Reforms and macroeconomic policy under Gorbachev (1985-91)

- Overview of Gorbachev reforms
 - Soviet economy on the eve of reforms
 - Reforms and their results
- Macroeconomic Policy 1985-1991
 - Monetary overhang
 - Origins
 - Consequences
 - Possible means to reduce/eliminate monetary overhang

Basic Facts on the USSR

Territory	22.4 million square km (Russia - 17.1 million)
Population (01.01.1990)	288.6 million (Russia - 148 million)
Nationalities	22 nationalities, numbering more than 1 million each + 34 nationalities numbering over 100,000 each + more than 70 smaller nationalities
GNP (1990)	1000 billion rubles (43% of the U.S. GNP in 1985
GNP per capita (1985)	37% of the U.S. level
Consumption per capita (1985)	26% of the U.S. level
Oil production (1986-90 annual average)	613 million tons
Steel production (1986-90 annual average)	162 million tons
Grain production (1986-90 annual average)	195 million tons
Military potential	About 4 million soldiers, over 2000 strategic nuclear carriers, 15% of GNP spent on defence

Soviet republics: population and regional economic disparities, 1989-1990

	Language group	Dominant religion	Population, million
USSR			288.6
RSFSR (Russia)	Slavic	Russian Orthodox	148.0
Ukraine	Slavic	Russian Orthodox and Greek Catholic	51.8
Byelorussia	Slavic	Russian Orthodox	10.3
Lithuania	Baltic	Catholic	3.7
Latvia	Baltic	Lutheran and Catholic	2.7
Estonia	Finno-Ugric	Lutheran	1.6
Moldova	Romanian	Russian Orthodox	4.3
Armenia	Caucasian	Armenian Orthodox	3.3
Georgia	Caucasian	Georgian Orthodox & Moslem	5.5
Azerbaijan	Turkish	Moslem	7.1
Kazakhstan	Turkish	Moslem	16.7
Uzbekistan	Turkish	Moslem	20.3
Turkmenistan	Turkish	Moslem	3.6
Kirghizia	Turkish	Moslem	4.4
Tajikistan	Persian	Moslem	5.2

Soviet republics: population and regional economic disparities, 1989-1990, continuation

	Structure of population, %				
	Nationals	Russians	Other		
USSR	100.0	50.8	49.2		
RSFSR (Russia)	81.3	81.3	18.7		
Ukraine	72.4	21.9	5.7		
Byelorussia	79.0	13.1	7.9		
Lithuania	79.2	9.3	11.5		
Latvia	51.8	33.8	14.4		
Estonia	61.4	30.3	8.3		
Moldova	64.4	12.9	22.7		
Armenia	94.0	1.6	4.4		
Georgia	69.5	6.2	24.3		
Azerbaijan	82.5	5.6	11.9		
Kazakhstan	41.7	37.6	20.7		
Uzbekistan	66.1	8.3	25.6		
Turkmenistan	71.9	9.5	18.6		
Kirghizia	52.0	21.4	26.6		
Tajikistan	62.1	7.6	30.3		

Soviet republics: population and regional economic disparities, 1989-1990, continuation

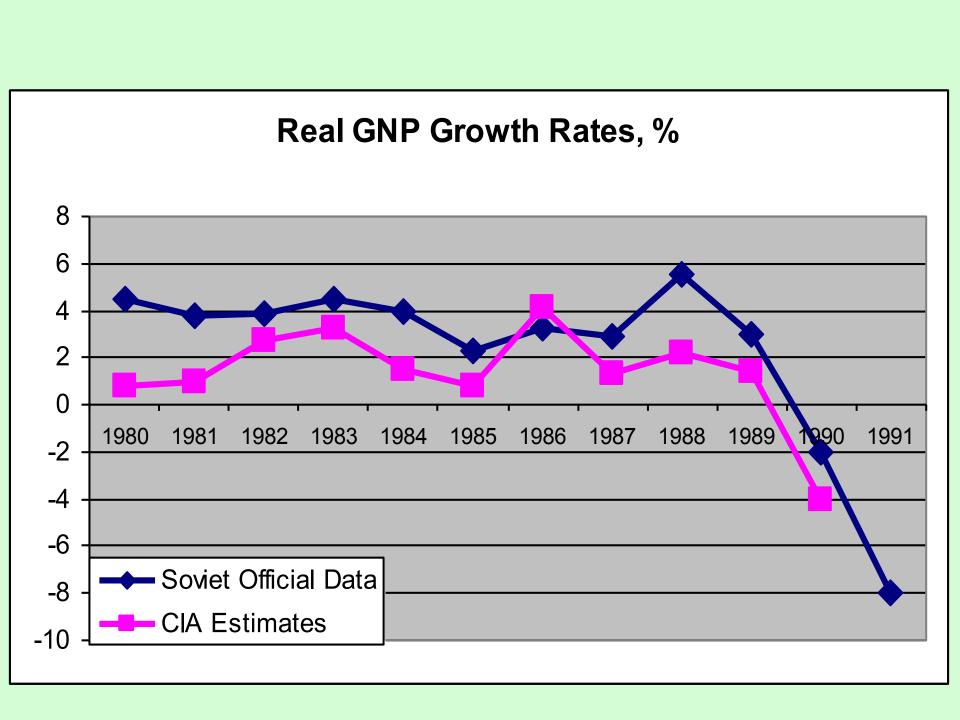
	U.S.S.R.	= 100%	March 17, 1991 Referendum	
	Retail sales per capita	Personal income per capita	Turnout rate,%	Those voting for the union
USSR	100.0	100.0	80	76
RSFSR (Russia)	110.1	108.3	75	71
Ukraine	94.3	100.1	83	70
Belorussia	110.9	107.8	83	83
Lithuania	128.3	117.1	84*	9*
Latvia	146.2	116.2	88*	25*
Estonia	154.0	120.8	83*	21*
Moldova	90.5	92.7		
Armenia	90.3	87.9	Referendum to be he	<u>*</u>
Georgia	86.6	95.5	90*	1*
Azerbaidjan	57.9	77.5	75	93
Kazakhstan	83.1	92.1	89	94
Uzbekistan	58.7	68.3	95	94
Turkmenistan	68.0	73.8	98	98
Kirghizia	68.5	74.5	93	94
Tadjikistan	52.0	64.7	94	96

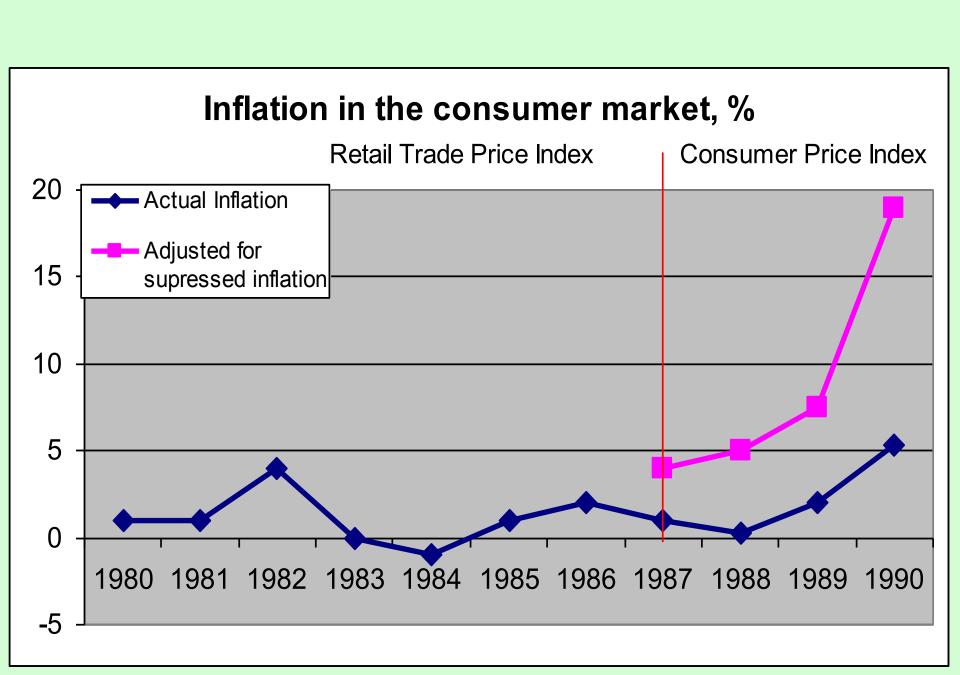
^{*} Republican polls were organized by Republican authorities on February 9, 1991 in Lithuania, on March 3,1991 in Latvia and Estonia, and on March 31 in Georgia. Their results were not considered valid by the all-union government.

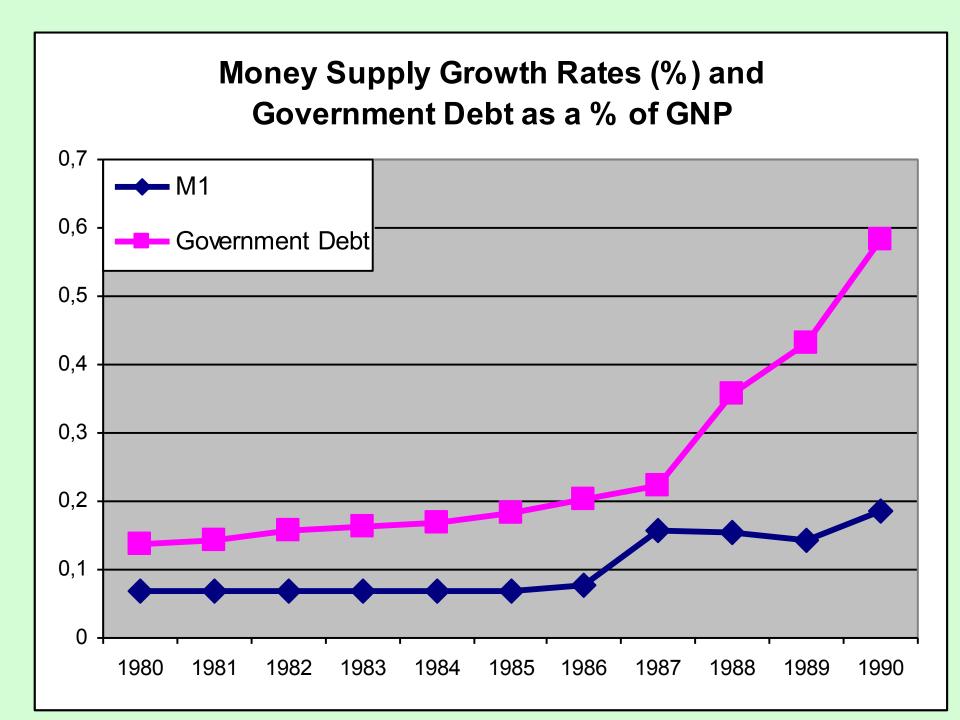
Source: Goskomstat and newspaper reports.

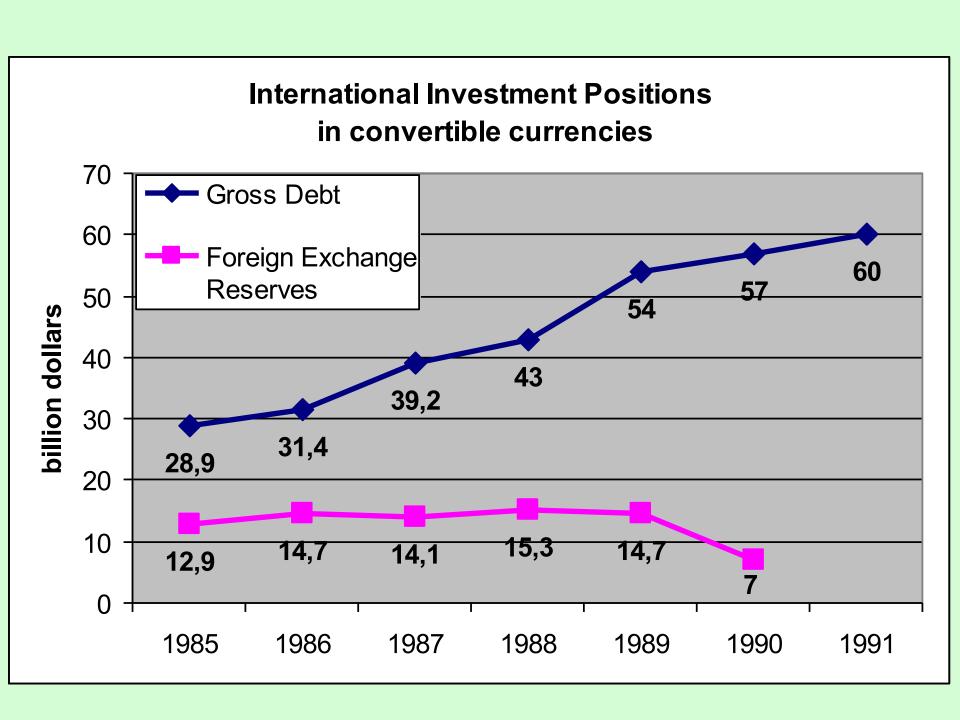
Soviet economy on the eve of the reforms: inefficient, but in good macroeconomic conditions

- GDP in 1990: 1 trillion rubles
- Economic growth in the late 1980s 1 to 3%
- Low inflation level
 - One-time price increase in the early 1960s for meat and milk products
 - Open and hidden inflation in 1947-87 was less than 3% a year - very good record of macroeconomic stability
- Slow growth of money supply
 - M1 grows by less than 10%
- Small public debt (less than 20% GDP in 1985)
 - Requirement for entering the euro-zone less than 60% of GDP debt
- Small stock of foreign currency reserves, but small external debt (about 3% GDP only)
 - Good reputation as a debtor









Government debt, billion rubles

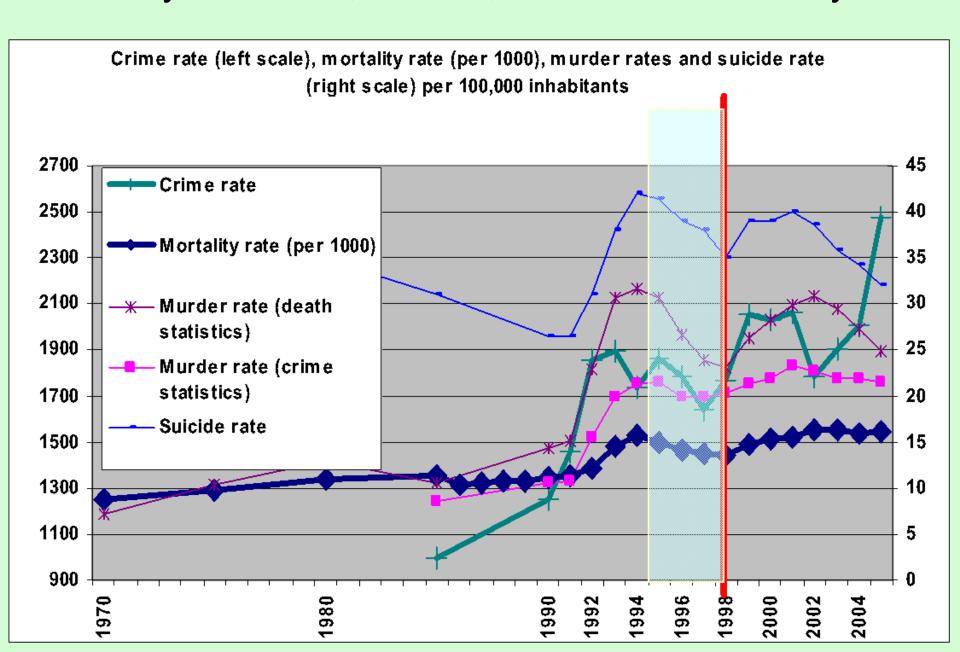
Years	1975	1980	1984	1985	1986	1987	1988	1989
(1) Bank credit - total	29.2	70.7	96.2	106.7	125.7	180.2	267.7	349.9
- against deposits of the public	29.2	70.7	96.2	106.7	125.7	144.7	165.7	185.5
- from state loan fund	1	-	1	1	1	35.5	102.0	164.4
(2) Non bank credit (loans from insurance funds, public and enterprises)	33.2	33.1	32.1	34.9	35.6	39.6	44.7	48.8
(3) Official domestic debt, total (3)=(1)+(2)	62.4	103.8	128.3	141.6	191.3	219.8	312.4	398.7
- as a % of GNP	12.7	16.8	16.9	18.2	20.2	26.6	35.7	43.1
(4) Agricultural price support fund	-	-	1	11.3	11.3	20.5	30.3	39.6
(5) Domestic debt, adjusted, (5)=(3)+(4)				152.9	172.6	240.3	342.7	438.3

Source: A Study of the Soviet Economy. IMF, World Bank, OECD, EBRD. 1991, Vol. 1, p. 125 (Data provided by the USSR Ministry of Finance and Gosbank).

Social and economic conditions on the eve of the reforms

- Low level of inequality
 - Decile coefficient: income of top 10% to income of bottom 10%. Decile coefficient was about 5 according to the official statistic, 8 – taking into account non-monetary benefits of elites
 - Level of inequality as low as in Scandinavian countries
- Only about 300 persons were serving sentences for political crimes
- Low level of corruption
 - Bribes much smaller than today (In 1980-85, USSR was in the middle of the list of 53 countries by the level of corruption - close to Greece, S. Korea, Spain, Portugal - today Russia is at the very bottom of this list)
- Relatively low crime and mortality rates

Relatively low crime, murder, suicide and mortality rates



Direction of reforms

- Not clear until 1987
- May, 1987: official target transition to indicative planning
- Until 1990 no talk at the official level about transition to the market, only "improvement/perfection of the CPE via introduction of some market mechanisms"
- Only in 1990 the transition to the market economy was proclaimed an official target
 - Ryzhkov programme May, 1990

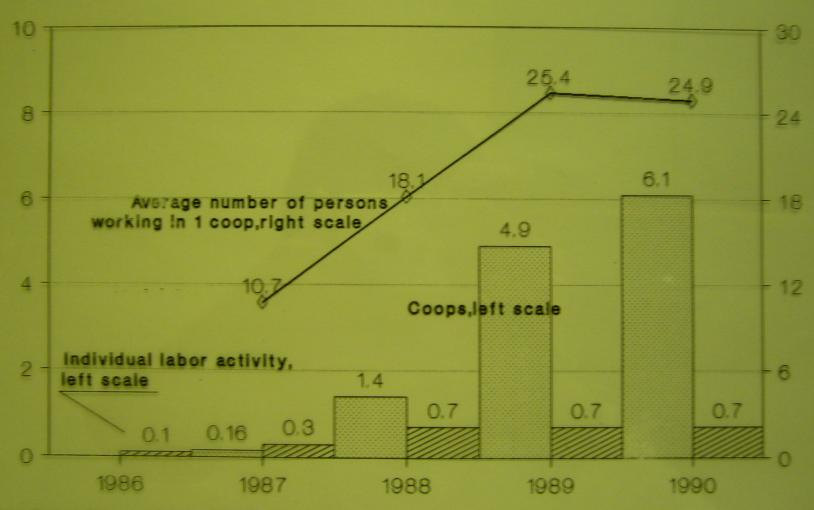
Gorbachev reforms

- First "glasnost" article published in 1987 (Khanin, Selunin "Deceptive figure", Noviy Mir, February 1987)
 - Chief editor of the journal that published this article was not fired, so "glasnost" period started
- Individual labor activity permitted in 1986
 - Individual enterprises were not allowed to hire workers
 - Number of engaged in individual labor activity did not grow since 1988
- Co-operatives permitted
 - In 1990 they employed 6 million workers (out of 130 million) and produced 17-18% of output in personal services and construction

Output, fixed production capital stock and employment, in state, cooperative and individual sectors

Sector	Output			
	1985	1985		
	billion rubles	% of total	billion rubles	% of total
Total, material production	1378.2	100.0	1638	100.0
State sector	1198.8	87.0	1354	82.7
Cooperative sector - total - collective farms - consumer cooperation - new producers' cooperatives	122.1 101.2 20.9	8.9 7.3 1.5	206 125 30 51	12.6 7.6 1.8
Individual sector - total - peasants farms - individual land plots - individual labor activity	57.3 - 57.3	4.2 - 4.2	78 2 74 2	4.8 0.1 4.5

Figure 17.1.Number of persons engaged in individual labor activity and working in coops(including part-time),million



Narodnoye Khozyaistvo SSSR (National Economy of the USSR) for various years

TABLE 17.2. New producers cooperatives in Soviet economy

Indicator	1987	1988	1989	1990	1991
Number of operating coops, thousand, end of year	14	77.5	193.1	245.4	
Employment - million - % of total	0.15 ^a	1.4 ^a 1.0 ^a	4.9 ^a 3.5 ^a	6.1 ^a 4.4 ^a	
Sales - billion rubles - % of GNP	0.35	6.3 0.7	40.3	67.3 6.1	
Consumer goods production - billion rubles - % of total		0.4	7.1 1.9	12.0	
Personal services production - billion rubles - % of total		4.6	3.3 15.4	2.9 17.7	
Retail sales - billion rubles - % of total		0.6	1.1	1.3	
Construction works - billion rubles - % of total		0.4	12.1	26.0 17.4	

a Including part-time workers (35% of total in 1989, 31% in 1990).

Source: Narodnoye Khozyaistvo SSSR (National Economy of the USSR); Ekonomika i Zhiz'n, 1991, N20; newspaper reports.

Gorbachev reforms

Leased enterprises

- Employees of leased enterprises were given the right to buy it out from the state (using part of the profit of the enterprise itself) in 20 years, if they fulfill the production plans
- Leased enterprises accounted for 20-30% of output in retail sales, catering, and services

Independent (family) farming

- Only 2% of agricultural output in 1993, about 5% in 2005
- Main problem: lack of investment
- Average size: 42 hectares smaller than US or even European farms

Joint ventures (enterprises with foreign capital)

- At first, foreign control was not allowed: share of soviet capital should have been more than 51%
- No significant capital inflow: in 1991 only 0.1 million employed in joint enterprises

Leased enterprises in Soviet Economy

Indicator	1989	1990	1991
Number of enterprises, thousand - all industries - industry - construction - autotransportation - trade and public catering - personal services	NA 1.3 0.7 NA NA 0.1	6.2 2.4 1.0 0.4 2.0 ^a 0.4 ^a	
Employment, thousand - all industries - industry - construction - autotransportation - trade and public catering - personal services	1,300 200 300 500 100	3,600 1,700 600 233 883 200	6,600 2,000 ^b 900 ^b 600 ^b 2,200 ^b 900 ^b
Output, billion rubles - industry - % of total - construction - % of total - autotransportation - % of total - trade and public catering (sales) - % of total - personal services - % of total	2.7 8.5 8.0 NA 1.8- 5.8 23.4 5.8 0.4	48 5.2 6.3 6.0 2.1 9.2 64.5 13.8 0.9 10.0	7 ^b 23 ^b 30 ^b

^a Excluding 33 thousand retail trade shops and cafes, 1.6 thousand personal services shops.

Sourse: Narodnoye Khozyaistvo SSSR (National Economy of the USSR) for various years; Ekonomika i Zhiz'n. 1991, N 23.

b By mid year 1991.

Independent peasants' farms in the USSR^a

End of period	Number of farms, thousand	Land area, thousand hectars	Average land area per farm, hectars
January 1, 1990	6.5	10.0	1.5
April 1, 1990	20.8 (0.2)	(11.6)	(50.2)
July 1, 1990	29.5 (0.9)	309.3 (30.7)	10.5 (34.3)
January 1, 1991	40.6 (4.4)	700 (203.9)	17.2 (46.0)
March 1, 1991	(0.9)	(395.2)	(44.3)
May 1, 1991	60 (20.2)	(833.4)	(41.3)
January 1, 1991			

Source: Ekonomika i Zhiz'n, 1990, N30, 46; 1991, N17; Report on the USSR, 1991, July 19, RL/RFE, p. 22;

^a Figures in brackets show the respective indicators for Russia.

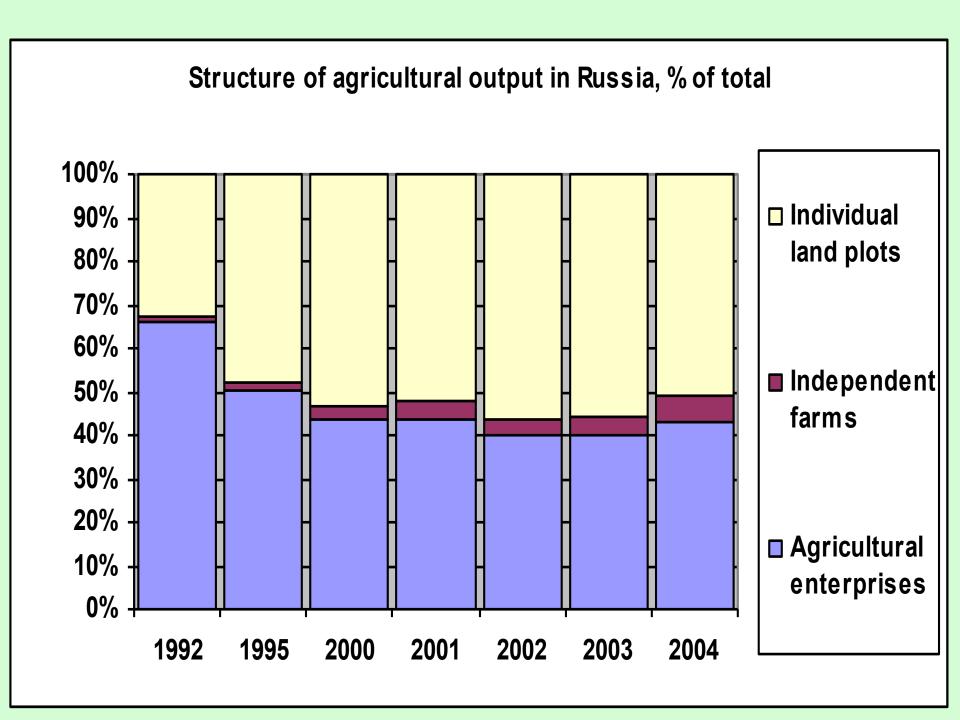
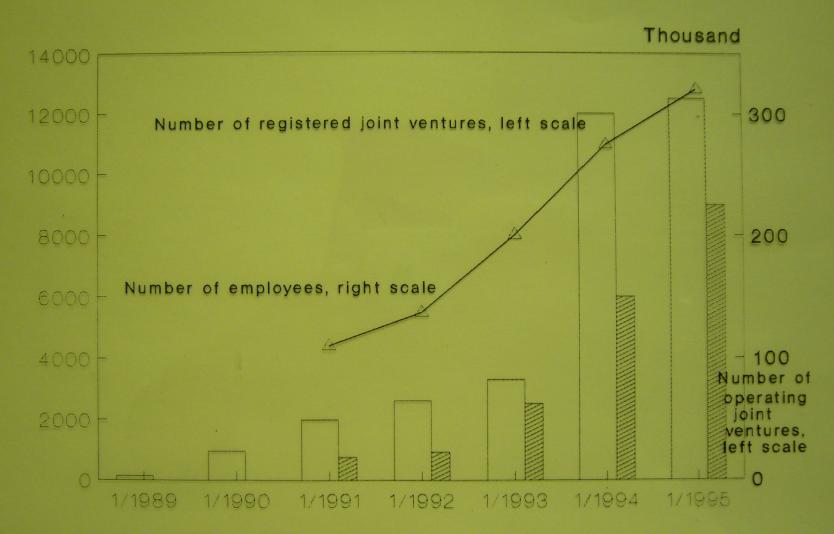


Figure 19-4-A. Joint ventures in Russia



Source: NarKhoz, 1990, p.65;Russian Economy in Fall 1992.Institute for Economic Policy,Moscow,Dec.1992,p.139;Goskomstat.

Indicator	Absolut	% of total
	e value	
Total number, million - individual plots	30	Nearly 100% of families living in rural areas and some families living in urban areas
 collective orchards and vegetables gardens 	18.5	17% of families living in urbar areas
Agricultural land area, million hectares - individual plots - collective orchards	4.5	0.8
and vegetable gardens	1.3	0.2
Sowed land, million hectares	2.8	1.2
Fixed production agricultural capital stock, billion rubles (excluding cattle)		
	6.2	2.0
Cattle overhead, million heads - cattle - pigs - sheeps and goats	24.2 15.2 36.3	20 19.0 25
Meat production, million tons	5.1	25.4
Milk production, million tons	29.4	27
Egg production, billion pieces	22.4	26
Wool production, million tons	0.13	28
Potatoes	42.5	59
Vegetables, million tons	8.5	30
Fruits and berries, million tons	5.6	58
Total agricultural production, billion rubles	57.3	25
Agricultural production for sale		10
Labor productivity, collective and state farms=100%, estimate		40%
Capital productivity, collective and state farms=100%		over 300%
Land productivity, collective and state farms=100%		over 30 times

Source: Narodnoye Khozyaistvo SSSR (National Economy of the USSR) for various years; Ekonomika i Zhiz'n, 1991, N6; 1990, N21, 22.

Distribution of registered joint-ventures by area economic activity, end-March 1990

				Today Colored Traities and test				
Industry	Number of joint- ventures ^a		Initial capital					
	absolute	as a % of total	million rubles	as a % of total				
Heavy industry (fuels, energy, metallurgy, chemicals, timber, heavy machinery)	225	15.5	1015.8	27.8				
Construction and building materials	117	8.1	461.6	12.6				
Transportation and communication	27	1.9	34.0	0.9				
Light and food industry	144	10.0	493.1	13.5				
Other consumer goods production	123	8.5	331.0	9.1				
Services and related areas (retail trade, health care, education, tourism, public catering, R&D, engineering, consulting, publishing, films, videos, concerts, PC production and programming)	811	56.0	1318.3	36.1				
ALL INDUSTRIES	1447	100.0	3653.8	100.0				

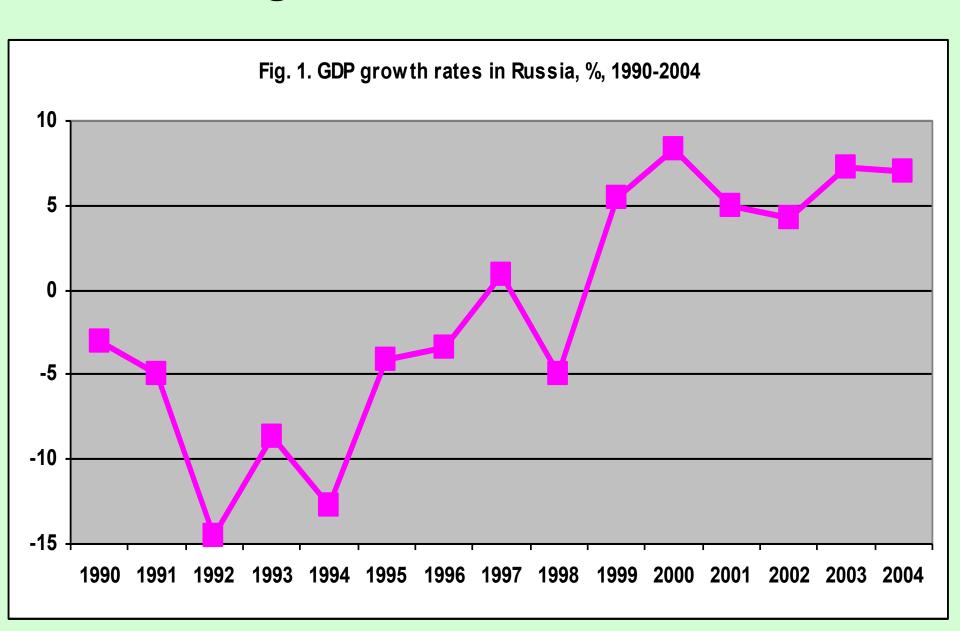
^a Data missing for 95 out of the 1542 registered joint-ventures. Source: *A Study of the Soviet Economy*. IMF, World Bank, OECD, EBRD. 1991. Vol. 2, p. 103.

Results of the reforms in 1985-91

- Reforms did not change the planned nature of the economy
- Poor macroeconomic policy
- Decline of the institutional capacities

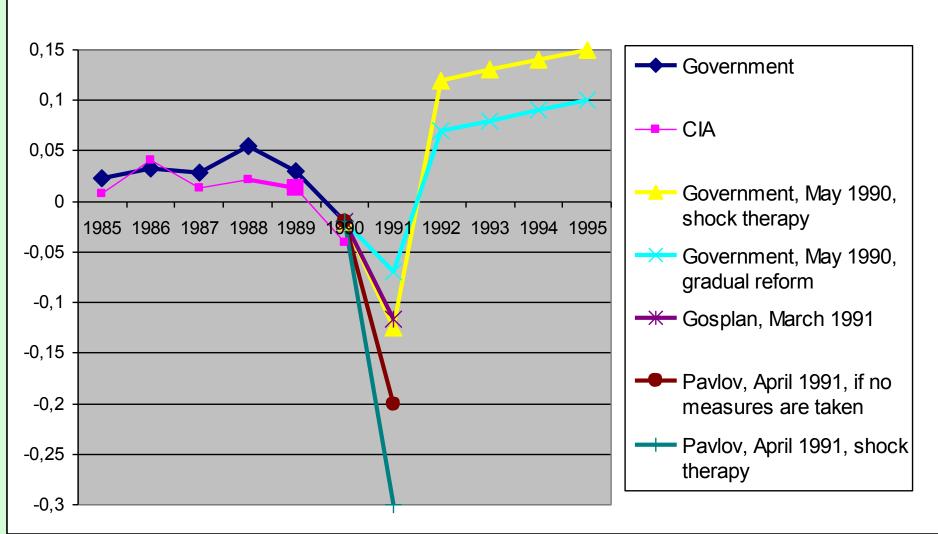
As a result – output started to decline in 1990 and 1991 (when the CPE was still in place!)

GDP growth rates in Russia



What was expected





The Two Restructuring Scenarios Presented by the Government to the Supreme Soviet, May 1990

Percentage change from 1990

Year	Indicator	Shock therapy	Gradual change
1991	GNP	-10 to -15	-5 to -9
	Employment	-5 to -7	-3 to -5
	Investment	-47 to -52	-14 to -19
	Real incomes	-4 to -7	-1 to -3
1995	GNP	+44 to +50	+25 to +35
	Employment	0 to +2	0 to+1
	Investment	+47 to +57	+5 to +10
	Real incomes	+25 to +30	+5 to +10

Source: Ekonomika i Zhiz'n, 1990, N28.

September 1990: Shatalin's (500 days) plan and Ryzhkov's (government) plan

SHATALIN'S PLAN	RYZHKOV'S PLAN
Elaboration	
A group of independent economists, created by the joint decision of Gorbachev and Yeltsin together with representatives of all the republics except Estonia.	Government bureaucrats; they modified slightly an old government plan, that was presented to the Supreme Soviet in May 1990 and failed to get the approval.
Support	
Democratic opposition, Russian Supreme Soviet, many republican and local Soviets.	The government itself, partly - the President, All-Union Supreme Soviet, Communist Party and trade unions.
Timing of reforms	
The plan was designed to be implemented in 500 days. It was stated that "the time for gradual reforms is lost, the inefficiency of partial reforms is proved by our own experience, as well as by the experience of East European countries".	The first version of government program, presented in May 1990, was designed to be implemented by 1995. In the second version (September 1990) there was not any references to the timing of the implementation. However, it was stated, that "living standards [because of price deregulation, envisaged in Shatalin's program] will decline by 30% and probably even more That is why the government can't carry out such proposals".

Shatalin's (500 days) plan and Ryzhkov's (government) plan (cont.)

SHATALIN'S PLAN

RYZHKOV'S PLAN

Financial stabilization

Quick decisive measures to sell state tangible assets (small enterprises, shops, apartments, gold, etc.) to the public; new issues of government bonds; considerable cuts of defense expenditure (20%), KGB budget (20%), foreign aid, except for humanitarian (70-80%), investment financing (20-30%). This should allow to reduce the government deficit and money emission to zero in 1991 and to pump out of circulation 20 billion rubles by the end of 1990 and another 123 billion ruble in 1991.

General support of the idea to sell small state companies, apartments and new government bonds to the public, but no decisive actions to implement it. Cautious approach to cuts in defense, KGB and foreign aid budget. Reduced financing of investment in material production. This should enable to bring government budget deficit to 25-30 billion rubles in 1991 instead of 60 billion rubles planned for 1990 (and 100 billion rubles envisaged according to preliminary estimates made in the fall 1990).

Prices

Deregulation of prices after financial stabilization, i.e. after liquidating the monetary overhang, so as to ensure that there will be no outburst of inflation after deregulation. By the day 400 70-80% of all prices should be deregulated. An increase in consumer price index of 53% was envisaged for 1991.

An administrative (centrally managed) increase in prices before (in fact-instead of) financial stabilization scheduled for January 1, 1991: twofold increase in food prices and price increase for non-food consumer goods and services for 20-70%. Full compensation to consumers was envisaged. Slow deregulation of prices, starting in 1991, so as to increase the share of goods, traded at market prices to 70% in 1992.

Shatalin's (500 days) plan and Ryzhkov's (government) plan (cont.)

SHATALIN'S PLAN

RYZHKOV'S PLAN

Central government-republics

All powers to regulate the economy inside republics rest with the republican governments, as well as the property for land, forests, and mineral resources. Republics have their right for a share of gold, diamond and foreign exchange funds of the USSR. Federal ruble and foreign exchange funds are created by the agreement of the government of all republics. One central bank with emission rights and ruble as an all-union currency. No borrowings of republican governments in international capital market in the transition period. Common customs policy, no barriers in internal trade during transition period.

Central government keeps the responsibility for defense, external affairs, national security, energy, raw materials, transportation, foreign trade, tax gathering and monetary circulation. The union treaty determines the distribution of power in other areas. Shatalin's plan claimed the government, will lead to an economic disintegration and to the break down of the Soviet Union. Republics should not have all powers to regulate the economy; federal (all-union) property should not be treated as the joint property of the republics.

Taxation

Taxing power belongs to republican governments - they determine what will be their contribution to all-union budget for certain purposes. Federal taxes may be established by an agreement of all republics. Taxation is the joint responsibility of republican and central government. They both have the right to establish personal income, corporate and sales taxes, while only the central government collects all the taxes.

Shatalin's (500 days) plan and Ryzhkov's (government) plan (cont.)

SHATALIN'S PLAN	RYZHKOV'S PLAN
Subsidies to producers	
Elimination of most subsidies to producers by the day 100. Shutting down of 100-200 most inefficient enterprises in the first 100 days was envisaged.	Shatalin's plan, according to the government, will force to go bankrupt every fourth state and collective farm and will lead to shut down of coal mines, producing 100 millions tons (15%) of coal.
Planning and state orders	
Voluntary state orders during the transition period: the government can influence producers through offering them better prices, providing resources or imposing sanctions. Reduction of government orders (for all-union government this will be just orders to provide the necessary goods and services for the military, schools, hospital and the like; export shipments in accordance with inter-government treaties; and increase in reserves). Prices for products sold to the government, will be negotiated and should be close to the market price, except for energy, raw materials and some special products for which the government will continue to set prices.	No definite measures to cut obligatory production quotas for enterprises were proposed. A commitment (made in 1988) to cut mandatory state orders to less than 40% in 1989 was abandoned and never referred to. It was also suggested that existing production ties (embodied in the plan for 1990) be preserved in 1991.

Shatalin's (500 days) plan and Ryzhkov's (government) plan (cont.)

SHATALIN'S PLAN

RYZHKOV'S PLAN

Privatization

First 100 days: transformation of 50-60 state enterprises into joint-stock companies. By the day 250 the number of these companies will increase to 1000-1500; also by that time 50% of small shops and restaurants should be privatized. By the day 400 up to 30-40% of fixed capital in industry, 50% in construction and auto transportation, more than 60% in trade and services should belong to joint-stock companies or sold to or rented by individual owners. By the year 1995 the share of government property in industry will be reduced to 30-40%, by the year 2000- to 20%. Those shares that are not sold will be held by Investment funds that will not interfere into the management of companies.

After taking the new stand on this issue in summer 1990, the government was supporting in principle the idea of transforming large state enterprises into joint-stock companies and small state enterprises (less than 25-200 employees) - into individual private businesses and coops. But no time schedules for privatization was set, and the mechanisms to carry out this process were elaborated very slowly.

Every peasant has a right to quit the collective of state farm with his own land plot and means of production (or a compensation for them) in order to start his own business. Other workers (not in agriculture) can obtain land plots in those areas, where the land is not used. Land becomes private property and may be traded and mortgaged trough Land Banks.

If a peasant wants to leave a collective or state farm to start his own business his request should be approved by the collective or state farm. If there is a dispute, the local Soviets should resolve the issue. Land may not be traded and used as a collateral when getting credit from the bank.

Social policy

Fixed low prices for 150 basic consumer goods (25-30 billion rubles or 7% of annual retail sales). Wage tariffs set by the state play the role of guaranteed minimum wages, obligatory for all enterprises. Indexing of pensions, stipends, allowances, fixed salaries in service industries (at the expense of the budget) and indexing of wages in goods producing state enterprises at their own expense. Indexation of bank deposits. Special allowances to elderly, disabled, orphans and families with large number of children. Unemployment insurance (70% of the average wage in first three months after loosing job, 60% - in 3 months after that, 50% - in the course of the following year).

Full
compensation of
consumer goods
price increases
in 1991 (135
billion rubles)
to individuals;
adjustment of
the value of
bank deposits,
insurances and
securities, as
well as of
interest rates.

Shatalin's (500 days) plan and Ryzhkov's (government) plan (cont.)

SHATALIN'S PLAN

RYZHKOV'S PLAN

Ruble convertibility

In the period from 250-th to 400-th day, when prices are deregulated, all enterprises (including joint-ventures and foreign companies, operating in the USSR) and individuals should be granted a right to trade rubles for hard currency using market exchange rate.

No definite plan for convertibility except a previous commitment to establish a new exchange rate, and a new system of custom duties, starting from 1991, together with a administrative price changes and introduction of new export and import taxes.

Borrowing abroad and foreign aid

Emergency borrowing abroad to import consumer goods; negotiations with Western countries and international organisations to provide economic assistance (probably \$10-20 billion) for such a collateral as a commitment to the program of radical economic restructuring. A possibility a Marshall plan for the USSR is envisaged.

"We should not rely on international aid to finance economic reforms. International investment position of the USSR is already bad and there is no way to service an increased indebtedness", - Ryzhkov stated. Not saying in directly, Ryzhkov nevertheless left the impression, that the appropriate way to deal with a shortage of hard currency is to ensure an even greater centralization of foreign exchange revenues.

October 1990: Gorbachev's plan

Elaboration

The plan was presented by Gorbachev himself and elaborated by Abel Aganbegyan, former President's economic adviser and the chairman of the Commission on evaluation of alternative plans for economic reforms in July-August 1990. It was claimed that the plan is based on Shatalin's plan and combines the best ideas of the latter and the Ryzhkov program. Gorbachev's plan was very vague and contained no specifications of general statements.

Support

Approved in principle by the All-Union Supreme Soviet on October 19, 1990 by a majority of 356 against 12. Yeltsin immediately qualified the plan as "another attempt to preserve a system hated by people" and predicted that it's failure will be evident to everyone in less than half a year.

Timing of reforms

The transition period "may take 1,5-2 years. Additional powers are granted to the President of the country for that particular period".

Financial stabilization

Reduction of government budget deficit to 25-30 billion rubles in 1991, financing this deficit by securities issues. Financial clean-up, monetary stabilization and strengthening of the ruble "in 1,5-2 years at most". Increase in interest rates on deposits, first of all – on term deposits.

Prices

Gradual deregulation of consumer prices, starting from non-basic items. In 1992 only some basic consumer goods prices will be regulated (bread, meat, and milk products, oil, sugar, basic drugs, schoolbooks, some children's goods, some transportation and utilities tariffs). Wholesale prices were partly deregulated by a Presidential decree shortly before that - in the beginning of October.

October 1990: Gorbachev's plan (continuation)

Central government-republics

Decentralization of power, but not crossing a line, beyond which lies the break-down of the Union and chaos. Common monetary, foreign exchange, credit and custom system. Privatization and land reform will be largely carried out by Republican governments and local authorities. They may also regulate prices and introduce rationing. Increased role of the Council of Federation to carry out economic reforms.

Taxation, subsidies, planning

The plan was very vague on these issues: it promised to grant new rights to republics in taxation with no specification; it envisaged the elimination of mandatory state orders in agriculture; and it said nothing about subsidies to producers. Shortly before the submission of the program, in the end of September 1990, the President signed a decree, freezing all production links (planned deliveries) between enterprises for the rest of the year 1990 and for 1991.

Privatization

Recognition of the right of private property. Trade and service enterprises, such as restaurants, repair shops, construction units, and other small enterprises are the first to be privatized. Simultaneously large and medium size industrial and other enterprises are transformed into joint-stock companies and partnerships. Priority rights to buy property and shares of enterprises are granted to work collectives and their members; they may also enjoy some privileges while buying out enterprises.

Land reform

While leaving the elaboration and the implementation of this reform largely to the republics (that are free to establish the procedure, allowing peasants to leave collective and state farms with land plots and agricultural implements), the President recommended life time lease of land from the state rather than private property, without the right to trade it.

October 1990: Gorbachev's plan (continuation)

Social policy

Republican and local authorities may introduce rationing while the central government will implement indexation of incomes (pensions, stipends to students and allowances - 100%, fixed salaries of the military personnel, teachers, doctors, academics, government employees and the like - 70%); will introduce new pension legislation, allowing to increase average pension in 1990-93 by 1.5 times; will create an employment fund and introduce unemployment insurance.

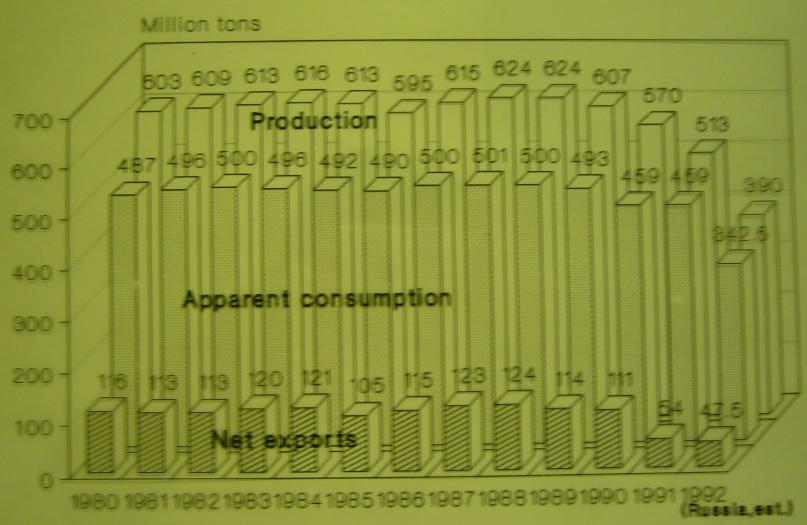
Ruble convertibility

After deregulating prices and balancing government budget, at the final (fourth) stage of the stabilization program, the internal convertibility may be achieved, i.e. a possibility for all foreign and Soviet companies, operating in the USSR to sell and buy freely foreign currency at market exchange rate.

Borrowing abroad and foreign aid

The inflow of financial resources from abroad is useful and necessary. The negotiations on this issue started. A special fund to accumulate western financial assistance and to control the use of resources is to be established. Aganbegyan and Gorbachev accused Yeltsin that his attempts to undermine central government's power in external economic policy create difficulties in obtaining western credits and financial assistance.

Figure 19.1.Soviet oil production,net exports,and apparent consumption (million metric tons)

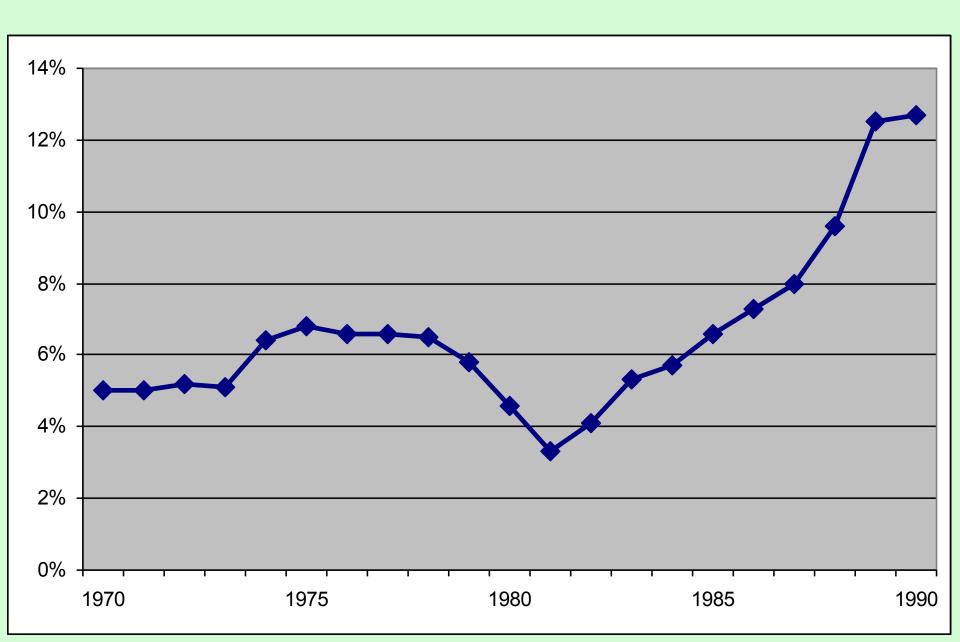


Source: PlanEcon Report, 1991, March 6.

Monetary overhang = delayed (consumer) demand = forced savings

- Definition the gap between money demand and supply at fixed prices
- Personal savings rate increased
 - Long-run level 5%, in 1990 13.9%, in 1991 22%
- Inventories in trade decreased sharply in 1985-1991
 - from 100-120 days of trade in the 1980s to 30-40 in December 1991
 - When prices were deregulated, trade stocks stabilized at the level of 50-60 days

Monetary overhang = delayed (consumer) demand = forced savings Household savings rate, as a % of personal disposable income



Monetary overhang = delayed (consumer) demand = forced savings Household savings rate, as a % of personal disposable income

Fig. 4. Personal savings as a % of personal disposable income

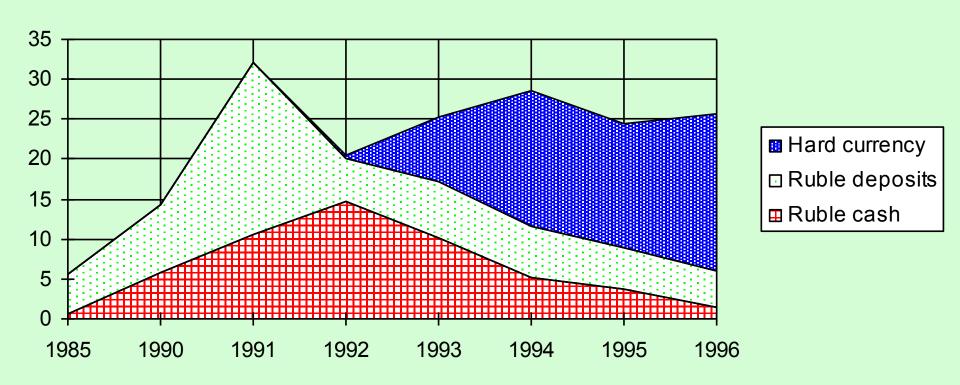
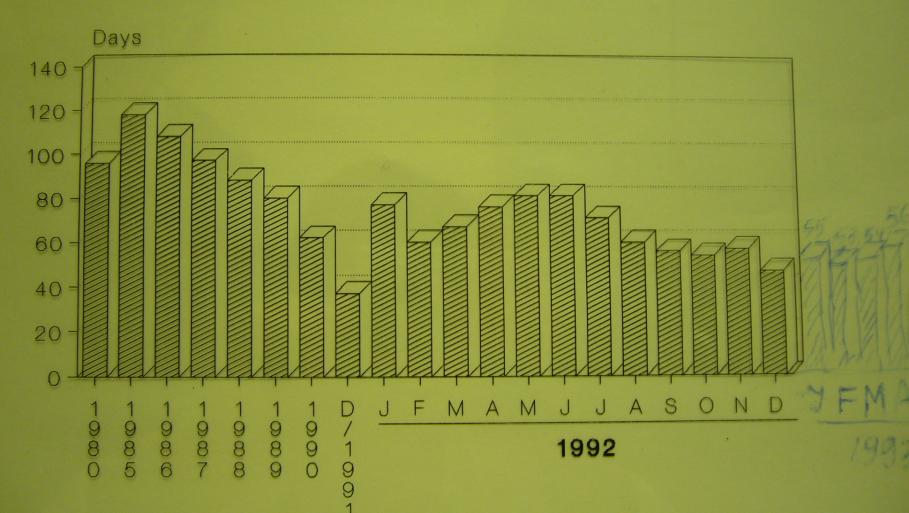


Fig.1. Inventories of consumer goods in industry and trade in days of retail trade turnover, end of period



Source: Goskomstat.

EC estimate of excess household savings, billion rubles

Year	Household	Consumer	Household	Savings rate	Savings rate	Excess	Cumulated
	disposable	expenditure	savings	percent	1970-1984	savings ^a	excess
	income				average		savings ^b
					percent		
(1)	(2)	(3)	(4)=(2)-(3)	(5)=(4)/(2)	(6)	(7)	(8)
1970	174.9	166.2	8.7	5.0	5.5		
1971	186.7	177.3	9.4	5.0	5.5		
1972	199.0	188.6	10.4	5.2	5.5		
1973	209.3	198.6	10.7	5.1	5.5		
1974	224.6	210.3	14.4	6.4	5.5		
1975	240.9	224.5	16.4	6.8	5.5		
1976	251.8	235.1	16.7	6.6	5.5		
1977	263.8	246.5	17.3	6.6	5.5		
1978	276.8	258.8	18.0	6.5	5.5		
1979	289.2	272.4	16.8	5.8	5.5		
1980	304.1	290.1	14.0	4.6	5.5		
1981	317.3	306.7	10.6	3.3	5.5		
1982	330.5	317.0	13.5	4.1	5.5		
1983	346.5	328.2	18.3	5.3	5.5		
1984	359.4	339.0	20.4	5.7	5.5		
1985	371.7	347.3	24.4	6.6	5.5	4.1	4.1
1986	384.9	356.9	28.0	7.3	5.5	7.0	11.0
1987	399.8	367.8	32.0	8.0	5.5	10.1	21.2
1988	436.3	394.4	41.9	9.6	5.5	18.0	39.2
1989	493.5	431.7	61.8	12.5	5.5	34.8	74.0
1990 ^c	562.5	491.3	71.2	12.7	5.5	40.5	114.5

^a Excess savings is defined as actual savings (column 4) minus the savings that would have been made if the 1970-84 average savings rate applied (column 6 multiplied by column 2). This is an annual flow.

Source: Stabilization, Liberalization and Devolution: Assessment of the Economic Situation and Reform Process in the Soviet Union. EC, December 1990, p. 163.

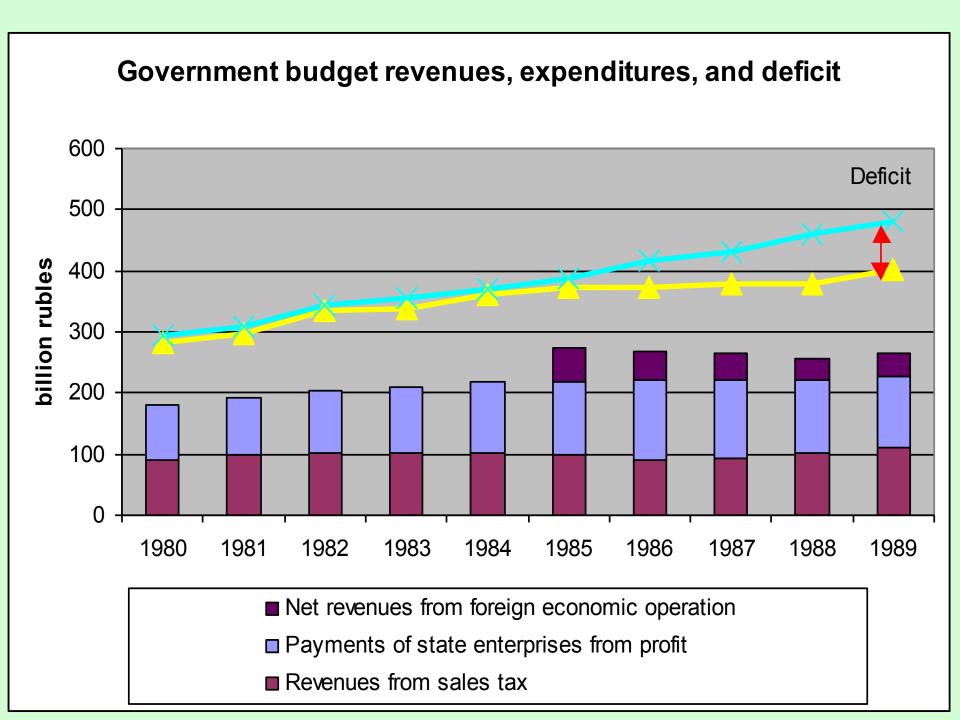
^b The monetary overhang is defined as the cumulative excess savings (column 7) since 1985. This is a stock value.

^c European Commission estimates.

Monetary overhang: origins

Inflationary financing of budget deficit

- First started in 1987
- Reasons for growing budget deficit: misfortunes and mistakes
 - Fall in oil prices in 1986. Oil export was increased, but not enough
 - Increase in expenditures: earthquake in Armenia, Chernobyl
 - Anti-alcohol campaign: drop in excise tax revenues to the budget
 - Law on self-financing of enterprises: decrease in share of profits paid to the budget



Legal sales of alcoholic beverages

Year	1960	1970	1980	1984	1985	1986	1987	1988	1989	1990
Vodka and liqueurs, mill. decalitres	144.1	230.4	293.9	286.6	251.2	156.6	123.1	136.9	179.5	
Wine, mill. decalitres	90.6	321.6	485.1	483.9	386.8	189.5	153.5	184.7	204.8	
Champagne, mill. decalitres	2.8	6.8	14.9	24.1	21.9	20.7	20.8	21.8	22.4	
Cognac, mill. decalitres	1.5	4.6	9.2	9.9	8.5	8.8	9.6	11.3	13.1	
Beer, mill. decalitres	251.9	421.1	620.7	662.0	667.8	496.9	510.9	564.8	608.1	
Consumption of pure alcohol per capita, liters	3.9	6.8	8.7	8.4	7.2	4.3	3.3	3.7	4.4	
Retail sales of alcoholic beverages, bill. rubles			43.1	51.8	46.4	36.3	35.7	39.9	49.8	
Turnover tax from marketing of alcoholic beverages, bill. rubles					30.1	27.2	29.1	33.4	40.4	39.0
Revenues of government budget from all turnover taxes					97.7	91.5	94.4	101.0	111.1	121.9

Source: Narodnoye Khozyaistvo SSSR (National Economy of the USSR) for various years; PlanEcon Report, March, 1991, p.18.

Government debt, billion rubles

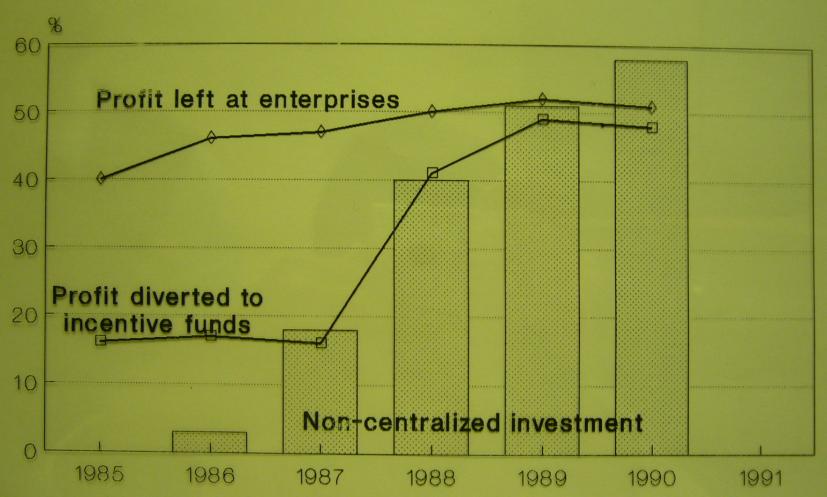
Years	1975	1980	1984	1985	1986	1987	1988	1989
(1) Bank credit - total	29.2	70.7	96.2	106.7	125.7	180.2	267.7	349.9
- against deposits of the public	29.2	70.7	96.2	106.7	125.7	144.7	165.7	185.5
- from state loan fund	1	-	-	-	-	35.5	102.0	164.4
(2) Non bank credit (loans from insurance funds, public and enterprises)	33.2	33.1	32.1	34.9	35.6	39.6	44.7	48.8
(3) Official domestic debt, total (3)=(1)+(2)	62.4	103.8	128.3	141.6	191.3	219.8	312.4	398.7
- as a % of GNP	12.7	16.8	16.9	18.2	20.2	26.6	35.7	43.1
(4) Agricultural price support fund	-	1	1	11.3	11.3	20.5	30.3	39.6
(5) Domestic debt, adjusted, (5)=(3)+(4)				152.9	172.6	240.3	342.7	438.3

Source: *A Study of the Soviet Economy*. IMF, World Bank, OECD, EBRD. 1991, Vol. 1, p. 125 (Data provided by the USSR Ministry of Finance and *Gosbank*).

Monetary overhang: origins

- Budget deficit financed by money emission
- Initially monetary overhang emerged in non-cash circulation
 - Enterprises were allowed to use a part of profits for investment; as a result, shortage of resources increased
 - Additional wage payments not allowed
- Abalkin's tax (1989): non-cash monetary overhang was transformed into cash circulation monetary overhang
 - Enterprises were allowed to increase wages.
 Additional high taxes did not prevent the increase in wages paid to the employees

Figure 16.1. The share of profit left at state enterprises and non centralized investment,% of total

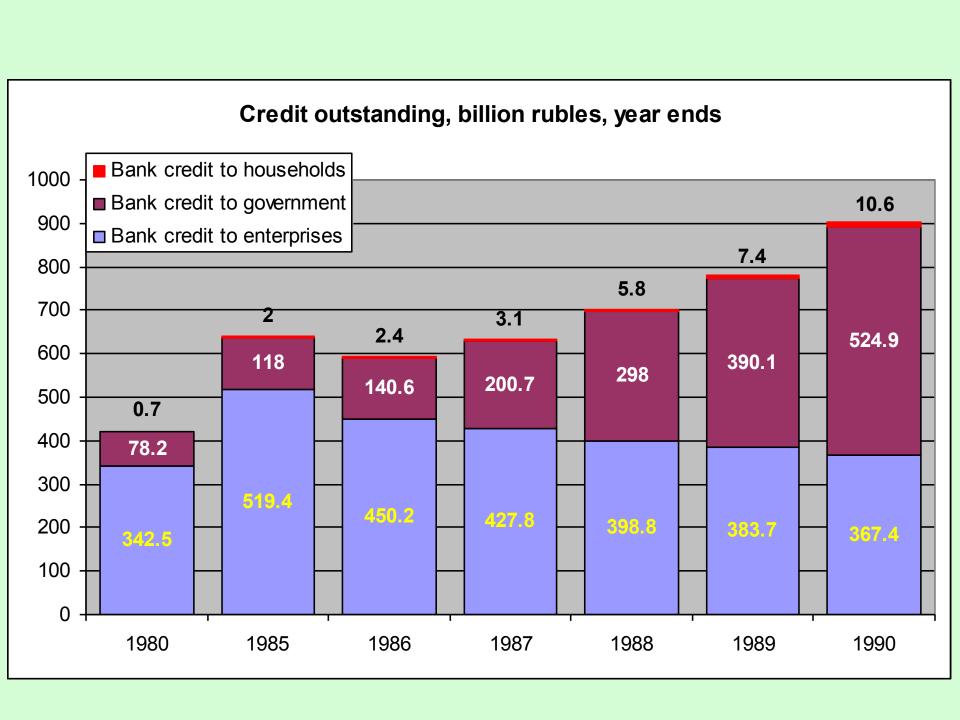


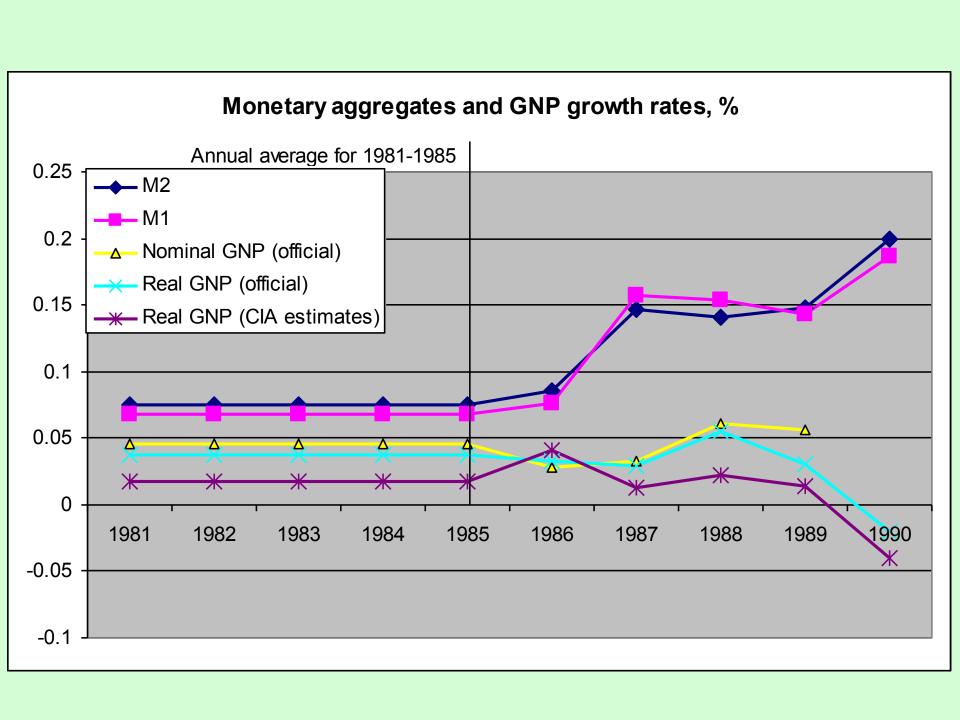
Source: Narodnoye Khozyalstvo SSSR (National Economy of the USSR) for various years.

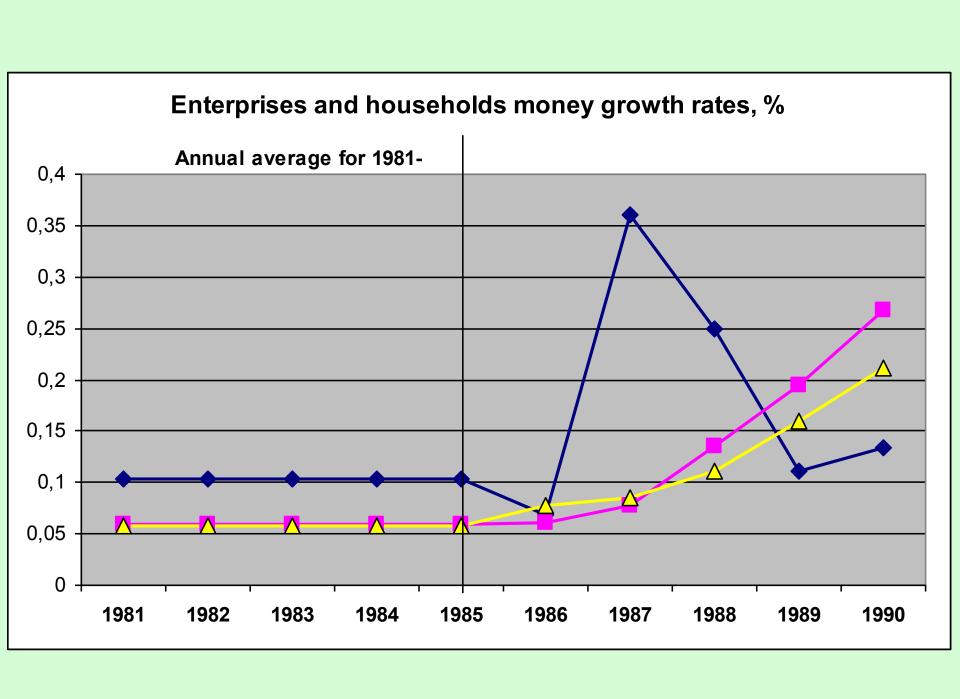
Taxation of enterprises revenues used for payments to employees (effective in the fourth quarter of 1989 and in 1990)

Increase in total payments to employees, as compared to preceding period, %	Tax payments for every ruble of the increase in payments to employees, rubles
less than 3 3 - 5 5 - 7 more than 7	no tax payments 1 2 3

Source: Izvestiya, 1989, August 11.







Evaluation of the possible inflation after price deregulation

A simplified equation for evaluating the price jump in the consumer goods market:

$$I(1 + ap) + F = (1 + p)(E + P&B + F-O),$$

where I - personal money income in the base period;

- p price increase in current period as compared to the base period (if prices doubled, p is equal to 1);
- a the degree of indexation in the current period (if prices double, while incomes increases only by 50%, a is equal to 0.5);
- F total financial assets of households (including money) by the end of the base period;
- E households expenditure for consumer goods and services in the base period;
- P&B "privatization and borrowing",

additional tangible and financial assets sold to households in current period (valued at base period prices);

O - monetary overhang, excess household savings at the end of the base period.

Evaluation of the possible inflation after price deregulation

Degree of indexation, %	Possible annual increase in prices, %, provided that households real additional investment in tangible and financial assets will total (billion rubles):						
	0	0 50 100 150					
0	31	24	18	12			
50	47	35	25	16			
75	61	45	31	20			
100	90	63	42	27			

Note: This is an evaluation of the possible price jump in 1991, provided that prices would have been deregulated on January 1, 1991. The actual value of variables for 1990 was used: I=560, F=570, E=490, O=200 billion rubles.

Evaluation of possible inflation in 1991 by 500 days program

Indexation, %	Additional investment into tangible and financial assets, billion rubles	Government budget deficit, billion rubles	Inflation,%
88	123	-2	53
87	37-98	+4	55
75	0	-8	90

Source: *Perekhod k Rynku. Kontseptsiya i Programma* (Transition to the Market. Concept and Programm), 1990, p. 224-233.

Таблица 9.8 Оценка возможной инфляции после дрегулирования цен в 1992 г. в России

Величина накопленных вынужденных сбережений на 1.01.1992 г. млрд. руб.		при		HE NH	(в%) декса- равном
	0%	50%	80%	90%	100%
200	43	78	151	220	404
250	52	100	217	357	1020
300	62	125	327	699	∞

Примечание: В расчете использованы фактические показатель для России за 1991 г. (I=758, E=590, F=459 млрд. руб.)

Evaluation of possible inflation after price deregulation assuming constant money velocity

Years	1980	1985	1990
(1) Households' expenditure for consumer goods and services, billion rubles	290.1	347.3	491.3
(2) M1 of households, billion rubles	153.1	203.6	371.2
(3) Mo of households, billion rubles	50.9	68.9	132.7
(4) M1 velocity, ratio, (1):(2)	1.89	1.71	1.32
(5) Mo velocity ratio (1):(3)	5.70	5.04	3.70
Assuming constant (1980) M1 velocity (6) - Needed M1, billion rubles, (1):1.89 (7) - Excess M1, billion rubles, (2)-(6) (8) - Needed price increase, %, (7):(6)	153.1 0 0	183.8 19.8 10.8	259.9 111.3 42.8
Assuming constant (1985) M1 velocity (9) - Needed M1, billion rubles, (1):1.71 (10)- Excess M1, billion rubles, (2)-(9) (11)- Needed price increase,%, (10):(9)		203.6	287.3 83.9 29.2
Assuming constant (1980) Mo velocity (12)- Needed Mo, billion rubles, (1):5.70 (13)- Excess Mo, billion rubles, (3)-(12) (14)- Needed price increase, %, (13):(12)	50.9 0 0	60.9 8.0 13.1	86.2 46.5 53.9
Assuming constant (1985) Mo velocity (15)- Needed Mo, billion rubles, (1):5.04 (16)- Excess Mo, billion rubles, (3)-(16) (17)- Needed price increase, %, (16):(15)	1 1 1	68.9 0 0	35.2 97.5 36.1

Note: Needed by 1991 price increase is calculated as a ratio of excess money to needed money.

Source: PlanEcon Report, 1991, March 27.

Means to reduce/eliminate monetary overhang

- Price increase (deregulation)
 - What was done: prices increased in April, 1991 by 40%. Some prices deregulated, so de facto in 1991 price level doubled. Then prices were deregulated at the beginning of 1992 – prices increased 3.5 times in January 1992.
- Produce more consumer goods
 - Two ways to do it:
 - 1) reduce investments,
 - 2) conversion of military production
 - What was done:
 - 1)reduction of investment in the framework of CPE (without the transition to the market) caused the decline in output
 - 2)conversion was not successful, because additional investment and time were needed to get benefits in the form of increased production of consumer goods

The share of investment in national income and GNP, %, official statistics

Years	1980	1985	1986	1987	1988	1989	1990	1991*
Share of net investment (accumulation) in national income	23.9	26.4	25.8	24.6	24.8	23.1	20	13
Share of gross investment in GNP - total	30.7*	32.0	32.0	32.1	31.5	33.1		
- excluding investment in residential construction*	27.3	28.4	28.1	28.0	27.5	27.0		

^{*}Estimate.

Source: Narodnoye Khozyaistvo SSSR (National Economy of the USSR) for various years.

Defence conversion program, official data

Years	1989,	1990,	1995,	1991-95,
2 53.55	actual	planned	planned	planned
Share of military expenditure in	12.0	11.8	6-8	8.3-9.5
national income,%				
Military expenditure, billion rubles				
(assuming a 3% annual increase in real				
national income), total	77.3	70.9	45.4- 60.6	280-325
- purchases of equipment and supplies	32.6	31.0		
- R & D	15.3	13.1		
- operating expenditure	20.2	19.3		
- military construction	4.6	3.7		
- pensions to personnel	2.3	2.5		
- other	2.3	1.3		
Share of civilian goods in total defence				
industry output, %	40	50	60	
Capital investment, needed for				
conversion, billion rubles		4.0-4.5		38.0
Production of consumer durables and				
its increase due to conversion, pieces				
per 1000 inhabitants:				
- radios	30		42	+17*
- TV's	34		49	-1*
- tape recorders	20		25	-5*
- refrigerators and freezing cameras	22		31	+10*
- washing machines	23		23	-7*
- vacuum cleaners	18		30	+8*
- sewing machines	5		11	+6*

^{*} Increase in output per 1000 inhabitants due to conversion is calculated on the assumption that without conversion this output would increase at an average annual rate of 1981-88.

Source: *Mirovaya Ekonomika i Mezdunarodniye Otnosheniya* (World Economy and International Relations), 1990, N11, p. 35,37,39.

Means to reduce/eliminate monetary overhang

- Currency reform (confiscatory to decrease the money supply)
 - What was done: Pavlov's reform in 1991 reduced money supply only by 4-5 billion rubles – by exchanging banknotes of the largest denomination (50- and 100-ruble bills)

Privatization and asset sale

 What was done: privatization started only in 1993, when savings were already lost due to high inflation, so vouchers were issued

Domestic borrowings

- The idea was to transform forced savings into voluntary savings by offering higher returns on investment into financial assets
- What was done: loan securities at 15% issued in 1990, when hidden inflation was already higher (too little, too late)

Distribution of personal savings in the Saving Bank, January 1, 1989

Size of savings accounts	Number of accounts, million	Number of accounts as a % of total	Value of accounts, billion rubles	Value of accounts as a % of total
All saving account	196.0	100.0	296.7	100.0
- less than 300 rubles	65.4	33.3	7.4	2.4
-300-1000 rubles	44.8	22.9	28.2	9.7
-1000-2500 rubles	48.2	24.6	75.2	25.4
-2500-5000 rubles	24.3	12.4	82.3	27.8
-5000-10000 rubles	11.1	5.7	72.8	24.5
-10000-25000 rubles	2.2	1.1	28.3	9.6
-25000-50000 rubles	0.05	0.03	1.6	0.5
-more than 50000 rubles	0.003	0.002	0.2	0.1

Source: *Narodnoye Khozyaistvo SSSR v 1989 godu* (National Economy of the USSR in 1989). Moscow, 1990, p. 93.

Opinion polls on private property rights and private entrepreneurship (end of 1989 and beginning of 1990)

	Percentage of
	respondents
1. Support the idea of private enterprise?	
- Yes	47
- No	15
2. Should private companies have the right to hire?	
- No	42
- Yes, limited to a small number (say, 10)	12
- Yes, limited to substantial number	13
- Yes, without restriction	13
3. Support individual use of land	
- Yes	87
- No	10
4. Support granting the right to buy and sell land	
- Yes	24-26
- No	50
5. Peasants	
- Want to become independent farmers	10-14
- Wish to have individual plots	40
- Want land but fear it will be taken back	30-33
- Don't ever want to own land	10
6. How do you evaluate the performance of new cooperatives?	
- Positively	15
- Negatively	29
- Mixed feelings	56
7. What type of enterprises should dominate in future Russian economy?	
- State conventional and self accounting enterprises	66
- Joint-stock companies	9
- Leased enterprises	15
- Cooperatives	4
- Private	7
- Joint-ventures	10

Sources: Question 1 and 2, *Izvestiya*, February 26, 1990; question 3 through 5, *Izvestiya*, February 28, 1990; question 6, *Economika i zhiz'n*, November 2, 1990; question 7, *Argumenty i Fakty*, 1990, N 21.

Means to reduce/eliminate monetary overhang

Foreign loans

- The idea of the "anesthetic surgery" to borrow the money abroad in order to pay for the initial costs of transition until market reforms will bring major benefits ("marketization dividend")
- What was done: Money were borrowed, but not used for paying the cost of reforms (because there were no major market reforms)
- Foreign direct investments (FDI)
 - What was done: too many obstacles for FDI, so capital inflow was insignificant

Means to reduce/eliminate monetary overhang: summary

- 1. Price increase (deregulation)
- 2. Produce more consumer goods
- 3. Currency reform (confiscatory)
- 4. Privatization and asset sale
- 5. Domestic borrowings
- 6. Foreign loans
- 7. Foreign direct investments (FDI)
- 1-3: costly or difficult to implement effectively;
- 4-7: carried out, but too little and too late

Finally monetary overhang was eliminated via price deregulation in January 1992