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SOVIET ECONOMISTS ADVANTAGEOUSLY EMPLOY DOLLAR NATIONAL
INCOME COMPARISONS

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~~S E C R E T~~

SOVIET ECONOMISTS ADVANTAGEOUSLY EMPLOY DOLLAR NATIONAL INCOME COMPARISONS

Soviet press reviews of comments on the recently published Soviet statistical compendium The USSR in Figures: 1960 have contained several comparisons of Soviet and US economic indicators.* What is novel in the set of comparisons apparently appearing in the handbook are estimates of per capita national income in dollar terms for the USSR, US, Great Britain, France. In the Soviet comparison, the USSR's per capita national income is half that of the US, and greater than that of the UK and France, two of the leading economies of Western Europe. On the other hand ORR estimates of per capita gross national product (GNP) show the USSR to be considerably smaller than all three Western economies. The sharp differences in results between the two estimates can be explained in terms of differing concepts as to national income and different conversion ratios, not only between rubles and dollars, but also between dollars and pounds sterling and dollars and francs.

Dollar Estimates of Per Capita National Income and Per Capita GNP, 1959

<u>Country</u>	<u>Soviet Estimate 1/ of National Income</u>	<u>ORR Estimate 2/ of GNP</u>
US	1,655	2,722
USSR	804	1,050
UK	738	1,516
France	733	1,395

Effects of Differing Concepts of National Income

Conforming to the traditional Marxist concept that "production" is limited to the sphere of material production of goods or of services directly connected with their production, the Soviet concept of national income excludes incomes generated in what the Soviets term non-productive sources. These incomes are included in Western measurements of both national income and gross national product (GNP). Non-productive incomes aside, the Soviet concept of national income is equivalent to the Western concept of GNP. In our national accounting methodology, GNP equals national income plus capital consumption allowances plus indirect business taxes. Since the services have been the most rapidly expanding sectors in highly advanced economies, the effect of using the Soviet concept of national income is to lower the magnitudes of national product of the US and Western European economies relative to those of less advanced countries. In addition, since most of these excluded services are consumption-oriented, their exclusion rebounds to the propaganda advantage of an economy like that of the USSR in which the consumer is accorded a low priority on resources.

Since it may be assumed that the Soviet measurement of US national income is derived directly from adjustment of US data, comparison of the Soviet and ORR per capita estimates of US national product provide a direct measure of the degree to which substitution of the Soviet concept reduces US product in measurement.

* The actual publication does not contain the relevant information.

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In the above table the reduction amounts to nearly 40 percent. The effect of the use of the two different concepts in determining Soviet product cannot be directly computed from the table as the differences between the two sets of estimates involve other variables in addition to that of concept of national product. It is possible, however, to estimate the approximate extent of under-statement by deduction from the ORR estimate of Soviet GNP of those elements of national product which are excluded within the Soviet context. The reduction amounts to about 20 percent, or about half the relative reduction in US national product. ORR's computed ratio of per capita Soviet GNP to US GNP is about three-eighths; the effect of using the Marxist concept of national income is to raise the ratio to over half.

Att "ORR"
G/S →

The effect of using the narrower Soviet definition of national income leads to similar understatements of per capita UK and French GNP relative to that of the USSR.

Effects of Conversion Ratios

If the announced per capita dollar national income of the USSR is compared with an estimate of about 6,400 rubles per capita, derived from official sources, 3/ a ruble-dollar ratio of about 8 rubles to 1 dollar emerges. This is about the same as the ratio computed by ORR in its comparison of 1957 rubles and 1959 dollars. This identity in conversion ratios vanishes, however, when variations in concepts of national product are taken into account. Ruble-dollar ratios are lowest on those services expenditures which are excluded if the Soviet income concept is adopted. Thus, if the ORR ruble-dollar ratio were adjusted to conform to the Soviet measure, the resulting ruble-dollar ratio would be much higher than the existing ORR estimate.

The conversion ratio error is even more glaring in its effects on the estimates of UK and French per capita dollar national products. The technique by which the Soviet economists derived dollar estimates for the three countries cannot be deduced from the data presented, but the relationships between their per capita national products and that of the US are similar to those that would be obtained by converting estimates in pounds and francs into US dollars at prevailing exchange rates. Studies by Western scholars have concluded that exchange rates seriously understate the internal purchasing power of Western European currencies relative to the US dollar. 4/

The ORR estimates in the table are based on conversion ratios representing the geometric average of dollar and European prices for a selected sample of goods and services in 1955. The effect of this adjustment is to raise UK per capita GNP by 18 percent and French by 21 percent over the values obtained by exchange rate conversions. 5/ Therefore, the Soviet measure understates the positions of UK and France relative to the USSR not only by using the narrower Marxist concept of national product, but also by overstating pound-dollar and franc-dollar ratios in the UK and French estimates.

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Analyst:

Sources:

1. FBIS, Daily Report (USSR and Eastern Europe), 11 Apr 61, p. BB 15. OFF USE.

2. Gross National Product. US GNP estimate from Economic report of the President. 1961. p. 127. U.

CIA estimates moved from 1955 to 1959 dollar terms by implicit deflator of total US GNP, as reported in Economic Report of the President, 1961, p. 132. U. Since the aggregate deflator is based on US end-use distribution it may not be representative of UK and French GNP and hence would introduce slight distortion into the 1959 dollar estimate for these two countries. Mid-year 1959 population figures from CIA/RR, op. cit., p. 12.

3. Soviet national income in 1960 was planned to reach 1,450 billion rubles, an increase of 9 percent. (Finansy SSSR, No 5, 1960, p. 3. U.) This represents an increase of 120 billion rubles ($1,450 \div 1.09 = 1,250$), yielding a 1959 estimate of 1,330 billion rubles. According to the same source national income in 1959 rose by 8 percent, or 100 billion rubles ($100 \div .08 = 1,250$ for 1958. $1,250 + 100 = 1,350$ for 1959). Dividing the higher estimate by the mid-year population of 210.3 million yields a per capita income figure of 6,371 rubles.

4. Milton Gilbert and Associates, Comparative National Products and Price Levels, Paris, 1958. U.

5. Estimates based on geometric averages obtained from CIA/RR, op. cit., p. 1. S. (See note 2 for description of subsequent adjustment.)

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