

S-2279

4 200

CIA HISTORICAL REVIEW PROGRAM  
RELEASE AS SANITIZED  
1999

~~SECRET~~

14 April 1967

MEMORANDUM FOR:

DD/P

FROM

: Chief,

ORR

SUBJECT

: US and USSR; Information on Comparative  
Economic Development

As per your request of 10 April, selected materials on the economic development of the US and USSR are forwarded. Because both the statistics and accompanying notes are based on unclassified and scholarly source materials, the recipient in the field should feel free to carry out unrestricted distribution.

Attachments

US AND USSR: INFORMATION ON COMPARATIVE ECONOMIC DEVELOPMENT

S - 2279

Office of Research and Reports  
14 April 1967

CONTENTS

	<u>Page</u>
1. Soviet Economic Development -- General . . . . .	1
2. Trends in Comparative US and USSR Consumption in Recent Years . .	5
3. Comparative Indicators of Education . . . . .	7
4. Comparative Indicators of Mortality Rates and Health Services . .	9
5. Comparative Growth of Employment . . . . .	10
6. Comparative Growth in Agriculture . . . . .	11

TABLES

1. US and USSR: Gross National Product, Selected Years ,1913-65 . .	2
2. US and USSR: Indexes of GNP, Selected Years, 1913-65 . . . . .	3
3. US and USSR: Trends in Per Capita GNP, Selected Years, 1900-64	4
4. US AND USSR: Index of Total Per Capita Consumption, . . . . . 1950 and 1955-63 . . . . .	6
5. US and USSR: Comparative University Enrollments . . . . .	8
6. US and USSR: College Graduates as Percent of Population . . . . .	8
7. US and USSR: Mortality Rates, 1959-65 . . . . .	9
8. US and USSR: Comparative Indicators of Health Services, 1964	9
9. US and USSR: Index of Total Employment . . . . .	10
10. US and USSR: Indexed Agricultural Output, Selected Years, 1913-65 . . . . .	11

US AND USSR: INFORMATION ON COMPARATIVE ECONOMIC DEVELOPMENT

1. Soviet Economic Development -- General

a. Historical Perspective, 1913 to 1928

According to official Soviet Statistics, Russia was ranked as the world's fifth industrial producer in 1913, behind the US, Germany, the UK, and France. Although the Russia of 1913 was backward by advanced market economy standards, she still possessed many of the essentials for a "developmental takeoff" and, in this respect, was far ahead of most less-developed countries of Asia, Africa, and Latin America of the present day.

As a result of the long years of economic chaos and recovery between the Bolshevik seizure of power in 1917 to the inauguration of intensive planning in 1928, the world position of the Soviet Union slipped from the fifth position to between sixth and eighth rank. Had the growth rates which prevailed between 1900 and 1914 continued through 1928, the level of GNP would have been higher than the actual attainment by 35 percent, and industrial and agricultural output by 200 and 15 percent, respectively. When viewed in these terms, the cost of the revolution by 1928 could be estimated as about 15 years of growth.

b. Relative Size of the US and Soviet Gross National Product in Recent Years

As a proportion of the US equivalent, Soviet GNP increased from one-third in 1950 to a plateau of around 45-46 percent since 1958. In terms of the absolute margin of the US economy over the Soviet, the minimum difference was reached in 1958. Since that date, the dollar gap between US and USSR GNP has been progressively widening (see Tables 1 to 3).

The economic significance of the gap depends on the variable being measured. If GNP be considered as a rough quantification of general economic potential, the

Table 1

US and USSR: Gross National Product, Selected Years, 1913-65

	1913	1928	1937	1950	1955	1958	1960	1962	1963	1964	1965
US	132	203	228	387	477	487	531	577	599	629	676
USSR	44	47	92	124	174	215	237	265	272	293	301
Difference	88	156	136	263	303	272	294	312	327	336	375
USSR as % of US	33.3	23.2	40.4	32.1	36.5	44.2	44.6	45.9	45.4	46.7	44.5

Billions of 1964 Dollars

Sources:

Years 1913, 1928, 1937, 1950, 1958: From Stanley H. Cohn, Soviet Economic Development Over Its First Half Century: Growth, Efficiency, and Structure. (Unpublished). USSR figures for 1913, 1927, and 1937 are mid points of ranges.

Years 1960 and 1962-64: From Stanley H. Cohn, "Soviet Growth Retardation: Trends in Resource Availability and Efficiency" in New Directions in the Soviet Economy, Joint Economic Committee, US Congress, Washington, D. C., p. 109

Year 1965: US: Bureau of the Census, Statistical Abstract of the United States: 1966 (87th edition) Washington, D. C., 1966, p. 322.

Year 1965: USSR: From Stanley H. Cohn, "Soviet Growth Retardation: Trends in Resource Availability and Efficiency" in New Directions in the Soviet Economy, op. cit., p. 109 and 127.

Table 2  
US and USSR: Indexes of GNP, Selected Years, 1913-65 a/

	A. Cumulative Index (1937 = 100)										
	1913	1928	1937	1940	1950	1958	1960	1962	1963	1964	1965
US	57.9	89.0	100.0	110.9	169.7	213.6	232.9	253.1	262.7	275.9	296.5
USSR	47.8	51.1	100.0	110.3	134.8	233.7	257.6	288.0	295.7	318.5	327.2
	B. Average Annual Rate of Growth (Percent) b/										
	1914-28	1929-37	1938-40	1941-50	1951-58	1959-60	1961-62	1963	1964	1965	1914-65
US	1.0	1.3	3.5	4.3	2.9	4.4	4.2	3.8	5.0	7.4	3.2
USSR	0.7	7.7	3.3	2.0	7.1	5.0	5.7	2.7	7.7	2.7	3.8

a. Based on data shown in Table 1.  
b. Based on year preceding the year shown.

above comparison is appropriate. If the concern be with some concept of consumer welfare, the dollar gap between the two economies would be limited to a comparison of consumption, and would show an even larger divergence. If the concern be military potential, the best indicator would be industrial production, in which case the gap would continue to narrow.

Table 3

US and USSR: Trends in Per Capita GNP,  
Selected Years, 1900-64

1964 Dollars			
US		USSR	
<u>Year</u>	<u>Dollars Per Capita</u>	<u>Year</u>	<u>Dollars Per Capita</u>
1900	1049	1913	207 - 374
1920	1417	1928	204 - 368
1940	1886	1937	500 - 531
1950	2536	1950	699
1958	2790	1958	1049
1964	3273	1964	1289

Source: Stanley H. Cohn, Soviet Economic Development Over Its First Half Century: Growth, Efficiency, and Structure, (Unpublished).

## 2. Trends in Comparative US and USSR Consumption in Recent Years

Consumption per capita in the USSR increased from about 20 percent of that in the US during 1950 to about 30 percent of the level attained in the US during 1963.

Most of the gain relative to the US had been attained by 1958. Since that year, consumption per capita has grown at about the same rate in both countries (see Table 4).

In contrast with its failure to move dramatically with respect to the US, per capita consumption in the USSR increased rapidly relative to its own past. By 1963 it had reached a level almost 70 percent above that in 1950, an average annual increase of about 4 percent per year.

Per capita consumption in the USSR did not fail to advance each year since 1955, but the rate of growth has fallen off drastically. After growing at an average annual rate of 5.7 percent between 1950 and 1955, consumption per capita rose only 4.9 percent in 1956 and the rate declined steadily to 2.3 percent in 1961. After recovering somewhat in 1962, the rate of growth plummeted to less than 1 percent in 1963.



Table 4  
 US and USSR: Index of Total Per Capita Consumption  
 1950 and 1955-63

	1928	1937	1940	1944	1950	1955	1956	1957	1958	1959	1960	1961	1962	1963
US	n.a.	n.a.	n.a.	n.a.	93	100	102	102	102	106	108	108	111	114
USSR	68	67	64	43	76	100	105	109	113	116	120	122	127	128
USSR as percent of US	--	--	--	--	21	26	27	28	29	29	29	30	30	29

Sources:

Years 1928, 1937, 1940, and 1944: Janet G. Chapman, "Consumption," Economic Trends in the Soviet Union, (ed. Abram Bergson and Simon Kuznets,) Cambridge, Massachusetts, 1963, p. 238.

Years 1950, 1955-63: Current Economic Indicators for the USSR, Joint Economic Committee, US Congress, 1965, p. 119.

### 3. Comparative Indicators of Education

Total enrollments in Soviet educational institutions for 1964-65 were 42 million in elementary-secondary schools of general education, about 3.3 million in secondary specialized schools, and 3.6 million in higher educational institutions or a total of about 49 million. For the US, with a smaller schoolage population, total elementary, secondary, and higher education enrollments for the fall of 1964 were 53.5 million. The figures cannot be compared more than grossly, since the statistics on each side include elements not included in the other.

In the fall of 1964, higher education enrollments in the US were 5 million, considerably higher than the Soviet total (3.6 million). Higher education degrees in the US conferred in 1963-64 school year, totaled about 600,000, of which approximately 500,000 were bachelor's and first professional degrees and 100,000 were master's and doctor's degrees. Higher education diplomas and degrees in the USSR for the same period totaled about 343,000 of which approximately 331,000 were

bachelor's and first professional diplomas and 12,000 were advanced degrees. Because of the

different contexts and purposes of the education and training involved, these

figures can only give a general sense of the order of magnitude, and would require

exhaustive detailed analysis to explain what are in large measure non-comparable

data. <sup>1/</sup> (Data on comparative enrollments and numbers of college graduates are shown in

tables 5 and 6.)

1. Source: Seymour M. Rosen, "Changing Guideposts in Soviet Education," New Directions in the Soviet Economy, op. cit., p. 819.

Table 5

## US and USSR: Comparative University Enrollments

US		USSR	
Year	Ratio	Year	Ratio
1910	3.8	1914	0.8
1920	5.6	1928	1.2
1930	8.9	1932	3.2
1940	11.3	1937	3.3
1950	17.6	1940	3.0
1960	20.0	1950	4.7
		1958	6.4
		1964	6.7

Source:

Stanley H. Cohn, Soviet Economic Development Over Its First Half Century: Growth, Efficiency, and Structure, op. cit.

Table 6

## US and USSR: College Graduates as Percent of Population

	US		USSR 1958	US 1958 number of graduates as a percent of USSR 1958 number of graduates
	1890	1958		
Number graduating from college				126.8
Percent of population 20 to 24	0.3	3.6	1.4	<input type="text"/>
College graduates Percent of population over 24	--	7.6	3.4	<input type="text"/>

Sources:Columns 1-3:

Janet G. Chapman, op. cit.; p. 252.

Column 4:

USSR calculated from James W. Brackett and John W. DePauw, "Population Policy and Demographic Trends in the Soviet Union," New Directions in the Soviet Economy, op. cit., p. 662. US from US Bureau of the Census, Current Population Reports, Series P-25, No. 318, "Estimates of the Population of the US and Components of Change by Age, Color, and Sex: 1950 to 1960," Washington, D. C., 1965, p. 12.

4. Comparative Indicators of Mortality Rates and Health Services

Table 7

US and USSR: Mortality Rates, 1959-65

Year	Crude Death Rate		Infant Mortality	
	Deaths Per Thousand Population		Deaths of Infants Under One Year Per Thousand Live Births	
	US	USSR a/	US	USSR
1959	9.4	7.6	28	41
1960	9.5	7.1	27	35
1961	9.3	7.2	25	32
1962	9.5	7.5	25	32
1963	9.6	7.2	25	31
1964	9.4	6.9	24	29
1965	9.4	7.3	24	27

Sources:

US: US Department of Health, Education, and Welfare, Health, Education, and Welfare Trends, Washington, 1965, p. 8-8.

USSR: Ts. SU, Narodnoye Khozyaystvo v 1965, Moscow, 1966, p. 42.

- a. One factor influencing the low crude death rate during the 1960's has been the relatively few persons in age groups with the highest mortality -- infants and aged.

Table 8

US and USSR: Comparative Indicators of Health Services, 1964

	US a/	USSR
Doctors (Number per 10,000 persons)	14.7	20.5
Dentists " " " "	5.6	4.2
Hospital beds " " " "	88	94

Sources:

US: US Bureau of the Census, Statistical Abstract of the US: 1965, (87th edition) Washington, D. C., 1966, p. 120.

USSR: Ts. SU, Narodnoye Khozyaystvo v 1964, Moscow, 1965, p. 604.

- a. The USSR does not have business administration colleges and trains few graduates in liberal arts. As a result, physicians in the USSR often are used as administrators and managers in hospitals and other medical centers, whereas in the US, such posts would be manned by persons trained in hospital administration and other general fields. Thus, the Soviet ratio above is overstated because not all physicians are actually practicing medicine. See Nicholas DeWitt, Education and Professional Employment in the USSR, National Science Foundation, 1961, p. 548.

5. Comparative Growth of Employment

Table 9

US and USSR: Index of Total Employment

1928 = 100

<u>Year</u>	<u>US</u>	<u>USSR</u>
1928	100	100
1940	104	106
1950	129	107
1955	137	117
1960	145	128
1965	160	143

Sources: Absolute numbers of persons underlying the index series shown above were obtained from the following:

1928: Warren W. Eason, "Labor Force," in Economic Trends in the Soviet Union, op. cit., p. 44.

1940-65: Murray Feshbach, "Manpower in the USSR: A Survey of Recent Trends and Prospects," in New Directions in the Soviet Economy, op. cit., p. 786.

6: Comparative Growth in Agriculture

Table 10

US and USSR: Index of Agricultural Output,  
Selected Years, 1913-65 a/

<u>Year</u>	1940=100	
	<u>US</u>	<u>USSR</u> (Present Territory)
1913	73	82
1940	100	100
1949-53	128	100
1950	123	100
1951	127	97
1952	132	104
1953	133	106
1954	133	109
1955	138	126
1956	139	141
1957	139	141
1958	151	155
1959	153	149
1960	158	150
1961	159	163
1962	161	161
1963	167	153
1964	167	170
1965	171	171

Sources:

1913-50: USSR and US.: D. Gale Johnson, "Agricultural Production,"  
Economic Trends in the Soviet Union, op. cit., p. 208-10

1950-65: USSR: Douglas B. Diamond, "Trends in Output, Inputs,  
and Factor Productivity in Soviet Agriculture," New Direction  
In the Soviet Economy, op. cit., p. 346.

USA: Economic Report of the President, 1967, p. 300.

Council of Economic Advisers, US Government Printing Office

a. Since 1950 the Soviet Union has made rapid albeit at times halting progress in expanding output. On the other hand, the United States, until very recently, has attempted to restrict farm output.

b. Net farm output (excludes production for farm use).

c. Gross agricultural output (does not exclude use of production for farm use -- seed, feed).