

Russian Economic History

Lecture 7: Postwar Developments

Econ 472

Fall 2020

Successors to Stalin

The Big Five

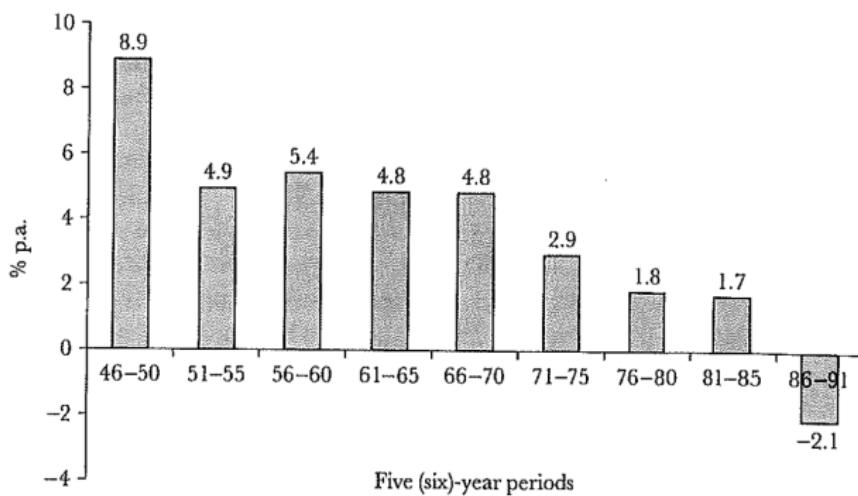
The Presidium (Khrushchev, Malenkov, Molotov, Bulganin, & Beria)



Postwar

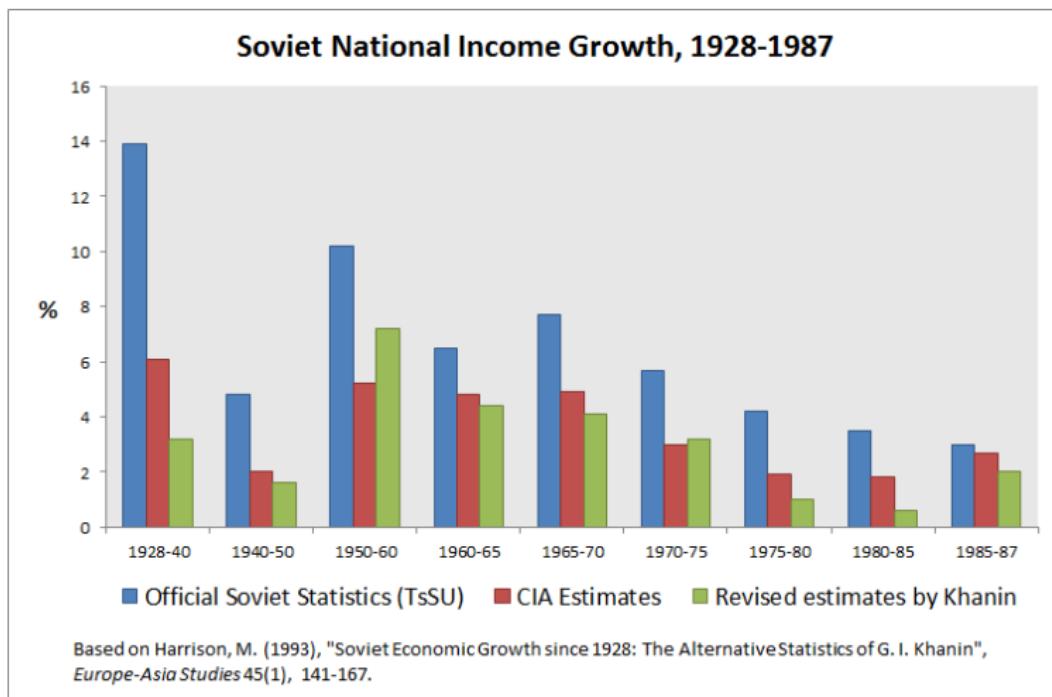
Soviet GNP: Average Annual Growth Rates

Soviet GNP: Average Annual Growth Rates, 1945-1991



Soviet Income Growth Rates

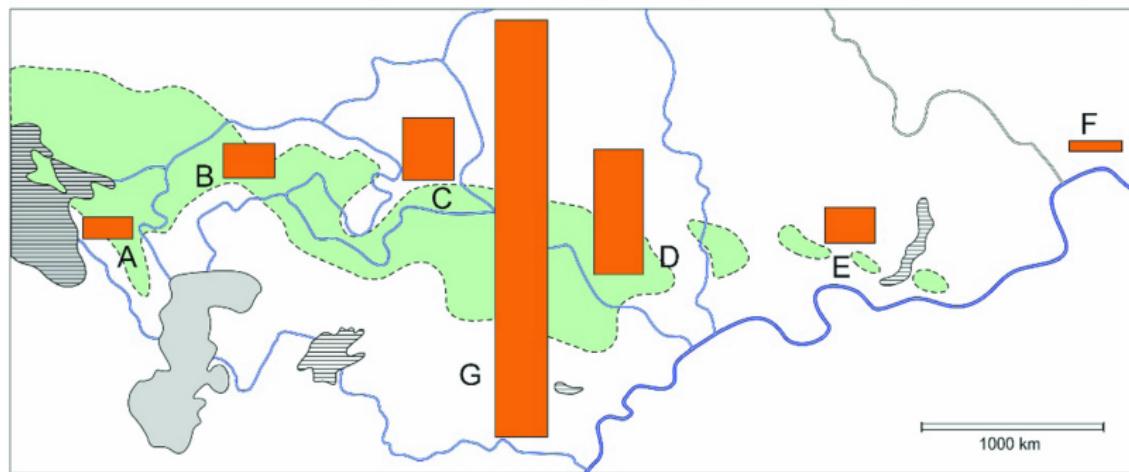
Growth in Different Periods



Agriculture

Virgin Lands Campaign

Extent and areas of the Virgin Lands Campaign during the first 3 years (1954 to 1956)



- A North Caucasus region
- B Volga region (15.000 km^2)
- C Urals region (45.000 km^2)
- D Western Siberia region (62.000 km^2)
- E Eastern Siberia region (42.000 km^2)
- F Far East region
- G Republic Kazakhstan (255.000 km^2)

Steppes and Forest Steppes

Agriculture

Khrushchev and his wheat



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Agriculture

Khrushchev and Lysenko



Agriculture

USSR Net Agricultural Production per-capita

USSR Net Agricultural Production per-capita

	1940	1950–53 average
Grain	238.4	247.9
Potatoes	194.6	172.8
Green vegetables	50.1	41.2
Milk	144.2	144.8
Meat	24.5	27.5
Eggs (units)	58.9	68.0

Source: Johnson and Kahan 1959, p. 210.

Agriculture

Net Farm Output

Soviet Net Farm Output per capita (kg) and Agricultural Value Added

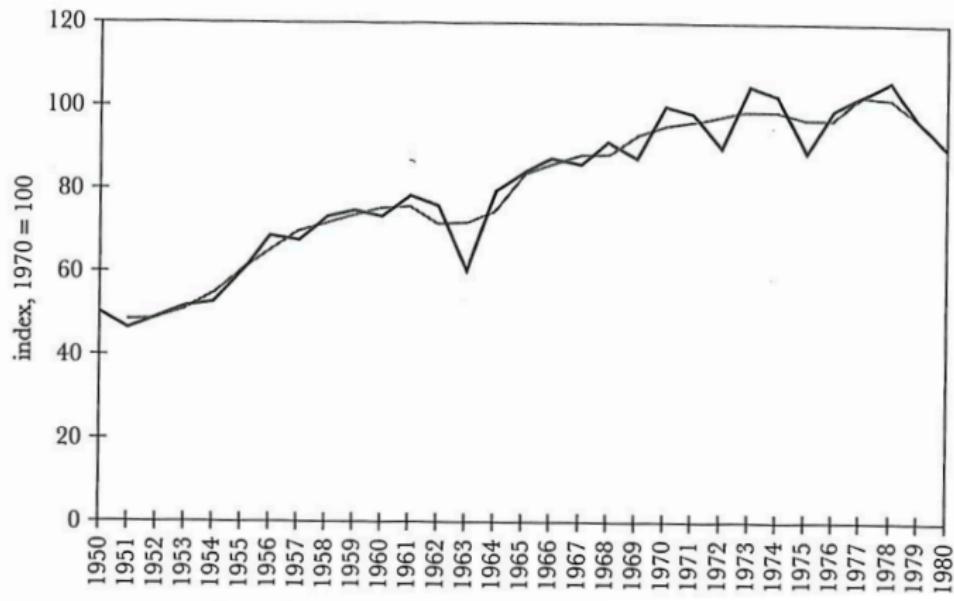
	1950–53	1955–58
Grain	247.9	297.6
Potatoes	172.8	163.2
Green vegetables	41.2	56.4
Milk	144.8	200.9
Meat	27.5	34.8
Eggs (units)	68.0	95.1
Value added in agriculture (1970 = 100)	49.3	67.3
Value added in agriculture as % GNP (1970 factor cost)	28.0	28.3

Agriculture

Value Added, 1950-1980

Soviet Agriculture: Value Added, 1950-80

(and 3-year moving average)



Income Comparison

Real Incomes and Consumption

Soviet Real Incomes and Consumption Levels, 1937-55 (1937=100)

	<i>Jasny (per capita real incomes in 1927-28 prices)</i>	<i>Chapman (per capita private consumption in adjusted year 1937 prices)</i>
1940	86	96
1944	—	66
1948	74	—
1950	97	114
1952	113	—
1955	135	159

Housing

Khrushchyovka



Housing

Khrushchyovka

Brick Khrushchyovka in Tomsk



Housing

Khrushchyovka

Panel Khrushchyovka in Tomsk



Housing

Housing Construction

Soviet Urban Housing Construction, 1946-55

(million square meters of total living space)

1946-50	1951-55	1956-60	1961-66
127.1	178.1	337.8	394.4

Soviet Growth Rates

Output and Capital per Worker

Soviet Growth, Various Estimates 1928-1987

period	<i>Industry Official</i>	<i>Industry Western</i>	<i>Total Economy Western</i>
<i>Growth rate of output per worker</i>			
1928-1987	6.3	3.4	3.0
1928-1939	12.5	5.0	2.9
1940-1949	0.1	-1.5	1.9
1950-1959	8.9	6.2	5.8
1960-1969	5.7	2.8	3.0
1970-1979	5.2	3.4	2.1
1980-1987	3.4	1.5	1.4
<i>Growth rate of capital per worker</i>			
1928-1987	6.2	3.2	4.9
1928-1939	11.9	6.5	5.7
1940-1949	1.5	-0.1	1.5
1950-1959	8.0	3.9	7.4
1960-1969	6.1	3.4	5.4
1970-1979	6.3	4.1	5.0
1980-1987	5.6	4.0	4.0

Soviet Growth

TFP Growth

Table 2: Total Factor Productivity Growth Rates, western estimates
source: Easterly and Fischer (1994)

<i>Period</i>	<i>Industrial sector</i>	<i>GNP</i>
1928-1940	1.7	-1.2
1940-1950	-1.1	-0.2
1950-1960	6.1	1.3
1960-1970	1.9	-0.1
1970-1980	2.4	-0.8
1980-1987	-0.1	-1.2

Soviet Type Economies

Women's Labor Force Participation

Labor Force Participation Rates for Women, age 40-45.

	1950	1970	1985
<i>Socialist Countries</i>			
Bulgaria	78.6	88.5	93.3
Czechoslovakia	52.3	79.9	92.4
East Germany	61.9	79.1	86.1
Hungary	29.0	69.4	84.7
Poland	66.4	79.5	84.7
Romania	75.8	79.5	85.1
Soviet Union	66.8	93.2	96.8
<i>North European Countries</i>			
	30.9	53.8	71.1
<i>West European Countries</i>			
	34.5	46.4	55.6
<i>South European Countries</i>			
	22.4	29.7	37.1

Soviet Economy

Sectoral Distribution of Capital Stocks

Sectoral Distribution of Capital Stocks, 1987 (percent)

	Agriculture	Industry	Dwellings	Other
Soviet Union	14.2	32.2	18.6	35.0
Industrial Market Economies	5.0	23.4	35.9	35.6
United States	2.8	22.4	45.6	29.2
Finland	7.5	19.9	33.8	38.8
Federal Republic of Germany	3.6	20.1	44.2	32.1

Soviet Economy

Raw Material and Energy Intensity

Indicators of Raw Materials and Energy Consumption, 1988

		USSR	USA	Germany	Japan
Crude Steel production (millions of metric tons)	ratio USSR to	280	19	11	34
			14.7	25.5	8.2
Refined Copper Production (thousands of metric tons)	ratio USSR to	1,173	381	114	307
			4.5	15	5.6
Primary aluminum production (thousands of metric tons)	ratio USSR to	4,116	809	200	11
			5.1	20.6	374.2
Synthetic rubber production (thousands of metric tons)	ratio USSR to	4,262	477	132	418
			8.9	32.3	10.2
Primary energy consumption (millions of bbls/day oil equivalent)	ratio USSR to	46	8	1	2
			5.8	46	23

source: Handbook of Economic Statistics,
CIA (1989), IFS, IMF; and the Economist.

Soviet Economy and Environment

Aral Sea

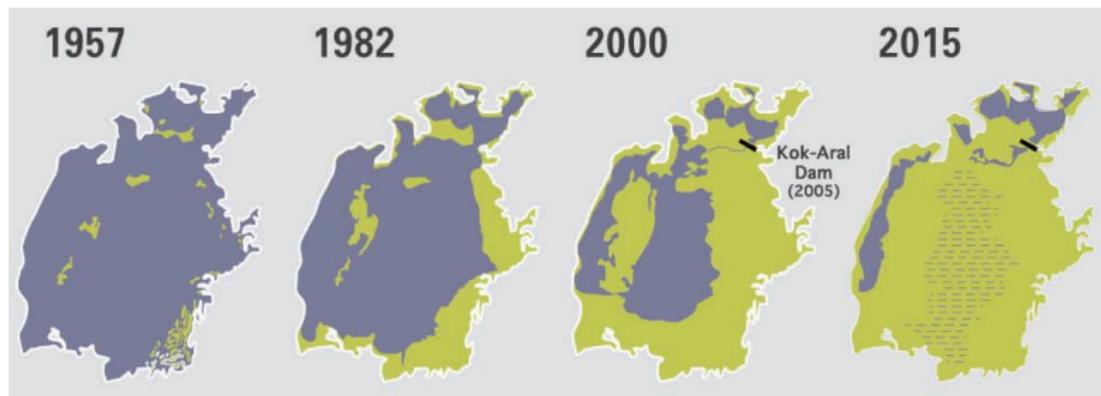
The Aral Sea: Before



Soviet Economy and Environment

Aral Sea

Timeline of the Aral Sea



Soviet Economy and Environment

Aral Sea

Impact of Aral Sea Receding



Hypermilitarization Distribution of Defense Enterprises

Major Defense Enterprises in Russia

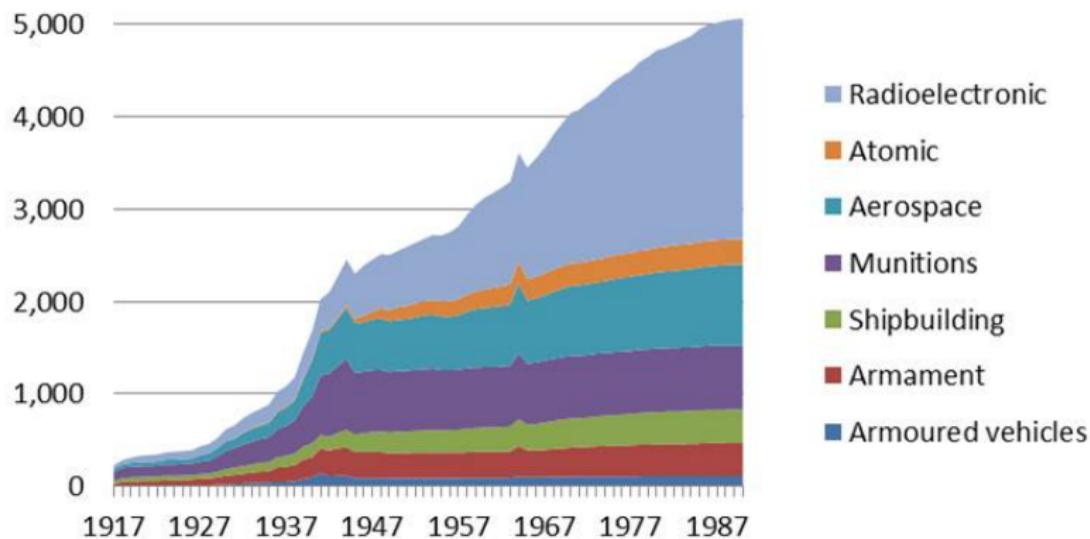
Figure 1
Major Defense Industry Facilities in Russia



Hypermilitarization

Growth of Defense Enterprises

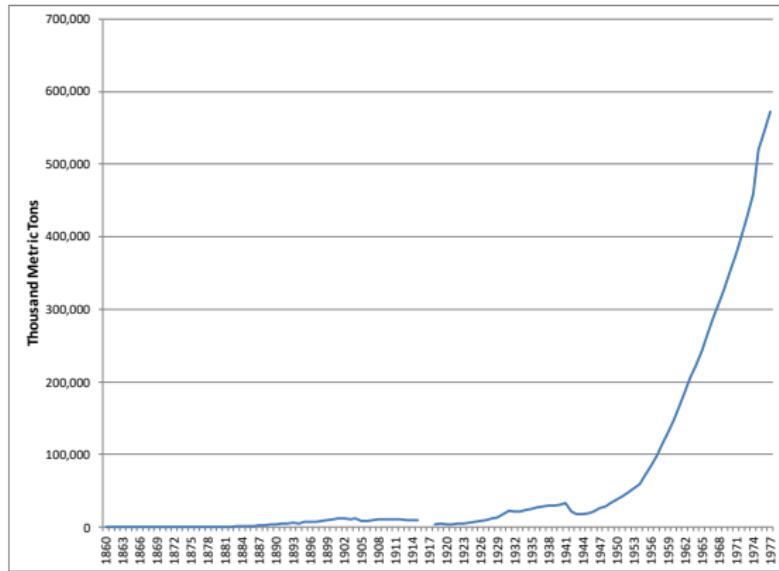
The number of Soviet defence plants by industry, 1917-1991



Soviet Economy

History of Russian Oil Production

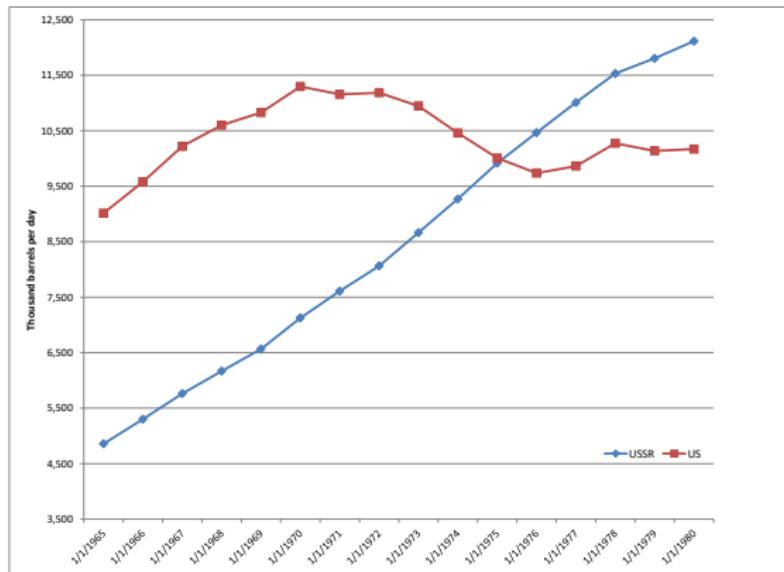
History of Russian Oil Production, 1860 to 1977



Soviet Economy

Soviet and US Oil Production

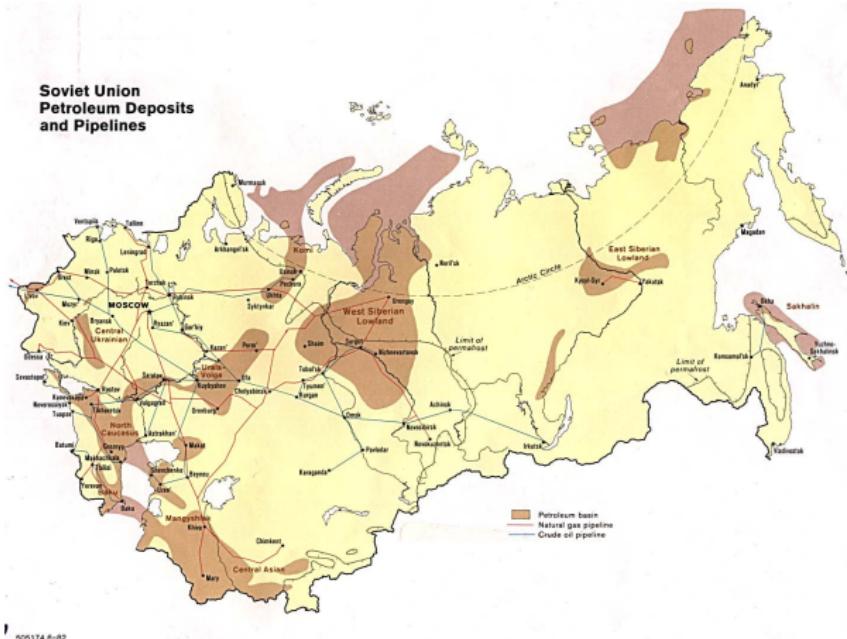
Soviet and US Oil Production, 1965-1980



Soviet Economy

Location of Soviet Oil Production

Oil Regions of the Soviet Union

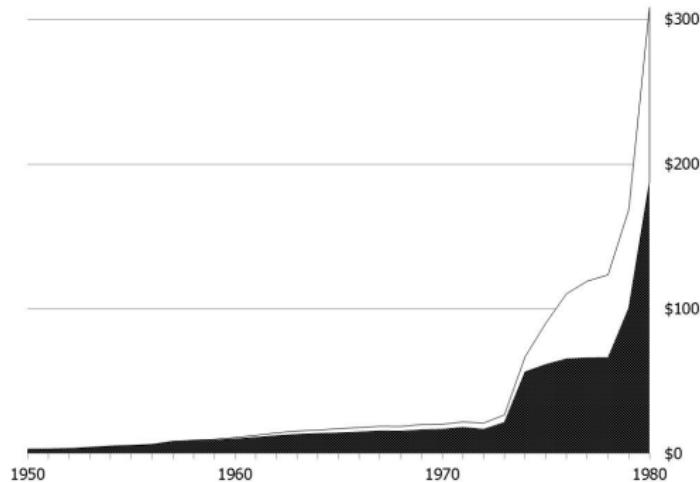


Soviet Economy

Soviet Oil and Gas Rents

Soviet Oil and Gas Rents 1950-1980

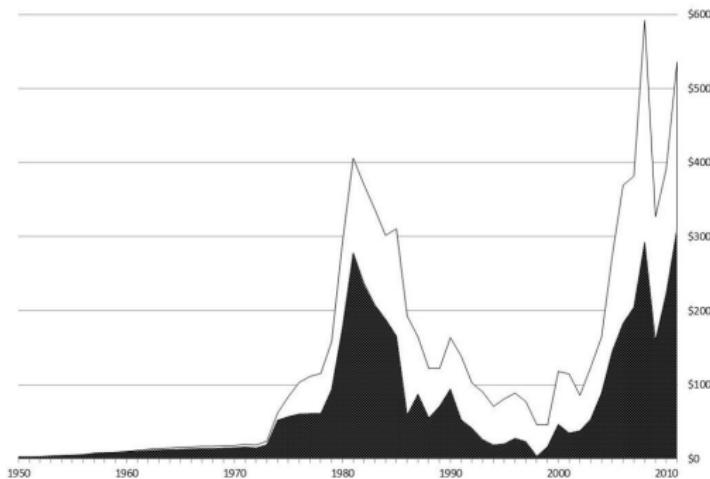
Oil rents in black, natural gas rents in white; billions of 2011 US dollars



Oil and Gas Rents

Soviet and Russian Rents

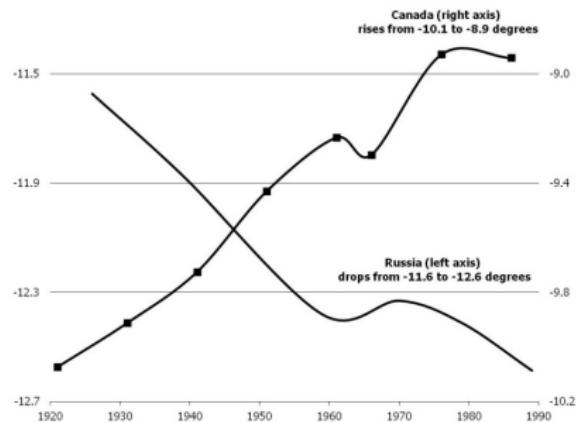
Soviet/Russian Oil and Gas Rents since 1950 with Increasing Costs of Production (billions of 2011 US dollars)



Russia and Cold

TPC in Russia and Canada

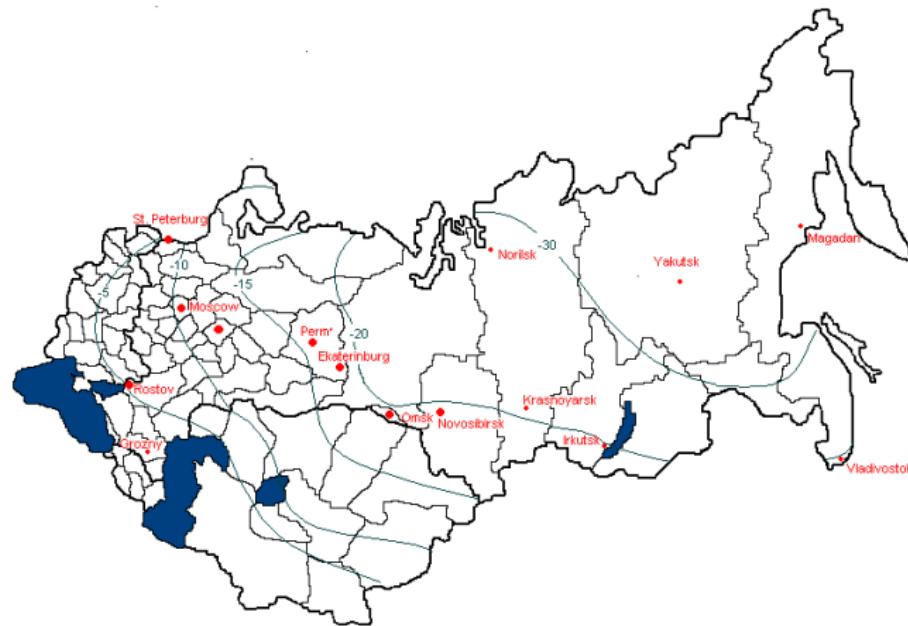
TPC in Russia and Canada During the 20th Century



Soviet Economy

Russian Population and Temperature

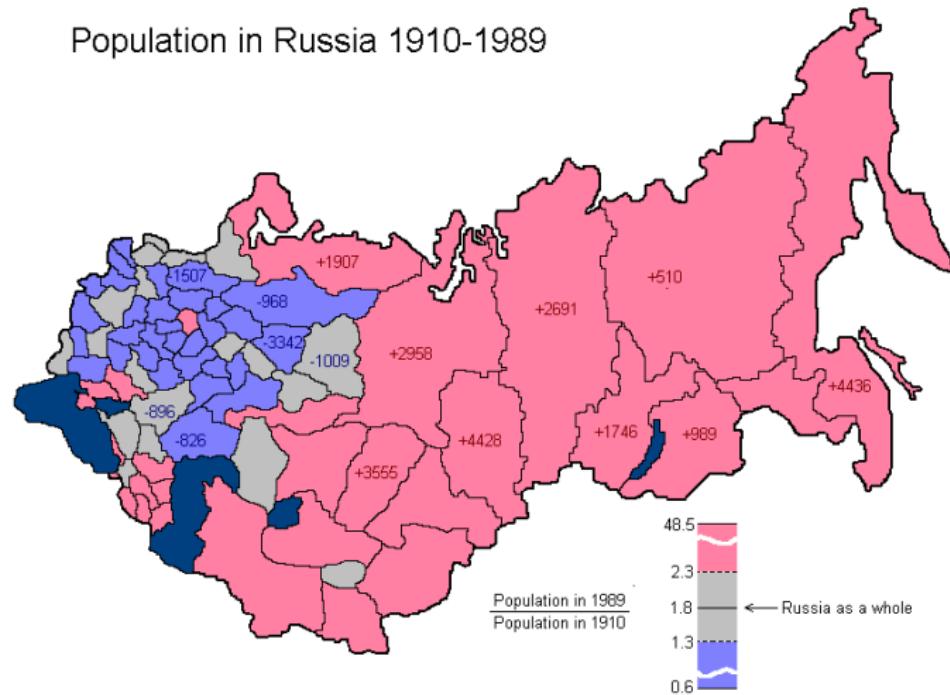
Total population in Siberia and Far East in 1989 was: 37 mln.
(out of 147 mln. in RF).



Cold

Russian Population Movement

Population in Russia 1910-1989



Soviet Economy

Soviet Agricultural Inputs and Output

Soviet Agricultural Inputs and Output, 1970-1990

