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Recent Trends in Soviet Personal

Income and Consumption

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I. Introduction

As part of the examination of recent economic growth in the Soviet economy, this paper concerns itself with trends in real personal income and the several components of consumption. During the 1930's and 1940's consumption was awarded an extremely low priority. The primary concern of the Soviet planners was to train and maintain an effective labor force as cheaply as possible. Thus, only those resources essential for this purpose were allocated to consumption.

The low priority awarded consumption throughout this period stems only indirectly from Marxian ideology. Karl Marx, in his treatise <u>Das Kapital</u>, set forth a formula by which an economy which wishes to increase its rate of growth can best succeed. He explained that a nation, by increasing the share of its national product allocated to producer goods, and reducing the share allocated to consumer goods, can increase its rate of growth. Nevertheless, Marx did not indicate the criteria to be followed by a socialist economy in allocating its resources between producer and consumer goods, nor the appropriate speed and pattern for such a nation's economic development.

Instead it was necessary for the Soviet government, the first nation to adopt Marx's political philosophy, to adjust this formula to its goals.

The formula adopted in 1928, the year in which the Soviet Union's first 5 Year Plan was initiated, placed primary emphasis on heavy industry as the most rapid road to economic development. Thereafter the needs of heavy industry were to assume highest priority. The results of this policy were





forced savings and a diversion of resources from consumption to investment channels. Furthermore, the increase in the share of national output going to investment was not primarily oriented towards the future production of consumer goods and services, but rather to the output of more investment goods. Thus since 1928, the most important production targets have been machine tools, steel, and chemicals, not textiles, shoes, and radios.

Illustrative of this policy was the fall of consumption, which represented 84 percent of GNP in 1928, to 60 percent of GNP by 1940, according to computations made by Professor Bergson.* 1/ During World War II, the proportion of GNP which was devoted to consumption continued to fall rapidly, reaching 40 percent in 1944. However, upon termination of the War, consumption as a share of GNP rose, reaching approximately 56 percent in 1950.**

Since the demise of Stalin in 1953, consumer welfare has been awarded a higher priority. However, this higher priority has not taken the form of a growing share of the national product, but rather a relatively constant share of a growing national product. For example, consumption as a share of GNP in 1955 was approximately 57 percent, or only slightly higher than in 1950, 2/ and while there is presently no published measure of consumption as a share of GNP (valued in factor costs) for the period since 1955, an independent calculation reveals that this share has probably declined somewhat.

^{*} Both consumption and GMP are valued in 1937 ruble factor costs.

^{**} It should be noted however, that even though consumption as a share of GNP might decline between two points in time, the increase in GNP during the period might be sufficient to enable consumption to be greater in the second period that in the first.

The shift in allocational policy probably did not represent signs of a benevolent dictatorship but rather an attempt by the Soviet leadership to adopt a policy more conducive to maximizing growth. Increases in labor productivity were to be obtained partly through effective economic incentives rather than through the harsh and oppressive measures used in the 1930's and 1940's.

In discussing consumption in the USSR, this paper will focus primarily on the period since 1955. Nevertheless, since the great improvement in the welfare of the Soviet consumer dates from approximately 1950, the events which occurred in the period 1950-55 will frequently be compared with what has happened since.

Despite the significant gains in per capita consumption of goods and services during the 1950's, in recent years agriculture and industry have failed to maintain the earlier growth rates in the output of food, fiber, and manufactured consumer goods. As a result, there has been a slowdown in the increments in available goods and services for consumption. Meanwhile disposable income received by the Soviet population has continued to increase rapidly. The growing disparity between the rates of increase in personal income and real goods and services has resulted in inflationary pressures. The government attempted to alleviate this situation somewhat by suspending the scheduled abolition of income taxes in September 1962. In addition, the increase in the prices of meat and butter in June 1962 has also helped to reduce inflationary pressures somewhat.

II. Personal Income and Consumption

The position of the consumer in the recent period of rapid Soviet growth can be evaluated by observing the trends in personal income and consumption. This paper, therefore, is devoted primarily to estimating these trends on the basis of the best available data.

Corresponding to US practice, personal income is defined in this paper to include both money income and income-in-kind. In contrast to the Soviet definition, it does not include the value of communal services provided by the State, for example, through its health and education systems. Money income in turn is comprised mostly of wages received for labor performed in the State sector or on collective farms,* transfer payments, and proceeds from the sale by individuals of consumer goods (mostly foodstuffs). Income-in-kind, an important share of personal income in the Soviet Union, is the value of commodities consumed by households for which no monetary payment is made. These products consist primarily of the unmarketed share of payments-in-kind received from the collective farm for labor services and those agricultural commodities produced from small private holdings in the form of gardens and livestock. Table 1 sets forth the relative importance of the different types of compensation for the Soviet population in 1955.**

^{*} The wages of wage and salary workers come directly from state sources. In general the total wage of the individual worker is comprised of the basic wage, bonuses and premia and is nearly independent of the production performance of the enterprise. The collective farm on the other hand is nominally a cooperative form of enterprise. Persons participating in collective farm work earn "workdays" (trudodni) and their earnings per workday are directly related to the current income of the farm. Thus, collective farm workers are reimbursed after the collective farm has paid its taxes, insurance, contribution to the capital fund, and production and administrative expenses from the money revenue which it has earned from the sale of farm products. After these expenses are met, the remainder is available for distribution to the peasants, along with the produce set aside for this purpose. The cash and produce are paid to the participants in proportions determined by the number of "workdays" each earned during the year.

*** A detailed report on the data in this paper is being prepared for publication elsewhere.

Table 1

Relative Share of Various Types of Personal Income Received by the Population in 1955 (in percent)

Money Income	<u>77</u>
Wage Fund of Wage and Salary Workers in State Sector	48
Money Income Received by Collective Farmers from Wages and Income from Sale of Farm Products	9
Transfer Payments	7
Other a/	13
Income-In-Kind b/	<u>23</u>
Total Income	100

a. Includes cooperative artisans wages, income from the sale of farm products by workers and employees in the State sector, prisoners' wages, profits distributed to cooperative members, other urban labor income, and military pay (including subsistence).

Section III discusses the trends in real personal disposable income in the Soviet Union from 1950 to 1961. For an examination of trends in consumer welfare, personal income is converted to real personal disposable income by deducting direct taxes and net bond purchases and then deflating the residual by a price index of consumer goods and services. This price index is a weighted index combining several individual price indexes in a manner designed to approximate the changes in the cost of goods and services purchased by a Russian consumer in a base year.

b. Includes imputed rent, prisoner subsistence, farm household income-in-kind, and investment-in-kind.

The trends in the components of real consumption are discussed in

Section IV. Real consumption is defined as the quantity of consumer goods
and services valued in base year prices that the economy supplies to its

members. In the Soviet Union real consumption consists of five basic
categories (1) goods and services sold by the State retail trade network,

(2) goods acquired by consumers in collective farm markets,* (3) purchases
of services from municipal enterprises or artels, (4) that part of personal
production on private plots or collective farm earnings-in-kind which is
consumed rather than sold, and (5) the array of goods and services supplied
to the population by the State free of direct charge. Section IV also contains
a brief discussion of the qualitative changes in Soviet consumption and the
problems the planners face in selecting the correct assortment of consumer goods
and services to be offered to the Russian people.

Section V discusses the problem of recent inflation in the Soviet Union, and the steps which the government has taken to offset it.

^{*} Collective farm markets are local retail food markets where collective farms and individuals are able to sell any surpluses remaining at their disposal after they have met their legal obligations to the Government and satisfied their own requirements. Prices on the collective farm markets, in contrast to prices in State controlled stores, fluctuate in response to the conditions of supply and demand. In 1961, food sales on the collective farm markets and in State controlled stores constituted 7 percent and 93 percent, respectively, of total sales of foodstuffs.

III. Trends in Real Personal Disposable Income, 1959-61

Real disposable income increased at a rapid rate from 1950 through 1955, but since 1955 the rate of increase has declined somewhat. In the periods 1951-55 and 1956-61 real personal disposable income (which represents disposable income deflated by an index of consumer prices) increased at the average annual rates of 8.7 percent and 6.1 percent, respectively, or on a per capita basis by 7.0 percent and 4.4 percent, respectively. Since personal disposable income depends on the behavior of money earnings, income-in-kind, transfer payments, and the extent of deductions from money income in the form of direct taxes and compulsory purchase, the varying trends in these components are discussed below.

Table 2

Average Annual Rates of Growth of Real Personal Disposable Income,
1950-61
(inpercent)

•	<u> 1951 - 55</u>	1956-61	1956-58	1959-61
Total a/	8.7	6.1	6.1	6.0
Per Capita b/	7.0	4.4	4.3	4.7

a. The index of real personal disposable income was obtained by estimating personal disposable income in 1950, 1955-61 and deflating it by a price index of goods and services. Estimates of the components of personal disposable income employed in the construction of the index were obtained or derived from official statements contained in the Soviet press or publications and from research performed by Western students of the Soviet economy. The weights for the index of the cost of goods and services to households were obtained by estimating purchases by households in 1958 of (1) goods purchased in State and cooperative stores, (2) services, excluding housing, (3) housing, and (4) collective farm market sales. The price indexes to which these weights were assigned were estimated from official sources and from previous research on the Soviet economy performed in the West.

b. Based on unpublished estimates of population of the US Bureau of the Census, Foreign Manpower Office.

A. Gross Earnings of Wage and Salary Workers

The gross earnings of wage and salary workers in the State sector increased at the average annual rate of 7.9 percent in the period 1956-61.*

Workers' wages grew by an annual average of 2.9 percent, while the labor force increased at the average annual rate of 4.6 percent.**

It has often been observed in modern industrial economies that over time wage differentials tend to narrow. Under conditions of market competition for labor, one would expect a rather continuous decrease in wage differentials in the rapidly growing Soviet economy. But as is characteristic of a State directed economy such as that of the USSR, relative wages tend to be rigid in the short run with large changes introduced from time to time. According to Soviet literature, it would appear that such a change in the structure of relative wages has recently been initiated in the Soviet Union, the first significant change since the 1930's. For example, in 1957, the minimum wage rates (stavki) for all wage and salary workers in State enterprises and budgetary organizations were raised by about one-third to 27 to 35 rubles per month.*** 3/ An independent calculation reveals that this adjustment affected more than 12 percent of the workers employed in the state sector.****

^{*} Includes wages of cooperative artisans in both 1955 and 1961, although cooperative artisans did not become part of the State labor force until 1960.

^{**} A portion of the expansion of the State labor force represents the transfer of workers from collective farms to State enterprises.

^{***} Ruble values in this report are given in new rubles established by the Soviet currency reform of 1 January 1961. A nominal rate of exchange based on the gold content of the respective currencies is 0.90 ruble to US \$1. This rate, however, should not be interpreted as an estimate of the equivalent dollar value of similar US goods and services.

^{****} In addition to the minimum wage which a worker would be able to earn, he might receive an additional 15 to 25 percent in the form of bonuses and other types of incentive pay. Thus although prior to the increase in the minimum wage, a worker's total earnings might be more than 27 to 35 rubles per month, if his base pay (stavki) was less than this amount, he would be allotted a supplement to bring his base pay (not total earnings) up to the minimum amount.

In 1962, minimum wage rates are scheduled to be increased to 40 to 45 rubles per month, while in 1963-65, they are to jump to 50 to 60 rubles. 4/ However, research indicates that the new minimum wage levels installed in 1962 represent little more than an institutionalization of the earnings levels of the lowest paid workers before the wage adjustment. 5/

Similarly, a major wage reform was to be accomplished during 1956-62. According to official sources, the average wages received by workers in the State sector were to increase by 10 to 20 percent, while the wages of lower paid worker: were to increase by 30 to 35 percent. 6/ This action was to be accomplished partly by reducing the pay differential between the highest and lowest grades. For example, a 6 step pay scale for wage workers (instead of an 8 step pay scale) was introduced in most industries. The ratio between the first and 6th step was set at approximately 2:1, rather than the 3.5 to 2.5:1 which existed just prior to the wage reform. 7/ Together with the change in the structure of workers' wages, the salaries of engineers and other technicians were also raised, but by less than the relative increase in the wages of workers. Nevertheless, Walter Galenson has demonstrated that these Soviet comparisons are spurious, and that no sharp reduction in differentials actually took place because there were almost no wage workers in the first 2 grades of the wage scales. 8/ Thus, one should actually have compared the dispersion between the 3rd step and the 8th step in the old scale with the dispersion between the 1st step and the 6th step in the new wage scale. The new extreme ratios in the various industries correspond roughly to the extreme ratios which were in existence prior to the wage reform. Not only were the "actual" extreme ratios relatively unchanged by the wage adjustment, but the distribution of workers by "actual" wage grades was also not altered significantly. 9/

One important result of the wage reform was the increase in the portion of an employee's total earnings which he receives in the form of base pay. While base pay constituted approximately 45 to 55 percent of total earnings prior to the wage reform, it is presently believed to constitute 75 to 85 percent.10/ Because the higher and middle paid workers' compensation was often based on a piece rate scale and included proportionally greater amounts of bonuses and premia than did the pay of certain lover paid (and less skilled) coworkers who paid on a straight time basis, the change in the wage structure, which will make it more difficult for a worker to earn bonuses and premia, is expected to reduce the disparity in rates between the various classes of workers.* However, the actual effect of this action on reducing the disparity between income groups is expected to be only slight because the number of lower paid workers who are paid on a straight time basis is relatively small, probably constituting less than 10 percent of all industrial production personnel. It would thus appear that the recent Soviet attempt to improve the system of wage payments and to reduce wage differentials has not changed earnings differentials significantly.

B. Money Income of Collective Farmers

The peasant population in households attached to collective farms has two primary sources of money income: (1) the remuneration for labor services expended on the collective farm and (2) money income from the sale of farm

^{*} The wage reform not only increased a worker's base pay, but also the amount of work it was necessary to perform in order to receive that base pay. In so doing, it became increasingly more difficult for a worker to earn bonuses and premia by overfulfilling his goals.

products. The total money income of the collective farm population from farming activity increased by 44 percent from 1955 to 1961 as the result of a 90 percent increase in money income received from the collective farm and a 10 percent increase in earnings from the sale of farm products.

Much of the increase in money income from participating in collective farm activity can be explained by the change in the manner in which the collective farm labor force was compensated for its work. Over the past decade official policy recommended that the compensation of the collective farmers be, wherever possible, in the form of cash payments rether than payments-in-kind. The effect of the new policy can be seen by the fact that in 1955 the portion of the total income paid out by collective farms in the form of cash for services rendered was 42 percent, but by 1960 had increased to 68 percent.*11/ Thus the 90 percent increase in the wages paid to farmers represents not only an increase in the amount which these workers received for a day's labor, but also represents a payment in lieu of the portion of the payments-in-kind which they no longer received under the new compensation arrangement.

Money income from the sale of farm products by the collective farm population comes from the sale of products either obtained from their "own enterprises" -- land allotment and livestock held by the household -- or from the sale of products obtained from the collective farm as in-kind payments. These sales now provide about 50 percent of the collective farmers' money income from farming activity.

^{*} These shares are based on an official calculation which values payments-in-kind in State retail prices.

Great disparities exist in income distributed not only within each collective farm, but also among the various collective farms. It has been estimated that farm mechanizers (tractor drivers, combine operators, etc.), who comprise about 10 percent of the labor force on collective farms, receive about 20 to 25 percent of the income distributed from the farms. 12/ Workers on model farms and on those farms which produce high priced crops, primarily industrial crops, are also in a favored status in relation to other farms. According to the calculations performed by Arcadius Kahan, "about 20 percent of the collective farm population absorbs 40-45 percent of the total labor remuneration distributed by the collective farms." 13/ Since the lower paid workers on the majority of collective farms receive a relatively small portion of the collective farms' total income, the output from their small private holdings of land and livestock represents an important supplement to their income.* Recently the Government has attempted to reduce the size of these "own enterprises" attached to the households of collective farmers. by reducing the importance of the private sector, the Government is, in effect, tending to widen the differences in income within the collective farm labor force.

^{*} Although all households attached to collective farms maintain "own enterprises" the importance of these plots in the total income of higher paid workers and agricultural specialists is much less than for the lower paid workers.

C. Income-in-Kind

Income-in-kind represents the imputed value of agricultural produce consumed directly without a monetary transaction. This value is comprised of the unmarketed portion of commodities (1) received by collective farmers as payment for the services which they render on the collective farms, and (2) produced by households (both urban and rural) on their small holdings of land and livestock. Since this production is consumed by households without passing through the normal trade channels, it is not included in data on sales transactions. Income-in-kind constitutes a significant proportion of the total income in the Soviet Union. This is especially true of lower and middle income groups. As mentioned above, there are significant variations in the money income received by collective farmers. As a result, persons in the lower paid categories such as milkmaids, shepherds, etc., rely heavily on the production from their private plots to compensate for their lower money earnings.

In the period 1956-61, income-in-kind increased at the average annual rate of 1.9 percent, or somewhat less than the average annual increase of 2.4 percent registered in the period 1951-55. However, since 1958, income-in-kind has declined by approximately 2 percent.

The relatively small increase in income-in-kind compared to the increase in the other components of personal income, during the 1950's, was a result of two official policies: (1) the form of remuneration to collective farmers for work on the collective farm was steadily changed from that of in-kind payments (grain, potatoes, etc.) to cash payments; and (2) after a period of relaxation in the mid 1950's in policy towards the private sector, measures were taken after 1958 to restrict the size of the agricultural holdings of households.

D. Transfer Payments

During the period 19%-61, transfer payments increased at the average annual rate of 14.3 percent. This sharp rise is explained largely by the 1956 revision in the pension laws and the increase in the number of persons receiving such pensions. Prior to 1956, the maximum old age pension was 20 rubles per month.* 14/ However, with the revision of the pension laws, the minimum rate was set at 30 rubles per month.** In addition, a new scale of payments benefiting lower paid workers was instituted. (See Table 3). Persons earning up to 35 rubles per month would receive pensions amounting to 100 percent of their earnings, with progressively smaller percentages granted to those with high earnings.

As a result of these revisions, the average pension in 1961 was approximately 2.5 times the average in 1955. 15/

Other transfer payments received by individuals from the State include sickness benefits, maternity leave, and grants and stipends. Although no recent changes have been made in rates of payment, overall expenditures for these purposes have increased as a result of increases in the total numbers of persons receiving such payments and in the increase in the average wage.

^{*} Persons in certain favored occupations were exempt from this requirement,

^{**} Further increases in minimum old age pension payments are to be made in 1963 and 1966.

Table 3

Share of Wages Received by Wage and Salary Workers as Retirement Benefits a/

Monthly Wage (rubles)	Percent of Wages Received as Pension Payments b/
Up to 35	100
35 - 50	85
50 - 60 `	75
60 - 80	65
80 - 100	55 ~
100 and more c/	50

a. USSR. GIPL. Na Blago i Schast'e Naroda: Sbornik Dokumentov (For the Welfare and Happiness of the People: Collection of Documents), Moscow, 1961, p. 164.

- b. Received by all wage and salary workers except those engaged in underground work, and in harmful, dangerous or arduous occupations.
- c. With certain exceptions, the maximum rate was set at 120 rubles per month.

Sick pay and maternity leave payments are made on a graduated scale of payments which is based on length of service. Persons who are injured at work or suffer from diseases incurred on their jobs are entitled to 100 percent of their earnings regardless of the length of service. Since 1960, a worker who voluntarily leaves his job for another, is entitled to sick pay for ordinary illness on his new job if he finds work within 1 month.* Although maternity benefits in the past several years have not been changed, the period of paid maternity leave was extended in 1956 from 70 days to 112 days.

^{*} Certain people are exempt from this provision.

E. Direct Taxes and Compulsory Bond Purchases

Disposable income was also increased between 1955 and 1961 by the reduction or elimination of direct taxes on certain income groups and the suspension of compulsory bond purchases. In 1957-58, persons earning 37 rubles per month or less were relieved of their tax obligations, while the burden of taxation on those earning between 37.1 and 45 rubles per month was reduced. 16/ As a result, approximately 1.3 billion rubles was added to the purchasing power of the population. 17/ More significant was the announcement by the Supreme Soviet in 1960 of the gradual abolition of the income tax, which by 1965, was expected to add a total of 7.4 billion rubles to the population's disposable income.* 18/ (See Table 4)

However, in September 1962, the Government decided to postpone further tax cuts. While not affecting these persons in the lower income groups whose taxes had already been eliminated or reduced, the September announcement curtailed the growth in disposable incomes and the inflationary pressures which this growth was exerting.

An additional factor in the explanation of the rise in disposable income was the suspension of compulsory bond purchases in 1958. As a result, bond purchases dropped from 2.5 billion rubles in 1955 to 0.3 billion rubles in 1958, and thereafter declined to an insignificant level.

^{*} In 1960, approximately 7 percent of an individual's gross income was expended for taxes.

Table 4

Time Schedule for the "Abolation" of Income Tax for Wage and Salary Workers, 1960-65 a/

	1960	19 <u>51</u>	1952	1963	1961 ₊	1965
Persons earning the following or less per month are not required to pay income tax as of		(:	in ruble	es)`		
the following dates	50	6)	70	top free	+40 Hz	
Range of monthly earnings on which tax to be adjusted downward on an						Full abo-
average of 10 percent	50 .1- 60	60.1 _c 70		70.1 - 90	70.1- 100	income tax
Expected annual increase in	00					
aggregate disposable income during the year	360	(in m) 400	illions 450		Les) 240	(5,710) <u>c</u> /

a. USSR. SSSR-UShA: Tsifrakh i Fakti (USSR-USA: Figures and Facts), Moscow, 1961, p. 101.

b. By 1966 persons earning up to 100 rubles per month would have been entirely relieved of taxation, while those earning between 100-200 rubles per month would have had their base pay adjusted downward by a portion of the tax originally imposed on their incomes. Workers who earned more than 200 rubles a month would have had their pay adjusted downward by the complete amount of the tax that had been collected on their pay prior to the "abolition" of the tax

c. Difference between total increases in disposable income from tax deductions of 7.4 billion rubles and sum of reductions for previous five years, 1960-64.

IV. Recent Trends in Consumption

The previous section was concerned with real personal income in the Soviet Union in the period 1954-61. In this section attention will be focused on how the disposable income (excluding in-kind payments) received during this period has been spent on consumer goods and services. The discussion of trends in personal consumption expenditures is supplemented by a discussion of trends in communal consumption. Communal consumption includes the value of health, education, and other social services supplied by government institutions to the population free of direct charge. Viewed as an aggregate of total consumption, personal consumption expenditures comprise about 90 percent, and communal consumption about 10 percent of the total. The rates of growth of the several components of consumption since 1950 are shown in Table 5.

Average Annual Per Capita Rates of Growth of Components of Consumption
(in percent)

	1951-55	1956-61	1956-68	1959-61
Food goods a/	4.5	2.9	2.7	3.1
Nonfood goods b/	10.8	6.9	7.8	5.9
Soft goods c/	3.4	4.3	5.1	3.5
Consumer durables d/	29.1	11.9	12.8	11.0
Services to households e/	5.8	5.9	5.4	6.3
Communal services f/	3.0	3-9	3.2	4.6

s. The index of growth in the consumption of foodstuffs was estimated as follows:

^{1.} Estimates were made of Soviet output of 25 representative food products in three categories -- basic foods (flour, potatoes, vegetables), animal products, and processed foods.

^{2.} The production data were adjusted to exclude waste, losses, seed, and animal feed, and were further adjusted to reflect net imports and inventory changes when more than 5 percent of total production was involved.

^{3.} In order to eliminate double-counting of products at different spages of production, some of the basic foods and animal products series were modified accordingly. For example, the milk required to produce canned milk, butter, and cheese was subtracted from the fluid milk series.

- 4. These physical estimates of human consumption of various food products over time were then combined into one aggregate series. The weight of each individual series in the aggregate index for the consumption of foodstuffs is the proportion of its 1955 value (physical consumption priced in 1955 state store prices) to the total value of the sample.
- b. The index of consumption of non-food goods is obtained by (1) deducting from officially reported state and cooperative retail sales of non-food goods estimates of household purchases on non-food goods for non-consumption purposes, household purchases of personal and repair services and communist party literature, and retail purchases by institutions, enterprises, and collective farms; (2) adding estimates of purchases on the non-food portion of subsistence by military and internal security forces; (3) deflating the total of (1) and (2) by the official index of state and cooperative retail prices for non-food goods.
- c. The index for growth in consumption of soft goods is based on the following procedure: (1) retail sales in 1955 are obtained for four categories of textiles and for sewn garments, knitted wear, hosiery, and leather footwear; (2) these 1955 values are moved over time by production indexes based on official data. Since the production data have not been adjusted for net imports, changes in composition, or for inventory changes, the value series are not precise indications of the trends in consumption of these products in constant prices; (3) the summation of the individual value series provides the basis for the over-all index for the consumption of soft goods.
- d. In constructing an index for the consumption of durable goods the procedure used to calculate an index for soft goods (c, above) was adopted. Again retail sales in 1955 serve as base year weights. The sample of durable goods includes furniture, bicycles and motorcycles, radio and television sets, watches and clocks, electrical appliances, sewing machines, cameras, and kerosene burners.
- e. Services reflected in the index of purchases of services by consumers include household utilities, transportation, recreation and sports, religion, personal and repair services, and housing services. The majority of services were valued by multiplying estimates of the physical quantity purchased by 1958 prices. In some cases, they were estimated partly or entirely from official data on sales of these services in current prices and then deflated by price indexes based on 1958. The over-all index is computed from the aggregate value of these services in 1958 prices. The index of housing services is simply an index of total housing stock measured in M² of living space.
- f. The index of communal services is based on the trend in the total value of health and educational services as estimated from state budget data and collective farm and state enterprise expenditures. Expenditures on capital investment were deducted as was also the wage component. The residual series, or the expenditures on goods and services by the health and education sector, was converted to 1957 rubles by the use of an index of state store prices, excluding alcoholic beverages. The wage bill was estimated by moving the 1957 value through time by an index of the number of workers and employees engaged in health care and education. The sum of the deflated expenditures on goods and services and the wage bill series serves as the index of the state's provision of communal services.

A. Consumption of Foodstuffs

In the period 1956-61, the value of per capita consumption of foodstuffs increased at the average annual rate of 2.9 percent, or substantially less than the average annual per capita rate of 4.5 percent in the period 1951-55.

There has been a substantial improvement in the Soviet diet since
the death of Stalin. One indication of this improvement is the decline in
the "starchy-staple ratio," i.e. the percentage of total calories ingested
that are derived from grains and potatoes. The "starchy-staple ratio"
generally reflects the relative level of real personal income of a country's
population. The presence of a low ratio usually indicates that the
population's income is high enough to allow the substitution of relatively
expensive foods such as meat and dairy products for the cheaper starchy
staples. For example, traditionally as consumers' real disposable incomes
rise, animal products, oils, fats, sugar and other "quality" foods tend to
be substituted for the basic staples. At the same time the total quantity
of food ingested -- both in physical weight and calories -- may remain relatively
stable. The substitution of higher quality foods for the basic foods causes
this ratio to fall.

In 1953, approximately 75 percent of the calories consumed in the USSR were derived from low quality starchy foods, while only 10 percent were derived from animal products -- neat, dairy products and eggs. By 1960, the proportion of per capita caloric intake from starchy foods had dropped to 65 percent, while the proportion contributed by animal products had increased to 17 percent. In the case of the Soviet Union, where real consumer disposable

income has been rising steadily, me would expect the "starchy-staple ratio" to continue to decline. Instead, since 1960 there has been a general leveling off in the improvement of the Soviet diet. This has been due not to the satisfaction of the Soviet consumer with his diet, but rather to the inability of the egricultural sector to keep pace with the increase in the demand for higher quality foodstuffs. Evidence of the populations unsatisfied demand for high quality foodstuffs, particularly for animal products, has been the rise in collective farm market prices, reports of civil disturbances due to shortages, and the State store price increases on meat and butter of 30 and 25 percent, respectively, in June 1962. Nevertheless, Khrushchev, at the 22nd Party Congress implied that by 1970 the "starchy-staple ratio" would decline to about 28 percent, or to the level which prevailed in the US in 1948-49. 19/ As indicated in the paper in this series concerned with agricultural production, such claims are viewed by Western students of the Soviet economy with considerable skepticism, if not outright disbelief.

Middle improving the quality of their diet, the Soviet consumers have also been able to reduce the share of their total income spend on foodstuffs. For example, in 1950, approximately 60 percent of total disposable income was spent on foodstuffs. By 1960, this figure had declined to approximately 55 percent. In addition, during this period the proportion of foodstuffs purchased in State stores had increased from approximately 45 percent to approximately 60 percent, while the share derived from collective form markets and private production has declined proportions tely this trend is expected to continue throughout the next 20 years.

B. Consumption of Nonfood Goods

In the period 1956-61, per capita consumption of nonfood goods increased at the average annual rate of 6.9 percent, which was substantially less than the average annual per capita rate of growth registered in the period 1951-55. While the average annual per capita rates of growth of both soft goods and consumer durables in the period 1956-61 was approximately half of the increase achieved in 1951-55, the more rapid growth of consumer durables throughout the period tended to produce a continuing shift in the composition of nonfood consumption. For example, in 1952, approximately one-fourth of consumer expenditures on nonfood goods were for consumer durables, 20/ but by 1961, this figure had increased to approximately one-third. 21/

Since 1955, there have been growing indications of consumer resistance to the nonfood goods which were being manufactured in State enterprises. In recent years the most graphic evidence has come from the size of unsold inventories in the hands of the retail and wholesale networks. In 1961, total inventories of nonfood goods were 100 percent above 1955, while retail sales were only 60 percent above. 22/ That this increase in inventories is attributed partially to unsaleable goods (at present prices) is suggested by the heavy press commentary concerning the poor quality of soft goods and consumer durables and the lack of a more suitable assortment.

In response to the growing signs of consumer dissetisfaction, the State ordered the production managers to manufacture better and more attractive goods and strangthened the position of trade officials in deciding whether

to accept or reject shipments of consumer goods. The increased authority granted to the trade officials has not yet resulted in any substantial improvement in the consumers' position.

equilibrium are numerous. In the Soviet Union both production and prices react only sluggishly, if at all, to the forces of demand, so that the conflict between consumers' and planners' preferences results in the piling up of some goods on the shelves at the same time as there are long waiting lists for certain other products. Since most of the trade officials have received their training and experience in an economy in which buyers were willing to purchase any goods available, they have had little experience or training in estimating or anticipating consumers demands.

To reduce inventories, credit purchases were introduced in 1959, for goods in relatively ample supply. The terms for such purchases were relatively liberal: 25 percent of the purchase price was required as a down payment, with six months to one year in which to pay the balance. The effective rate of interest on the credit received was 1 to 2 percent per year. 23/ But in 1961, such sales constituted slightly more than 1 percent of a retail cales. 24/

1. Soft Goods

In the period 1951-55, the per capita availability of soft goods, as measured by weighted production indexes, increased at the average annual rate of 8.4 percent.* However, in the period since 1955, it has increased

^{*} A volume index of soft goods and consumer durables was constructed for the USSR in the period 1950-61, with 1955 retail sales used as value weights.

Table 6

Per Capita Consumption of Soft Goods in the USSR and the US

	Unit of Measurement	USSR 1952 a/ 1960 b/		US 1959 c/
Textiles, total	Sm	20 <u>c</u> /	26	70 <u>c</u> /
of which:				_
Cotton	m ²	17	<u>1</u> 9	52
Wool	m ²	1.3	2.2	2.7
Silk and artificial fabrics	<u>m</u> 2	0.7	3.4	15
Linen	_m 2	1.2	1.3	negligible
Knitted wear	pieces	1.6	2,9	11 <u>d</u> /
Stockings, hose	pairs	3.1	4.5 <u>e</u> /	10 <u>f</u> /
Leather shoes	pairs	1.3	1.8	3.4 <u>g</u> /

a. Estimated apparent consumption based on production estimates in USSR. TSU, Narodnoye Khozyaystvo v SSSR v 1958 Godu (The National Economy of the USSR in 1958), Moscow, 1959, several pages, and USSR. TSU. Sovetskaya Torgovlya (Soviet Trade), Moscow, 1956, pp. 82, 90. 131.

b. Tyukov, V. "Sovetskaya Torgovlya v Period Razvertnutovo Stroitel'stva Kommunisma" (Sovet Trade in the Period of the Development of Communism), Planovoye Khozyaystvo, No. 11, Nov 1961, p. 44.

c. All figures rounded to two significant digits.

d. Erro, I. "Catching Up and Outstripping: An Appraisal," <u>Problems of Communism</u>, Vol X, No. IV, Jul-Aug 1961, p. 25.

e. Aganbegyan, A. "Uroven' Zhizni Trudyashchikhsya v SSSR i v UShA" (The Standard of Living in the USSR and the USA) Mirovaya Ekonomika i Mezhdunarodnyye Otnosheniya, p. 35. The figure is for 1959.

f. Erro, op. cit. p. 27. Estimate of 1960 per capita production.

g. <u>Ibid</u>., p. 25.

at only 4.3 percent per year. Investigation of a shorter time period reveals that the growth of soft goods production has continued to decline. For example, in the period 1959-61, the average annual increase in the production of soft goods dropped to 3.5 percent.

Despite its slowdown, there have been important structural changes in the consumption of soft goods since the early 1950's. For example, of total sales of textiles in 1952, about 64 percent were of cotton, and 16 percent of silklike fabrics (mostly rayon goods), 25 / while, by 1964, the proportion of cotton to the total had dropped to 39 percent and the proportion of silklike fabrics had climbed to 29 percent. 26 / Although such a shift would seem to represent a sharp improvement in the quality of the fabrics consumed by the Soviet people, the paper in this series dealing with consumer goods' production tends to discredit such a conclusion.

In addition to the change in the structure of textile consumption, the proportion going directly into ready-made garments increased, while the share of textiles which was purchased by consumers in State stores, and custom processed into garments either at home, by seamstresses, or artels, declined.

The increased demand for higher quality merchandise also affected the consumption pattern for footwear. Whereas in 1952, only about 57 percent of the total sales of footwear represented the sale of leather shoes 27/, by 1961, purchases of leather shoes comprised approximately 71 percent of total sales of footwear. 28/

2. Consumer Durables

Although during the decade of the 1950's, production of consumer durables increased at an extremely rapid rate, the stock of consumer durables in the USSR in 1960 was shill extremely low. Data have been published on the

reproduced in Table 7 together with the available estimates of 1960 US stocks of the same goods. It should be noted, however, that Soviet and US stocks of consumer durables are not strictly comparable due to the poorer quality of Soviet goods and to the fact that the Soviet models differ substantially from their American counterpart. For a discussion of the quality of Soviet durable goods, see the paper in this series by Erro.

Stocks of Consumer Durables per 100
Families in the USSR and the US

Nome of Decision	USSR	US
Name of Product	1960 a	1960 b/
Radio equipment	48	94
Television	10	89
Cameras and photographic equipment	17	N.A.
Watches and clocks	263	N.A.
Refrigerators	3.5	98 <u>c</u> /
Sewing machines	35	N.A.
Washing machines	5 <u>a</u> /	95
Two-wheeled modes of transportation	45	N.A.

a. Tyukov, V. "Sovetskaya Torgovlya v Period Razvernutovo Stroitel'stva Kommunisma" (Soviet Trade in the Period of the Development of Communism), Planovoye Khozyaystvo, No. 11, Nov. 1961, p. 44. These figures exclude rental equipment.

b. Commerce, Bureau of the Census, Statistical Abstract of the United States 1%1, Washington, 1%1, p. 821. Besed on 51,6%0,000 potential users except for radios where potential users are 53,300,000.

c. Electric refrigerators only.
d. Lokshin, R. "Narodnoye Potrebleniye i Torgovlya Dvadsatiletke"
(National Consumption and Trade in 20 years) Sovetskoye Torgovlya,
No. 11, Nov 1961, p. 10.

C. Services

Household expenditures for utilities theat, gas, electricity, telephone, etc.), transportation, recreation and sports, religion, personal care and repair services, and bousing are estimated to have increased at the average annual per capita rate of 5.9 percent during the period 1956-61, which was slightly more than the average annual increase of 5.8 percent registered in the period 1951-55.

The notable laggard in the service sector has been in housing.

Although the urban housing stock (measured in terms of living space*)

increased by 95 percent from 1950 to 1961, there has been only a 6 percent increase in the rural housing stock. Adjusting the urban housing stock for population changes the per capita increase in living space

Table 8

Average Annual Rates of Growth of Urban and Rural Living Space (percent)

	1951-55	1956-61	<u> 1956-58</u>	1959-61
Urban housing	4.4	7.9	7.5	8.3
Public	4.9	6.2	5.1	7.1
Private	3.6	10.2	10.5	9.8
Rural housing	0	1.0	1.0	1.0
Urban housing, per capita	0.4	3.7	3.0	4 • Ի
Rural housing, per capita	0	1.4	1.2	1.7

^{*} In the Soviet Union, living space is defined to include dining rooms, living rooms, bedrooms, but does not include bathrooms, kitchens, hallways, and corridors. Approximately 73 percent of the total urban housing stock is estimated as living space.

during this same period of time was only 28 percent. The decline in the rural population coupled with the 6 percent increase in housing stock resulted in an 8 percent increase in per capita rural housing.

The big spurt in urban housing (increasing the stock by 33 percent) occurred in the period 1957-60. In 1957, the government pledged to "overcome the housing shortage" in 10 to 12 years, and took the necessary steps to increase housing construction between 1957 and 1960. In addition to allocating additional funds for State housing, the goals for private urban housing were increased by 33 percent.

To facilitate the fulfillment of the goals for private housing construction, the government made building lots available and encouraged local enterprises to help private builders obtain materials and even urged them to provide trucks for the purpose of hauling the materials. As a result of the regime's attitude, substantial increases in the construction of private housing took place between 1957-60. Since then, however, the increase in State investment in housing has slowed and private home construction has begun to falter because of a reversal in 1959 in the government's policy toward private home building. Not only has credit been tightened in certain regions, but the number of building lots and supplies of building materials made available for that purpose have been restricted.

Although there has been a rapid spurt in home building in the last several years, the Soviet housing stock is still woefully inadequate. For example, in 1%1, per capita living space in urban areas was only 71 square feet, while in rural areas it was even less - 66 square feet.

This compares with an estimate of approximately 300 square feet per capita in the US in the same period. In addition, after years of neglect and under-maintenance, the condition of the Soviet housing stock is extremely poor.

D. Communal Consumption

Communal consumption includes the value of health, education, and other social services supplied by the government, collective farms, and other enterprises to the population free of direct charge. Included are the conventional services associated with health care such as doctor's services; the upkeep of clinics, hospitals, rest homes and sanitoria; public health measures; etc.

The expenditures for education, which are included in the definition of communal services, consist not only of expenditures for schools, but also expenditures for libraries, museums, parks, and other cultural and recreational activities. Although the Soviet concept of communal services includes expenditures on scientific research, these costs have been excluded in the concept of communal services as defined in this paper.

In the period 1956-61, consumption through communal services increased at the average annual per capita rate of 3.9 percent, with an increase of 4.6 percent in the period since 1958. This compares favorably with the average annual per capita increase of 3.0 percent between 1951-55.

Since 1955, expenditures for health care have increased at a considerably faster rate than expenditures for education. Expenditures in health have increased at the everage annual per capita rate of 5.0 percent.

while expenditures on education (excluding scientific research) have increased at the average annual per capita rate of 3.1 percent.

In the period 1956-61, communal consumption increased more slowly than personal consumption.

V. The Problem of the Recent Inflation

As indicated above, since 1950, real consumer disposable income has increased at a rapid rate. Until recently, the State has provided (at given prices) a sufficient quantity of goods and services to absorb the growth in purchasing power. However, evidence has recently become available of a growing disparity between the rates of increase in money income and of real consumption of goods and services. The imbalance between the supply of goods and services and consumer purchasing power, which Khrushchev has called". . . a situation fraught with dangerous consequences," is the basis of his immediate problem with the consumer.

Because the regime has had a consistent policy of not raising prices in retail stores, the resulting inflationary pressures took the form of long waiting lists for consumer durables, growing queues for certain nonfood goods in State outlets, rising prices in the collective farm markets, and a growth in unplanned savings on the part of the consumers. In the face of this inflationary gap and the dim prospects for future acceleration of production for consumer purposes, a 30 percent increase in the average price of meat and meat products and a 25 percent increase in the price of better was put into effect in State stores on 1 June 1962. The purpose of these price increases was to bring supply and demand in State controlled outlets for these two cosmodities closer to equilibrium and at the same time to reduce purchasing power held by the appulation. As Korusbehav explained in a speech to Guisa students on June 3rd, "... we have run into difficulties caused by the fact that our pacple now have more money than there are goods being turned out by our industry and agriculture." 29 / Apparently the

reaction of the urban population to these large price increases was rather violent in certain urban centers. A series of protest rallies end riots caused dozens and possibly hundreds of leaths, necessitating the use of Soviet army units to quell the disturbances. 30/ In an attempt to increase the supply of those products which were in greatest demand, and thus reduce inflationary pressures, the government also announced in June 1962 an average increase of 35 percent in the price it would pay to individuals and collective farms for the meat it purchases.

Apparently the steps taken in June 1962 to reduce or prevent the expansion of inflationary pressures on the economy were insufficient, for on September 24th the government announced the postponement of the scheduled abolition of the income tax. However whether the recent price adjustment and the postponement of the tax cut will successfully curtail its growth remains to be seen. At the time of this writing, it appears highly unlikely that substantial resources will be allocated to the consumer sector in an effort to ease the inflationary pressure.

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