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CONTINUITY AND CHANGE IN SOVIET RESOURCE ALLOCATION POLICY: Oberservations on the 1971-75 Five Year Plan

GEORGE R. FEIWEL

I

For over three decades since the early 1930s the Soviet system's directors have been obsessed with the imperative and superrapid rate of industrialization, with a forced rate of growth of investment outpacing that of national income and with maximination of physical output at almost any cost.

As the crash industrialization program unfolded the high rate of growth performance was mainly being achieved through extensive development and exploitation of manpower and natural resources—with maximization of output the paramount task and economy of resources considered a subordinate constraint. The economy enjoyed relatively abundant natural and manpower resources which could be freely exploited. The advantages of backwardness enabled it to borrow technology extensively from the more developed countries. As the possibilities for further extensive growth are circumscribed by scarcities in manpower and resources (which become more acute with a greater degree of exploitation), as possibilities of borrowing new techniques diminish, and as the opportunities of investing in relatively simple industries abate, the irrational utilization of productive agents becomes responsible for a slowdown in the rate of growth, for mounting pressures and strains, and for recurring bottlenecks. As intensive forms of development become more imperative, it is increasingly evident that the dynamics of growth of national production (investment, defense, personal, and collective consumption) are limited not only by the size and structure of available resources, technological and organizational know-how, and decisions to allocate and reshuffle resources to priority areas, but also by relative neglect of economic calculation.

Some of the most flagrant features of inefficiency in the Soviet system are waste of capital frozen in protracted, ill-conceived, and dispersed construction projects; accumulation of idle equipment, underutilization of capacity; excessive labor turnover; and lack of stimuli for assimilating technical progress. Added to these are severe fluctuations in output, poor quality and unsatisfactory composition of output, accumulation of huge stocks of unwanted consumer goods, dominance of seller over buyer, rationing, uncertainty of delivery, and a cumbersome supply system. To make matters worse, there is hoarding of materials by industrial producers (which slows down the turnover of working capital and decelerates production flow) and excessive factor inputs and use of resources in

less productive employment. And finally, the system is rigid, accompanied by inertia and lack of initiative, and a proliferation of the bureaucratic apparatus. The planning system, with the choice coefficients, action parameters, and incentives it generates, is a predominantly contributing factor to this state of affairs. It is a legacy of the period of extensive development and essentially has not been altered and evolved to meet the requirements imposed by intensive development.

Under the impact of an economy developing with increasing capital-intensity, to maintain the same growth rate it is necessary to either (or combination of) 1) increase the rate of investment; 2) raise the efficiency of investment (reducing the quantum of investment required to produce an incremental unit of national product); or 3) increase the weight of the noninvestment factors of growth. Ceteris paribus, if efficiency of investment declines, then to maintain the same growth pace it is necessary to increase the share of investment in national income; i.e., to reduce the share of comsumption in national income, as otherwise deceleration in the growth rate would occur. If the incremental capital-output ratio tends to increase, the growth rate may be expected, ceteris paribus to decline. With rising costs of investments, increasing pressures from the competitive uses of national product, and exhaustion of some of the quantitative growth factors, the problem is of overcoming the impediments to technical progress and system-made inefficiencies. Granted that the system suffers from flagrant static inefficiencies—in themselves partly a cost of economic growth the claim that it is superior to the capitalist mode of production in terms of dynamic efficiency cannot be maintained. This is particularly so in case of technical dynamism. One could argue that even if grossly inefficient choices are made in combining factors of production (movement along isoquants), but such inefficiencies are counteracted by shifts of parameters of the production function (movement of isoquants toward origin), in the long run the economy is more efficient than one where the conditions of static efficiency are satisfied, but where the system is not conducive to economic growth. However, it is particularly in the sphere of technical dynamism that the Soviet system has scored low marks.

Although resulting from a combination of many factors, the slump of growth rates in the 1960s was undoubtedly severely aggravated and accelerated by the anachronistic methods of planning and management. Since 1961 the USSR has fallen behind the US in growth rates and its position among major industrial nations shifted from second highest (after West Germany) during the period 1950–1958 to fifth (below Japan, Italy, West Germany, and France) during the period 1958–1963.

II

The primary raison d'etre of the Soviet economic reform was to inject some efficiency into the economic system. Obviously, the 1966-70 quinquennium was only a period of transition. Even had the reform been consistent, significant

results could not be expected, for those usually take longer to come to fruition. All the more, little could be expected from the timid half-measures introduced.⁽¹⁾ Yet the particularly disappointing fact was that especially during the latter part of the quinquennium, when most enterprises had already been converted, the acute inefficiencies of the system became increasingly apparent. At the end of the 1960s essentially the same unresolved problems haunted the decision-makers as those that had prompted them to initiate the reform in 1965. Disillusioned by the lack of achievements of the reform, or fearful of embarking on the road to more meaningful reform, the planners reverted essentially to stop-gap halfmeasures, in the best tradition of the dynamics of perpetuation.

In the late 1960s a manifest deterioration in economic performance took place. Whereas during the first two years of the 1966-70 FYP respectable growth rates of national income were reported (1966, 8.01 per cent, and 1967, 8.06 per cent), in the latter part of the plan, a deceleration set in (1968, 8.03 per cent, and 1969, 4.08 per cent). (2) The exceptionally unfavorable performance of 1969 was influenced by the poor showing of agriculture (decline by 3.3 per cent). But it was also caused by the progressive deterioration (in part conditioned by agricultural performance) of the pace of growth of industrial output (1966, 807; 1967, 10; 1968, 8.03; 1969, 7.01 per cent). (3) In 1969 the rate of growth of industrial output declined for the second consecutive year and was the lowest reported in the postwar period, and that of national income was only slightly higher than the low point reached in 1963 (4 per cent)—a matter of increasing concern to the leadership. In fact, at the end of 1969 an important Plenary Session of the Communist Party of Soviet Union Central Committee was held on the economic situation and policy. Although the speeches and resolutions of the Plenum were never published, subsequent publications and political speeches revealed the gist of what was said. (4) The importance of the Plenum was obvious from the repeated references to its proceedings in the economic literature in the immediate period thereafter. The recurring theme of extensive versus intensive growth and the need to shift to the latter were probably among the crucial issues tackled:

The rise in efficiency of social production has become the key problem, above all because a change occurred in the key factors propelling our economic growth. If before there was a possibility of expanding the economy predominantly by employing quantitative factors, i.e., by investments; it is now necessary to rely above all on the qualitative factors of growth; on

⁽¹⁾ Cf. G. Feiwel, The Economics of Socialist Enterprise N.Y.: Fredrick A. Praeger 1965 and Soviet Quest for Economic Efficiency N.Y.: Fredrick A. Praeger 1967.

⁽²⁾ Narkhoz 1969, p. 43. The provisional plan fulfillment figures were considerably lower.

⁽³⁾ Narkhoz 1969, p. 43.

⁽⁴⁾ See in particular, L. Brezhnev's speech at the Kharkov Tractor Plant, *Izvestia*, April 14, 1970: Editorial, Ekonomicheskaya Gazeta, Nos. 4-5, 1970; Editorial, Pravda, January 13, 1970; K. Gerasimov, Izvesita, December 18, 1969; N. Baibakov, Pravda, December 17, 1969; Z. A. Zaytsev, Kommunist voruzhennykh sil, No. 23, 1970.

the increase of efficiency; and on the intensification of the national economy. The point is that production must be expanded and quality improved increasingly by fuller and more effective utilization of existing productive capacites; by renovation of equipment; by introduction of achievements of contemporary science and technology; and by rational use of each minute of working time, every machine and every gram of materials and fuels. (5)

In a nutshell, in attacking the immediate economic problems, and in preparing for the 1971-75 FYP, the leadership seems to have been primarily concerned with the following salient issues, many of which have been of a recurring nature since the 1930s: 1) mismanagement of investment resources; 2) underutilization of capacities; 3) inflationary pressures; 4) poor quality of output; 5) maldistribution of materials; 6) lack of labor discipline; 7) short-comings of the planning system; 8) lagging performance of agriculture; 9) waste of raw materials in extraction, distribution, and processing; 10) incipient labor shortages; and 11) failures to introduce technical prograss. (6)

1. A sequence of bottlenecks, especially in the fuels and power industries and material supply branches were among the key immediate causes of retardation of industrial output. In turn some of the bottlenecks were caused by delays in commissioning capacities, whose output had been taken into account in the distribution of materials in the period for which start of production of the new capacities had been slated (unrealistic planning of the stream of output).

The difficulties encountered by the Soviets in implementing the taut investment program are a recurrent problem. They reflect both the unrealistic investment effort in terms of available resources, and the system-made inefficiencies in allocating and implementing the investment program. An overambitious investment program is bound to encounter and generate bottlenecks and phycical and organizational ceilings which will over-prolong the gestation period, and contribute to a scattering of resources, thus reducing investment efficiency. The existing technical and managerial personnel are incapable of handling effectively the manifold and expanding projects. To reduce imbalances the planners are usually forced to decelarate the momentum of expansion (as indeed was the case in the USSR in 1969).

It was generally recognized that the investment plan adopted for 1966-70 over-taxed the economy. That the country is investing enormous resources, but the returns are intolerably low. That the number of projects approved exceeded the potential of the construction, building materials, and machinery industries.

⁽⁵⁾ Editorial, Ekonomicheskaya Gazeta, No. 4, 1970. Cf. S. Kuznets Modern Economic Growth New Haven: Yale University Press 1966 pp. 72ff, E. Denison Why Growth Rates Differ Washington, D.C. The Brookings Institution 1967.

⁽⁶⁾ Cf. Feiwel, Soviet Quest for Economic Efficiency, (N.Y.: Fredrick A. Prager, 1967) ch. 1,2,3 & 6.

⁽⁷⁾ See M. Kalecki, Introduction to the Theory of Growth in a Socialist Economy, (Oxford: 1969).

That investment resources are dissipated on too many projects. That resources are squandered on ineffective ventures. That construction costs considerably exceed estimates. That a large amount of resources is frozen in unfinished projects. That plants are obsolete at the time they are commissioned. (8) In fact, during 1966-69 uncompleted investments increased more than twice as fast (44 per cent) as the volume of centralized investments (21 per cent). (9)

Even after the stringent measures taken in 1969 to curtail the investment front, the lists of construction projects for 1970 included 3,184 large projects in the process of construction. The total estimated costs of the projects was 188.2 billion rubles, and the estimated cost of completion 87.9 billion rubles as of January 1, 1970. About 14.1 billion rubles (8.4 percent of total estimated costs or 16 per cent of costs of completion) was allocated for these projects in 1970. At this rate another twelve years would be required to complete the projects. It was estimated that the actual number of projects under way at the same time is about two and half to three times in excess of that which could be executed in accordance with the branch average construction norms. In 1967-68 500 to 600 large new projects were begun each year. By 1970 the ministries proposed to start 1,000 new projects (during the last year of a FYP an attempt is made to shove as many new projects into the plan as possible, to ensure their continuation in the subsequent FYP). Gosplan cut this figure down to 300. (10)

In addition to cutbacks on new investment projects, 1969 featured a stress on concentration on critical projects from the planner's standpoint. Brakes were imposed on decentralized investments. (11) Under conditions of taut planning, the planners sacrifice first of all decentralized investments and employ administrative methods to prevent dissipation or resources from the priority projects. This rises once again the question of coexistence between centralized and decentralized investments, under taut planning. As usual the cutbacks affected severely the welfare-oriented investments. (12)

While much could be said about the overstimulation of the system's directors to invest, this penchant has pervaded and permeated virtually the entire system. One of the visible manifestations of the institutionalized growth mania is the identification of the unit's own growth with that of the national economy. If all growth is beneficial, then the best is the biggest (hence the proclivity for gigantomania). Under most conditions, this is most expendiently achieved through investment. The institutionalized postulate of overriding growth priority is strengthened by the attempt to maximize investments as a measure of the unit's

⁽⁸⁾ Brezhnev, Pravda, March 31, 1971: T. Khachaturov, Voprozy Ekonomiki, No. 4, 1971, p. 27: Cf. A. Ambartsumov, Voprozy Ekonomiki, No. 2, 1971, pp. 118-23.

⁽⁹⁾ Cf. V. Garbuzov, Finansy, No. 1, 1971, p. 13.

⁽¹⁰⁾ L. Mishin and Ye. Petrova, Voprozy Ekonomiki, No. 10, 1970, p. 118.

⁽¹¹⁾ Baibakov, Prayda, December 17, 1969.

⁽¹²⁾ Cf. Feiwel, Industralization and Planning Under Polish Socialism N.Y.: Fredrick A. Praeger 1971.

rank, power, and status in the economic hierarchy. The Soviet planning system is prone to exaggerated demands for inputs. In balancing the plan, the central planner has to cut drastically the requests. But the pressures for higher inputs are so potent and the method used to cutback so arbitrary and crude that the final plan is still unrealistic in terms of resources. The central planner's own proclivity for overinvestment and the limitations on his freedom to effect cuts probably prevent him from trimming down the plan to a realistic level.

It was suggested that prima facie evidence of the plan's lack realism is the fact that the plan for commissioning new capacities is alarmingly underfulfilled. In some cases the underfulfillment reaches 50 to 60 per cent. Throughout the economy the sluggish commissioning of capacities has become an alarmingly widespread phenomenon. Another indication of the plan's lack of realism is the striking upsurge of total unfinished construction (from 29.6 billion rubles in 1965 to 48.6 billion rubles in 1969). The rise in unfinished construction projects was particularly high in the greatly troubled chemical industry (from 2.3 billion rubles to 3.1 billion rubles respectively) and in machine building (from 2.5 billion rubles to 4.3 billion rubles respectively). Frequently projects whose construction period is estimated at two or three years, remain under construction for ten years or more. The average construction period of the large projects is about twelve years. The dragging out of construction periods is particularly pronounced in the consumer goods industries (light, food, meat, dairy, and fish).

The not unfamiliar phenomenon in the West of overshooting estimated costs of construction has been a matter of growing concern in the USSR, especially since it often reaches the 50 to 100 per cent mark of the original appropriation. While the system encourages underestimation of construction costs at the planning stage, in all fairness the size of the variance between estimated and reported costs, by itself is not a measure of inefficiency. In a dynamic economy requirements shift and new improvements are introduced. Prices go up even under Soviet conditions. However, with a taut investment plan, the cost increases are bound to contribute to further scattering of resources and prolongation of gestation periods.

The protracted construction period and a host of other shortcomings of the investment process, give rise to the burden of uninstalled equipment. (20) In spite of measures to reduce inventories, substantial increases in uninstalled equip-

- (13) Khachaturov, op. cit., p. 27.
- (14) Brezhnev, Izvestia, April 14, 1970.
- (15) Narkhoz 1969, p. 512.
- (16) The not uncommon case of the Chechen-Ingush Cement Plant was cited. The plant has been under construction since 1960, and by 1969 only 20.8 per cent of the extimated costs of construction was expanded. Gerasimov, op. cit.
 - (17) Khachaturov, op. cit., p. 27.
 - (18) Gerasimov, op. cit.
 - (19) Brezhnev, Izvestia, April 14, 1970.
 - (20) Cf. Feiwel, Industralization and Planning Under Polish Socialism Vol. II ch. 5.

ment were recorded (e.g., from 4.4 billion rubles on January 1, 1969 to 5.0 billion rubles at the beginning of 1970, and to 5.7 billion rubles as of October 1, 1970). The increases of uninstalled equipment were particularly pronounced in ferrous metallurgy, chemistry, tool industry, coal mines, pulp and paper, and the petroleum and petrochemical industries. (21) The volume of uninstalled equipment is not only an "escape channell" from immediate productive use, but also a contributing factor to the rapid obsolence of new investments. Reportedly, some of them are sheer waste. (22)

The protracted commissioning of capacities is followed by an extended period of mastering capacities. In this area as well the plan targets are notoriously underfulfilled. Once again the chemical industry was singled out as a particular trouble spot. (23) The national economy is continuously deprived of a quantity of output incorporated in the plan as a result of failures to assimilate new capacities on time. For example, in 1968 and the first nine months of 1969 alone, some of the allocated materials that failed to materialize were: over 5 million tons of mineral fertilizer, and "substantial amounts" of cement, paper cardboard, and other products. (24)

A long-term trend of decline of efficiency of investments has set in since the late 1950's. According to several sources, there was some improvement in the incremental capital-output ratios in 1969 and 1968. (25)

However, a decline in the return on capital continued to occur in a number of branches of industry. (26) The evidence is elusive, not only due to the refractory nature of the statistical material and different methods of calculation, but also due to the usual time-lag particularly pronounced in the investment process. (27)

- 2. Ceteris paribus, the growth rate may be accelerated by increase in the share of investment in national income and/or a rise in the efficiency of investment (measures to compress the incremental capital-output ratio). The growth rate may be increased by a rise in the weight of noninvestment growth factors (an increase in the rate of utilization of stock of capital and other resources). Sav-
- (21) Garbuzov, Pravda, December 17, 1969 and Finansy., No. 1, 1971, p. 13; Pravda, September 4, 1970.
 - (22) Garbusov, Pravda, December 17, 1969.
- (23) Ibid. For the difficulties encountered by the chemical industry as a result of failures by suppliers see the statement by L. Konstandov, the Minister of Chemical Industry in Pravda, March 21, 1971.
 - (24) Baibakov, Pravda, December 17, 1969.
- (25) N. Drogichinsky, Planovoye Khoziaystvo, No. 11, 1970, p. 39; A. V. Bachurin, EG, No. 8, 1971: V. Isayev, PK, No. 2, 1971, pp. 38-39; Khachaturov, op. cit., p. 27; A. N. Nikolskaya, Economika i Matematicheskie Metody, No. 2, 1966, pp. 186-94; and B. Ryabushkin, Vestnik Statistiki, No. 4 ft. 5. On the 1969 Gosplan recommendations for calculating investment efficiency see Isayev, op. cit., pp. 38-39. See also L. Vaag, Pravda, September 24, 1969; and A. Minifranov, EG, No. 29, 1969.
 - (26) Baibakov, Pravda, April 9, 1971.
- (27) Cf. M. Rakowski (ed.), Efficiency of Investment In a Socialist Economy Oxford: Pergamon Press 1966 and M. Kalecki Ekonomista No. 1, 1957, pp. 3-13.

ings of investments can be obtained by improving the utilization of capacities. Whereas central planning was supposed to remove marked underutilization of capacities (especially in machine-building) still plagues the centrally planned economy. While the major contributing factor here is the system of functioning, the content of the central plan largely predetermines the disparities in the utilization of capacities in various branches. Indeed, one of the touchstones of the reform's success is the extent of the improvement in utilization of capacities (efficiency of investments, motivation to work, and technical dynamism). In those terms the Soviet reform was a failure. (28)

According to many reports there has been a sharp deterioration in the utilization of capacities in the latter half of the 1960s. For example, in 1969 the shift coefficient of machine building dropped sharply for an undisclosed figure to 1.33. In the Russian Republic the reduction was particularly acute in machine-tool, motor vehicle, and tractor and farm machinery industries. (29) Numerous other examples of startling underutilization of capacities were cited, particularly in the cement, building-materials, chemical, and food industries. (30)

3. Intensification of powerful inflationary pressures—to a large extent a consequence of adopted growth program and aggravated by system-made impediments-magnified the problems faced by the leaders. The planners were never able to cope satisfactorily with sharp disequilibria between purchasing power and the available provision of consumer goods. (31) Growth acceleration is usually associated with stepped up capital formation and expanding employmnet, marked increase in the disparity between rapidly expanding wage fund (income generated) and the sluggish share of consumer goods. Without repeating all the primary reasons, (32) it should be recalled that increase in the investment (defence) activity even without change in the average wage rate—would produce an upward drift of the wage fund. Average wages in those priority activities are usually higher than in the economy as a whole, so that reallocation of labor from lower to higher paid activities would boost the wage fund. But the growth (armaments buildup) drives are usually supported by offering palpable material inducements to attract labor to priority activities by using the allocative function of wages (premiums and bonuses). The expansive employment tendency is not sufficiently counteracted by administrative measures and monetary restrictions on enterprises' liguidity. Wage fund and employment plans are invariably sharply exceeded. Pressures on exceeding the wage fund are created both in the producer and con-

⁽²⁸⁾ Cf. Feiwel Soviet Quest ch 6.

⁽²⁹⁾ N. Garetovsky, Fin., No. 2, 1971, p. 31 and N. Zenchenko, Pravda, April 19, 1971.

⁽³⁰⁾ See in particular, Editorial, Pravda, May 13, 1970; Gerasimov, op. cit., Mishin and Petrova, op. cit., p. 113; A. Drobnis, Kom. No. 7, 1970, pp. 8-9.

⁽³¹⁾ Cf. F. D. Holzman, Quarterly Journal of Economics, May, 1960, pp. 167-88, and Feiwel, Industralization & Planning Vol. I ch. 3 and vol. II ch. 5 and IO. Bauer and I. Kerstenetsky (ed.) Inflation in Latin America New Haven: Yale University 1964, pp. 214ff.

⁽³²⁾ Feiwel, Industralization & Planning vol. I ch. 3.

sumer goods sectors. Resources originally earmarked for current consumption are increasingly absorbed by investment and military activity. Plans of consumer goods production are underfulfilled.

Excessive restraints on current consumption affect adversely growth of productivity and largely undermine the assumed program of growth of production. accelerated growth of employment in industry and construction, without concomitant and appropriate increase of agricultural produce (meat) threaten living standards. The planner is increasingly forced to take into account the impact of compressed consumption levels (failure to meet promised and "advertised" increases) on productivity.

Conflicting tendencies in the structure of consumption are expressed in the continuing phenomenal significance of the supply of foodstuffs as a limiting factor the growth of consumption; and a lack of concordance between the population's purchasing power over and above that earmarked for necessities and the structure of supply of necessities. Consequently, in spite of a decisive preponderance of industry in the creation of national income, the increase of the population's standard of living is limited by progress in agriculture, and accentuated by the failure of industry to provide the "right" quantities and product mix of industrial consumer goods to afford an attractive alternative competing for the, consumer's ruble. In fact, a rapidly increasing part of the population's income, over and above the earmarked for the elementary needs (for food consumption, clothing, footwear, etc.) is saved due to the unsatisfactory structure of supply of nonnecessities that do not correspond to the structure of demand, and partly in anticipation of future purchases of durables.

Frequent and numerous shortages in the supply of goods and services in relation to demand perpetuate a sellers' market. Given the size of the consumption fund wrong choices of output composition produced are utterly wasteful and counterproductive. Of course, the question is not only one of the volume of consumer goods produced (directly or indirectly), but the wrong product mix reduces satisfaction to be derived from the resources designated for current consumption. Wrong output not only wastes current national product, but adversly affects productivity and production of future output.

It cannot be overemphasized that under conditions of a sellers market, it is misleading to assume that breakage of assortment plans of consumer goods might benefit the consumer; that the variance constitutes another type of "adjustment mechanism" envigorating the system and making it more flexible; that wrong plan is adjusted and verified during its implementation; etc. Available evidence admittedly fragmentary—seems to point out that the contrary is the case. (33)

Producers introduce small variations or product differentiation with no effect on the "use value" of the product, in order to justify prices increases; enterprises discontinue production of cheaper products and instead produce similar goods, priced higher as a plan-satisfying manuever. The phenomenon of "latent inflation" appears when prices are set at below equilibrium levels and instead of price increase queues and shortages are observed. A direct consequence of excess demand (below-equilibrium prices) and price rigidity is the phenomenon of speculation and bribes.

The persisting divergence between the pattern of demand and supply is partly demonstrated in accumulation of unsalable goods. But the deficiency of certain products is reflected also in the substitution by the consumer of inferior products for those he wants, without benefiting from price compensation for the deterioration of quality of attractiveness. The effects of such "forced" realization are difficult to identify and measure, but they constitute considerable waste and impose a burden on the consumer. On the whole, the persisting sellers market for a number of goods produces frustrations in society, in the attitude to work, in motivation, etc.

The disparity between rising disposable income and lagging supply of consumer goods was intensified during 1968-69. The gap between aggregate demand and supply widened. Savings shot up at an unprecedented rate. From 1966 to 1967 to 1968, by about 11.6 billion rubles (11.7 per cent); and from 1968 to 1969 by about 8.4 billion rubles (7.3 per cent). The industrial wage fund rose from 1966 by over 8 per cent, from 1967 by over 11 per cent; and from 1968 to 1969 by nearly 8 per cent. The generation of purchasing power was affected not only by the notorious excesses of planned wage fund (e.g., by 4 billion rubles in the first ten months of 1969), but also by rather substantial increases in average wages, in connection with an increase of the minimum wage to 60 rubles a month and to pay raises for various categories of workers. In 1968 there was a rather exceptional rise in the average wage (nearly 8 per cent) followed by a considerably lower (nearly 4 per cent) rise in 1969. (36)

As noted later, substantial increases of rural incomes and an upsurge in pensions and other transfer payments contributed to inflationary pressures. A partial attempt to arrest the growth of purchasing power was already made in 1969, followed by stringent administrative controls in 1970. In 1970 the average wage rose by about 4 per cent and the wage fund by about 7 per cent, with a certain retardation in the growth of employment. Both the wage fund and employment targets for 1970 were overshot. (87)

In 1969 the planners were alarmed that generally the growth rates of wage payments had been outstripping those of labor productivity. The problem was

⁽³⁴⁾ Narkhoz 1969, pp. 529-35, and 538-39; Voprosy Statystyki, VS, No. 4, 1971, pp. 87-88; and Izvestia, July 22, 1970.

⁽³⁵⁾ Gerasimov, op. cit.: Cf. Brezhnev, Izvestia, April 14, 1970.

⁽³⁶⁾ For sectoral and branch breakdown of average wages see Narkhoz 1968, pp. 555-56, Narkhoz 1969, p. 539; and VS, No. 4, 1971, pp. 87-88.

⁽³⁷⁾ Pravda, February 4, 1971.

reported to have been particularly serious in heavy machine building. (38) The relationship between dynamics of wages and labor productivity, particularly at the micro level is often a spurious one. (39) The imposition of stringent controls relating wage expenditures to growth of labor productivity (introduced as a result of the planner's alarm) was a very inequitable measure that went against the grain of the reform. With an accent on punitive measures and enhanced controls, Gosbank Chairman, M. N. Sveshnikov castigated the enterprises' overstatement of requirements for the labor force and the average wage; the growth of overtime; overexpansion of planned wage payments; etc.. (40)

The inflationary problem is not only one of growing aggregate discrepancy between purchasing power and accumulated monetary resources of the population and the corresponding flow of goods and the corresponding flow of goods and services, but one of enduring partial disequilibria. In a well-operating market economy the adjustment takes place by price-output variations. In the USSR, with prices remaining generally unchanged, and with the absence of an effective mechanism of adjustment of output to demand, repressed inflation persists. The "free" market (collective farm) partly registers the intensity of inflationary pressures.

While a considerable improvement in supplying the consumer was registered in the early years of the 1966-70 quinquennium, there was a marked deterioration in the supply during the latter years, especially in the variety and quality of foodstuffs. In 1969 chronic and intensified shortages of meat products and fruits and vegetables were critical issues. The sales were far below the 1968 level. Save for TV sets, bicycles, and sewing machines, in 1969 the rates of growth of sales of durables were below those recorded for preceding years. But even in the case of TV sets, it was evident that output did not adjust to demand. Particular shortages were noted in woolen fabrics, clothing, quality shoes, building-materials, and some durables (mainly refrigerators and the notorious shortages of cars).

Complains abound in the press about the periodic shortages of many consumer goods including safety razors blades, teepots, cutlery, towels, meat grinders, etc.. One of the reasons is the defective study of demand and laxity of wholesale trade in its relations to industry. And it is through those wholesale bases that trade is supposed to influence industry. The bases themselves lack the necessary incentives to rationalize trade turnover, stock building, and improving services. (41) An indication of the continuing seller's market in the supply of at least a number of consumer goods could be found in the widespread allegations that producers discard consumers' demand in their manipulation of output to secure the largest possible profit. (42) Yet if they were not able to sell the unsatisfactory consumer

- (38) Gerasimov, op. cit.
- (39) Cf. Feiwel, Economic of a Socialist Enterprise ch 5.
- (40) M. N. Sveshnikov, EG, No. 18, 1971.
- (41) L. Dekelman, Pravda, February 18, 1971.
- (42) D. Allakhverdyan, VE, No. 11, 1970, p. 67.

goods they would not brake assortment plans or orders, for they have to reckon with the sales criterion.

Shortages and poor quality of products result both from macro disproportions and from persisting deficiencies in the system of functioning. The growing stocks of unsalable goods also result from the Soviet consumer's shifting pattern of demand and response to available supplies. With the relative advance in the standard of living and consumers' tastes are refined, selectivity widens, and expectations increase. The consumer rejects inferior products, chooses and compares, and shops around. He is less prone to substitute interior products for what he wants. This trend is likely to have a profound repercussion on the planning system. It might even force more radical reform.

The widespread shortage of housing is one of the greatest burdens, disconforts, and infringements on privacy that the Soviet citizen generally suffers. Housing and the personal car rank high on the scale of preferences of the consumer. Progress in these two areas becomes increasingly the touchstone of the system's success, rather than the overall reported rates of increase of consumption, at least among a broad sector of the population. Developments in these two areas are not likely to have profound economic repercussions (productivity), but social and political ones as well. The planners seem to be preoccupied with the failures in housing construction and automobile production, as adverse repercussions on workers' productivity. Therefore, some attempts are being made to redress the situation in the 1971–1975 FYP—about which later.

Throughout the 1960s the proclaimed targets for housing have been underfulfilled. The quantitative improvement in the neglected field of housing continues to be slow. The quantity of housing built in 1968 and 1969 was below that of 1967. Since 1960 living space per capita (a somewhat ambiguous concept) has increased by 20 per cent—not a mean achievement. But the quality of new housing is continuously deplored. Numerous complaints about mismanagement of housing construction funds are heard. In many cases these funds are diverted to the building of administative offices, stadiums, clubs and other monuments to those in power. (44)

On the whole, the marked improvement in living standards in recent years did not lower the consumer frustration barrier, but intensified demands for more tangible immediate gains.

4. The leadership is understandably concerned about the deterioration (or slow rate of improvement) in the quality of output. Apart from the usual ill effects of poor quality and inefficiency, concern was voiced about the spillover into the high priority military sector. Apparently, "it is impossible to provide for the systematic mass rearming of the Army and Navy with new modern weapons, without improving the entire production system." In every branch

⁽⁴³⁾ Cf. Baibakov, Izvestia, October 11, 1967; Pravda, March 15, 1971 and April 11, 1971.

⁽⁴⁴⁾ Brezhnev, Izvestia, April 14, 1970.

⁽⁴⁵⁾ Zaytsev, op. cit.

there is a chain reaction where output quality suffers from the low quality of inputs from the preceding stages of production. In particular the consumer goods industries usually suffer not only from cutbacks in the quantity of inputs originally allocated, but they particularly suffer from getting the *residual quality* of inputs. (45) Indeed, the possibilities of "selling" substandard goods under conditions of a seller's market not only helps the producer to produce *pllan satisfying* output, but earns personal gains for the managers.

A noted economist, V. Chernyavsky, posed recently the question why production continues to be developed by extensive methods, i.e., by increase in the sheer volume of output rather than by improving output quality, etc.. His answer was that production plan fulfilment, often expressed in physical units of measurement (in tons, meters, or pieces) continues to be key performance creitrion. "Every plant director knows well that his first obligation is to produce a certain quantity or volume. If he fails to do so than his enterprise is classified as laggard." Most technical and economic indicators are calculated in physical units of output. The production of cast iron and forgings for instance is planned in tons. Wage funds and indexes of labor productivity are planned accordingly. It does not pay a producer plant to deliver output with minus tolerances. The need is for increased tonnage. The plants using the product do no object strenuously to inflated tonnage either. After all, purchased metal is included in the planned cost of production and ultimately increases the volume of that production.

The role of economic agreements in mutual relations among suppliers and consumers of the product is still ineffective. While to demand higher quality should be primary concern of the product's user, he sometimes has little choice in this matter. Under prevailing shortages, the buyer is reluctant to aggravate the seller. The well known examples are cited over and over again. When shortages of small diameter pipes prevail—and such pipes allow more effective satisfaction of requirements with reduced consumption of metal—to increase production of small diameter pipes exhortations will not suffice, but such performance criteria must be adopted as to provide enterprises with incentives to expand output of such pipe. This is still not the case. As before, planning practice induces plants to produce large diameter, thick walled pipe, rather than small diameter, thin walled pipe. Rolled metal producers lack potent incentives for reducing their consumption of metal. (47)

Ferrous metallurgy output and that of machine building continues to be evaluated by weight. Prices on many of these goods are also set on the basis of weight. Hence most of the equipment produced in the USSR continues to be heavier than its counterpart elsewhere. Fallacious prices not merely fail to spur in the direction, but often even operate in reverse. For instance, the Siberian Heavy

⁽⁴⁶⁾ Cf. Kosygin, Pravda, April 7, 1971.

⁽⁴⁷⁾ Chernyavsky, op. cit.

⁽⁴⁸⁾ I. Pashko, VE, No. 1970, pp. 33-38.

Electrical Machinery Plant introduced new improved and more economical motors into production. As a result it began to operate at a loss. Reportedly, when it was producing obsolete machines, however, it showed a profit. (49)

5. One of the important sources of waste is the excessive stockbuilding and maldistribution of producer goods. (50) The root of the problem is the tautness in the economy, creating a seller's market and accompanied by the cumbersome rationing of goods. Like in a war economy the rationing system was imposed to distribute scarce supplies to priority areas. (51) But the overdeveloped supply system contributes to many apparent shortages. Apart from other well-known effects, the supply system has created its won power structure and peculiar rules of the game. While radical improvement here seem to be to introduce on a large scale wholesale trade of producer goods, one should remember that here, like in many other spheres, it is not the logic of economic arguments showing superior efficiency of alternative arrangements that matters, but pressures of vested interests have a large say. The key may be in the theory of bureaucracy, rather than economics. (52) However, from the economic standpoint, a conditio sine qua non for replacing the cumbersone distribution system by wholesale trade in a relaxation in the overall tautness in the plan and the provision of real reserves at the planning stage. Such a relaxation would be propicious for undertaking far reaching reforms in other areas of the system.

Several measures were postulated to counteract the escalating stocks of inventories. The Chairman of Gosbank called for the bank to compel enterprises to sell redundant stocks, partly to the state supply organs or to other enterprises, if the enterprises do not voluntarily reduce their stocks. Together with stringent enforcement of law compelling enterprices to dishoard redundant stosks, the Gosbank chief contemplates possible use of financial levers. Discriminatory payments for normatives and above normative stocks may be introduced. Payments for above normative noncredit financed stocks and uninstalled equipment probably will be increased as compared with payments for normative stocks. In order to induce enterprises to utilize more effectively their own and outside funds, broader differentiation and increase of interest for creditors to be introduced pending on the reasons for the need for credit, duration of repayment. Svenshnikov hinted at the possibility that a part of punitive interest charges due to violation of financial discipline would be directly deducted from the enterprise incentive fund based on profit. (58)

- 6. While there seems to have been a sober diagnosis of the ills, the remedies sought generally centered on the "strengthening of central planning:" on increased
 - (49) Chernyavsky, op. cit.
 - (50) On excessive stock accumulation see Gerasimov, Izvestia, December 18, 1969.
 - (51) Cf. O. Lange, Papers in Economics & Sociology Oxford: Pergamon Press 1970 pp. 102ff.
- (52) Cf. A. Bergson, *Essays in Normative Economics* Cambridge, oluss Harvard University Press 1966 pp. 186-188.
 - (53) Svenshnikov, op. cit.; Cf. O. Koriakin, EG, No. 18, 1971.

"plan discipline" (greater discipline for plan executant, but in the best tradition not accompanied by increased responsibility of the planner for the errors incorporated in the plan); and on exorting the worker to greater efforts. The mismanagement of labor resources came into focus. The problems of deteriorating labor discipline, lack of responsibility for work performed, lax attitude toward plan targets, excessive labor turnover, absenteeism, drunkeness, featherbedding, economic crimes (lax attitude toward state property)—all these came under strong attack. (54) Notably, the trade union boss launches a campaign commanding the trade union rank and the file to exert all efforts, to increase resolutely discipline, to punish violators, etc.. His emphasis was more on the stick than on the carrot,(55)

The call for improvement in scientific organization of labor (more widespread application of standard labor norms and "improvement" of the standards) could be reduced, in a certain sense, to a call for tightening labor norms. (56)

The all-around stress was on tightening discipline. Apparently, investigations disclosed that enterprises deliver resources for "unplanned" ventures. Widespread price and assortment violations as a means for increasing profitability were severely castigated. The financial authorities were instructed to intensify their control over expenditures of state resources, "observance of financial and plan discipline", and to curb all kinds of "extravagancies in outlays." The usual complaint about plan understatement by enterprises was heard over and over again. The need for quality performance and husbandry of resources was again stressed. There were broad appeals to infuse technical progress and inventiveness. Brezhnev made good sense when he admitted that while the USSR had already surpassed the 100 million ton mark of steel production, the "fundamental question is not only how much you produce, but also at what cost." He went on to say that in the long run it is the factor of relative economic system. He acknowledged that the gravity point in the competition with the West lay exactly in this sphere. (57)

Although much was said about improving the system of functioning, no bold measures were either taken or envisaged. Market-type reforms were categorically rejected. While the Soviet leaders badly need and want all the good things that a market-type reform can provide (including the effort-releasing effect), they are not prepared to pay the price in terms of some slack in the economy, and possible social and political repercussions. Neither are they prepared to limit the scope of central planning to shaping basic macro proportions 'with increasing concentration on developing efficiency criteria for determining such proportions), to desist from interferring in micro processes of adjustment, where the

- (54) Brezhnev, Izvestia, April 14, 1970; EG, No. 4, 1970: and L. Kostin, Eg, No. 24, 1970.
- (55) A. Shelepin, Trud, January 28, 1970.
- (56) Kostin, op. cit.

⁽⁵⁷⁾ Brezhnev, Izvestia, April 14, 1970. Emphasis added Cf. A. Maddison Economic Growth in Japan and the USSR N. Y.: W. W. Norton 1969 passim.

record of central planning is inordinately poor. One cannot overemphasize that the approach is on the functioning system, instead of concentrating on the process of effective interaction between the center and the subsystems, features stress on discipline, responsibility, control, and computerization. (58)

III

Official preliminary assessments of growth dynamics in the second half of the 1960s claim that national income in 1970 exceeded the 1965 level by 41 per cent and that in 1966-70 the average annual growth rate of national income distributed (utilized) was 7.1 per cent, as against 5.7 per cent in the preceding quinquennium (1961-65). The national income performance index was higher than in 1961-65 principally due to relatively very good showing of agriculture, with only one really critical harvest. Apart from the exceptionally favorable (by Soviet standards) overall record of agriculture, the national income figure shows better results than its disagregatee components because of the apparent marked inflation of its weighty industrial component. However, the extent of upward bias and whether the final effect of the distortions materially effects intertemporal comparisons is difficult to ascertain at the time of writing.

Commenting on the dynamics and shift in proportions of the Soviet economy, F. Kotov, Deputy Chairman of the General Planning Department of Gosplan, stressed that whereas in 1961-65 the growth pace of accumulation considerably outpaced that of consumption; in 1966-70 the spread between growth rates of accumulation and consumption markedly narrowed down; and in 1971-75 the planned growth tempo of consumption is supposed to exceed that of accumulation. (59) While the share of accumulation in national income will somewhat decrease, the share of productive accumulation will be maintained at the 1966-70 level (i.e., slightly lower than in 1961-65). While the rate of capital formation is to be maintained, the planned gain in comsumption is to be largely accomplished, by an upsurge in the technical and organizational efficiency of production. Under the present circumstances this is a very shaky foundation on which to base a projection of marked increases of living standards. The Polish experience in optimistic planning is most instructive in this context. (60) It also appears that the planners intend to increase personal consumption by encroaching on so-called unproductive investments (welfare oriented) and possibly by reshuffling resources from the collective consumption fund. In fact, a slowdown in the planned rate of growth of the collective consumption fund was disclosed (approximately 40 per cent growth as against reported 53 per cent for 1966-70). There is a pos-

⁽⁵⁸⁾ Cf. Feiwel, Soviet Quest chapters 4 & 6 W. Brus, General Prowlems of Functioning of Socialist Economy (In Polish) Warsow: Polish Scientific Peblishers 1961 English edition in Preparation.

⁽⁵⁹⁾ Kotov, EG, No. 9, 1971.

⁽⁶⁰⁾ Cf. Feiwel, Industralization & Planning passim.

sibility that during plan execution welfare oriented rather than production oriented investment outlays will be sacrificed if and when the investment program encounters the well-known barriers.

Official index figures claim that during 1966-70 gross industrial output grew by 50 per cent (average of about 8.5 per cent, compared to 8.6 per cent in the preceding quinquennium). The planners boast that the national income and gross industrial output targets were not only met, but the upper limits of the planned target range were reached, but fell short of the raised target of 53 per cent in October 1967. Curiously, when one looks more closely into the more disaggregated figures, on the whole the deviations of reported performance from the plan are quite striking. The bulk of industrial plan targets—indeed its most essential part, save for oil and some consumer goods—was substantially underfulfilled.

The possible explanation for the "statistical riddle" might lie in the spurious expansion of volume registered in value terms due to price weights. One could assume that the inflation of volume reported is due to the sizable price (rather than physical quantity) variance. The price variance is probably a result of the 1967 price hike; the continuing process of reclassification of items due not only to dynamic changes in the economy, but to a propensity to manipulate prices; the notorious problem of new products; and disguised price increases.

Another reason why the aggregate industrial output target expressed in allegedly constant prices reached the upper margin of the plan target, while many of its essential components were underfulfilled might be the compensatory overfulfillment (corresponding positive physical quantity variances) of some undisclosed components due to military or space secrecy.

By its very nature of job-order production, with particular opportunity to manipulate product mix and influence prices, the machine building industry is particularly susceptible to latent price inflation. In view of the importance of that sector in total industrial output, the manipulations are likely to have considerable impact on final results. While those price manipulations undermine control by the planners and give rise to a host of grave problems for the center, the upward drift of the index is not inconsistent with the central planner's interest, as growth dynamics is still probably the system's directors most important performance criterion. One might even suspect that at times when performance lags, the executants' propensity to compensate the "negative physical variance" by inflating the price variance is intensified.

No industrial growth index with net product (value-added) weights is published by the Central Statistical Office. The use of gross value (in contrast to value added) results in allowing relatively higher weight to products at higher stages of processing (multiple counting). Organizational shifts aside, with the advance of industrialization, the ratio of highly fabricated to relatively low processed

⁽⁶¹⁾ This represents a retardation in comparison with the reported 84 per cent expansion during Khrushchev's Seven-Year Plan (1958–1965).

product increases, i.e., value added in processing is rising in relation to material input employed in their production, but due to multiple counting gross value drifts upward. Compared to the relative weight in volume of output measured in value added, capital goods play a relatively greater weight in gross value index than raw materials or semifabricates.

Within the industrial sector a manifest change was reported in the relative rates of growth of producer and consumer goods (so called groups A and B). (62) Recognizing the striking disproportion that had developed in the relative growth rates of A and B, the 1966-70 FYP stipulated a considerable rapprochement of rates of expansion. In 1961-65 the rate of growth of A was 50 per cent faster than that of B. The 1966-70 FYP envisaged that the rate of growth of A will outpace that of B by about 13 per cent. However, the reported rates of growth of A outstripped those of B by 4 per cent as shown in Table 1.⁽⁶³⁾ The basic change in proportions occurred as a result of a number of factors. One of them was the rising consumer expectations (frustration barrier). The need to improve markedly consumers' supply during a period featuring many great festivities (Fiftieth Anniversary of the Revolution, 100th Birthday of Lenin) also played its part. The actual increase of purchasing power (of the urban and rural population) considerably outpaced that planned. The redress in the relative rates of growth of A and B is partly due to the necessity to cope with the powerful pressures of inflationary forces released by the overcommitment of resources to capital formation,

TABLE I. AVERAGE ANNUAL GROWTH RATE OF INDUSTRIAL OUTPUT, AND CONSUMER GOODS, 1961–1975.

(Percentages)

FYP	Gross Industrial Output	Producer goods A	Consumer goods B	Ratio of B: A Growth rates
1961-65 Reported	8.6	9.6	6.3	0.68
1966-70 Plan	8.0-8.5	8.3-8.7	7.4-7.9	0.89-0.91
1966-70 Reported ¹	8.5	8.6	8.3	0.97
1971-75 Plan	7.3–7.9	7.1–7.7	7.6-8.2	1.06–1.07

Notes: 1) preliminary

Sources: Y. Belin, EG, No. 20, 1971; E. Gorbunov, VE, No. 3, 1971, p. 45; F. Kotov, VE, No. 4, 1971, p. 34; Pravda, April 11, 1971.

⁽⁶²⁾ Cf. M. Dobb, *Papers on capitalism, Development anod Planning* N: York Intenational Publishers 1967 pp. 107-123.

⁽⁶³⁾ Kotov, VE, No. 4, 1971, p. 34. Khurshchev's Seven Year Plan envisaged 80 per cent increase of industrial output, reported 83 per cent; Group A 85–88 per cent, reported 96 per cent; and Group B, 62–65 per cent, and reported 60 per cent; i.e., overfulfillment in case of A and underfulfillment in case of B. The share of producer and consumer goods in overall industrial output were roughly the same in 1965 and 1970 (74 and 26 per cent respectively). SSSR v novoy piatiletkie (Moscow: 1966), p. 12; Narkohoz 1969, pp. 43 and 145; and Kotov, VE, No. 4, 1971, p. 45.

and overshooting the size of the planned wage fund without commensurate increase in the flow of goods and services to meet the rising effective demand. This is aggravated by system-made impediments for adjustment of supply to demand (ineffective combination of inputs and structure of output). The grave problems of inflationary pressures were intensified by mastructure of production, poor quality, persisting shortages, and ilfunctioning planning, production, and distribution system. Planners insisted on maintainning at least in theory stable prices and were reluctant to revert to rationing by the purse (apart from "downward movement along the demand curve" to dispose of accumulated stocks). Without price adjustment, the planners had to revert to increasing output of consumer goods in operational plans and to other measures during plan implementation.

Starting from 1968 the industrial index invariably recorded that the rate of growth of consumer goods outpaced that of producer goods, as shown in Table II. The ratio changed markedly during the process of plan implementation. For example, the 1970 plan was overfulfilled to a much greater degree for producer than consumer goods, resulting in a deterioration of observed versus planned relations between the rates of expansion of consumer and producer goods. One could suspect, baring fundamental changes in policy and the system, that a similar pattern of behavior might emerge in the 1971-75 FYP, although, of course, the quantitive dimensions will vary. (64)

TABLE II. REPORTED RATES OF GROWTH OF PRODUCER AND CONSUMER GOODS, 1965-1970 (in percentages)

YEARS	Producer Goods	Consumer Goods
1965	8.9	8.3
1966	9.2	7.4
1967	10.1	9.9
1968	8.3	8.5
1969	7.0	7.3
1970 (Plan)	6.7	7.4
1970 (Preliminary results)	8.2	8.5

Sources: Narkhoz 1969, p. Pravda, February 4, 1971.

For the first time since embarking on the accelerated industrialization drive, the long-term plan provides for higher planned rates of growth of B and A. be sure the differential between those two rates is very small. Should the rate of expansion of A reach the higher limit of the bracket (7.7 per cent), while that of B only the lower (7.6 per cent), the priority of A would be reasserted. But the mere necessity of making such a promulgation and the political impact and content of the pronouncement outrank the paucity of the margin by which B is to exceed A, and the likelihood that during plan implementation the proportions might be reversed or preferential treatment of A might be revealed by preferential resource allocation. Whereas a cannon of Stalin's industrialization strategy was that producer and consumer goods must be separated by a very wide margin in favor of A, the salient point of the 1971-75 FYP is the reversal of the priority of heavy industry tenet.

It is conceivable, but by no means certain, that the spread between the growth rates of producer and consumer goods in the 1971-75 FYP merely represents a statistical illusion. Naturally the proportion of output produced and classified either as A or B could be easily manipulated as it depends on what is considered the predominant use of the product and a host of other factors. Admittedly such a classification is rather arbitrary and provides only a rough indicator of composition of planned output or planner's allocation preferences. During the process of plan implementation, the executants might attempt to reclassify output to meet this or that target. Moreover, the planned proportions between A and B depend on pricing methods adopted. If the prices of light industry products or some of the durable whose output is expanded should incorporate a relatively higher than average rate of profit (as they often do) this is likely to have an upward bias on the index of expansion of industrial consumer goods. Budgetary considerations dictate extraction of the highest accumulation and reducing the real purchasing power (gross industrial output, A and B, is computed exturnover tax and, therefore, depends on rates of profitability only). The state is interested in expansion of consumer goods featuring high rates of profit (and so do the enterprises), for expansion of such production simultaneously increases state resources for financing budgetary expenditures. (65) However, a change in proportions between producer and consumer goods constitutes merely a necessary, but not a sufficient condition for effective increase of the consumers' wellbeing. The planners approach taken in the late 1960s and early 1970s in a manner resembling that of Malenkov's New Course. They increase somewhat the share of B and lower the share of A in total industrial output, but without creating the necessary conditions for ensuring growth of capacities, diverting quality resources, and above all ensuring an upsurge of efficiency of the productive system without which a sustained rise in consumer welfare cannot be achieved. (66) In order to pacify the heavy industry lobby, Brezhnev sought to assure his audience at the Congress that the system's directors would not reduce their stress on heavy industry. He spoke about the imperative of high rates of development of heavy industry to ensure high rates of growth, appropriate military hardware, and the development of consumer goods industry. But manifesterly the accent was on assigning a high rather than an overriding priority. The producer goods industry

⁽⁶⁵⁾ Belik, op. cit. The reported rate of profit in light industry in 1969 was twice as high as in the industrial sector as a whole, Narkhoz 1969, pp. 743-44.

⁽⁶⁶⁾ Cf. O. Latsis in Besedy ob ekonomicheskov reforme (Moscow: 1969), pp. 4ff.

should not only produce for its own sake, but an increasing share of its output should be earmarked for speeding up production of consumer goods.

The machine-building the output targets for agricultural equipment, equipment for light and food processing industries, and automobiles are to outpace considerably those for the machine-building industry as a whole. While, overall production of machine-building is planned to expand, by 1.7 fold, the production of equipment for light and good industry is to increase 2 fold (from a low base), for trade and gastronomical establishments 1.8 times, and for dry cleaning 3.5 times. (67)

Heavy industry was assigned the task of increasing the flow of consumer goods from its existing capacities. Brezhnev asserted that "all branches have considerable possibilities for doing so". The defence industry was cited as a case in point. In the defence industry "even today 42 per cent of the total output goes for civilian purposes." In view of the relatively higher technical level and employment of some of the best brains and most skilled workers, the transmission (spillover) of the experience, inventions, and discoveries of the defense sector to all speres of the economy "assumes paramount importance." (68) However, it is doubtful whether such a transition would be implemented. For one, factors of production, at least in the short run, are not as versatile as mitgh appear. process of changeover is particularly handicapped by the institutional factors and impediments to change in Soviet-type economies. During the period of the New Course in the USSR severe impediments were encountered. Polish experience provides ample evidence of how costly and difficult is the process of changeover from defence to civilian production. Such change usually cannot be effected without substantial investment. (69)

As noted the real emphasis is on increasing the production of consumer goods (durables) by heavy industry in order to minimize the reshuffle of resources in favor of light industry. The plan provides for marked speed up in production of consumer durable (e.g., refrigerators by 54 per cent) and envisages that production of such durables as TV sets, radios, washing machines, (70) can be expanded predominantly by noninvestment measures; i.e., by using existing idle capacities in heavy and defence industries. The envisaged average annual rate of increase of consumer goods by heavy industry in 1971-75 will be 12 per cent (over a very low base), (71) as against 8.3 per cent for industry as a whole. The

- (67) Kotov, VE, No. 4, 1971, p. 34.
- (68) Brezhnev, Pravda, March 31, 1971.
- (69) Feiwel Industralization & Planning vol I ch 3.
- (70) Starting from a dismally low level, increases were recorded in the number of durables per 1,000 inhabitants, e.g., TV sets from 68 in 1965 to 127 in 1969, refrigerators from 29 to 71, radios from 165 to 193, etc. Narkhoz 1969 p. 584. Planned possession of TV sets is to increase from 2 to 72 per 100 households, refrigerators to 64 and radios to 85 in 1975. Lebedinsky, PK, No. 3, 1971, p. 22.
- (71) In 1968, it was revealed that heavy industry enterprises used only 11.5 per cent of their capacity to produce consumer goods. Interview with N. Drogichinsky, Zhurnalist, No. 8, 1968, p. 11.

absolute increase of consumer goods in heavy industry is to be twice as large as during 1966–70. The share of consumer goods in heavy industry is to increase to 13 per cent (while in forestry, cellulose and paper and wood processing industry this share is to grow to 15 per cent). Production of consumer goods is to increase in ferrous metallurgy by about 1.4 fold, in machine-building more than twice, in woodworking 1.5 times, and in the chemical and petroleum industry 2 times. The share of group B in those branches will increase considerably. For instance, in the pulp, paper, and woodworking industry the share will rise from 22 per cent in 1970 to 26 per cent in 1975 and in machine building from 11 to 15 per cent. (74)

While pronouncements are being made to draw more actively heavy industry enterprises into the production of consumer goods, the results so far have been disappointing. The impediments to switch existing capacities to production of consumer goods are not only technical, but are also intensified by management's unwillingness to undertake such production on a mass scale in those industries. Apart from the less prestigious production of consumer durables, the producers might be wary of subjecting themselves to the increasingly more exacting standards on the consumers' market. There is usually a marked underfulfilment of assignments to increase output of consumer goods by heavy industry.

The planned rise in money incomes is going to be translated into increased effective demand and will raise ever more vividly not only the problem of quantity, but also that of quality of consumer goods. At the Congress Brezhnev spoke about the impediments to the rise of quality of consumer goods. Officials at the center and in the local areas were reprimanded for indifference and tolerence of inferior quality of consumer goods and actually expending production of a number of consumer products at a snail's pace. Some officials were blamed for reducing or stopping altogether production of goods in short supply and for discontinuing production of inexpensive items of daily necessity for the population on the pretext of replacing obsolete goods with new ones. Brezhnev spoke about a diametrical shift in the very approach to consumer production. Whereas before consumption was largely conceived as a residual in the distribution of resources, he urged "a serious change in the very approach to consumption." But the First Secretary failed to spell out the measures that are going to be taken to ensure such a diametrical shift.

Whether the present course is merely a temporary departure (corrective) of the policy of priority of A and is unlikely to be pursued for longer than a temporary

⁽⁷²⁾ Kotov, VE, No. 4, 1971, p. 34.

⁽⁷³⁾ Promises were made that by 1975 the consumers will be offered 800,000 passenger cars, whereas in 1970 only 24,000 were sold. The waiting list for cars is expected to shrink but probably will not be entirely exhausted. A Gosplan official maintained that only after demand for cars would be fully met at existing prices, with the quedtions of selling cars on credit and price reduction arise. N. N. Mirotvortsev, LG, No. 7, 1971.

⁽⁷⁴⁾ Kotov, EG, No. 9, 1971: Kosygin, Pravda, April 7, 1971.

interval, or whether it is a more profound shift in Soviet growth strategy is too early to judge. Hopefully the change in policy is not a shift in rethoric dictated by the expediencies of the day. In the final analysis only time can tell. The behavior of the system's directors during plan execution: reshuffle of resources when the growth-promoting or defence priority takes are endangered can "reveal planner's preferences. However, the greater emphasis on the consumer shows the increasing importance attached to that force and the constraining role it plays in the leaders' allocation of resources.

Finally, in comparing the relative rates of growth one should keep in mind the initial levels. Since the consumer sector was relatively underdeveloped, the rate of increase, even if somewhat higher than that of heavy industry, cannot quickly make up for the years of neglect. For example, the planned rates of production and sale of personal automobiles are impressive by themselves, aside from the probability that they might be met only with considerable delay. But, obviously, one should relate them to the negligible initial level of such sales, and to those in other countries. On the other hand the demand for TV sets at the present income, prices, quality novelty, etc. has been largely satisfied and the cutback on the projected volume of production is dictated by the present demand conditions, pricing policy, and the failure to innovate. In the same manner, the impressive rate of increase of investment in light industry should be related to the deplorable state of capital formation in this industry in the past. While one should commend the Soviet leadership for having recognized the necessity of speeding up development of consumer goods, the rates of increase are not sufficient to advance rapidly the Soviets to approaching living standards in the advanced capitalist economies. Moreover, the bridging of the gap depends both on the relative initial positions and the rates of advancement.

In comparison to experience thus far, the 1971-75 plan directives evidently were based upon more realistic assessment of the economy's productive potential under the existing (or moderately altered) system of functioning. Generally the 1971-75 FYP appears to be less ambitious. (at least in terms of claimed performance) than its predecessor (it is this assumption that is difficult to accept) but remains overoptimistic and strained in many respects (ill-balanced), with consequent built-in imbalances, tensions, growth barriers, and bottleneck-generators. Growth rate of national income and industrial output are to be moderately decelerated in comparison to plan and performance in 1966-70, (75) The national income growth target (37-40 per cent) was set below that planned (38-41 per cent) in the previous FYP and below that reported 41 (per cent). If the contention that

(75) The 8th (1966-70) FYP was not officially promulgated. Compared to the directives of the Twenty-third Congress, gross industrial output targets were subsequently increased. N. Baibakov announced in October, 1967 revised targets for overall industrial output—an increase of 53 per cent over the five-year period, producer goods by 55 per cent and consumer goods by 49 per cent. Izvestia, October 11, 1967. In reporting plan fulfillment Soviet leaders have invariably referred to the original (lower) figures as shown in Table 1.

the reported index is inflated is true, it is possible that the planned rates do not diverge markedly from those actually achieved. One should also keep in mind that in Soviet planning the planned rates of increase are at least equal to those actually achieved in the previous period, or higher. This has been the practice so far, but it is not an invariable rule. The lowest postwar planned rate of expansion of gross industrial output was set as a target (42-46 per cent), below the reported achievement (50 per cent) in 1966-70. As noted, probably the most outstanding feature of the plan is that for the first time in the history of Soviet long term planning, it provides for faster growth rates of consumer than producer goods in the industrial sector (even though the margin is rather negligible). The increase in real per capita income target is set at 30 per cent, the same as in 1966-70 plan, but below the claimed achievement of 33 per cent. The increase is to be principally affected through the growth of the population's money income, save for some price reductions, based on overoptimistic forecast of cost reduction, and relative decrease of the sizable agricultural support bill, the stability of state retail prices for consumer goods was proclaimed. Retail goods turnover is planned to expand by no less than 40 per cent, compared with 48 per cent increase reported for 1966-70. The cardinal issue here is the planned change in product mix.

While the systm's directors probably differ fundamentally on allocation preferences, these clashes are not generally aired in public. The pre-Congress draft directives for 1971-75 FYP were published with considerable delay, some two and a half years after the promised date. In case of some crucial targets (e.g., major investment breakdown) the draft directives conveyed even less than the customarily scant information and in many other cases they were by design uninformative, ambiguous, or perhaps, purposefully vague or misleading. Since the publication of the pre-Congress draft directives some shifts were made and further details disclosed. As such they did not contain "startling revelations," but it is too early to evaluate their full impact and significance.

The pregnent events of the Polish December, 1970 and the continuing unrest and ferment after Gierek's ascent to power must have had a marked impact on the Soviet leadership, quite aside from the need to carry a part of the burden of the ailing Polish economy to pacify the Polish population. There appears to have been some "last minute" cognizance of the possible impact of Polish events, resulting in intensified, even if modest, attempts to placate the consumer. These included announcements of moderate planned increases of the population's disposable income; some novel welfare measures and interesting innovation in the welfare package; startling announcement by Brezhnev of somewhat earlier repayment of "overdue" state bonds; the notable (in the Soviet context) pronouncements that *one* of the duties of the trade unions is to defend the rightfull interests of working class in raising living standards; and some hint about the need of workers' democracy and participation in decision-making process. While it is by no means a breakthrough to a consumer oriented economy (or consumer sovereignty within the bounds of centrally determined size of the consumption

fund and key allocation decisions), the draft of the plan attempts to alleviate the consumer's lot. True, the proclaimed chief task of the FYP is to ensure significant upswing in the standard of living, but this was always the declared aim. However, this time is appears to be backed more substantially (save for labor productivity). Yet, the real gauge is whether the commitments made to the consumer are going to be carried out. While a limited reshuffle of resources in favor of the welfare oriented sectors is envisaged, it cannot be overemphasized that in the best tradition of that planning, the improvement of the consumer's welfare is to be principally achieved not by withdrawal of resourced from growthpromoting capital formation, the space program, the production of means of destruction etc. but largely by imposing additional assingnments for production (of consumed goods) of consumer goods, while only moderately altering the traditional growth program, and postulating a high (even exaggerated) growth of productivity as a plan balancing device. Apart from temporary tactical or expediency measures the Soviet leaders believe that marked increases in consumption must not be purchased at the expense of a deceleration of overall (short-run) growth rate of production. Although the direct relationship between improvements in labor productivity and increase of consumption is recognized, its role is still underrated.

The escalating commitment of resources to the costly agricultural program seems to be prima facie evidence of the increasing strength of the agricultural lobby. The leadership (Brezhnev in particular) is apparently ready to pay a high price in terms of commitments of vast inputs to obtain relatively low gains in agriculture, in order to obviate the risk of paying the price Krushchev has paid for the mismanagement of agriculture. Expansion of production of industry is to a large extent contingent on the realization of the considerable improvement in agricultural performance.

By and large marked increases of industrially processed consumer goods that need to be supported by considerable investment effort and a major reshuffle of resources are to be avoided or kept to an acceptable minimum (as evaluated by the planners). Understandably somewhat along the lines of the consumeroriented experiment under Malenkov, the real emphasis is on increasing the production of consumer durables by utilizing the idle capacities (i.e., largely noninvestment measures) of the heavy and armaments industries, in order to minimize the reshuffle of resources. The accent is on a substantial increase in the production of consumer goods by the branches of heavy industry. With an overall growth of 44-48 per cent in the production of consumer goods, their production in the branches of heavy industry will increase by more than 80 per This is not to say that the planners have a considerable leeway in aftering the proportions in investible resources due to both technical and institutional impediments. The tendency to perpetuate the traditional structure is very strong.

The 1971-75 targets involve a good dose of optimism: apart from an anticipated (76) Baibakov, Pravda, April 9, 1971.

enlarged agricultural produce, the increased flow of consumer goods is to be largely obtained by "mobilizing reserves"; by saving resources; by improved utilization of the stock of existing capital; by better investment allocation and improvements in the investment process; by strengthening work discipline and control; and generally relying on the handy old device of postulated system improvements, without providing conditions for such improvements, and without stipulating the introduction of radical reform or even vigorous carrying out of the existing timid half-measures. In fact, the plan stipulates that the evisaged increase in stadard of living is to be achieved on the basis of high rates of expansion of socialist production, increased efficiency, increased use of computers, scientific and technical progress, and the accelerated growth of labor productivity. Significantly economic reform is omitted from the listing.

The planned growth rates of labor productivity are higher than the reported rates during the past ten years. The accent is on "all-around utilization of achievements of science and technology" as a critical condition for meeting the targets of growth of labor productivity. The gain from application of science and technology has been computed by Gosplan as 40 to 42 million rubles, about 80 per cent of which will be obtained through employment of modern types of equipment and technological processes.

In his Congress Speech, (77) Brezhnev addressed himself to the sources of growth and the resources that must be mobilized for rapid growth. He stressed the limited quantitative importance of interbranch redistribution of resources, and the increading deficiency of extensive factors of growth. For example, in 1971–75 the labor force will not grow as fast as in 1966–70. Moreover, "the growth rates of investments also have their limits". Hence the question of relying primarily on increasing the efficiency of production becomes a paramount problem and "the main factor we have to count on... to achieve a substantial increase in the volume of production and national income per unit of labor, material, and financial outlays." In the 1971–75 FYP, at least 80 per cent of the increment in national income, 87 to 90 per cent of the increment in industrial output, 90 per cent of the increment in construction, and the entire increment in the volume of freight shipments by rail is to be obtained through increased labor productivity. The planned increases of agricultural output are to be achieved with a reduced laborforce. (78) Decisive acceleration of scientific and technical progress is pro-

(78) In the past the labor productivity targets have been consistently underfulfilled. Yet the 1971-75 FYP targets are more ambitious than those planned and reported for 1966-70. Expectations from extension of the Shckekino-type experiment underly this optimistic assumption. The increasing growth rates of labor productivity are reported and planned as follows:

	1961–65	1966–70	1971–75
	reported	reported	planned
Industry	25 %	32 %	36–40 %
Agriculture	18 %	35 %	37–40 %
Construction	29 %	22 %	36–40 %

Source: F. Kotov, VE, No. 4, 1971, p. 36.

⁽⁷⁷⁾ Pravda, March 31, 1971.

nounced as one of the main tasks. Indirectly the present system of incentives and income distribution was assailed as Brezhnev advocated that those that improve production techniques and produce output that meets current and future demand must be placed in a more privileged position.

Acceleration of scientific and technical progress presupposes the substantial expansion of research and development activity in industry itself, the creation of design bureaus and experimental bases at enterprises, and the influx into industry of substantial number of well-qualified scientific personnel. Brezhnev stressed that all this can only be accomplished by relying on associations as the basic organizational unit.

Brezhnev announced that in the coming years increased production efficiency must rely on reduction of material intensity and savings of materials at all stages of production. He correctly argued that the development of extractive industries demands rapid expansion of various raw materials. Brezhnev reminded his audience that generally the extractive branches are more capital and labor intensive than the processing branches. He advanced the general proposition that it is more beneficial to strive for savings of raw material inputs by changing production techniques in the processing industries, rather than to produce additional raw materials.

Along with improvements in technology and labor organization at enterprises, the increasing of production efficiency required the all-around development of machine-building to accelerate replacement of obsolete machinery. And the factor for increasing production efficiency is the substantial improvement in the composition and quality of output. Brezhnev singled out improvements in foreign trade as an important reserve for increasing the economy's efficiency. Expanded international economic relations require measure for improving the management of all foreign economic activity and the elimination of the narrowly departmental approach. The foreign trade activity is to be increasingly based on the combination of production and trade functions, so that the requirements of the world market can be met and opportunities promptly exploited. Such developments are likely to have a favorable effect on the efficiency of domestic economy. However, the crucial issue here is to what extent foreign trade will be expanded, especially in the manufacturing industries.

A middle of the road program emerged from the Congress. But it is difficult to discern where the real priorities are and how the system's directors will behave when faced with the real test and choice and sacrifice during the course of plan implementation. In broad terms, conflicting aims and controversies regarding allocation are reconcilled by incorporating wider range of objectives and *increasing* the *tautness* of the plan, rather than by outright rejection or considerable trimming of demands of powerful pressure groups.

Because of these proliferating priorities, the planners face an increasingly difficult task in real (as contrasted with accounting) balancing the plan. At the Congress, the planning chief addressed himself to the problems encounted in

distributing the plan assignments correctly over the years of the FYP and to "ensure balanced nature and coordination of the plan's indexes." He was alarmed that in the drafts submitted "a number of ministries and union republics permit the understating of plan assignments during the first years of the five-year plan, and then provide for unrealistically high rates of increase in the subsequent years." Such an approach—the experienced Gosplan chief said with considerable understatement—"naturally makes it difficult to ensure proportionality in the national economy and may lead to difficulties in fulfilling the plans for individual branches." The penchant to build new plants rather than to modeernize existing ones apparently continues. There is reluctance to increase output primarily in existing enterprises by technical reequipment. The decision to limit new construction encounters strong resistance. (80)

A high ranking Gosplan official attacked the Ministries of Ferrous Metallurgy and Light Industry for great delays in elaborating the FYP drafts, for planning a snail paced growth of output for 1972-73, and for "hurra" planning for the last two years of the plan. While these two ministries were singled out, it was stressed that these were by no means unique cases. (81) The major problem encountered by Gosplan seems to be to ensure effective time distribution of the targets within the quinquennium and the balance the plan accordingly. Realists already express fears that little will happen during the early years of the quinquennium and storming would start about the end of the period to catch up with the plan. Gosplan officials acknowledged the problem and called for commissioning of new capacities not only to achieve plan targets by 1975, but also for continuous increase in output of goods in short supply during the quinquennium. Recognizing the worker-consumer's pressures, N. Lebedinsky correctly argued that the planners can no longer urge the population to wait until the very end of the plan period for an alleviation of shortages and satisfaction of rising demands. The crucial problem the planners face in balancing the plan is to ensure that palpable increases are going to materialize during the first years of the plan and this is not likely. While considerable investment resources—at least at the planning stage—have been appropriated for ferrous metallurgy and light industry, there does not seem to be much likelihood at present that the capacities will be commissioned and output forthcoming during the earlier years of the plan. Barring other developments and sharp reallocation of funds during the execution, the consumer still has a long wait ahead.

IV

The 8th FYP for a majority of principal products was underfulfilled by some

- (79) Baibakov, Pravda, April 9, 1971.
- (80) Ibid.
- (81) N. Lebedinsky, Pravda, May 10, 1971.

10 to 20 per cent or more. Only very few plan targets reached or exceeded the planned volume. (82)

Oil extraction nearly reached the upper target for 1966-70. This virtually single good showing was largely due to exploitation of Tuyement fields and other newly developed deposits. However, difficult climatic conditions, high labor turnover, and prohibitive transportation costs limit the expansion of exploitation of those valuable deposits. The planned growth rate in 1971-75 is somewhat lower than that reported in 1966-70, as shown in Table III.

TABLE III. SHARES OF PRODUCER AND CONSUMER GOODS IN GROSS INDUSTRIAL OUTPUT 1928-1970 (percentages)

Years	Producer goods	Consumer Googs
1928	39.4	60.5
1940	61.2	38.8
1945	74.9	25.1
1950	68.8	31.2
1955	70.5	29.5
1960	72.5	27.5
1965	74.1	25.9
1966	74.4	25.6
1967	74.2	25.8
1968	73.8	26.2
1969	73.8	26.2
1970¹	74.0	26.0

Note: 1) provisional.

Sources: Narkhoz 1969, p. 145: A .Bulzlyakov, SI, December 23, 1970;

and L. Voladarsky, EG, No. 7, 1971.

In the critical fuel and power balance acute demand-supply imbalances haunted the planner. Marked underfulfillment was registered in electric power generation and natural gas. (Connected with difficulties in construction of pipeline). The disappointments in meeting these overambitious targets prompted the planners to stress coal production. Discovery of vast low-cost coal resources seems to be only part of the explanation for an upsurge of interest in coal which was primarily due to difficulties in achieving the desired structural change in the fuels and power balance. A pace setting and more efficient development of the fuels and power complex is considered as one of the key tasks of the forth coming The aim is to increase the share of petroleum and gas in the country's

⁽⁸²⁾ Interestingly, the plan targets for meat (industrially slaughtered) were surpassed, but critical shortages of meat persisted, indicating once again that the degree of plan fulfillment cannot be treated as a satisfaction of needs and independently of other plan targets and the frame of reference (Base).

fuel balance and the technical re-equipment of the coal industry, the commissioning of hydraulic and thermal power stations, and the expanded construction of atomic power stations. (83) Some pressures have also been exerted by the heavy industry to stop the relative neglect of coal extraction. A rather modest rate of expansion of electric power generation is stipulated, probably in view of difficulties encountered in the last quinquennium (climbing investment costs per killowatt of electricity compared with declining costs in the first half of the 1060s).

TABLE IV. GROWTH OF PRODUCTION OF SOME PRODUCER GOODS IN 1966-70 AND PLANNED FOR 1971-75 (in percentages)

	1966-70	1971–75
Equipment		
Instrument-making	202	200
Metal cutting lathes	108	115–124
Forging Pressing machines	119	146-158
Trucks	138	150
Tractors	104	125
Agricultural equipment	141	179
Materials	′	
Steel	127	122-129
Oil extraction	145	138-143
Gas	154	152-162
Plastics and synthetic resins	208	200
Synthetic fibers	153	169–177
Mineral improvements	177	164
Cement	132	128-133

Source: Yu. Belin, EG, No. 20, 1971.

The plan stipulates a "substantial development" of atomic power, the building of large power stations with reactor installations having a unit capacity of one million kilowatts and more. Capacities of atomic power stations of 6 to 8 million kilowatts are to be commissioned.

In 1966-70 all principal indicators in metallurgy were far below plan. At the Congress the Minister of Ferrous Metallurgy boasted that the average annual rate of growth of output of ferrous metals in the USSR was higher than in the U.S. (84) During the 1966-70 period the gap between the USSR and the US in the

⁽⁸³⁾ It was argued at the Congress that increased extraction of coal and improved productivity of the coal industry depends largely on the reconstruction of mines and the construction of new mines. "Serious concern" was voiced for the further development of the Donets Basin which depends on the accelerated commissioning of power capacities. The plans do not provide for sufficient growth of capacity. Serious anxiety was aroused by the slow pace of the construction of power units in the region. V. I. Degtyarev, Pravda, April 6, 1971.

⁽⁸⁴⁾ I. P. Kazanets, Pravda, April 3, 1971.

smelting of steel was reduced by about 6 per cent, and the USSR outstripped the US and took first place in world production of pig iron. However, the Minister stressed the plan targets for the production of steel and rolled metals were considerably underfulfiled. This was partly due to the allocation of fewer investments than planned. But even the investments that had been allocated were not being put to effective use. New capacities were not commissioned on time and costs rose steeply. The fundamental problem of metallurgy remained the poor quality of output. Without a fundamental breakthrough in quality of metals, the stipulated savings (e.g., a saving of 18 per cent to 20 per cent in rolled ferrous metals in machine-building) in metal-using industries cannot be reached.

TABLE V. OUTPUT OF SELECTED CONSUMER GOODS, 1965-1975

	Unit of	1965	1966–70	1970	1975	Growth Rate	
Description	measure	reported	plan	reported	plan	1965 1970	1971 1975
Output of light industry and household	billion						
goods	rubles	49.1	n.a.	76.5	112.4	55	47
Furniture	,,	1.8	2.6-2.8	2.85	4.55	56	56
Refrigerators	millions units	1.7	5.3-5.6	4.1	6.7	141	63
Fabrics	billion sq. meters	7.5	9.5-9.8	8.9	10.5–11	19	17–24
Leather footwaer	million pairs	486	610–630	676	800–830	39	18–22
Output of the food, dariy, meat and fish industry	billion rubles	59.5	n.a.	78.8	106.6	32	35
Meat (indu- strially processed)	million tons	5.2	5.9-6.2	7.1	9.9–10.2	38	40–43
Passenger cars	thousands	201.2	n.a.	344.0	1200–1300	71	243–271

Sources: Kosygin, Pravda, April 7, 1971: SSSR v novoy piatiletke (Moscow: 1966), pp. 51, 54, 63, 65; N, Lebedinsky, PK, No. 3, 1971, p. 18.

In this respect the new plan regards not quantitive increase of production (the targets for steel and finished rolled metals are moderately lower than claimed for 1966-70) as the main target, but a fundamental improvement in the quality of metal output through introduction of progressive methods of metal production and the expansion of the assortment of rolled metals, pipe, and hardware.

To emphasize the continuing predominance of heavy industry, it was disclosed by I. P Kazanets, the Minister of Ferrous Metallurgy, that 17.7 billion rubles were allocated for the development of ferrous metallurgy in the 1971-70 FYP. This is almost 70 per cent more than in the preceding FYP. The resources will be partly channelled for completing a number of projects under way which are

scheduled to produce a stream of output during this FYP. About 70 per cent of all investment is to be channelled to construction of 28 industrial enterprises (out of the 217 in the branch). The Minister cited figures on the sad state of obsolescence, but was not hopeful that the situation would be mitigated. The retirement of obsolete equipment is again postponed, largely contributing to a low productivity index in ferrous metallurgy. (85)

The priority accorded to ferrous metallurgy could be gauged from the fact that the planned rate of expansion of investment is nearly twice as high as for aggregate investment. While some of the steel will be used for a sharply increased output of consumer durable, capital goods for the production of consumer goods, and agricultural implements, the emphasis also seems to be on "more steel" for the internal uses of heavy industry.

No comparable data for nonferrous metallurgy were disclosed. The 1971-75 FYP provides for 40 per cent overall increase in output, including an increase of 50 to 60 per cent in aluminum production, an increase of 35-40 per cent in copper production.

In the greatly troubled chemical industry overall volume of output increased by 78 per cent during 1966–70 (100 per cent planned). The new plan stipulates an increase of output by 70 per cent. The overoptimistic fertilizer plans have a long history of up and down revisions. Even the more realistic targets set in 1966 were far from fulfilled. The 1971–75 planned growth rate is considerably lower than that reported for the last quinquennium, but whether it is a realistic one depends, inter alia, on completion and commissioning in the early 1970s of the projects under construction, meeting planned commitments for delivery of equipment, and appropriate staffing of the plants. The ambitious targets in chemistry are supported by a vast commitment of investment resources, but the growth bottlenecks are likely to impede progress. The stress is on developing production of high quality concentrated and complex mineral fertilizers so as to bring their proportion in total volume of mineral fertilizer by 1975 to about 80 per cent. Average content of nutrient substances in mineral fertilizers is to be increased to about 35–37 per cent.

Plan assignments for chemical fibers were even more underfulfilled than fertilizers. The 1971–75 FYP provides for considerably higher rates of increase than those claimed for the last five-year period, but markedly lower than planned for 1966–70. The structure of production of chemical fibers is to be improved. By 1975 the share of synthetic fibers in the total production of chemical fibers will be increased to 38 to 40 per cent. As usual planned targets for plastics and synthetic resins were substantially underfulfilled. The new plan provides for slightly lower tempo of expansion than that reported for the prvious FYP. The quality of plastics and goods made thereof is to be improved. The production of highly durable, heat-resistant electric-insulating, corrosion, resistant, and

other new types of polymer materials is to be mastered. The production of rubber is to expand by 70 per cent. The share of synthetic rubber production in total volume of rubber production is to increase to about 55 to 60 per cent. Output of household chemical products is to be increased by 90 per cent.

Sharp contrast between ex-ante and ex-post targets in the lumber, pulp, and paper branches continued. Output of pulp increased by some 55 per cent as against 160–180 per cent planned. The 1971–75 plan envisages a 80 per cent growth rate. Great shortages of paper and cardboard persist (including shortfalls for industrial purposes, for machine packaging of foodstuffs, for household uses, and for printing). Output of paper increased by some 30 per cent as against some 60 per cent planned. The new plan provides for a moderate increase over the rate of expansion claimed.

While reports were nearer to plan targets, shortfalls were reported also in cement production. In building materials the problems are not confined to cement, but to many other building materials such as bricks. The new plan stipulates an increase of cement production roughly at the level reported for the 1966–70 FYP. It also calls for large scale production of prefabricated industrial structurals, and lightweight fillers that reduce the weight of structures. Assortment of finishing materials and sanitary equipment is to be "significantly expanded". Total volume of the building materials branch is to be increased by 40 per cent (lower than planned in the last FYP—about 50 per cent—and than the industrial output as a whole for 1971–75).

It is reported that total output of machine-building increased by 74 per cent in 1965–70, as compared to 60–70 per cent planned. This substantial overful-filment can be partly explained by overshooting the plan targets for automated equipment. However, marked dificiencies in meeting physical plan targets were reported. Pronounced shortfalls in meeting targets for chemical and oil equipment, turbines, textile machinery, agricultural implements, tractors, rolling stock, and machine tools were disclosed.

In 1971–75 machine building output is to grow by 70 per cent, with a 120 per cent growth of consumer durables. The highest rates of growth are planned for instruments, computers, and calculating devices, automobiles, farm equipment, construction and reclamation equipment, metal-cutting machine tools, electrical power generating equipment, gas turbines, equipment for atomic power stations, chemical machinery, rolling stock, and equipment for light and food industries. Computer technology is particularly stressed. The plan provides for an increase by 160 per cent in the number of computers produced over 1971–75. The tasks include mastering the serial production of a new complex of electronic computers based on integrated circuits, creation of a complex of technical means ensuring the automation of the process of recording, collection, storage, transmission, and processing of information, new technical means for a unified automated communications network, etc..

If the machine-building industry is to cope with the task of assisting other

branches to raise the efficiency of production, it has to be re-equipped. Not only must the machinery product mix be changed, but the rate of retirement of obsolete machinery must be sharply increased and new technical processes introduced and dissiminated. To accelerate replacement of obsolete equipment in the machine-building industry, production of metal-cutting machine tools and forge and press machines is to be accelerated, technical improvements and new varieties introduced, and some 25–30 per cent of production of metal-cutting tools and at least 30 per cent of forge and press machines is to be retained for the internal uses of the branch.

In the light industry the overall plan target was overfulfilled. In textiles marked shortfalls were registed, but sharp speed up was reported in the production of ready-made clothes in 1966–70. Leather footwear surpassed the overall plan assignment. Kosygin berated light industry for failing badly to satisfy the demand for quality garments, knitwear, and footwear. To alleviate the prevailing shortages of textiles, the new plan envisages a marked speed up in production of textiles over the preceding period. Output of knitwear is to grow by 40 per cent, garments by 40 per cent, and china and pottery, where sharp shortages were recorded by 100 per cent. The overall panned rate of increase of light industry output (35–40 per cent)⁽⁸⁷⁾ is lower than that claimed for 1966–70 (50 per cent) and even somewhat below that planned for 1966–70—40 per cent.

The performance of the food processing industry hinges on the vagaries of agricultural performance. Allegedly output increased in 1966–70 by some 33 per cent, compared with 40 per cent planned, but here again the price weights used obscure the picture. The new plan envisages increase in foodstuffs by 33 to 35 per cent, including increases of 40–43 per cent in meat, 29 per cent in whole milk, about 34 per cent in sugar, and at least 47 percent in edible fish products.

While considerable progress was made in the neglected field of housing, the 1966–70 plan was substantially underfulfilled. It is claimed that in 1966–70 housing with a total "useful space" of 518 million square meters was built, but the figures are of limited comparability with the announced targets for 1971–75. The new target is to build housing with a total space of 565,575 million square meters.

Apart from heavy industry whose output of consumer goods is to double during 1971-75, the light and food processing industries were assigned the difficult task of increasing markedly their production (of total retail trade turnover over three-quarters is supplied by the light and food industries). Marked changes are taking place in the uses of agricultural produce. More processing is envisaged before the product reaches the consumer. For example, according to input-output tables for 1959 and 1966, in 1959 33 per cent of overall agricultural pro-

⁽⁸⁶⁾ Koysgin, Pravda, April 7, 1971.

⁽⁸⁷⁾ The output of light industry and of producers of all sorts of household goods is to expand by some 47 per cent during 1971-75. Kosygin, op. cit.

duce was sold unprocessed, and 39.6 per cent was processed in branches of light and food industry, whereas in 1966 the corresponding figures were 25.7 and 43.9 per cent (the rest was used directly in agriculture as productive inputs and reserves). As a result of increased processing of agricultural produce the share of B in total industrial output displays a tendency to increase.

To increase markedly the flow of output of light and food processing industries, the expansion, reconstruction, and replacement of the obsolete plant and equipment in these relatively neglected branches is of primary importance (including adequate quantity and improved quality of other inputs). The 1971-75 plan provides 8.7 billion rubles in investment funds—i.e., the volume of investment in light industry is to be increased by 90 per cent. More than 500 new enterprises are planned. Investments for expansion and reconstruction of existing capacities and to improve production processes are to be increased by 50 per cent over 1966-70. In 1971-75 light industry is to receive twice as much equipment as in 1966-70, 70 per cent of which will be channelled for re-equipment of existing facilities. (88) In the food, meat, dairy, and fish industries, investment

TABLE VI. PRINCIPAL AGGREGATE INDEXES OF PLAN AND PERFORMANCE, 1961–1975 (growth rates in percentages)

Indexes	1961–65 Reported	1966–70 Plan	1966–70 Reported ¹	1971–75 Plan
National income distributed	332	38-41	41	37-40
Gross industrial ouput	51	47–50	50	42-46
industrial producer goods	58	49–52	51	41–45
" consumer goods	36	43–46	49	44-48
Gross agricultural output ³	12	25	21	20–22
Investment	45	47	42	36–40
Per capita real income	19	304	33	30
Total employment	24	18	17	n.a.
Average wages	19	205	26	20-22
Average earning of collective farm members ⁶	n.a.	n.a.	42	30–35
Retail goods turnover	34	43–48	48	40

Notes: 1) national income produced increased by over 37 per cent;

- 2) preliminary results;
- 3) five-year average ending in 1975, approximate;
- 4) approximately;
- 5) at least by; and
- 6) from socialized sector only.

Sources: L. Brezhnev, Pravda, March 31, 1971; A. Kosygin, Pravda, April 7, 1971; N. Lebedinsky, PK, No. 3, 1971, p. 16; F. Kotov, VE, No. 4, 1971, pp. 33 and 41; SSSR v novoy piatiletke (Moscow: 166), pp. 126-34; Narkhoz 1967, p. 58; Narkhoz 1699, pp. 529 and 539; and Pravda, February 4, 1971 and April 11, 1971.

outlays are amount to nearly 14 billion rubles, or 60 per cent more than in 1966-70 Over 1,500 large enterprises are to be built or reconstructed. But as the deputy head of the Central Committee.s Department of Light and Food Industry correctly warned, if past experience is to be a yardstick, these plans might not be fully realized. Furing the 1966-70 FYP the construction enterprises treated projects in light and food industry as matters of "secondary importance". These construction sites are also poorly equipped with machinery and are shifted to a secondary place in the supply of materials. For example, in 1970 the Ministry of Industrial Construction fulfilled its plan by 101 per cent, but for the construction of light industry only by 87 per cent and for food industry by 97 per cent. The performance of other construction ministries was similar. (89)

It appears that there was a moderate decline in the share of accumulation in national income in the second half of the 1960s as shown in Table 5 (the disclosed data are in current prices and their comparability is thereby impaired). (90) But the plan for the next quinquennium provides only for a modest and marginal

TABLE VII. NATIONAL INCOME DISTRIBUTED, 1960–1969 (In current prices, billion rubles)

Distribution	1960	1965	1966	1967	1968	1969
Accumulation	38.3	50.2	54.2	59.4	64.8	69.1
increase of capital assets	25.3	27.9	29.7	31.8	34.0	49.9
increase in productive capital	15.7	17.5	28.9	19.4	20.7	24.9
increase in nonproductive capital	9.6	10.4	10.8	12.4	13.3	15.0
increases in stocks	13.0	22.3	24.5	27.6	30.8	29.2
Consumption	104.5	140.3	150.0	162.1	174.8	187.5
personal consumption	93.9	124.9	133.2	144.0	155.2	166.2

Sources: Narkhoz 1968, pp. 571-72 and Narkhoz 1969, pp. 559-60.

TABLE VIII. CHANGES IN SHARES OF DISTRIBUTION OF NATIONAL INCOME, 1966–1975 (in comparable prices billions of rubles)

Plans	National income	Consumption	Accumulation
1966-70 reported	1166	859	307
Percentage shares	100	73.68	26.32
1970 reported	266.3	197.2	69.1
Percentage shares	100	74.06	25.94
1975 planned	365–373	272-278	93–95
Percentage shares	100	74.53	25.47

Source: A. Kosygin, Pravda, April 7, 1971.

⁽⁸⁹⁾ Sizov, EG, No. 20, 1971 and Kotov, EG. No. 9, 1971.

⁽⁹⁰⁾ The reader may wish to consult the monumental work by A. Bergson, *The Real National Income of Soviet Russia Since 1928* (Cambridge, Mass: 1961) for a conceputual framework and for imputation of relative shares of final uses in gross national product (Table on p. 237).

decline, as illustrated in Table VIII.

Whereas in 1966-70, 16.4 per cent of the Increment of national income (in comparable prices) was channeled to accumulation (73.6 per cent to consumption), the plan for 1971-75 calls for a somewhat smaller share of the planned increment, i.e., 24.2 per cent to be allocated to accumulation (ipso facto a some what larger share, 75.8 per cent, to overall consumption.) The share of accumulation in national income is slated to decline moderately from about 26 per cent in 1970 to about 25.5 per cent in 1975, and consequently the share of consumption to increase somewhat. The 1971-75 FYP envisages a moderately higher pace of expansion of the consumption fund than of the accumulation fund. From 1970 to 1975 national income is slated to increase by about 37.2 per cent, the consumption fund by about 38 per cent, and the accumulation fund by about 35 per cent. (91) Given the refractory nature of the statistical material and the perplexities of determining the rate of accumulation and changes over time, it is noteworthy that the planners have chosen to accelerate the rate of increase of consumption over that of accumulation (national income) and have planned a reduction in the rate of accumulation. However, the changes are so modest and marginal that a reversal of the planned proportions during implementation might very well take place. A reshuffle of resources within the broadly defined accumulation would increase at the expense of unproductive accumulation (welfare-oriented investments). And changes might occur within the personal consumption fund itself (shifts between personal and collective consumption and within the latter between welfare or production-oriented outlays).

The customary warning about the distortions of the shares of accumulation (consumption) in Soviet national income accounting is in order. The data reported on consumption incorporates the turnover tax—the major constituent of financial accumulation. Since the bulk of the turnover tax is levied on consumer goods, the share of consumption (industrial sector) in national income is inflated and accumulation (investment) understated. (92) Even some Soviet writers now concede that the proportionate share of consumption in national income is overstated and of accumulation understated due to the inappropriate price weights used. Consequently they advocate an appropriate redistribution of turnover tax.

While official statistics claim that since the early 1950s about 25 per cent of national income was channeled to accumulation, the late eminent Soviet econo-

⁽⁹¹⁾ Brezhnev announced at the Congress that in 1971-75 the national income will increase by 37 to 40 per cent, including an increase of 40 per cent in the consumption fund and 37 per cent in the accumulation fund. Pravda, March 1, 1971.

⁽⁹²⁾ The Soviets often stress that the accumulation fund remained about one-quarter and consumption about three-quarters of national income over time. However, this "steady" relationship is a statistical illusion since over time prices of producer goods displayed a tendency to decline relatively to those of consumer goods, i.e., the share of investment tended to outpace that of consumption, if we were to adjust for the spurious price weights.

mist and statistician, A. Vainshtein's recalculations indicated that up to 35 per cent of national income was so diverted. [93] It may be mentioned in this context that Vainshtein's painstaking research pointed to the adverse effects of over-investment on productivity. He concluded that a considerable and uninterrupted retardation in the growth rates in actual industrial productivity serves as a strong warning that within the "next few years" the share of investment (accumulation) in national income should not be increased. The bitter lesson of Soviet economic development is that in future long-term plans the presently attained rate of accumulation cannot be exceeded. Preferably it should be somewhat reduced. A fall in the share of consumption in national income causes a considerable retardation in the dynamics of labor productivity. [94]

In pre-Congress discussion and Congress speeches the sad state of the investment field was emphasized. The notable failures of underfulfillment of plan assignments for the commissioning of production capacities; the drawbacks in design work and organization of construction periods; late commissioning and mastering of capacities; etc.—all these were again discussed and denounced. These are familiar ills that do not have to be elaborated again, but need to be kept in mind in evaluating the record for the preceding period. They are also likely to condition the performance during the 1971-75 period. Indeed, it is probable that completion of the much delayed projects would result in an increased flow of output. (95) It seems reasonable to assume that some of the key bottlenecks in chemistry, for example, will be overcome during 1971-75 and the considerable number of projects under construction will be finally completed and put into operation. This, of course, does not mean that new bottlenecks will not be created and, indeed improvement in performance might intensify capital formation. The aggregate investments in national economy are slated to increase by 36-40 per cent (basic productive investments by 50 per cent), (96) as against 42 per cent reported (47 per cent planned) for 1966-70.

The inefficiency of the investment process is so sharply criticized in part due to the overoptimistic assumptions as to "significant upsurge of investment efficiency" during plan construction. The problem is that the inefficiency of the investment process is largely conditioned by the size and content of the investment plan (and patently aggravated by the working arrangements for resource allocation and utilization). But constructing an overoptimistic and ill balanced investment program, the planners generate pressures and bottlenecks that extend

⁽⁹³⁾ A. Vainshtein, Narodyn Dokhod Rossll i USSR (Moscow, 1969).

⁽⁹⁴⁾ The planners were deliberately vague on the composition of investments. Even the key projects were not disclosed. The list of authorized new construction projects is apparently to be specified in detail and discussed with union republics, and ministries during the elaboration of the FYP. Kosygin, Pravda, April 7, 1971.

⁽⁹⁵⁾ F. Kotov, VE, No. 4, 1971, p. 33.

⁽⁹⁶⁾ See, for example, Pravda, Febraury 14, 1971, and April 7, 1971.

intolerably the gestation and fruition periods, and therefore reduce the efficiency of the investment process. (97)

V

The welfare package announced by Brezhnev at the Congress contains a number of novel and significant, even if in many respects modest, measures. (98) It was, however, tempered by Kosygin who spedified that the benefits would be delayed to the latter part of the FYP. (99) The improvements in the consumer's lot rely primarily on variations of disposable income, rather than on price reduction. To be sure, by introducing new products, by pricing the automobile and other goods in "short supply", by setting or varying the rates of turnover tax, etc. the state is able to take some compensatory measures.

- 1. During the five-year period (with the "happy times", according to Kosygin to come only in 1973-75 for the prevailing majority of workers) the minimum wage will be raised to 70 rubles per month from the present 60 ruble minimum. (100) To preserve wage differentials, the basic pay rates of employees in the middle wage categories are to be increased, but neither the amounts nor the rates were specified. Pay increases (on the average by about 20 per cent) are planned for a number of low-paid occupations such as teachers, physicians, medical personnel, and certain other employees in the so-called nonproductive sphere. The wage structure is to be improved to reward for difficult conditions, for improved skills and qualifications', and for increased productivity and quality of performance. Wage differentials are to be used on a large scale to attract and retain labor in remote and unattractive regions where grave labor problems impede industrialization. Pay for night work is to be increased substantially to increase the rate of utilization of existing capacities. These measures are to be implemented gradually by regions and branches of the economy and are to affect 90 million employees (roughly the number employed in 1970). As a result during the FYP the average monthly earnings will increase from 122 rubles in 1970 to 146 rubles (i.e., but 20 to 22 per cent). With the aim of further reduce the differential between urban and rural labor, the average monthly earnings of collective farmers for work in the socialized sector will be increased to 98 rubles (i.e., by an average 30 to 35 per cent).
- 2. Some relief from the burden of direct taxation for certain groups of employees was announced to boost their disposable earnings. Income tax for workers and office employees who earn less than 70 rubles per month will be
 - (97) Cf. M. Kalecki, Zycie Gospodarcae No. 24, 1963.
 - (98) Brezhnev, Pravda, March 31, 1971.
 - (99) Kosygin, Pravda, April 7, 1971.
- (100) In September, 1967 as part of the celebration of the Fiftieth Anniversary of the Revolution, it was announced that minimum wages for all non-kolkhoz workers would be increased to 60 rubles a month (and in some cases to 70 rubles).

reduced. Reduction or abolishment of income taxes is opposed by the conservative financial apparatus on the grounds that such action would reduce the flow of budgetary revenue and add fuel to inflationary pressures. The Ministry of Finance is reluctant to give up the instrument of siphoning of purchasing power at the source and is reluctant to rely only on the turnover tax. Following Khrushchev's announcement at the Twenty-First Concress, a law was enagted in 1960 about a progressive reduction in six annual installments leading to complete abolishment of income tax on earnings by 1965. The first two installments were implemented in 1960 and 1961, bringing the non-taxable income to 60 rubles per month. In 1962 further reduction was suspended in view of an upsurge of inflationary pressures (substantial overshooting of employment and the wage bill, in part due to growing budgetary expenditures on armaments). In 1967 further reduction of income tax was announced; i.e., the tax rates on wages in the range between 61 and 80 rubles per month were reduced on the average by 25 per cent. (1011)

- 3. Brezhnev announced a redemption six years ahead of time of the state bonds which until 1958 the population had to buy under payroll withholding scheme. The mass subscriptions" to the state bonds were a weighty contribution to the state budget and an important instrument in extracting surplus product. Eleven loans were issued from 1947 to 1956, totalling 25.8 billion rubles. In 1957 it was decided that this debt would be redeemed over a period of 20 years, beginning in 1977. The innovation introduced at the Twenty-Fourth Congress was to begin the redemption in 1974. The following schedule was adopted: in 1974 and 1975, 1 billion a year; in 1976 to 1980, 1.2 billion a year; in 1981, 1.5 billion a year; in 1986 to 1989, 2 billion a year; and in 1990, 2.3 billions a year. The leaders were silent on whether interest on the long-overdue state loans would be paid.
- 4. A very significant move toward mitigating poverty was the introduction of the family allowance program, which is also a move to stimulate a higher birth rate. In 1974 cash allowances are to be introduced for children in those families where total income (from all sources) per member of the household is less than 50 rubles a month. This provision should particularly benefit low income, large size families, supported by a single wage earner. In also raises the crucial question of the income base on which the calculations are to be based. Kosygin emphasized that the total income includes income from all sources. It is possible that the planners might inpute the value of free or low cost expenditure from the collective consumption fund, thereby reducing the number of households below the poverty line. It is interesting that Soviet sources referred to the minimum accepted standard of living-poverty line—at about 52 rubles per capita. Computations showed that an average family, consisting of four persons (husband, wife, boy about 13 years old, girl about 8 years old) requires as a very

minimum 206 rubles per month in 1965 prices. Should both parents earn the minimum wage, they would find themselves in a serious financial difficulties. Even those earning average wages find it excessively difficult to increase the size of their families, even when both husband and wife are gainfully employed. (102)

- Some of the other welfare benefits announced include:
 - As of July 1, 1971 the minimum pensions for collective farmers were to be increased and subjected to the rules for fixing pensions that have been in force for non-farm employees.
 - b) From mid-1971 the minimum size of old-age pensions was to be increased but the amount was undisclosed. As previously noted the growing share of pensioners and their increasing income creates some new problems for the planners, particularly in large cities.
 - c) During the 1971-75 FYP the size of invalid's pensions were to be raised by an average of 33 per cent and pensions of families that have lost their breadwinner by an average of 20 per cent.
 - d) The number of paid days of leave to care for a sick child was to be increased and 100 per cent paid pregnancy and maternity leaves for all working women, regardless of the length of employment, to be established, as yet another incentive to encourage a faster population growth rate.
 - e) Larger expenditures from the collective consumption fund were to be allocated to public health and education, for example larger expenditures on meals in hospitals and urban vocational schools and increase of overall scholarships.
 - f) The wage increases and welfare measures are expected to amount to 22 billion rubles during 1971-75 as compared with 10 billion rubles during 1971-75 as compared with 10 billion rubles in the preceding quinquennium.

The rise in income again focuses on the problem of the lagging consumer goods production. The planned growth in the population's cash incomes is supposed to correspond to the production of consumer goods and the growth of trade turnover. A growth of 40 per cent in the population's cash income is envisaged by the plan, sales of consumer goods to be increased by 42 per cent and volume of paid services to be increased by 47 per cent. During 9th FYP, market supplies of meat, fish, vegetable oil, and eggs are to increase by 40 to 60 per cent, sale of clothing is to grow by 35 per cent, that of knitwear by 56 per cent, sale of household goods by 80 per cent. Supply of refrigerators is to grow so as to increase the holdings from 32 per 100 families in 1970 to 64 in 1975, for TV sets the corresponding figures are 51 and 72; and for washing machines 52

and 72. By 1975 the sale of personal cars is to increase by more than sixfold over 1970. (103)

Admittedly, given the targets for the volume of expansion of production and sales of consumer goods, the formidable problem is to expand and improve the product mix. "The task is not only to cover customer demand in terms of quantity—the most important thing is the kind of goods the customer find in the stores and how well they satisfy him in terms of their variety and quality."(104) The problem is not only one of effective response of industry and trade to the shifting patterns of consumer demand, but industry should create new wants, influence the customer's demand by producing new and improved products.

A statement made by Paul Samuelson in his address upon receiving the Nobel Prize is not devoid of application to the Soviet scene. Samuelson referred to the writer of the New Left who was scathing on the notion of Pareto optimality:

Yet as I digested his message, it seemed to me that precisely in a society grown affluent, where dissident groups are called toward a way of life of their own, there arises an especial importance to the notion of giving people what *they* want. An Old Left writer dealing with a socialist economy on the verge of subsistence has surely less need for the concept of Pareto optimality than does the modern social observer in the United States or Sweden. (105)

⁽¹⁰³⁾ Construction of the country's largest automobile plant in Togliatti began in 1967. In August, 1970 the Volga Automobile Plant turned out its first batch of passenger cars. The construction of the Volga plant is scheduled to be completed in 1972. Its expected capacity is 660,000 cars per annum. The output of Moskevich cars is to double when the reconstruction of the Lenin Y. C. L., Plant in Moscow is completed. Their output is to reach 200,000 cars per annum. The new Izhvesk plant, whose expected capacity is rated at 220,000 cars per annum, is to produce 70,000 cars in 1971. It is anticipated that the output of passenger cars should reach 1.2–1.3 million by 1975, compared to 344,000 in 1970. Kosygin, Pravda, April 7, 1971. (104) *Ibid*.

⁽¹⁰⁵⁾ Paul A. Samuelson, Science, September 10, 1971.