

Russian Economic History

Lecture 2: World War 1, War Communism and Civil War

Econ 472

Fall 2020

Overview

- World War 1 is the pivotal event
- War devastated Russia and caused the Autocracy to collapse
- Hard to believe Bolsheviks would have ever come to power without the War
- Shaped the 20th Century, which many argue began in 1914
- Unlike the Western Front, in the East war was one of movement

Russia in the Great War

The Eastern Front



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Russia in the Great War The Eastern Front



MAP 1 Russia's western front, 1914-1917
Source: Adapted from Gatrell, Peter, *A Whole Empire Walking: Refugees in Russia During World War I*, Indiana University Press, 2000.

Russia in the Great War

The Southern Front



Russia in the Great War

The Southern Front Focus



Geography

- Outbreak of hostilities cut off Russia from its suppliers and markets
- Enemy seals trade off from the west
- Baltic is cut off by German navy
- Black Sea is cut off at Constantinople
- Only port for western supplies to Russia is Vladivostok; Archangelsk is ineffective due to narrow gauge railway
- it had rich reserves of raw materials and fuel that could have enabled it to provide the additional industrial output that was needed to sustain its military campaigns.

Prophecy of Doom

Peter Durnovo:

The peasant dreams of obtaining a gratuitous share of somebody else's land; the workman, of getting hold of the entire capital and profits of the manufacturer. Beyond this, they have no aspirations. if these slogans are scattered far and wide among the populace, and the Government permits agitation along these lines, Russia will be flung into anarchy, such as she suffered in the ever-memorable period of troubles in 1905-1906. War with Germany would create exceptionally favorable conditions for such agitation.

Russia in the Great War

Balance of Trade

Russia's Merchandise Trade, 1913-1917 (million rubles)

	<i>Exports</i>	<i>Imports</i>	<i>Balance</i>
1913	1,520.1	1,374.0	+ 146.1
1914	956.1	1,098.0	- 141.9
1915	401.8	1,138.6	- 736.8
1916	577.3	2,451.2	- 1,873.9
1917	464.0	2,316.7	- 1,852.7

Source: Khromov, 1950, p. 455.

Russia in the Great War

Composition of Output

Manufacturing Output to Final Demand, 1913-1918 (percent)

<i>Year</i>	<i>Investment goods</i>	<i>Construction goods</i>	<i>Household consumption</i>	<i>Defence</i>
1913	9.1	3.7	81.8	5.4
1914	9.7	3.6	79.0	7.7
1915	7.3	3.9	68.1	20.7
1916	5.4	3.9	61.9	28.8
1917	4.5	3.6	59.8	32.6
1918 (1st half)	5.7	1.9	85.6	6.7

Source and note: Derived from *Promyshlennaya perepis'*, 1926, vol. 1, p. 41. Investment goods include rolling stock, industrial machinery and agricultural equipment.

Russia in the Great War

Government Revenue and Expenditure

Russian Government Revenue and Expenditure, 1913-1918
 (million rubles)

	1913	1914	1915	1916	1917	1918
Total expenditure	3,383	4,858	11,703	18,101	30,607	46,706
Revenue	3,417	2,898	2,828	3,975	5,700	15,580
Surplus/Deficit	+ 34	-1,960	-8,875	-14,126	-24,907	-31,126
Per cent financed by deficit	(1.0)	40.3	75.8	78.3	81.4	66.6

Sources: Michelson et al., 1928, pp. 70, 118–19, 129, 144; Malle, 1985, pp. 169–71.

Russia in the Great War

Financing the Budget

Financing the Russian Budget, 1914-1917 (million rubles)

	1914	1915	1916	1917
Total expenditure	4,859	11,562	18,101	30,607
War-related	1,655	8,724	14,049	26,161
Ordinary revenue	2,961	3,008	4,345	5,039
Deficit	1,898	8,554	13,756	25,568
Long-term domestic debt	709	2,879	4,174	3,729
Overseas borrowing	82	2,140	3,665	2,554
Short-term debt	805	3,176	5,611	10,844

Sources: Michelson et al., 1928, pp. 214, 325; Davies, 1958, p. 8.

Russia in the Great War

Monetary Expansion

Monetary Expansion in Russia, 1914-1917

	<i>Notes in circulation, million rubles</i>	<i>Index (July 1914 = 100)</i>
1 July 1914	1,630	100
1 January 1915	2,947	181
1 July 1915	3,756	230
1 January 1916	5,617	345
1 July 1916	6,628	407
1 January 1917	9,097	558
1 March 1917	9,950	610
1 July 1917	13,055	801
1 October 1917	17,290	1061

Source: Katzenellenbaum, 1925, pp. 56-7.

Russia in the Great War

Prices

Indexes of Russian wholesale and retail prices, 1913-1918

Year	Col. 1 Wholesale prices	Col. 2 Wholesale prices	Col. 3 Wholesale prices, foodstuffs	Col. 4 Retail prices, USSR territory	Col. 5 Retail prices, Moscow
1913		100	100	100	100
1st half 1914	100	106	110	101	101
2nd half 1914	101			102	
1st half 1915	115	117	153	138	120
2nd half 1915	141			145	140
1st half 1916	238	208	219	178	166
2nd half 1916	398				240
1st half 1917	702	327	434	—	365
2nd half 1917	1171			—	982
1st half 1918	—	639	953	—	5680

Source and notes: Harrison et al. forthcoming (Gatrell), Cambridge University Press. Column 1 is an unknown commodity sample, quoted in Sidorov, 1960, p. 147. Column 2 is taken from *Trudy TsSU*, 1926, volume 3, pp. 6-49; the left hand column refers to raw material inputs to wood, foodstuffs, mineral, leather and textiles, the right hand column to inputs to other branches of industry. Column 3 gives the wholesale prices of 13 food items according to Gosplan, quoted in Kokhn, 1926, p. 20. Column 4, Kokhn, 1926, pp. 160-61, is the price of a basket of 16 food items, 9 items of clothing and footwear, and 4 miscellaneous items, including soap, fuel and housing costs, weighted according to working class household budgets in 1918. Column 5 is a Gosplan index for Moscow city shop prices, from *Trudy TsSU*, 1926, volume 1, p. 11.

Russia in the Great War

Military Casualties

Russian Military Casualties, 1914-17,
(thousands)

	Killed in action	Wounded in action	Died of wounds	Contracted disease	Died of disease	Taken prisoner	POW deaths
1914	90.9	368.4	134.8	83.1	16.4	371.7	13.3
1915	226.7	842.1	308.6	423.0	88.4	2,004.5	71.5
1916	269.6	987.1	361.9	629.5	28.9	1,799.9	64.2
1917	102.4	454.1	165.0	1,292.6	22.0	918.2	32.9
Total	689.6	2,651.7	970.3	2,428.2	155.7	5,094.3	181.9

Source: Volkov (1930: 54, 56, 59, 60, 68). Prisoners of war are those held in Austrian, German, Turkish, and Bulgarian captivity.

Russia in the Great War

Inter-regional Grain Balances

Inter-regional Grain Balances, 1909/13 to 1917/18
(millions of tons)

Year	NCR	SPR	CPR	EPR	Combined
1909/13 to 1913/14	-3.5	+10.0	+1.6	+0.8	+8.9
1913/14	-2.9	+11.0	+1.5	+1.0	+10.6
1914/15	-5.3	+3.5	-1.6	+4.1	+0.7
1915/16	-4.6	+3.6	+2.1	+1.0	+2.1
1916/17	-7.4	-0.8	-1.1	-0.7	-10.0
1917/18	-8.5	-0.6	-5.7	+1.5	-13.3

Source: Estimates of regional production and utilisation from Wheatcroft (n.d.: 17). Abbreviations refer to Northern Consumer Region (NCR), Southern Producer Region (SPR), Central Producer Region (CPR), and Eastern Producer Region (EPR).

Russia in the Great War

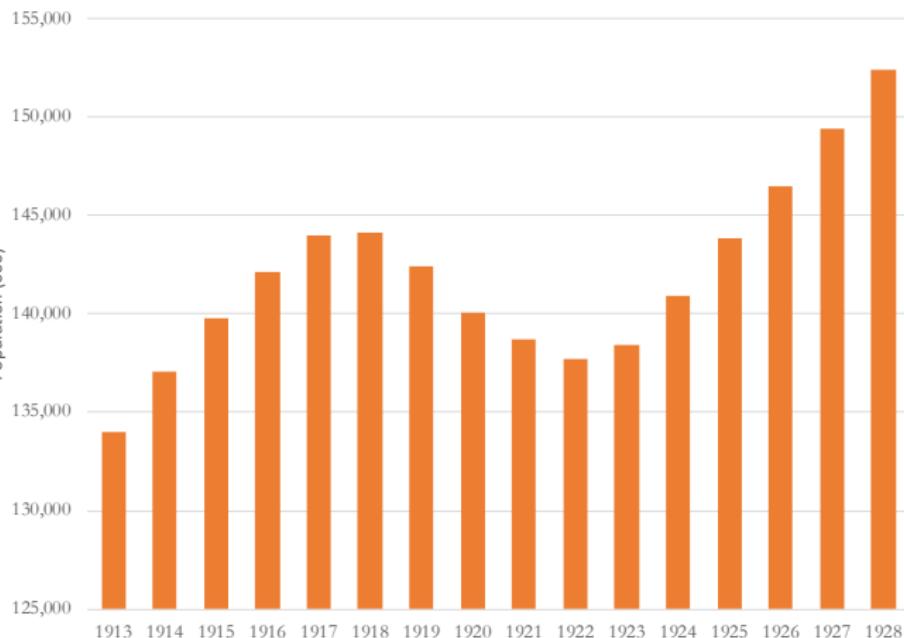
The Eastern Front



Russia in the Great War

Interwar Population

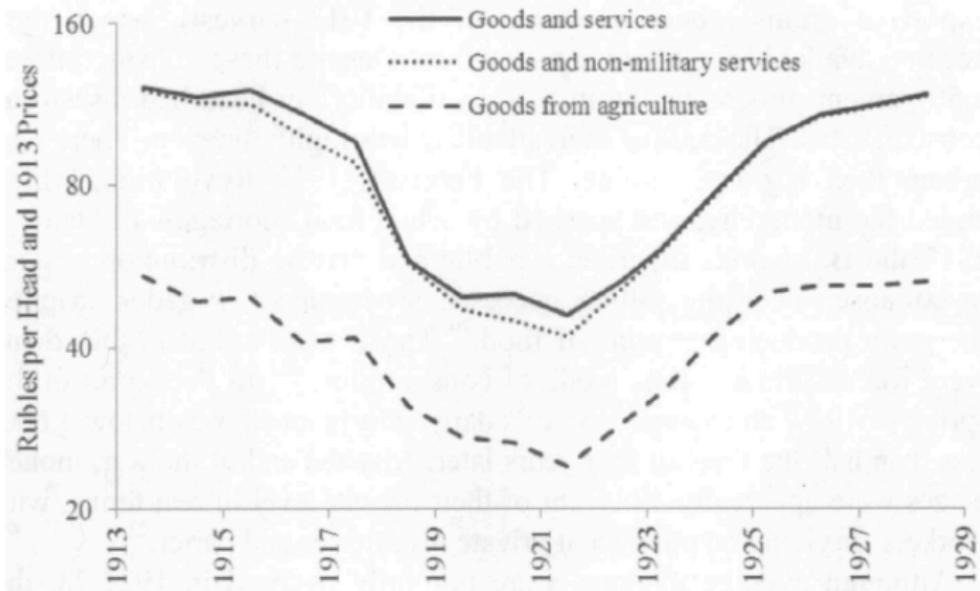
Population of Russia, Soviet Interwar Territory, 1913-1928



Russia in the Great War

Real National Income

Real National Income and Consumption per head, 1913 to 1927/28: Soviet Territory and Various Measures in Rubles and 1913 Prices

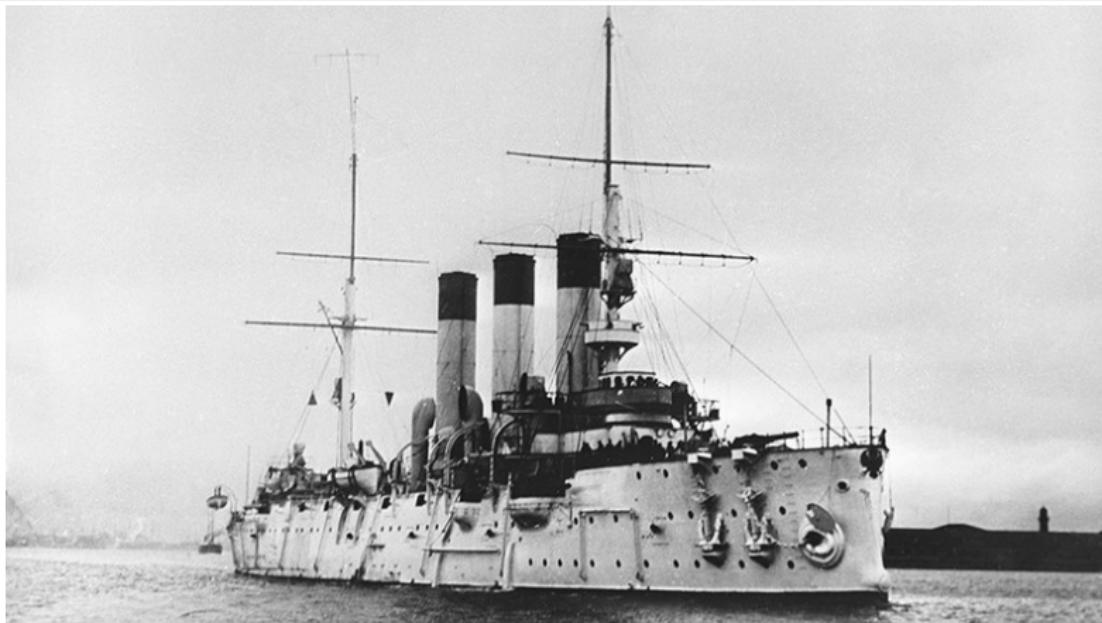


Russia in the Great War

Civil War



Winter Palace Cruiser Aurora



Winter Palace

Women's Death Battalion



National Income During the War

Russian Empire

Net national income within the borders of the Russian Empire, 1914 to 1917, by sector, at 1913 prices and percent of 1913

	Industry				Services			National income	
	Agriculture	Large-scale	Small-scale	Construction	Transport	Other civilian	Military	Total	Per head
1914	92	106	98	101	106	97	169	98	96
1915	94	111	78	75	128	97	452	102	99
1916	81	94	88	58	137	86	640	94	92
1917	79	73	78	42	80	76	562	82	81

National Income During War Communism

Territory of the Soviet Union

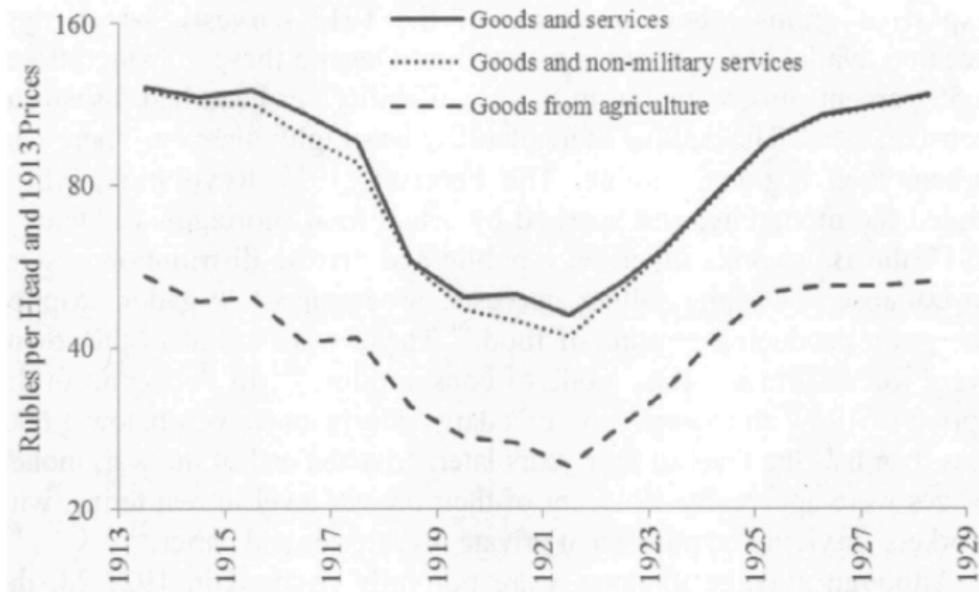
Net national income within the borders of the interwar Soviet Union, 1914 and 1917 to 1922, by sector, at 1913 prices and percent of 1913

	Industry		Services				National income		
	Agriculture	Large-scale	Small-scale	Construction	Transport	Other civilian	Military	Total	Per head
1917	80	73	78	42	79	76	562	82	77
1918	61	31	74	14	21	50	29	50	47
1919	53	17	49	11	27	41	175	43	41
1920	50	17	44	7	17	38	340	42	41
1921	45	16	49	7	21	35	251	38	37
1922	54	22	54	13	27	43	128	44	43

War Communism and NEP

Real National Income and Agriculture

Real National Income and Consumption per head, 1913 to 1927/28: Soviet Territory and Various Measures in Rubles and 1913 Prices



Money and Prices

Monetary Emission

Yearly Money Emissions and Price Increases, 1913-1923

Year	Amount of New Paper Currency Issued (in Millions)	Percentage Increase in Money Supply	Price Index for Moscow (as of Jan 1 of each year)	Price Index for Whole of Russia (as of Jan 1 of each year)	Percentage Increase in Prices for Russia
1913	-	-	1.00	1.00	-
1914	1,317	77.1%	1.01	1.01	28.7%
1915	2,670	90.6	1.30	1.30	20.0
1916	3,480	61.2	1.56	1.55	93.5
1917	16,403	180.3	3.15	3.00	683.3
1918	33,500	119.2	27.80	23.50	597.5
1919	164,200	302.5	278	164	1,375.6
1920	943,600	419.3	4,180	2,420	594.2
1921	16,375,300	1402.0	24,600	16,800	1,614.3
1922	1,976,900,000	11,268.2	244,000	288,000	7,196.9
1923	176,505,500,000	8,849.6	20,750,000	21,015,000	-
Oct., 1923	-	-	638,000,000	648,230,000	-

Money and Prices

Inflation

Inflation in Russia, 1914 to 1924

First day of:	Price level as a multiple of 1913	Rate of change of prices over preceding period, percent per month.
January 1916	1.42 ^a	2.1 ^a
March 1917	3.15	5.8
November 1917	10.2	15.8 ^b
July 1921	80.7 thousand	22.6
January 1922	288 thousand	23.6
January 1923	21.2 million	43.1
May 1923	54.7 million	26.7
February 1924	16.3 billion	88.3

War Communism and NEP

Civil War



War Communism and NEP

Civil War



War Communism and NEP

Lenin speaks



War Communism and NEP

Lenin speaks



War Communism and NEP

Lenin: Can the Bolsheviks retain State power?

"The proletariat cannot lay hold of the state apparatus and set it in motion. But it can smash everything that is oppressive, routine, incorrigibly bourgeois in the old state apparatus and substitute its own, new apparatus. The Soviets of Workers, Soldiers and Peasants Deputies, are exactly this apparatus."

"The chief difficulty facing the proletarian revolution is the establishment on a country-wide scale of the most precise and most conscientious accounting and control, of workers control of the production and distribution of goods."

War Communism and NEP

Lenin: Can the Bolsheviks retain State power?

"The big banks are the state apparatus which we need to bring about socialism, and which we take ready-made from capitalism; our task here is merely to lop off what capitalistically mutilates this excellent apparatus... We can lay hold of and set in motion this state apparatus ... at one stroke, ... because the actual work of book-keeping, control, registering, accounting and counting is performed by employees..."

As for the higher officials, ... they will have to be dealt with in the same way as the capitalists, i.e., severely. Like the capitalists, they will offer resistance. This resistance will have to be broken."

War Communism and NEP

Lenin: Can the Bolsheviks retain State power?

"Compulsory syndication, i.e., compulsory amalgamation in associations under state control – this is what capitalism has prepared the way for, this is what has been carried out in Germany by the Junkers state, this is what can be easily carried out in Russia by the Soviets, by the proletarian dictatorship, and this is what will provide us with a state apparatus that will be universal, up-to-date, and non-bureaucratic."

War Communism and NEP

Lenin: Can the Bolsheviks retain State power?

"We must not only terrorise the capitalists... We must also break passive resistance, which is undoubtedly more dangerous and harmful. ... We must also compel the capitalists to work within the framework of the new state organisation.

And we have the means to do this... These means are the grain monopoly, bread rationing and labour conscription. 'He who does not work, neither shall he eat.'

The Soviets will introduce work-books for the rich"

War Communism and NEP

Lenin: On Confiscation

Lenin to Molotov:

It is now and only now, when in the famine regions there is cannibalism, and the roads are littered with hundreds if not thousands of corpses, that we can (and therefore must) carry through the confiscation of Church valuables with the most rabid and merciless energy...so as to secure for ourselves a fund of several hundred million gold rubles...Without such capital no government work is possible, no economic reconstruction, and especially no defense of our position at Genoa.

War Communism and NEP

Essential Features of War Communism

- Abolition of private property in industry, confiscation of wealth
- Confiscation of land in agriculture from the gentry and rich peasants, return to scattered strip farming. All production above subsistence requisitioned
- Labor conscripted and subject to quasi-military discipline.
Wages paid in kind
- All industry under central planning *in theory*
- Government financed by printing press
- Price controls until inflation renders this meaningless,
rationing replaces monetary exchange
- Abolition of monetary exchange as an allocation device
especially in industry.

War Communism and NEP

Output Decline

Output Indexes for Russian Industry, 1913-1920

year	Large-scale	Small-scale	Total
1913	100	100	100
1916	116.1	88.2	109.4
1917	74.8	78.4	75.7
1918	33.8	73.5	43.4
1919	14.9	49	32.1
1920	12.8	44.1	20.4

War Communism and NEP

Agricultural Decline

Output and Stock Measures for Russian Agriculture, 1909-1921

Year	Sown area (million desyatins)	Gross yield of crops (million poods)	Number of horses (millions)	Number of cattle (millions)	Number of sheep and goats (millions)
1909-13	83.1	3,850			
1916	79.0	3,482	31.5	49.9	80.9
1917	79.4	3,350			
1920	62.9	2,082	25.4	39.1	49.8
1921	58.3	1,689	23.3	36.8	48.4

Quoted from official sources by Baykov, p. 23. The data do not refer to the whole territory of the USSR, but to the territory on which the census of 1920 was carried out (using the same territory for all years).

War Communism and NEP

Budget Financing

Russian State Budget and Note Issue, 1919-1921
(billion rubles)

<i>Year</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Deficit</i>	<i>Note issue</i>
1917	5.0	27.6	22.6	16.4
1918	15.6	46.7	31.1	33.5
1919	49.0	215.4	166.4	164.2
1920	159.6	1215.2	1055.6	943.6
1921	4139.9	26,076.8	21,936.9	16,375.3

Source: Baykov, p. 36.

War Communism and NEP

Real Value of Money

Real Value of the Money Supply, 1914-1922

<i>Year (figures for July or August)</i>	<i>Index of notes in circulation (July 1, 1914 = 1)^a</i>	<i>Index of prices (1913 = 1)^a</i>	<i>Real value of volume of money (millions of roubles)^b</i>
1914	1.0		3015
1918	26.8	88.5	493
1919	62.0	656	154
1920	313.9	8140	63
1921	1439.6	80,700	29
1922	196,288.4 ^c	5,795,000 ^c	55

Notes:

^a Official figures, quoted in Arnold, p. 91.

^b Calculated by dividing the volume of paper money by the official All-Union Price Index, in Arnold, p. 93.

^c Arnold, p. 129.

War Communism and NEP

Kronstadt Rebellion



NEP

NEP recovery

Output, Money, and Prices Under NEP, 1920-1924

Year	<i>Index of notes in circulation (July 1, 1914 = 1)^a</i>	<i>Index of prices (1913 = 1)^a</i>	<i>Index of industrial production (1913 = 100)^b</i>	<i>Index of agricultural production (1913 = 100)^b</i>
1920	314	8140	20 ^d	65
1921	1440	80,700	13	55
1922	196,288	5,695,000	24	69
1923	5,546,713	117,569,000	35	76
1924	496,702,887 ^c	61,920,000,000 ^c	49	69

Notes:

^a Arnold, pp. 91, 129, 186-7. Figures are for July (unless otherwise specified).

^b From a study by Jean Dessirier, quoted in Phillip Cagan, 'The Monetary Dynamics of Hyperinflation', in Milton Friedman (ed.), *Studies in the Quantity Theory of Money*, p. 117.

^c March, 1924.

^d From Table 1.1 above.

NEP

NEP recovery

Selected Indicators of Soviet Output Levels in 1928 Relative to 1913
(1913 = 100)

<i>National income</i>		<i>Selected physical production series</i>	
1913 prices	117	Grain production	87
1926–27 prices	119	Pig iron	79
<i>Industrial production</i>		Steel	102
1913 prices	129	Coal	122
1926–27 prices	139–43	Cotton cloth	104
		Freight turnover	104
<i>Agriculture production</i>		Electric power	203
1926–27 prices	111	Foreign trade	
		Exports	38
		Imports	49

Source: Gregory and Stuart, *Soviet Economic Structure and Performance*, 63.

War Communism and NEP

Scissors

