of inflation and recession in the West. The Soviet growth rate in 1971-75 compares with rates of 0.6% in the United States, 1.6% in West Germany, and 2.1% in Italy.

10. Two extremely poor agricultural years were responsible for slowing economic growth and causing wide annual fluctuations—from a low growth rate of 1.7% in 1972 to a high of 7.5% in 1973. Industrial growth, the largest contributing sector to GNP, was also below that achieved in 1966-70, partly a result of the repercussions of the poor harvests. In 1972, for example, a shortage of agricultural raw materials and the recruitment of industrial labor and vehicles for farm work helped reduce industrial growth to the lowest rate since World War II.

11. The stagnation in agricultural output in 1971-75 was largely responsible for an absolute decline of 0.2% in factor productivity (output per unit of combined inputs of capital and labor) compared with a growth of 1.5% in 1966-70. If industry alone is considered, factor productivity grew by 1.5% compared with 1.3% in 1966-70, still not fast enough to compensate for the continuing decline in the growth of inputs.

12. The decline in economic growth was reflected in a reduced growth in allocations to the principal resource claimants, consumption and investment. As in the past, outlays for investment grew at a higher rate than GNP. This led to a further increase in the share of GNP allocated to investment, from 27% in 1970 to 29% in 1975. In 1975 the relative share of GNP going to consumption was 57%, the remainder going for other government expenditures, including defense. The slow growth in other government expenditures during 1971-75 probably reflects drawdowns in inventories in 1975, largely because of the poor harvest and continued growth in imports relative to exports.

13. The much-touted emphasis on agricultural and consumer goods output was frustrated in 1971-75 by the poor harvests. The resource commitment, however, appears to have remained firm. Inputs into agriculture—investment and deliveries of mineral fertilizer—grew even more rapidly than the high rates planned. When farm output fell below requirements, major efforts were made to maintain livestock herds and meet consumption levels by using scarce foreign exchange to import grain and meat.

14. Another primary goal of the Ninth Five-Year Plan was to accelerate technical progress. Toward this end the Soviets imported record amounts of foreign equipment and technology. These imports contributed to the large hard currency deficit posted in every year of the plan period. The Soviets also made modest changes in industrial organization, notably the formation of production associations,

designed to encourage the quicker introduction and mastery of new technology. The fact that improved technology remains a shibboleth of the new plan attests to a continuing weakness in this area.

Policies of the New Plan, 1976-80

15. The Tenth Five-Year Plan, as outlined in the draft directives and in the speeches to the 25th Party Congress, indicates that major economic policy objectives (see Figure 1) will be very similar to those of the last five-year plan period.

- Industry and the military will maintain their prime claim on the nation's resources.

- Agriculture will continue to absorb large amounts of industrially produced materials and one-fourth of total investment.

- Consumers, although set back periodically by poor harvests, will again enjoy a moderate increase in living levels and will compete on a more equal footing with other resource claimants.

- Improved technology will continue to be regarded as the key to increased productivity.

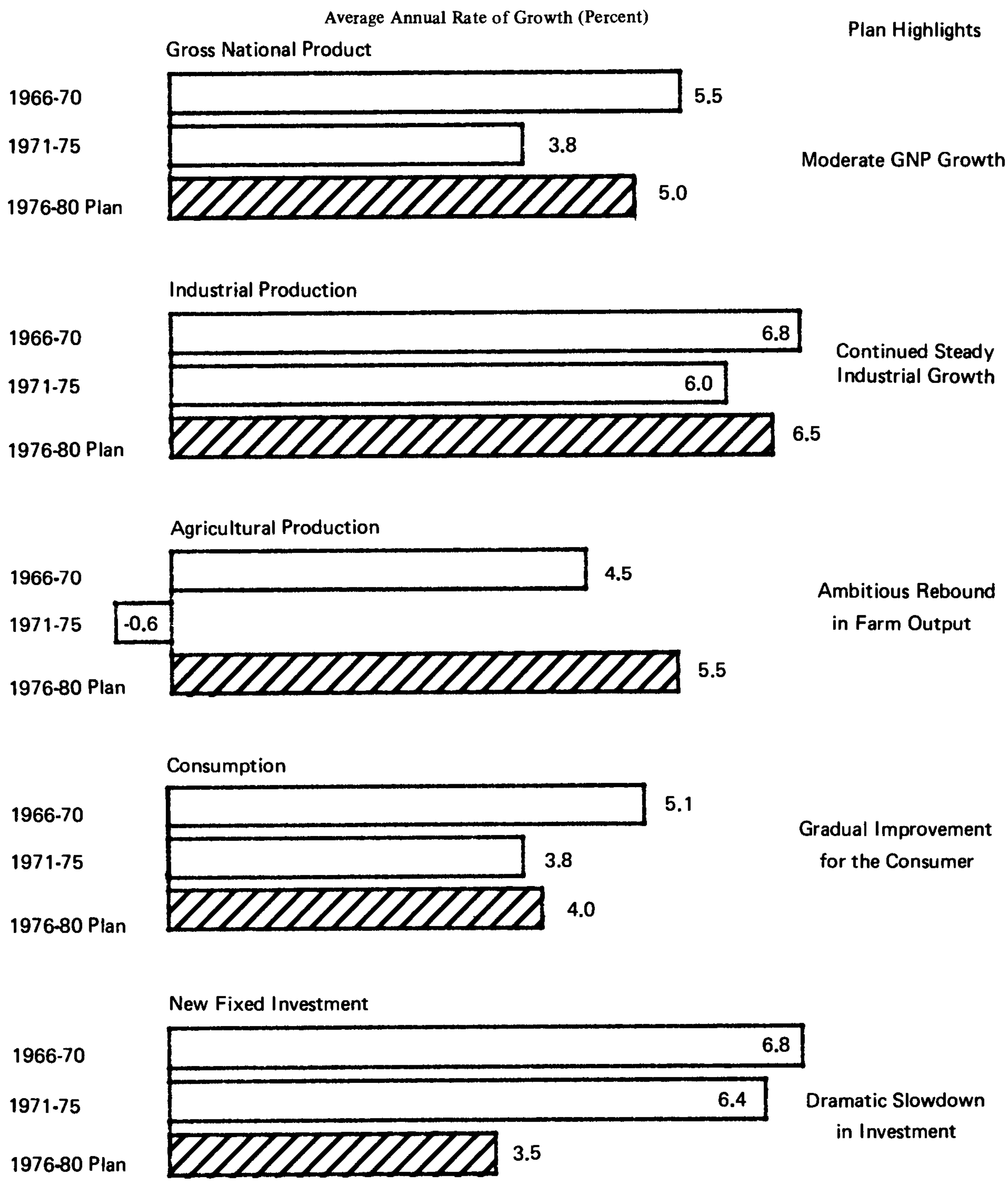
- Trade with the West will post another rapid rise.

16. The new plan, however, differs from its predecessors in two major ways. First, there is some indication of a shift in the allocation of resources among the principal claimants. In the past, investment consistently grew at a higher rate than GNP, increasing its share of total resources. In 1976-80, however, new fixed investment growth will slow dramatically, growing at a lower rate than that planned for GNP (see Table 1). The slow growth of investment as well as consumption relative to GNP planned for 1976-80 implies a substantial rebound in growth for "other government expenditures." We believe that this reflects unannounced plans to increase growth in inventory formation, to accelerate the rate of growth of capital repair, and to promote a better balance between imports and exports.

17. The Soviets hope to compensate for the decline in investment growth by concentrating on completing projects long underway and on expanding and modernizing existing facilities rather than constructing new ones. In this way they

Figure 1

USSR: SELECTED INDICATORS OF ECONOMIC PERFORMANCE



plan a relatively large boost in the total stock of plant and equipment with only a small injection of new fixed investment. Since this is a onetime gain and the growth of capital stock will fall precariously if this policy is continued, the slowdown in investment growth probably is a temporary phenomenon.

18. The other major difference from past plans is that the Soviets have lowered their sights for economic growth (see Table 2). The goals for 1976-80 are

Table 2

USSR: Average Annual Rates of Growth of GNP, by Sector of Origin[1]

Percent

			Plan	
	1966-70	**1971-75**	**1971-75**	**1976-80**
Total GNP, by producing sector	**5.5**	**3.8**	**5.8**	**5**
Industry	6.8	6.0	8.0	6½
Agriculture[2]	4.5	-0.6	3.5	5½
Construction	5.8	5.6	6.3[3]	3[4]
Transportation	6.7	6.3	6.9	4
Communications	8.9	7.2	N.A.	7
Trade	6.5	5.0	7.2	5
Services	4.2	3.6	N.A.	3½
Other	5.5	3.8	N.A.	N.A.
Nonagricultural sectors of GNP	5.8	5.1	N.A.	5

1. Calculated at factor costs.
2. This measure for agricultural output excludes intra-agricultural use of farm products but does not make an adjustment for purchases by agriculture from other sectors.
3. Plan for construction-installation work only.
4. Estimated plan for construction-installation work only.

modest compared with past targets. Indeed, the planned GNP and industrial growth rates are the lowest targets since World War II. The Soviet leadership ascribes this slowdown to (a) the problems of the last five years, mainly agricultural, which continue to reverberate throughout the economy, and (b) a new concentration on quality and efficiency rather than on quantitative targets. They apparently realize that the traditional emphasis on crude output has been a major reason for the reluctance of plant managers to introduce new techniques and technology. At this stage of development, the Soviets must rely on improved technology and better management to achieve the productivity gains necessary for future growth. Indeed, if overall growth targets are to be met with scheduled inputs in 1977-80, factor productivity must grow 2% per year—a much faster rate than attained in 1971-75. To achieve the industrial output goal, an annual productivity boost of 3% is needed, double the 1971-75 rate.[1]

Economic Output

Industry: Reliable Growth

19. The industrial growth rate of 6-1/2% planned for 1976-80 differs little from the rates achieved over the last 15 years, but shifts in emphasis reflect two main themes of the new directives—higher quality and improved technology (see Table 3 and Figure 2).

Table 3

USSR: Average Annual Rates of Growth of Industrial Production

Percent

	1966-70	1971-75	1976-80 Plan
Industrial production	**6.8**	**6.0**	**6.5**
Materials	5.9	5.5	5.7
Electric power	7.9	7.0	5.6
Coal products	2.0	2.3	2.8
Petroleum products and natural gas	7.8	7.1	5.8
Ferrous metals	5.5	4.1	4.8
Nonferrous metals	8.2	5.0	4.6
Forest products	3.5	3.7	4.3
Paper and paperboard	7.2	5.1	
Construction materials	5.4	5.1	5.4
Chemicals	8.7	8.9	10.2
Machinery	8.6	8.4	9.2
Consumer nondurables	6.2	3.1	4.6
Processed foods	4.7	3.7	4.4
Soft goods	8.0	2.6	4.9

1. See Tables 11 and 12 in the section discussing trends in factor productivity.

20. The emphasis on quality is most evident in industrial branches such as ferrous metals where planners are counting on improvements in quality and assortment to help compensate for a continued slowdown in the rates of growth of the physical volume of output. The high growth rates planned for machinery and chemicals reflect the official call for concentration on "those sectors which determine technical progress to the greatest extent." In addition, the high rate projected for the machinery sector reflects the emphasis on technology and the larger share of investment going to the installation of equipment and modernization of existing enterprises.

Chemicals

21. The traditionally rapid-growing chemicals sector is slated for a 10.2% average annual growth in 1976-80, about twice the rate for other industrial materials (see Table 4). Major attention continues on production of fertilizers and synthetic materials (plastics, rubber, and manmade fibers). The industry's quantitative goals seem ambitious as is the task of improving product mix and quality. The output of newer manmade fibers, for example, is scheduled to grow at a much faster rate than the output of relatively less modern

Figure 2

USSR: GROWTH IN MAJOR SECTORS OF INDUSTRIAL PRODUCTION

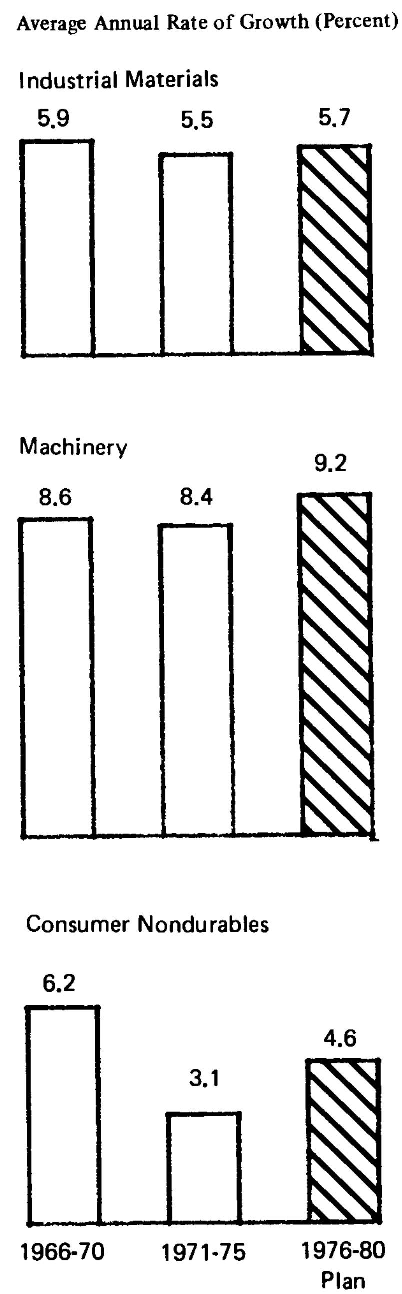


Table 4

USSR: Average Annual Rates of Growth in Output of Important Industrial Products

Percent

	1966-70	1971-75	1976-80 Plan[1]
Total primary energy[2]	**4.9**	**5.4**	**5.1**
Coal	1.2	2.3	2.6
Crude oil	7.8	6.8	5.1
Gas	9.2	7.9	7.6
Electric power	7.9	7.0	5.6
Metals			
Aluminum	11.2	7.1	4.6
Copper	7.4	7.0	4.6
Crude steel	5.0	4.0	3.2
Finished steel	5.5	4.5	3.6
Other materials			
Cement	5.6	5.1	3.4
Mineral fertilizer	12.1	10.2	9.6
Chemical fibers	8.9	8.9	9.0
Plastics	15.8	11.2	14.8

1. Midpoint of range.
2. Based on standard fuel equivalents.

rayons. Output of phosphate fertilizers, in chronically short supply, is planned to be increased by 17% in 1976 alone, compared with the 5% growth rate slated for all fertilizers.

22. Successful fulfillment of these output goals depends on meeting construction deadlines for expanding capacity. Efforts to reduce the backlog of unfinished construction in 1971-75 failed: the backlog rose by 58% from 1971 to 1974 compared with a 45% increase in investment. Unfinished construction now exceeds annual investment in the whole chemical industry. Ontime completion of construction is particularly important in the fertilizer industry where the introduction of new capacity in 1976-80 must average 11.2 million tons annually compared with 7.6 million tons annually in 1971-75.

23. Continued large imports of Western chemical equipment will be essential if the Soviets are to approach either their quantitative or qualitative chemical goals. Such imports set records in 1974 and 1975, exceeding $1 billion each year, spent mostly for complete installations for the production of ammonia,

plastics, and manmade fibers. The types of equipment purchased also reflect the priorities of the current five-year plan, and additional orders are imminent. Increasingly, these purchases are based on compensation agreements, whereby long-term Western purchases of Soviet chemicals help defray equipment costs. As a result, substantial quantities of Soviet ammonia, plastics, and intermediates for the production of polymers will be marketed in the West beginning in the late 1970s.

Metals

24. Over the last decade, the rates of growth of metals output in physical units have been falling, partly because the industry has been struggling to satisfy the economy's demand for more specialized and sophisticated products. Also, the slow growth in steelmaking capacity—only about half of that planned was added during 1971-75—has retarded development. For example, the steel industry's program to add new oxygen converters continues to lag behind schedule, forcing reliance on the traditional open hearth furnace, long supplanted in the West.

25. The Soviets apparently plan to compensate for the unfulfilled domestic demand by continuing to import steel from the West. Soviet purchases of Western steel cost $2.3 billion in 1975. Unlike the chemical industry, little interest has been shown in massive purchases of Western steelmaking equipment to spur growth.

26. Aluminum and copper rates of growth also have been reduced for the current plan period. However, the Soviets are seeking Western participation in major expansion projects that should permit increased exports to the West following completions in the early 1980s.

Fuels

27. The plan directives indicate that the production of primary energy will grow at an average annual rate of 5.1%, about the same rate as the last 10 years and generally consonant with the rate of growth of GNP. The targets for oil and natural gas, however, are optimistic and, unless met, could cause a shortfall of 2%-5% in the target for primary energy output. By 1980 the share of oil and gas in the overall fuel balance should be about two-thirds compared with about 45% in 1965. Coal's share should decline to slightly more than one-fourth by 1980 compared with about two-fifths in 1965.

28. Fulfillment of the oil and gas goals for 1980 depends on rapid development of West Siberian deposits and substantial improvements in technology,

neither of which are likely to be achieved to the extent planned. The oil target presumes that West Siberian output, which is to supply all of the planned increase, will reach 6.0-6.2 million b/d in 1980. Available data on West Siberian oilfields suggest, however, that the maximum production capacity will be about 5.7 million b/d. Even if new fields are discovered, their output will not contribute significantly by 1980 and may only offset depletion of older fields.

29. To compensate for a possible oil shortfall, the Soviets could curb consumption, as recently suggested by the Minister of the Petroleum Industry. If annual increases in oil consumption can be held to about 5% through 1980—instead of the 7% to 7-1/2% of recent years—the USSR will have adequate oil to meet domestic needs, increase deliveries to Eastern Europe, and maintain sales to the West near present levels. In the event that consumption growth cannot be slowed, the Soviets must either cut oil exports to Eastern or Western Europe or import more OPEC oil. The USSR is heavily committed to providing the bulk of Eastern Europe's oil, and the need for hard currency would militate against substantial reductions in sales to the West. Because large direct purchases would be limited by hard currency shortages, the USSR probably would seek to get OPEC oil by barter, perhaps for military equipment.

30. Technical problems, mainly with pipeline construction, continue to hinder gas industry development. Efforts to provide better equipment and technical know-how for gas pipeline operations have lagged badly, and no breakthroughs are in sight. Much of the line pipe, valves, and compressors for pipelines will have to be imported from the West. We estimate that gas production in 1980 probably will not exceed 390 billion cubic meters compared with the 400-435 billion planned.

Electric Power

31. The increase in electric power output slated for 1976-80—roughly 5-1/2% per year—is the lowest rate of growth for a five-year period since World War II. This suggests that some power shortages may occur because

- industrial output is slated to grow at a higher annual rate of 6-1/2%;
- increased mechanization and a reduced share of manual labor in industry, prescribed by the plan, will require the increased electrification of industrial processes; and
- the share of electric power allocated to the rural sector is scheduled to rise.

Moreover, some regional shortages could develop in the European area because of limitations in the high-voltage transmission network and the emphasis placed on building electric power generating capacity in the Eastern regions. In 1976-80, new nuclear and hydroelectric powerplants will represent a larger share of total installation of electric generating capacity, with the result that the share of new conventional thermal powerplants will drop from 77% in 1971-75 to 60% in 1976-80.

32. The continuing failure to commission new capacity on time—14% short of plan in 1971-75—could frustrate achieving even the low rates of growth targeted. In his speech to the 25th Party Congress, the Minister of Power and Electrification expressed concern that in the past few years the annual increment in demand for electricity has begun to exceed the commissioning of new electric power capacity. The minister attributed this to the failure to deliver the required machinery and to the drafting of power construction personnel for major projects such as the Kama and Volga Motor Vehicle Plants.

Machinery

33. Soviet machinery output—the source of equipment for investment, military equipment, and consumer durables—is planned to grow more rapidly during 1976-80—an annual average of about 9%—than in 1971-75—8-1/2%. As indicated above, this reflects the emphasis on new technology and on raising the share of investment funds spent on equipment rather than construction.Within the machinery category, rapidly growing product groups include computer hardware (about 12%), instruments and automotive equipment (10%-11%), numerically controlled machine tools (about 9% in physical units and probably much faster in value), metalforming machine tools (11%), and chemical and petroleum machinery (8-1/2% to 10%). Some items that were growth leaders in 1971-75 will grow at notably slower rates in 1976-80, including motor vehicles, tractors, and agricultural machinery. The dramatic slowdown in growth in the motor vehicle industry—1.4%-2.3% annually in 1976-80 compared with 16.5% annually in 1971-75—indicates that near-capacity production has been reached, particularly at Tol'yatti, and that quality and improved design will be stressed.[2] For example, trucks and trailers are to be tailored to the needs of agriculture, construction, mining, and commercial transportation. Production of tractors and agricultural machinery is scheduled to grow in the current plan period at about half the rates achieved in

2. These growth rates are for the number of physical units. Presumably, if qualitative improvements are made, the total value of output will grow at a faster rate.

1971-75. Here, as in the automobile industry, production capacity limits growth in the next five years. The reasons for this slowdown also may be greater concentration on quality.

34. Somewhat puzzling is the difference between the planned rate of growth of the machinery sector (9.2%) and the planned rate of growth estimated for the equipment component of gross fixed investment (5.6%). Logic dictates that these rates of growth should be similar since producers' durables, the largest component of machinery output, is the source of investment in equipment. This anomaly was also observed in the previous plan, but when actual performance data were published, the growth of investment in equipment closely paralleled the output of producers' durables.

Agriculture: The Spoiler

35. The performance of Soviet agriculture will be crucial to the successful fulfillment of the five-year plan since this sector contributes about one-fifth of GNP and is subject to extreme fluctuations in output. During the last five-year plan period, disastrous harvests in 1972 and 1975 put most of the original plan goals out of grasp. The continuing repercussions of the 1975 harvest and the possibility of two poor years again in 1976-80 probably make the new five-year goals too ambitious. The planned growth in the flow of resources to agriculture, although in keeping with the investment program for the rest of the economy, has been sharply reduced from the last five-year plan. Considering the planned increases in output, this change seems to stress efficiency and productivity gains not warranted by agriculture's record.

36. The grain target apparently was not scaled down in light of the poor crop last year (see Table 5). The goal of 215-220 million tons per year appears to be projected from the 1950-74 trend line of gross harvests, whereas if the 1975 harvest is included, an annual average of only about 205 million tons is projected. Statements by the leadership indicate that they are banking heavily on good weather over the next five years. Kosygin told the 25th Party Congress that the agricultural output plans "must be regarded as minimal since the material and technical resources which are being earmarked make it possible to achieve higher indicators, given favorable weather conditions." If history is repeated, however, one or perhaps two of the next five years will encounter serious weather problems, making fulfillment of the grain output plan unlikely. Since grain output constitutes about 15% of net agricultural output, failure to hit the grain target also threatens fulfillment of the 5-1/2% average annual increase planned for total agricultural output.

Table 5

USSR: Annual Average Output of Important Agricultural Products

Million Metric Tons[1]

	1966-70	1971-75	1976-80 Plan[2]
Grain	167.6	181.5	217.5
Sugar beets	81.1	75.9	96.5
Cotton	6.1	7.7	8.5
Meat (carcass weight)	11.6	14.0	15.3
Milk	80.6	87.5	95.0
Eggs (billion units)	35.8	51.5	59.5

1. Unless otherwise indicated.
2. Midpoint of range.

37. The 1980 targets for livestock products apparently had to be reduced as a result of the distress slaughtering that occurred last year—inventories of hogs and poultry dropped 20% and 15%, respectively, in 1975. Annual average production of meat (15.0-15.6 million tons), milk (94-96 million tons), and eggs (58-61 billion units) are only slightly above the levels achieved in 1975. Even so, the reduced plans remain tied to an ambitious herd rebuilding program. The 1975 setback probably will not allow 1976 meat production to exceed 12 million tons, requiring a staggering 12% average annual increase in meat output during the remainder of the five-year plan period to achieve the mid point of the announced goal. With domestic feed supplies inadequate, the Soviets will again be forced to import substantial amounts of grain to meet the plan for livestock products. Moscow is committed to buy at least 30 million tons of grain from the United States over the next five years.

38. On the input side, the directives indicate that agriculture continues to maintain its priority among resource claimants (see Figure 3). More than one-fourth of total investment will go to this sector in 1976-80, as in the last plan period. On the other hand, the planned growth in the flow of resources to agriculture, although in keeping with the investment program for the rest of the economy, has been sharply reduced from the last five-year plan (see Table 6). Because of this slowdown, the pattern of growth of inputs into agriculture in 1976-80 will differ somewhat from the "Brezhnev Agricultural Programs" of 1966-70 and 1971-75. Deliveries of mineral fertilizer will continue to grow at a high rate, but deliveries of tractors, trucks, and agricultural machinery to the farms will slow appreciably.

39. Maintaining the high rates of growth of mineral fertilizers is critical if grain production goals are to be met, since 55% of the planned increase in grain output is to come from higher yields. The chemical industry plans large increments in fertilizer capacity in 1976-80 and will emphasize boosting the output of the phosphate and complex fertilizers badly needed to increase grain harvests. Much of the fertilizer, however, will not be available until late in the plan period, and thus the effect on grain yields during the next five years will not be steady. Moreover, planned applications to grain will be difficult to meet unless losses in transportation and storage—currently 10%-15%—are reduced.

40. The slowdown in the delivery of equipment, especially tractors, in part reflects the fact that the industry is approaching its output capacity. Official policy calls for farm managers to cope with the cutback by using existing equipment more efficiently and possibly by retiring the park more slowly. Soviet press articles indicate that a sheer increase in numbers is not as

Figure 3

USSR: GROWTH IN AGRICULTURAL INPUTS

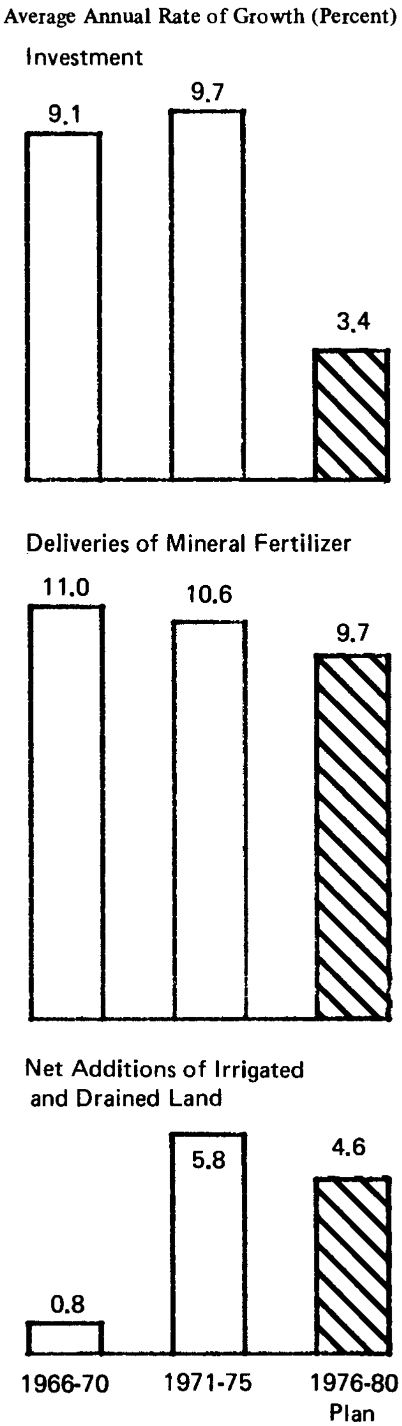


Table 6

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

Percent

	1966-70[1]	1971-75[2]	1976-80 Plan
Investment	9.1	9.7	3.4
Tractors	5.2	3.7	0.9
Trucks	10.7	11.5	0.1
Agricultural machinery	7.2	12.2	6.6
Deliveries of mineral fertilizer	11.0	10.6	9.7
Net additions of irrigated and drained land	0.8	5.8	4.6

1. First Brezhnev Program.
2. Second Brezhnev Program.

important as more powerful and specialized equipment and reliable flow of spare parts to repair the existing park. In this regard, a major US company recently signed an agreement with the Soviets to improve the design, development, and manufacture of tractors and other machinery.

41. Efforts to improve the quality of cropland will also be continued. The area limed is to average 8 to 10 million hectares yearly, compared with the 6 million hectares averaged during 1971-75. Application of lime will be a key ingredient in the program to raise productivity in areas such as the Nonblack Soil Zone of European Russia. The average yearly gross addition to irrigated and drained land during 1976-80 will be smaller than the area added in 1975. If current retirement rates are maintained, however, the area of improved land will grow by about 7 million hectares in 1976-80, equal to the net addition in 1971-75. The stock of improved land would increase even more if the area retired each year could be reduced. These improvements are noteworthy. While much of this improved land is used for technical crops such as cotton, a growing share is devoted to grain. Average grain yields in 1974 were 75% greater on irrigated and drained land than on nonimproved land. Moreover, year-to-year variation in yields on improved land is less.

Consumer Welfare: Restraint Necessary

42. If all goes according to plan, the Soviet consumer can expect "more of the same" in 1976-80—that is, a moderate but uneven growth in his level of living. Per capita consumption is planned to grow by about the same rate, 3.2%, as achieved in 1971-75 (see Table 7). Because of the repercussions of last year's poor harvest and

Table 7

USSR: Average Annual Rates of Growth in Per Capita Consumption

Percent

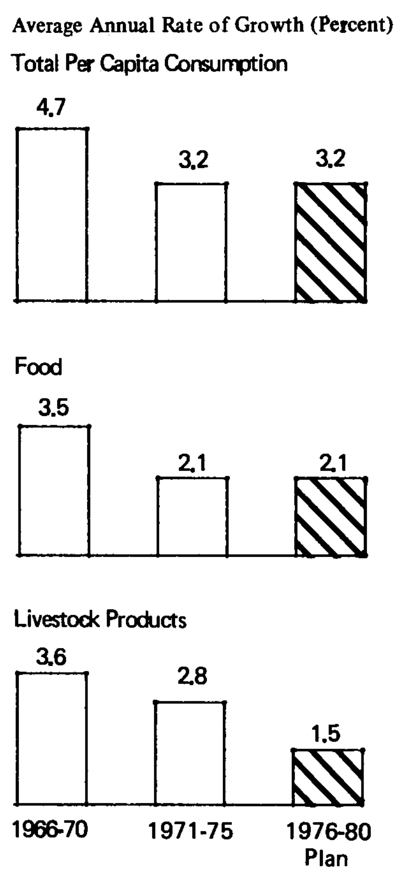
	1966-70	1971-75	1976-80 Plan
Total per capita consumption	4.7	3.2	3.2
Food	3.5	2.1	2.1
Soft goods	6.6	2.7	2.8
Durable goods	9.7	9.7	8.7
Personal services	5.4	4.3	4.1

future fluctuations in farm output, however, there will be temporary setbacks, particularly in food consumption (see Figure 4).

43. The effects of the poor 1972 and 1975 harvests dictated a modest consumer program for 1976-80. The regime's commitment to the consumer, however, appears firm. According to the plan directives and speeches to the recent Party Congress, the "chief task" continues to be "raising the people's material and cultural living standards." Kosygin pointed out that the traditional emphasis on heavy industry "does not mean...any lessening of attention toward extending the production of consumer goods in every possible way." Brezhnev also stated emphatically that "the party does not intend to renounce the course it has adopted. We regard the present tasks of the plan for Group "B" industries[3] as the minimum." Brezhnev was particularly candid about the reasons for consumer shortfalls. He blamed the shortage of agricultural raw materials caused by the poor harvest, slow construction of new capacity, and an attitude that treats "consumer goods production as something of secondary

Figure 4

USSR: PER CAPITA CONSUMPTION



3. By Soviet definition, Group "B" industries produce largely consumer goods, and Group "A" industries produce largely producer goods.

importance or as a side issue." Moreover, he seemed to acknowledge that the failure to supply more consumer goods could damage worker incentives, thereby jeopardizing plan: "Not everyone has yet grasped that this is an issue of enormous political and economic significance and is directly linked with fulfilling the aims of the party's program."

44. The paucity of investment data for the new plan makes it difficult to determine if resource commitments back up these verbal pledges to the consumer sector. Available evidence suggests that the status of consumers has not slipped relative to other resource claimants:

- The agricultural sector continues to receive priority.
- Brezhnev stated at the Party Congress that capital investment in Group "B" industries and in the trade and services sphere serving these industries is "continuing to increase."
- The leadership continues to call for the production of consumer goods by heavy industrial branches.
- A substantial amount of foreign exchange earnings in 1976-80 is already committed to buy grain via the US-USSR Grain Agreement.

45. The growth of the major categories within the consumer sector–food, soft goods, consumer durables, and services–shows little variation from the first half of the decade. The impact of the poor harvests in the recent past will continue to dampen rates of improvement in the food sector, which makes up about half of total consumption. The forced slaughter of livestock in 1975 will substantially reduce the consumption of meat and dairy products in 1976, and consumption may not begin to grow again until mid-1977. This slowdown probably explains the slight reduction–from 26%-28% in the December draft directives to 23%-25% in the February draft directives–in the 1976-80 goals for food industry output. The output of most other foods is scheduled to grow steadily, with quality improvements.

46. The consumption of soft goods, about 20% of total consumption, is slated to grow at a slightly higher rate than in 1971-75, but nowhere near that of 1966-70. In that period, high growth resulted from substantial imports from Eastern Europe and the West and strong demand from rural consumers whose incomes were

rapidly increasing. With demand for basic items now largely met, future growth depends on improving quality and assortment and on producing "fashionable" goods.[4]

47. The consumption of durable goods is planned to grow at a high rate, although somewhat more slowly than in 1971-75. This category will include goods that the Soviet consumer has never seen before, such as self-defrosting refrigerators, fully automatic washing machines, air conditioners, and video tape recorders. In contrast to the previous five-year plan period, rapidly increasing sales of automobiles will not play an important role in boosting growth rates of consumer durables. Because automobile production is planned to increase only slightly—about 1% per year—annual sales to the population are expected to remain at roughly the 1975 level. Nevertheless, at these rates, the stock of privately owned cars will roughly double, from an estimated 2-1/2 million in 1975 to 5 million in 1980, or nearly 2 cars per 100 people. Such sales could (1) absorb about one-third of the 91 billion rubles currently held in savings accounts and thus ease inflationary pressure, (2) boost consumer morale, and (3) drop the waiting period for a car to several months instead of several years. Recent proposals to initiate installment purchase of cars would facilitate purchases by lower income families.

48. The supply of personal services will grow at a slightly lower pace than during the past ten years, although it is this category that needs the greatest improvement. Housing continues to head the list of unsatisfied demands. If plans are met, per capita housing space in 1980 will nearly meet the nine square meters standard promised by the leadership in 1928. The volume of state-provided everyday services (such as barber shops, public baths, and shoe and clothing repair shops), although planned to grow by 50%, is still far below Western levels. In 1975, the total value of such services amounted to 6-1/2 billion rubles or about 26 rubles per capita—only enough for a woman to have her hair washed and set once a month.

49. Income goals for 1976-80 indicate an even more serious attempt than during the last plan period to stifle inflationary pressures (see Table 8). The growth in average money wages per worker at an estimated 3.2% is the lowest rate in the Brezhnev period and equals the growth rate planned for per capita consumption. Moreover, there is no "something-for-everyone" welfare package this time as implemented in 1971-75, perhaps a part of the anti-inflationary policy. Past attempts to hold incomes in line with the availability of goods and services were

4. In his speech to the 25th Party Congress, Kosygin said, "It is not some restricted circle of consumers but practically all the urban and rural population who are persistently making demands about the quality, convenience, and newness of goods."

Table 8

USSR: Personal Money Incomes

	1965	1970	1975	1980 Plan
	Billion Current Rubles			
Total money income	**123.43**	**182.98**	**247.89**	**312.04**
Of which:				
Earnings of wage and salary workers	89.05	132.05	179.30	209.88
Wage payments to collective farm workers	9.13	14.04	16.24	20.38
Transfer payments[1]	15.01	24.04	35.88	45.17
State deductions from income[2]	9.62	16.63	25.99	32.72
Disposable money income	113.81	166.35	221.90	279.32
	Rubles			
Per capita disposable money income	**492.90**	**685.13**	**871.91**	**1,045.75**
	1961-65	**1966-70**	**1971-75**	**1976-80**
	Percent			
Average annual increase in per capita disposable income[3]	5.9	6.8	4.9	3.7

1. Transfer payments include pensions and welfare payments, stipends to students, loan service, and insurance indemnities.
2. Total state deductions include direct taxes on the population, local taxes, state loans, trade union and party membership dues, and insurance premiums.
3. Average annual rate of growth during each five-year period with the terminal year as indicated.

frustrated largely because the cost of new welfare measures exceeded estimates. The only new welfare measures fall into the category of pensions and benefits. Minimum old age pensions will increase, and women with children will receive various benefits, including a shorter work day and week and longer paid leave after giving birth.

50. The leadership apparently does not intend to sop up excess purchasing power by raising the prices of consumer goods. The directives claim that the policy of "securing stability in state retail prices for basic foodstuffs and nonfood products is to be continued," with selective price reductions.

Economic Inputs

Investment: More from Less

51. A striking difference between the current five-year plan and its predecessors is the low rate of growth projected for capital investment (see Table 9). The average annual rate of 3-1/2% is only about half that recorded in the three previous five-year plan periods. Planners hope the reduction will force a more judicious use of investment funds by (1) concentrating on completing unfinished projects and expanding old facilities, and (2) raising capital productivity by incorporating the latest technology and employing better managerial techniques.

Table 9

USSR: Indicators of Capital Formation

	Average Annual Percentage Rate of Growth		
	1966-70	**1971-75**	**1976-80 Plan**
Total new fixed investment[1]	**6.8**	**6.4**	**3½**
Gross additions of new fixed capital[2]	8.3	6.5	5½
Backlog of unfinished construction[3]	12.1	8.4	½

1. Excludes net additions to livestock, capital repair, and changes in inventories.
2. This term differs from "gross fixed investment" in that it counts only those investment projects which were completed.
3. Some equipment installed in unfinished plants is included in this category.

52. The proliferation of new projects has tied up resources and lengthened construction times, even by Soviet standards. In 1975 the amount of unfinished construction equaled 76% of total state capital investment. The new five-year plan directives pledge that this number will fall to 65% by 1980. Toward this end capital investment will be concentrated on completing and commissioning new capacity and on raising the proportion spent on new equipment as opposed to starts of new buildings. In his speech to the 25th Party Congress Premier Kosygin warned ministries and departments not to seek "additional capital investment allocations but to fulfill the planned volume of capital work and commission new production

capacities in good time in accordance with the plan." In this way the USSR apparently hopes to obtain an average annual boost of 5-1/2% in gross additions of new fixed capital in 1976-80 with an annual increase of only 3-1/2% in new fixed investment, compared with the 6.5% growth in gross additions achieved in 1971-75 backed by a 6.4% rise in investment.

53. Similar campaigns have been waged in the past with mixed results. In 1973, for example, investment growth was targeted at only 1.8% and new construction starts were to be held to 460 compared with more than 700 planned for 1972. These efforts were successful; gross additions of new fixed capital in 1973 increased at about three times the previous year's rate, while the increase in unfinished construction dropped from 12-1/2% to less than 3%. In 1974 and 1975 the restrictions were relaxed somewhat, but 70% of all centralized investment was still to be concentrated on projects nearing completion. Although fairly good growth in gross additions of new fixed capital was achieved in 1974 and 1975, the annual rate of increase in the backlog of unfinished construction each year shot up to more than double the 1973 rate.

54. The inability to hold down new starts and complete old projects is inextricably linked to the system of planning and management. Overriding concern with growth and high investment rates impels ministries and enterprises to press as many projects as possible on the planning agencies. Project completions are frustrated by endemic bottlenecks in the distribution system and a lack of incentives in construction organizations where plan fulfillment is largely based on the value of work completed. Basic construction work is of high value but finishing work is not.

55. A concentration on project completions could lead to an imbalance in the availability of new production capacity. For example, a plant completed now might depend on inputs from plants whose construction has been postponed. Moreover, if new starts are limited in those sectors counted on for output growth – such as fuels and power from Siberia – the Soviet economy could suffer a shortage of essential materials in the 1980s. This concern was expressed by the Minister of the Coal Industry at the 25th Party Congress.

> The CPSU Central Committee draft for the 25th Congress outlines the development of the Kansko-Achinsk basin. But the 5-year plan does not provide for resources for starting the construction of new projects. We

ask the USSR Gosplan to allocate the necessary material and financial means, when it amends the 1976-80 plan, bearing in mind that it will take 10-15 years to create enterprises in new, sparsely inhabited areas.

56. In addition to increasing the capital stock, the emphasis on completing unfinished projects is aimed at raising its technological level. Currently, construction takes so long that the embodied technology is already obsolete when production begins. In 1969, first deputy Chairman of the USSR State Committee on Science and Technology, V. A. Trapeznikov, identified construction delays as largely responsible for the Soviets' technological lag behind the West. He advocated cutting the number of construction projects in half.

57. The new plan also emphasizes the reequiping and modernization of existing enterprises with a concomitant increase in the rate of retirement of outdated equipment. Accordingly, in 1976, "the share of expenditures on equipment in the total volume of capital investment is to be raised," and 64% of state capital investment[5] in industry will be channeled into existing enterprises.

58. The plan directives give scant detail on investment by sector or branch of industry. As noted above, agriculture will take one-fourth of total investment funds. Brezhnev indicated to the recent Party Congress that this is a long-term commitment: "The improvement in the quality of agricultural production requires time, toil, and huge investment ... we only recently started to allocate large funds to this sector." Within industry, priority will be placed in those areas that "insure the acceleration of scientific and technical progress." As in the last plan period, these are identified as machine-building, the chemical and petrochemical industries, and electric energy.

Manpower: Slowdown Ahead

59. The new plan directives fail to reveal the planned growth and allocation of manpower. Nevertheless, sufficient demographic data and secondary information on Soviet labor intentions permit the construction of estimates believed to be relatively accurate for the major labor force components. Assuming that labor force participation rates remain at their current high level, as is likely, the Soviet civilian labor force will grow by 1.5% annually during 1976-80 compared with about 1.6% in 1971-75. In 1980, the USSR will employ approximately three-fifths more workers than the United States, but many of the Soviets will be engaged in unskilled

5. Includes investment in state-owned enterprises and organizations; excludes investment in cooperative enterprises and organizations, in collective farms, and for construction of private housing.

activities and assisted by little machinery, resulting in low output per worker compared with the developed West. For example, in 1980, Soviet agriculture will still employ more than 30 million workers compared with fewer than 4 million in the United States.

60. Despite the slight slowdown in growth projected for the labor force because of fewer youths reaching working age, the USSR will not face an acute manpower shortage during 1976-80 (see Table 10). Sufficient workers will be

Table 10

USSR: Average Annual Rates of Growth of the Labor Force

Percent

	1966-70	1971-75	1976-80 Plan
Total civilian labor force	**1.5**	**1.6**	**1.5**
Agriculture	-1.3	-1.4	-1.5
Nonagriculture	3.0	2.7	2.6
Industry[1]	2.9	1.5	0.7

1. Industrial employment.

available to man all priority endeavors, including Siberian oil development, construction of the Baikal to Amur railroad, and industrial expansion. If some shortages occur, they will likely be in the services sector, where employment growth has been the most rapid and which is labor intensive.

61. The strain on manpower resources will be eased by the anticipated continuation of the slowdown in the growth of industrial employment. During the entire five-year period industry is expected to add fewer than 1-1/2 million new workers. A decade ago, Soviet industry was adding more workers than this every year. Planners are counting on increased productivity from more and better machinery, better educated workers, and improved work scheduling. Boosting productivity will become even more important in the mid-1980s when a very sharp slowdown in manpower growth is projected. During the 1980s, the labor force will grow at an estimated rate of only about 1% per year, largely a result of the sharp decline in birth rates during the 1960s.

Factor Productivity: The Key to Future Growth

62. In 1976-80 the average annual growth of combined factor inputs – capital, manhours, and land – is estimated at about 3-1/2%, somewhat slower than the 4% achieved since 1960 (see Table 11 and Figure 5). Given this growth, if

Table 11

USSR: Average Annual Rates of Growth of Inputs, Output, and Factor Productivity in Gross National Product

Percent

				Plan	
	1961-65	**1966-70**	**1971-75**	**1971-75**	**1976-80**
Total inputs[1]	**4.1**	**3.9**	**4.1**	**3.5**	**3½**
Man-hours worked	1.6	2.0	1.9	1.6	1½
Capital	8.7	7.5	7.9	7.1	6½
Land	0.6	-0.3	0.9	0.0	½
Output	5.0	5.5	3.8	5.8	5
Factor productivity	0.9	1.5	-0.2	2.2	1½

1. Inputs of man-hours, capital, and land are combined using weights of 60.18%, 36.69%, and 3.13%, respectively, in a Cobb-Doublas (linear homogeneous) production function. These weights represent the distribution of labor costs, capital costs (depreciation and a 12% charge on gross fixed capital, including livestock), and land rent in 1970, the base year for all indexes underlying the growth rate calculations.

GNP is to rise by the planned average annual rate of 5% in 1976-80, combined factor productivity must increase by about 1-1/2% annually – a much faster rate than attained during the past five years. If industry is to grow by the planned rate of 6-1/2%, industrial factor productivity must grow by 3%, about double that achieved in 1971-75 and in 1966-70 (see Table 12).

63. Moscow hopes to achieve the productivity boost mainly by importing foreign technology and raising the level of domestic technology. Soviet imports of machinery and equipment have run about 10%-12% of total Soviet investment in machinery and equipment over the last five years. However, the assimilation of new technology has been difficult, in part because the managerial incentive system is geared to quantitative targets. The directives do not indicate that a reform of incentives is being considered.[6]

6. See paragraphs 77-86 for a discussion of economic reform.

Figure 5

USSR: GNP, INPUTS, AND FACTOR PRODUCTIVITY

Average Annual Rate of Growth (Percent)

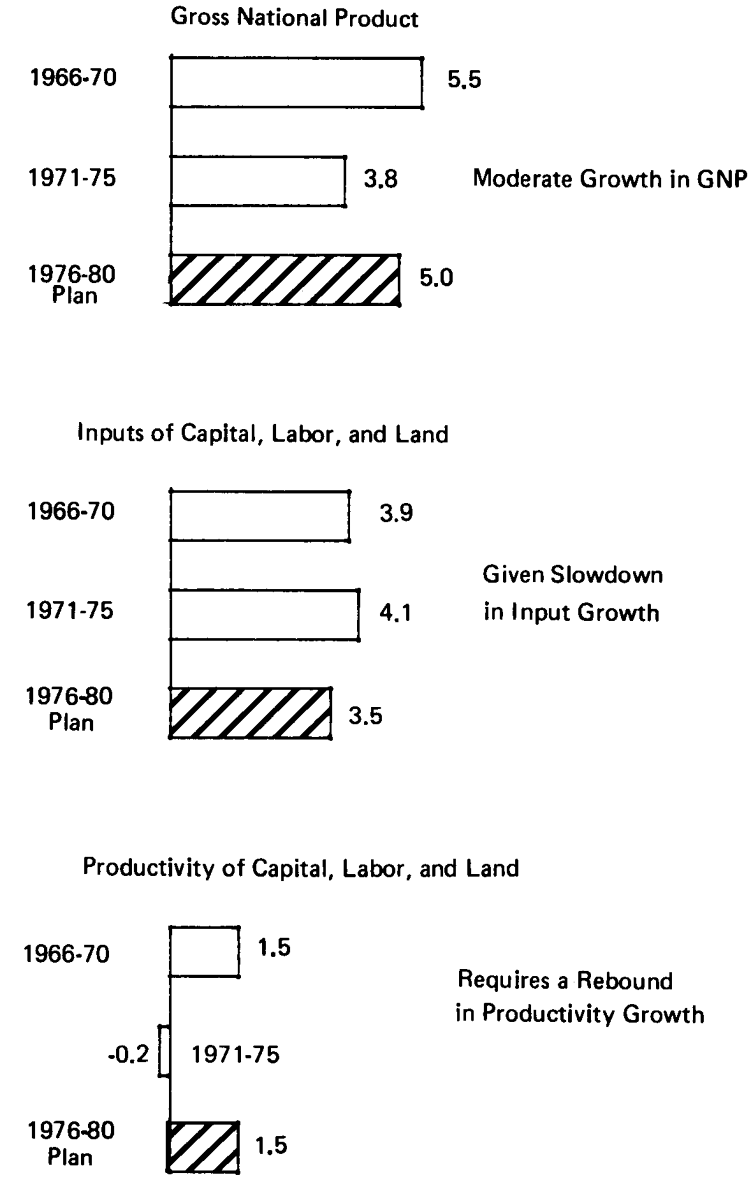


Table 12

USSR: Average Annual Rates of Growth in Inputs, Output, and Factor Productivity in Industry

Percent

				Plan	
	1961-65	1966-70	1971-75	1971-75	1976-80
Total inputs[1]	6.4	5.5	4.5	4.3	3½
Man-hours worked	2.9	3.1	1.5	1.3	½
Capital	11.2	8.7	8.7	8.4	7
Output	7.0	6.8	6.0	8.0	6½
Factor productivity	0.6	1.3	1.5	3.5	3

1. Inputs of man-hours and capital are combined using weights of 57.02% and 42.98%, respectively, in a Cobb-Douglas (linear homogeneous) production function. These weights represent the distribution of labor costs (wages, other income, and social insurance deductions) and capital costs (depreciation and a 12% charge on gross fixed capital) in 1970, the base year for all indexes underlying the growth rate calculations.

The Military Burden: Heavy but Manageable

64. Defense requirements have been absorbing an estimated 11%-13% of Soviet GNP since 1970. More importantly, defense impacts heavily in the high-technology areas where it exerts a priority claim on manpower and output. For example, defense still takes the lion's share of high-grade scientific and technical talent, and in electronics, defense requirements account for most of the total output of integrated circuits.

65. Public statements by the leadership often reflect concern about the sacrifices in economic growth and consumer satisfaction that follow from their defense priorities. This concern, however, has not prevented steady increases in military programs. Major defense programs have been generously supported even in periods of economic setbacks, and the followthrough on new programs has been strong.

66. In the future, the problem of lagging economic growth will make steadily rising defense costs an even more painful issue for the leadership. The economic burden, however, will not be the only, or perhaps even the major, consideration in deciding future defense programs. Other factors will be the leaders' views of

foreign military threats, the powerful institutional forces which support defense programs, progress in arms limitations negotiations, and the momentum of technological advances in the defense sector.

67. The annual increment planned for Soviet GNP seems large enough to allow for both increases in defense spending and improvement in living levels. Moreover, the present level of Soviet defense programs is such that modest rates of growth – or indeed even a constant level of defense spending – will allow inventories of military equipment to continue to rise.

Foreign Trade: Fastest Growing Sector

68. In 1971-75 foreign trade was one of the most dynamic sectors of the economy, growing about 2-1/2 times faster than GNP. This trend is expected to continue for the rest of the decade, since foreign trade will play an important role in Soviet development plans for 1976-80. Imports of Western technology are necessary to meet some production goals, and deliveries of foreign grain may be crucial to restore forward momentum in agriculture and consumption. The Soviets plan a growth of 30%-35% in the value of foreign trade in 1976-80 but this rate probably will be exceeded as in the past; the actual growth rate in 1971-75 was 186% compared with the plan of 35%.

69. Eastern Europe will remain Moscow's major trading partner in 1976-80, but trade with the West should rise rapidly as Moscow continues to import Western technology and equipment. How much the Soviets are able to import will depend largely on markets for their export goods, earnings from gold sales, the availability of Western credits, and the amount of grain needed from the West. The large hard currency deficits of recent years – $6.3 billion in 1975 and $4-$6 billion projected for 1976 – will place a new constraint on credits if not on new purchases, particularly if a huge deficit is repeated in 1977.

70. Much of the continued growth in trade with Eastern Europe projected for 1976-80 will come from higher Council for Mutual Economic Assistance (CEMA) prices. Since raw material prices are expected to rise faster than prices of manufactured goods at least through 1977, terms of trade with Eastern Europe should continue to shift in favor of the USSR. Despite the higher prices, the Soviets remain reluctant to raise the quantities of increasingly scarce raw materials traditionally supplied to Eastern Europe. Oil exports, for example, are expected to increase only slightly – from 1.3 million b/d in 1975 to about 1.5 million

b/d in 1980. Moreover, Moscow has insisted on East European participation in the development of raw material deposits used for exports to Eastern Europe. A gas pipeline from Orenburg to Eastern Europe is the largest such project under way. Other joint development projects include a pulp complex, an asbestos complex, an oil pipeline, and a fertilizer production facility.

71. Equipment and technology should account for a large share of Soviet imports from the West in 1976-80. Orders placed with Western firms have been largely for chemical plants, oil and gas field equipment, wood processing equipment, motor vehicle manufacturing equipment, and mining and construction equipment. Ongoing negotiations indicate that Western inputs will continue to be important in the development of these sectors. Large amounts of Western equipment, as well as consumer goods, will be particularly important for developing Siberian raw material deposits and the associated infrastructure.

72. Moscow has sought to make many of the Siberian projects – natural gas, forestry, chemicals, coal – self-liquidating by obtaining advance commitments from Western firms to purchase a major portion of the project-associated output. The Soviets are placing increased importance on such compensation agreements and will pay for a large share of equipment imports during 1976-80 in this manner (see Table 13). Negotiations for additional compensation agreements are under way

Table 13

USSR: Compensation Agreements Under Negotiation

Project	Western Countries Involved	Description	Hard Currency Cost
Udokan Copper	United States, United Kingdom	Complex to process copper	$1.5 billion
Sakhalin Offshore Oil	United States, Japan	Offshore oil exploration and development	$1 billion +
Aluminum Complex	United States, France	Alumina and aluminum plants	$2 billion
Yakutsk LNG	United States, Japan	Natural gas pipeline, LNG plant, LNG ships	$4 billion +
Pulp/Paper Plant at Yeniseysk	Japan, France, United States	Pulp factory and facilities to produce newsprint, manila paper, and plywood	$600-$800 million
North Star LNG	United States, West Germany, France	Natural gas pipeline, LNG plant, LNG tankers	$7 billion +
Kursk Steel Complex	West Germany	Pelletization plant, direct reduction plant	$1-$1.5 billion (Phase I only)

and even more should be generated by the recent Soviet decision to speed the construction of a second trans-Siberian railroad, which will open new raw material deposits for development.

73. In addition to equipment and technology, the Soviets should continue to rely on the West for imports of industrial materials. Signed contracts and continuing negotiations indicate that steel products will remain a large component of Soviet imports from the West. Beginning in 1974, such imports rose sharply as increased Soviet demands for specialty and shaped steels could no longer be met from domestic production and/or imports from Eastern Europe. Soviet preparation for the 1980 Olympics will also require sizable imports from the West. To date the Soviets have contracted for the construction of about $400 million in hotels, bringing total contracts associated with the Olympics to more than $1 billion.

74. The extent to which the Soviets can increase their imports of Western technology and equipment will depend in part on import requirements for grain and other agricultural products. In an average weather year, the Soviets probably will import 10-20 million tons of grain; a poor harvest could double this amount.

75. Soviet exports to the West should recover from the recession-induced slump, which has aggravated Soviet hard currency trade deficits since late 1974. Raw materials will continue to be the lion's share of these exports despite a rapid growth in exports of manufactured goods. Soviet exports to the West will be further boosted by increased deliveries of natural gas, timber, and coal resulting from compensation agreements signed earlier. By the end of the decade, the USSR also will be exporting large quantities of fertilizers and other chemicals produced at imported plants. Moscow's ability to expand some exports will be constrained by growing domestic needs and/or declining growth in production. For example, there appears to be little room for increased oil exports beyond the present 1 million b/d.

76. Soviet indebtedness to the West has risen rapidly as a result of large hard currency deficits. Nevertheless, the USSR will probably continue to seek a large volume of Western credits during 1976-80. Debt service was probably on the order of 20% of export earnings in 1975, but the structure of the estimated $7 billion medium- and long-term Soviet debt with its long repayment periods and grace periods should facilitate its management while export earnings are recovering. Moscow apparently regards such credits as a relatively low cost means

of importing Western technology and equipment. Moreover, the growing role of compensation agreements provides the USSR with greater certainty regarding its future ability to generate sufficient export earnings to cover the growing debt service.

77. Western governments probably will remain willing to extend large amounts of low-interest credits to the USSR. They recognize that credit is a key to the placement of new orders. Western competition for Soviet business becomes particularly keen during recessions when large Soviet orders provide a welcome stimulus to lagging domestic economies. Since mid-1974, the USSR has received more than $11 billion in credit lines from Western Europe, Japan, and Canada.

78. Heavy borrowing in 1975 from Western commercial banks, however, may have limited Moscow's ability to borrow from this source in the near future. By the end of 1975, many Western bankers had reached their self-imposed credit limits for loans to the USSR or were beginning to insist on higher interest rates. The Soviet decision to tightly control spending in 1976 rather than to continue borrowing from commercial banks could stem from a reluctance to increase their short- and medium-term indebtedness.

79. The Soviets have a large stockpile of gold, and output is increasing. At current market prices, Moscow could earn about $1 billion annually from sales just from current production. With Eurocurrency borrowing apparently limited in 1976, the USSR may have to market large amounts of gold and thereby risk driving down gold prices.

80. The Soviets probably will be forced to take severe measures to bring their hard currency trade into balance if large deficits occur in 1976 and 1977. These measures might include diverting easily marketable exports from soft currency trading partners to Western markets; requesting delays in deliveries of goods not covered by medium- and long-term credits; or even cancelling contracts outright. On the financing side, Moscow could expand gold sales even further or insist that imports financed by government-backed credits be 100% financed. An attempt to reschedule debts with commercial banks would be unlikely since this would tarnish the credit rating, which the USSR has worked so hard to achieve.

Other Policies

Private Activity: Another Swing of the Pendulum

81. Official support apparently will be given to the private sector in 1976-80.[7] In the most important area of private activity, farming, the plan directives pledge "adequate" feed for privately owned livestock and direct collective and state farms to provide the "necessary assistance" to the cultivation of private plots. This latest swing toward the private sector follows past practice favoring private farming after harvest failures; a period of relatively good harvests results in a tightening of the restrictions on private farming. Private producers still provide about 30% of the vegetables, meat, and milk, 40% of the eggs, and 65% of the potatoes produced in the USSR.

82. Press articles and speeches by local officials last fall presaged the high-level support given in the plan directives. They emphasized the importance of the private sector as a major reserve for increasing output and expressed concern that many farmers were abandoning private activity because of higher incomes from the socialized sector and a desire for more leisure time. The Georgian party boss, for example, suggested that the government supply more feed, fertilizer, pasture lands, and machinery to the private farmer. He decried as "abnormal" the fact that "42% of the rural population do not have cows at all and are being transformed from a producer of livestock products into consumers of those products." He suggested that a special commission be established to decide how to increase output in the private sector and that their recommendations be presented to the Central Committee and Council of Ministers.

83. The plan directives also indicate that support continues for the construction of private housing in "small towns, urban settlements, and rural areas" (private construction has been forbidden in cities of more than 100,000 population since 1964). For the first time the directives promise that the supply of equipment for heating and water for individual dwellings will increase. The leadership recognizes that such construction can help ease the housing shortage. During 1971-75, about one-fourth of all new housing was privately built.

Economic Reform: A Shortage of New Ideas

84. Although no major reform of the Soviet economic system appears imminent, the 25th Party Congress speeches indicate that some tinkering will

7. The production and marketing of agricultural products and the construction of privately owned family residences are the primary forms of private activity permitted in the Soviet Union.

continue. The new plan directives endorse further implementation of administrative reforms in the industrial and agricultural sectors aimed at promoting greater efficiency. In the industrial sector, this involves mainly completing the formation of production associations. In the agricultural sector, work will continue on the development of "interkolkhoz, kolkhoz-sovkhoz and state-cooperative associations, and agrarian-industrial complexes for the production, processing, and marketing of agricultural output."

85. Production associations – groups of enterprises that use similar production technology or manufacture similar products – were first formed in the USSR in 1961. They grew out of a need for "branch" management under Khrushchev's regionally run "Sovnarkhoz" system. With the reintroduction of ministerial management and the economic reform in 1965, the production association was deemphasized. During the last plan period it was revived as a way to streamline the bureaucracy and hasten technological progress. Its formation often allows the abolition of one bureaucratic layer, the ***glavk***, which traditionally stood between the enterprise and ministry. The association's size and ability to combine research and production organizations is touted as a way to encourage the mastery of new technology.

86. Brezhnev called for making the production association the basic unit of industrial organization at the 24th Party Congress in 1971. This was finally decreed in March 1973, and the regulations governing the associations' administration and functions were adopted by the Council of Ministers in March 1974. Ministries were to submit general plans for implementation by the fall of 1973 with the complete changeover to take place in 1973-75. Kosygin admitted at the recent Party Congress that production associations now account for only 24% of total industrial output and that the transition will not be completed before the end of the current five-year plan period. Progress has been slow because of bureaucratic inertia and resistance from those that stand to lose power to the production association, mainly the small enterprise and ministry.

87. Reorganization of the agricultural sector generally parallels the formation of production associations in industry; that is, the emphasis is on concentration and specialization to increase efficiency. As far back as 1961 Khrushchev encouraged interfarm associations, but change was slow. It was not until 1973 that Brezhnev breathed new life into the movement. In an address to the Central Committee he stated that "the time has now come for a step-by-step transition from small labor units to large-scale specialized production, using industrial methods

and the achievements of science and technology." Progress now is being made but not fast enough to suit Brezhnev. At the 25th Party Congress he demanded that "this line must be pursued more actively." Accordingly, a June decree of the Central Committee ordered party and government organs to accelerate the creation of interfarm associations and agro-industrial complexes.

88. Some local leaders, however, believe that the reorganization has been too rapid, on both administrative and economic grounds. A party secretary from the Volga region complained to the recent Party Congress that the formation of new farm organizations has gotten ahead of the legal norms and regulations. He called for the Ministry of Agriculture and planning organs to formulate model statutes for agriculture similar to those for the industrial production associations in 1974. The Belorussian first party secretary told a local plenum last November that large livestock complexes were being formed before the feed base was assured. He called for "review" of the agricultural construction program and even proposed scrapping the program to build large complexes and directing investment instead to fodder production. The Georgian party chief took a similar line last September, noting that "we have been excessively fascinated with the construction of large complexes – everyone wants to have his own economic giant."

89. At the 25th Party Congress, national and local officials agreed that new initiatives need to be taken in the management and planning of "intersectoral" and "territorial" areas: that is, where economic activity crosses either branch of industry or republic lines.

90. Brezhnev cited three cross-sectoral areas that need cooperative effort – fuels and power, transportation, and the production and processing of agricultural products. He claimed, for example, that "considerable losses" in agriculture stem from this "lack of coordination among departments and miscalculations in planning." He suggested a "dovetailing" of the farm sector "with the industries which supply the village with equipment, fertilizers, combined feeds as well as the construction industry, and with those industries which are responsible for procurement, receiving, storage and processing of agricultural produce."

91. Brezhnev cited the development of Western Siberia as an area ripe for the territorial principle of planning and management. He complained that Siberian development is "essentially a single task," but it is currently directed by four departmental river fleets, numerous construction and supply organizations, and at least ten ministries and departments in Moscow – "plenty of wet nurses but still a great deal of shortages." He suggested "a united, centralized program" to cover "all stages or work, from planning to realization."

92. In typical Soviet fashion, the exact form and timing of such reforms remain murky. One regional leader, Belorussian party chief Masherov, went so far as to suggest that a new structural subdivision under the Council of Ministers might be necessary. Brezhnev, however, demurred on the specifics and threw the responsibility for drafting solutions to the Council of Ministers and Gosplan. Kosygin, the chief spokesman for these components, directed Gosplan to take intersectoral and territorial matters into consideration when "elaborating comprehensive programs." He also promised that "in the immediate future" new organizational forms must be developed.

93. The Soviets consistently fail to come to grips with the fact that their refusal to change the basic operating principles of the Soviet economic system seriously limits the success of any economic reform. To be effective, the reform should be accompanied by more rational and flexible prices, less central control over the allocation of materials, and relief from excessive demand for most materials. The current emphasis on improving quality and assortment will be particularly hard to achieve without a change in managerial incentives. Without such incentives, plant managers will be loathe to bear the reduction in quantity of output that generally accompanies production of better items. The leadership has given no indication that the radical changes necessary to improve matters in these areas will be introduced.

Outlook: The Crunch Comes in the 1980s

94. Although the tenth Five-Year Plan represents a step toward more realistic planning, it is doubtful that major targets can be met.

95. ***Agriculture.*** Two unfavorable weather years would put the grain target and consequently the goal for agricultural output out of reach.

96. ***Consumption.*** Meat output – one of the most important consumer goals – is unlikely to grow at the unprecedented rates projected for 1977-80. This shortfall and others likely in the consumer sector again will open a gap between money incomes and supplies, adding to inflationary pressures.

97. ***Investment.*** Based on past experience, it is unlikely that the investment strategy will pay off as planned. The basic Soviet incentive system will conspire against the project completions that are necessary to yield the planned boost in capital stock.

98. ***Productivity***. Achieving the higher rate of productivity growth projected will require the adoption of bold new strategies for the introduction of new technology and for raising the efficiency of investment in industry and agriculture. None seem forthcoming. If productivity fails to rise above the average annual rate achieved during the last two five-year plan periods, GNP growth could be held to about 4% instead of the planned rate of 5%.

99. If major five-year plan goals are frustrated, as seems likely, Moscow has several policy options that could limit the decline in economic growth. The most effective measures would focus on the major sources of growth, increases in investment and manpower. If the Soviets are unable to meet the target for expanding the stock of plant and equipment by reducing unfinished construction, they could (a) boost investment at the expense of consumer welfare goals and/or (b) default on planned rates of retirement on older plant and equipment, as has happened in the past. Although the latter measure exacerbates the problem of meeting productivity goals, it permits the attainment of quantitative targets. On the manpower side, the Soviets could adopt a variety of policies to boost the rate of growth of manhours. The number of older workers could be raised by reducing pension ages and lifting penalties for part-time work after retirement. More young workers could be brought into the labor force by reducing the size of the armed forces and changing education policies to restrict the number of full-time students.

100. Even if its growth rate is disappointing during the next five years, the Soviet economy should show sufficient strength to support a strong military posture and gradually raise the level of consumption of the Soviet populace. The present leadership probably believes that as long as the economy satisfactorily performs these tasks, major economic reforms can be postponed.

101. The problems awaiting the Soviet economy in the 1980s, however, may well force the leadership to reassess the need for systemic reform. The most serious problems will affect manpower, investment, and productivity, the very sources of growth. The rate of growth of the labor force is estimated to drop markedly to an average annual rate of less than 1% in the 1980s compared with 1.6% in the 1970s. Investment will bring smaller returns as a larger share is allocated to capital-expensive development in Siberia, environmental programs, and projects for the consumer, such as the infrastructure for the auto age. Competition from other resource claimants may preclude allocating a larger share of GNP to growth-oriented investment to compensate for the lower returns. If nothing is done to boost productivity, such as a major reform of the incentive system, the average annual rate of economic growth in the 1980s could fall substantially.