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Economic Reform in Russia in 1992: The Government Battles Labor Collectives[1]

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Abstract

The economic "battle" that took place in Russia in 1992 consisted of the struggle between the liberally-oriented government and the labor collectives, the latter of which regarded the government's reform program as an attempt to encroach upon the established system of collective property. The specific form of collective ownership that has been in de facto operation since the beginning of 1992 explains to a large degree the unorthodox reaction of the Russian economy to the introduction of shock therapy, and the subsequent failure of the government to make a rapid transition to a western-style economy. To support this hypothesis, the present article gives an analysis of the patterns of macroeconomic indicators in 1992, examines the strategies of the collective resistance of enterprises to the government's credit and monetary policies, discusses current aspects of the privatization process, and addresses the basic behavioral traits of collective firms.

1 Introduction

When the Yeltsin-Gaidar government announced its plan to liberalize prices on 2 January 1992, the majority of economists forecast that prices would rise by 50–100%, or by 150% at most. Their method of calculation was simple: They compared the volume of the population's forced savings with the size of commodity turnover, and the ratio of the two yielded the desired estimate-provided that cash and credit emissions were kept under fairly stringent control. This logic stemmed from the belief on the part of the majority of government economists, international experts, and sovietologists that stereotypes for economic behavior could be universally applied. The market would reduce prices when demand was low and raise them when it was high; hence, it was concluded that the market would achieve a state of equilibrium as a result of "the law of supply and demand" and austere credit and monetary policies. Although the high degree of

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monopolization of production was considered a major pitfall, a monopolistic market was viewed as a lesser evil than shortage of goods[2] (and not without justification). As a result of changes in the structure of state orders, it was expected that economic performance would decline and unemployment would grow rapidly, reaching levels as high as 10–15% by the end of 1992. However, it was also believed that market stimuli and a reduction in defense expenditures would usher in the beginning of economic recovery within a year.

A number of economists warned that the irrationality of economic forces could impede the attainment of economic equilibrium, that the study of market stereotypes takes time, and that price reform would not lead to rapid structural *perestroika* owing to the natural limitations on the velocity of the renewal of funds. It should be noted, however, that such arguments were of an intuitive nature and could not have been otherwise, since no developed theory on the process of economic liberalization yet existed.

The results of shock therapy were as unexpected for its proponents as for its opponents. Within a year, consumer prices had risen by a factor of twenty-six and wholesale prices by a factor of thirty-four. Production levels had fallen much lower than had been anticipated (produced national income had fallen to 80% of its 1991 level), whereas the number of unemployed still had not exceeded more than one percent of the working-age population.

A number of scrupulously researched studies (see, in particular, [Gurvich, Kantorovich, et al. (1993)], [Reform Gaidar's Way: 500 Days Later (1993)], [Enterprises and the Government (1992)], [Ofer (1992)], [Ickes and Ryterman, (1992), (1993)]) have been dedicated to analyzing the events that took place in the Russian economy in 1992. It is my view, however, that a completely convincing explanation of the economy's unorthodox reaction to shock therapy has yet to be found. Monopolism and the inability to operate in a market setting have been advanced as the main reasons for that reaction, yet they fail to fully explain it. I have attempted to prove this contention by examining macroeconomic trends in 1992 in order to provide an analysis of the behavior of Russian firms. This analysis led to the conclusion that, in addition to the two aforementioned reasons, it is necessary to add a third, possibly weightier one: the specific form of ownership that has been in de facto operation in Russia since the beginning of 1992. The economic "battle" that took place in that year consisted of the struggle between the liberally-oriented government and the labor collectives[3] (including) their managers), the latter of which regarded the government's reform program as an encroachment upon their wages; their jobs; and their rights to use, manage, and own principal

[2] Y. Gaidar stated this directly in an interview given at the beginning of the reform program.

[3] Here and elsewhere, unless otherwise noted, reference is being made to labor collectives in industry, construction, trade, and consumer services; they employ slightly more than half of the total employed population. The labor collectives in agriculture, transport, communications, and in most of the non-productive sphere have not been examined in this paper.

funds. I have subsequently advanced additional arguments in support of this hypothesis by examining the strategies of the collective resistance of enterprises to the government's credit and monetary policies (section three), by briefly tracing the evolution of state property during the Soviet period (section four), and by analyzing current aspects of the privatization process (section five).

In section six I have addressed the theory of collective firms in order to introduce the concept of the artel monopoly, which, it could be said, reflects the basic behavioral peculiarities of Russian enterprises. While their reaction to the macroeconomic trends that were observed in 1992 was non-standard, it was nonetheless in keeping with their own objectives as collective monopolies. Hence, certain components of that reaction are likely to be repeated in the future. This concerns, in particular, the phenomenon of interenterprise debt, which is closely connected to monopolistic behavior in uncertain conditions.

An expansion of the system of collective monopolies would increase the danger that economic evolution in Russia will end in a deadlock. Although the claims of labor collectives are dubious from the standpoints of both social justice and economic efficiency, the established nature of production relations must be taken into acount in elaborating a future reform strategy. Several elements of such a strategy have been discussed in the conclusion of this article.

2 Price Liberalization: Economic Decline in Conditions of Full Employment

It is outside the purview of the present work to provide a complete analysis of the complicated economic events that took place in Russia in 1992. I have therefore limited myself to an examination of the patterns of several indicators that elucidate the behavior of industrial enterprises (see Table 1). Although the initial data were broken down by month, I have chosen the quarter as the temporary unit of analysis in order to smooth out incidental fluctuations. An atypical month – December 1991 – has been taken as a base in order to reflect the aftermath of shock therapy.

Since the plan to decontrol prices was announced in advance, the population managed to stockpile goods. This served to intesify the fall in demand that followed price deregulation, with the result that the real volume of commodity turnover in the first quarter of 1992 fell to less than one-third of its December level. The volume of production (in constant prices) fell insignificantly, and stocks of goods grew sharply.[4]

The state followed its plan to hold emissions in check, thereby precipitating an spasmodic rise in the velocity of cash circulation (line 3) that nearly reached a rate

[4] Not only relative to December figures but also in comparison with the first quarter of 1991, when the amount of goods in stock, taken as a monthly average, was enough to last for forty-nine days [Economic Review (1992) 1:47,] [Statistical Bulletin (1992) 3:32, 4:19].

Table 1. Selected Economic Indicators for Russia

Indicator	December 1991	Quarters of 1992 (calculated using the monthly average) I	II	III	IV
1. Volume of industrial production (in percentages)	100	99	89	76	78
2. Volume of commodity turnover in December 1991 prices (in percentages)	100	31	29	33	37
3. Ratio of commodity turnover to M_0^{avg}	0.44	0.53	0.52	0.41	0.43
4. Stocks of goods in the wholesale and retail network at the end of the month (in days)	37	68	79	62	53
5. Real wages of blue and white-collar workers in industry (in percentages)	100	42	42	45	50
6. Real money income per capita (in percentages)	100	39	28	36	39

Sources: Line 1: [Russia – 1992. Economic Trends (1992) p. 20], [Economic Review (1992) 1:8, 2:6, 47, 5:9], [On the Development of Economic Reform in the Russian Federation (1993) p. 28). Lines 2 and 3: [Basic Indicators of the Functioning of the Economy of the Russian Federation in 1992 (1993) p. 76], [Russian Economic Review (1993) 1:58, 1:61–62]. Line 4: [Economic Review (1992) 1:47], Statistical Bulletin (1992) 3:32, 4:19, 5:18, 6:18, 7:18, 9:18, 10:49], [Statistical Press Bulletin (1992) 12:23], [On the Development of Economic Reform in the Russian Federation in 1992 (1993) p. 15]. Line 5: [Gurvich, Kantorovich et al., (1993) p. 53], [Golovachev (1993)]. Line 6: [Statistical Bulletin (1992) 9:46, 10:91], [Basic Indicators of the Functioning of the Economy of the Russian Federation in 1992 (1993) p. 68–69]. The summary index of consumer prices in [Basic Indicators of the Functioning of the Economy of the Russian Federation in 1992 (1993) p. 75] was used as a factor of deflation to calculate lines 2, 5, and 6. M_0^{avg} was calculated as the average money supply (M_0) at the end and the beginning of a given month.

of 6.4 revolutions a year; in December this figure had not exceeded 5.3.[5] The shortfall of cash and credits (especially in April and May) and, consequently, of demand for output did not force enterprises to lower their prices. Instead, stocks of goods continued to grow during the second quarter, as is the tendency when the velocity of circulation of the money supply is high, real sales are falling, and

[5] The ratio of retail commodity turnover to the money supply (M_0) used here is not considered a standard measure of the velocity of money circulation. It is imprecise, since a part (evidently, a small part) of retail purchases was paid for in non-cash transactions; on the other hand, cash was used by enterprises to settle their accounts with each other during this period. An estimate of the velocity of circulation as the ratio of GDP to M_2 is given below.

production is in a "landsliding" decline. In June, in order to avert a catastrophe, the government and the Central Bank were obliged to increase the rate of credit emissions [Russian Economic Review (1993) p. 62]. This immediately led to a slowdown in turnover, an increase in its real volume, and a reduction in stocks of goods. The level of production, however, which was the most inert indicator, continued to fall and stabilized only at the end of the third quarter after having fallen more than 20% from its December 1991 level.

Despite this slump and – as would become apparent later – the severe shortage of working capital, the number of registered unemployed on 1 February 1993 was only 628 thousand[6] – that is, less than 1% of the total working population; approximately 40% of that number had lost their jobs as a result of layoffs. Rather than dismiss workers, enterprise managers preferred to send employees on leave, place them on a part-time working schedule, and put up with periods of idleness as well as slumps in labor productivity.

• The wage policy carried out by managers was just as unorthodox from the point of view of "generally accepted market logic". As a result of price shock, real salaries in industry plummeted to 42% of their December level. Subsequently, firms strove to increase them against all odds (see [Gurvich, Kantorovich, et al. (1992) p. 16]. Even during the second, most difficult quarter when financial pressures were particularly great, real wages did not fall. (It is true, however, that wages for April and May were held back and paid out together with June wages owing to a shortfall of banknotes.) Wages subsequently grew.[7]

Deregulating prices while curtailing state expenditures turned out to be especially painful for those branches that did not have developed markets for their final output; consequently, they were financed almost entirely from the state budget. The labor collectives of enterprises and organizations in the branches of health, education, culture, art, and science were not in a position to take advantage of the two main elements of the strategy of resistance employed by the industrial labor collectives: namely, raising the prices of output and halting payments ot suppliers (see section 3). Consequently, the relative wages of workers in those branches (which employed more than 25% of the working population) fell sharply.

Thus, the strategy chosen by industrial, construction, and transport enterprises enabled them to reduce the losses that resulted from shock therapy at the expense of other branches. Nonetheless, state-financed branches acted in an analogous fashion insofar as they could; in particular, they rarely resorted to laying off workers.

[6] The overall number of job seekers on the same date has been estimated at 1,029,000.

[7] The indices for total commodity turnover, wages, and incomes given in lines 2, 5, and, respectively, of Table 1 might seem implausibly low. It should be taken into account, however, that the corresponding indicators for December 1991 were significantly higher than the overall averages for that year. Moreover, whereas commodity turnover is usually divided by the index of retail prices, for the sake of consistency I have used the consumer price index, which rose much more quickly during the period under review.

What precipitated this particular type of behavior on the part of firms in Russia? Does it not bear witness to the specific nature of the intrafirm relationships between proprietors, managers, and workers? Of course, it would have been unrealistic to expect the directors of Russian enterprises to maximize profits in a highly professional manner. Yet, why did they refuse to use even the simplest of market tactics?

It is my hypothesis that a system of relationships and interests had already been formed by the onset of shock therapy that was typical for this particular brand of cooperative firm. In actuality, enterprises had ceased to belong to the government and had begun to be regarded by their labor collectives as the latter's inalienable property. The workers received income from this property which, in turn, secured their membership in the labor collective. Dismissing a worker was regarded as an infringement of ownership rights, a violation of the solidarity code, and the setting of a precedent that was dangerous for all. Managers became increasingly aware of their dependence on the collectives and conducted themselves as their representatives.[8] In such circumstances, it was possible to make a worker redundant against his will only in exceptional cases. At the same time, the maximization of payments to members of the labor collective was the natural goal of the firm. This hypothesis partially explains the data presented above. Before advancing other arguments in support of it, however, I have examined yet another phenomenon that played an important role in the economic drama of 1992.

3 The Strategy of Collective Resistance: The Interenterprise Debt Crisis

After price liberalization, which devaluated deposits in bank accounts, the most important objective of the government reform program was to radically limit monetary and credit emissions. Such a policy should have transformed soft budgetary limitations on enterprises into stringent ones and strengthened the ruble. It was assumed that low demand would force enterprises to stop raising prices, and that the ensuing low profit margins would not allow them to increase wages; hence, inflation be put under control. It was expected that many enterprises would go bankrupt and undergo reorganization, thereby facilitating the structural *perestroika* of the economy. The data given in Table 1 indicate that these expectations were not realized, since firms conducted themselves in an altogether different fashion.

It has sometimes been asserted that the government acted indecisively in implementing its economic program. It is my contention that there is no general basis for such an accusation (individual deviations notwithstanding), since strong

[8] Of course, this description has been stylized and represents nothing more than a verisimilar model.

Table 2. Velocity of Money Circulation

	January 1992	Quarter I	Quarter II	Quarter III	October 1992
		(average per month)			
Velocity of circulation (revolutions/per month)	0.36	0.41	0.46	0.47	0.41

Source: Calculated as the ratio of GDP to M_2^{avg} on the basis of data in [Russian Economic Review (1993) 1:61–62], which gives the estimated values of GDP

financial and taxational pressures were in fact brought to bear upon enterprises. The pattern of the velocity of circulation of money supply in 1992 supports my point of view. In Table 1, it has been measured as the ratio of commodity turnover to M_0. Table 2 contains an estimate of the velocity of circulation measured as the ratio of GDP to M_2^{avg} (the average of M_2 at the beginning and end of a given month), and includes both cash and the bank deposits of enterprises and of the population.

The velocity of circulation was 4.3 revolutions per year in January 1992 and 5.6 in the third quarter of 1992. It is worth pointing out that this same indicator in the USA for the period 1960–1987 never once exceeded 2 [Kaufman (1989) p. 588].[9] Of course, Russian technology cannot be compared with American technology in terms of the speed at which it allows payment transactions to be executed. Moreover, transactions are usually slowed down by the presence of the Clearing-Cash Centers (*Raschetno-kassovye tsentry*), which are subordinate to the State Bank and act as the obligatory intermediaries between commercial banks; a network of 1,400 Clearing-Cash Centers extends across the entire territory of Russia. Even the execution of non-cash payment transactions within the city of Moscow often took from two to three weeks [Yanovskiy (1992)], and interregional transactions took as long as two months to clear. In such conditions, the rapid velocity of circulation could only have been the result of intensive efforts on the part of firm managements. It should become clear in the future which methods they were using to achieve this goal.

In addition to a scarcity of working capital, enterprises experienced a serious cash shortage, especially during the second quarter [Statistical Bulletin (1992) 5:167–168]. Many enterprises were even forced to withhold the payment of wages.

[9] Kaufman (1989) provides data on the relationship of GNP to M_2, but the difference in the given case is not notable.

How did enterprises manage to survive under such exceedingly harsh monetary (and fiscal) pressure? It was only possible thanks to the use of a number of devices: a) the use of cash to settle accounts, thereby bypassing the banking system altogether; b) the transition to barter transactions; c) the partial payment of wages in kind; and d) the cessation of payments to suppliers.

Experiencing difficulties in receiving cash in banks and attempting to avoid the lengthy delays involved in non-cash transactions, trade enterprices began to hold on to proceeds (i. e., not depositing them in the bank) in order to make immediate payments for deliveries. This money was distributed across the entire production chain, thereby ensuring (together with the money from the commercial sphere) the continuation of the sale of intermediate goods in exchange for cash. This practice was retained in its essence even after the cash crisis had ended; in conditions of spiraling inflation, it turned out to be more profitable to transfer money by surface or even air transport than to wait several weeks for a transaction to clear. Furthermore, this mode of exchange, like the other modes listed above, enabled enterprises to evade taxation.

In a variation of the "selling for cash" strategy described above, enterprises began to pay workers part of their wages in kind with the goods produced by the firm. The employees of a tire factory, for example, could be paid in automobile tires. By receiving goods at the estimated wholesale rate and selling them at the commercial rate, workers effectively increased their actual wages. Barter was yet another method of limiting the demand for money and increasing wages. A chemical enterprise, for example, could exchange its output for consumer goods and then use those goods to pay its workers part of their wages – again, at wholesale rates. In certain instances workers were given coupons, which they could redeem in the factory cafeteria or store.[10]

The three aforementioned methods that reduced the need for money would most likely not have allowed enterprises to resist the financial pressure exerted upon them had they not discovered a fourth, exceedingly simple, yet effective method: Having exhausted their working capital, enterprises simply stopped paying their suppliers. Those enterprises, in turn, did not make deliveries of raw materials. Within a short period of time, the reciprocal extension of credit – hitherto practiced on a relatively small scale – had encompassed the majority of firms. This collective strategy of resistance led to a crisis in government policy, which was subsequently labelled the "interenterprise debt crisis".

The interenterprise debt crisis has been described in several studies [see, in particular, Ickes and Ryterman (1992), Ickes and Ryterman (1993), Yanovskiy (1992)]. I have put forward in the given work only a few figures for purposes of illustration.

[10] Different types of pseudo-money were in use in a number of cities and regions as a result of the cash shortage.

In the first quarter of 1992, payment was not made for 22% of produced industrial output; by the second quarter, this figure had reached 37%. The amount of indebtedness that accumulated during the month of April was 578.4 billion rubles, i. e., 67.7% of the output that was dispatched during the month. Overdue debts accounted for 46%, or 524.7 billion rubles, of the total debt volume. Moreover, 73% of all industrial enterprises had such debts [Statistical Bulletin (1992) 5:167–169]; by mid-year, this percentage had increased to 79%. Only 1 July the total amount of indebtedness in the economy was 3.2 trillion rubles, which represented an increase of 50% during the month of June alone [Socioeconomic Situation of the Russian Federation. Economic Review (1992) 5:16–17].

The failure to return cash to banks and to make payments deprived the government's austere credit policy of all sense and disorganized the system of settling accounts. Hence, the government attempted to force enterprises to observe market standards. Presidential Decree No. 622, issued on 14 June 1992, ordered enterprises to settle their accounts with one another on a non-cash basis only and introduced limits on the storage of cash. This limit could be exceeded only for the purpose of making wage payments and for no longer than three working days. On the same day, Presidential Decree No. 623 was issued, which established the procedure for filing bankruptcy and rehabilitating enterprises. However, since it was unfeasible to declare some 80% of all enterprises bankrupt, the government was forced to retreat from this measure.

Presidential Decree No. 720 followed on 1 July, in conjunction with which the Central Bank, over the next two months, carried out the mutual cancellation of enterprise debts according to the asset and liability balance of each firm. The amount of bank credit issued by the government to enable net debtor firms to make payments to net creditor firms did not exceed the former's total liability. Some 2 trillion rubles worth of debt was offset between enterprises, and the uncancelled ("net") debt amounted to 215 billion rubles [On the Results of the Socioeconomic Development of the Russian Federation in 1992 (1992) p. 33].

Presidential Decree No. 720 proposed that the indebtedness of state enterprises incurred after 1 July 1992 serve as a basis for instituting bankruptcy procedures. Simultaneously, a directive of the Central Bank allowed enterprises to demand prepayment for delivered output. Nevertheless, even after debt had been written off and the working capital of enterprises replenished thanks to the credits issued by the Central Bank, the system of extending reciprocal credit continued and debts again began to grow. According to the estimates of experts, by 1 December 1992 the volume of indebjednes of industrial enterprises for dispatched output had risen to 4.1 trillion rubles, 2 trillion of which was for overdue debts [On the Results of the Socioeconomic Development of the Russian Federation in 1992 (1992)].[11]

[11] In [On the Development of Economic Reforms in the Russian Federation (1993) p. 6], the figure of 2 trillion is as of January 1st. Two-thirds of the enterprises researched had overdue debts.

These figures were not catastrophic, however, since wholesale prices had risen nearly threefold during the past five 4 months.

In discussing the reasons for the insensitivity of enterprises to the fall in demand, the high degree of monopolization of production is usually mentioned in the first place. Also high on the list of reasons is the mode of thought formed by an "economy of deficit", according to which the selling of a good or service should never meet with any difficulty. It is worth noting, however, that the monopolist usually reacts to a reduction in demand by lowering prices,[12] although not as steeply as in a competitive market setting. The habit of not paying particular attention to sales problems appears to have influenced the size of the January 1993 price leaps. Although enterprises began to encounter such problems very soon, they still did not stop raising prices. Instead, they simply stopped making payments and created a mechanism for extending reciprocal credits to each other.

Of course, the absence of a law on bankruptcy (which only went into effect on 1 March 1993) and similar legislation greatly eased the decision to stop making payments. Often a firm/consumer did not have a choice, since, as noted in [Gurvich, Kantorovich et al. (1993) p. 20], "... in new conditions 'branch patriotims' and solidarity between similar enterprises manifested themselves first of all, and that is why their behavior was of a cartel-like rather than a competitive nature". Nevertheless, the debt crisis was clearly connected with a certain degree of risk for suppliers as well as for consumers. The extension of reciprocal credit required a cognizance of the situation as a whole as well as mutual consent. I would even venture to suggest that the relationships between suppliers and consumers from different branches were also of a cartel-like nature. Of course, this did not arise purely out of reasons of solidarity; branch and regional organs could solicit suppliers on behalf of their enterprises. As more and more enterprises were drawn into the reciprocal credit system, their mutual conviction that the government should retreat was fortified. Moreover, the realization of their expectations strengthened their conviction that their chosen strategy would continue to meet with success.[13]

[12] See section six, where it is also shown that monopolism can aid the development of a wave of nonpayments.

[13] In [Reform Gaidar's Way (1993)] and [Enterprises and the Government: The Difficult Road to Compromise (1992)], with which I became acquainted only after this article had already essentially been completed, the conscious opposition of enterprises to government policy is also emphasized. While in those works an enterprise is identified with its management, I identify it with its labor collective.

4 The Evolution of State Property

In order to clarify the thesis that Russian enterprises were cooperative firms of a distinctive type at the time of price liberalization in January 1992, it is useful to trace the evolution of state property in the USSR and examine the process of privatization in Russia.

In the well-known triad that defines property rights as the rights to own, manage, and use property, the first element is the most conservative one. The state exercised its right of ownership in full measure until 1988 through the appointment and replacement of the high-level managers of enterprises. The second and third elements of the triad – the rights of management and use – had already been partially delegated, and were delegated more and more as the requisite mechanisms evolved. During the pre-war years, the fulfillment of orders from above, including planning tasks, was ensured almost exclusively by means of compulsory administrative measures, Party discipline, and repression. Nonetheless, the "Fund for the Awarding of Prizes in kind" had already been established by 1920. In 1923 it was succeeded by the "Fund for the Improvement of the Way of Life of Blue and White-Collar Workers, and in 1936 the "Director's Fund" was introduced. These last two funds were formed using allocations from profits. In 1955 the Director's Fund was transformed into the "Enterprise Fund", which accounted for up to 7–8% of the wage fund; its primary aims were to better the welfare of workers and improve production [Garetovskiy (1964)]. Beginning in 1967 the schemes for setting up and allocating resources to economic incentive funds, including the "Fund for Material Incentives", the "Fund for Social and Cultural Activities", and the "Fund for the Development of Production", changed with each five-year plan and sometimes even more frequently (see, for example, [Polterovich and Shapiro (1985)]. As the fulfillment of the plan became more and more a matter of economic choice rather than necessity, incentive funds served to strengthen the mutual dependency of workers[14] and facilitate the setting of a single goal for the entire labor collective.

The paramount role played by the labor collective was always an essential tenet of Marxist and Soviet propaganda. Although the elements of worker self-management that appeared after the October Revolution were eliminated relatively quickly, the state nonetheless strove to make "relations of production" occupy as large a place as possible in the lives of the average worker. Enterprises distributed apartments and places in créches and kindergartens; parcelled out vouchers for rest homes, sanitoriums, and garden plots; afforded apportunities to engage in sports or dance; and provided access to medical and many other types of services as well as to scarce goods. This system found support in the mass collective psychology while simultaneously reinformcing it. The development of a system of economic incentives made not only wage payments, but also the scope of the services

[14] An analogous role was played earlier by "socialist competition".

available to workers largely dependent on the work efforts of the collective and on the proficiency of its managers.

In any system, a manager experiences pressure from two sides: that of the owner (whether a private owner, the state, or shareholders), on the one hand, and that of the labor collective on the other. As state control began to weaken, enterprise managers gradually became the spokesmen for the interests of their labor collectives.[15]

Beginning in the 1960s, legislation was adopted that curtailed the rights of the state to administer enterprises. Before 1962 an enterprise was legally helpless when faced with any directive issued by a ministry; hence, at any time it could be arbitrarily forced into unnecessary or unprofitable production, or its production timetable could be changed. In 1962, owing to the situation with deliveries, enterprises were given the right to refuse to engage in unnecessary production. In 1965, Article 47 of the Law on Enterprises was adopted, declaring that ministries could change the conditions of a firm's annual plan only in exceptional cases and with the management's consent [Kroll (1989)]. Of course, these changes were evident only on paper and served as a reminder of their theoretical possibility.

Nonetheless, directors of enterprises and labor collectives became ever more aware of their political power, especially since the majority of the intelligentsia and many economists supported demands to give them greater freedom of action. The Law on Enterprises adopted in 1987 was to a large degree the result of the joint pressure that had been brought to bear upon party and government organs over a period of many years. Following it adoption, the production plans for nearly 2,000 enterprises were cancelled, and planning was limited to issuing scheduled production figures and state orders. Moreover, the gradual reduction of state orders was proclaimed an important objective. The state's right to own enterprises was the first element in the triad defining property rights to be relaxed: In the spirit of the idea of worker self-management, labor collectives were given the opportunity to choose their directors, although their choices had to be confirmed by the appropriate ministry. The right of use was also delegated to a much greater extent than before. Under the so-called second scheme of economic accountability (*khozrashchet*), which was one of the two options for reorganization made available to enterprises, the wage fund was redefined as a source of income, minus the sums allocated for material expenses, budget payments, and contributions to special funds. The first option provided new, although not nearly as extensive, possibilities for increasing wages. As a consequence, the state attempted to limit wage growth but was not able to regain complete control. The most visible result of the weakening of centralized control over enterprises was the sharp increase in the rate of growth of the incomes of the population (see table 3), which slightly

[15] In other "socialist" countries, relations between managers and workers followed a similar pattern (see [Kornai (1990) P. 427]), and state property underwent a similar evolution.

Table 3. Rate of Growth of the Money Incomes of the Population

Year	1986	1987	1988	1989	1990
Rate (in percentages)	4.0	2.8	9.1	10.9	15.8

Source: [Member Countries of the CIS. Annual Statistics (1992) p. 518]

exceeded (and also somewhat accelerated) the rate of growth of the output of consumer goods and services.

Hence, the market was thrown out of balance to an even greater degree, giving rise to a state budget deficit. However regrettable, it must be admitted that the 1987 law granting enterprises their longed-for freedom accelerated the onset of the crisis in the Soviet economy. This law failed to compel firms to behave responsibly, with the result that directors continued to rely on government help as before. However, it was the particular "cooperative" structure of relationships and interests that had been established during the process of the evolution of the Soviet enterprise that was a root cause of the economic crisis.

5 The Struggle over Property: "People's Privatization"

Discussions about different forms of privatization began in earnest in the USSR only in the middle of 1990 in connection with the elaboration of a program for the transition to a market economy. Three central ideas can be distilled from the multitude of proposals that were advanced at that time: 1) the "corporation" of the economy; 2) the transition to a system of collective ("people's") enterprises, the owners of which would be the collectives of workers that labor in them; and 3) the creation of a competitive system on the basis of private and joint-stock forms of ownership.

The idea of corporatization – the creation of large holding companies that have a controlling interest in a number of firms – did not find a significant number of proponents. In fact, a detailed account of corporatization is not be found in official documents.[16] State holding companies are mentioned in the USSR draft law "On the Basic Principles of Enterprise Denationalization and Privatization" [1991], although the degree of importance assigned to them by the authors of the draft is unclear. While various types of ownership are enunciated in this first official privatization program, the terms "private enterprise" and "private property" are conspicuously absent. In a similar vein, in the list of the different

[16] The concept of checking investment funds, which was implemented at the end of 1992 and the beginning of 1993, can be considered a modification of this idea.

forms of denationalized property, joint-stock companies are mentioned in the third place following leased and collective enterprises; moreover, the members of a labor collective were mentioned in the first place in the list of potential stockholders. The draft law envisaged the possibility of purchasing a leased enterprise and transferring part of its property (those assets that had depreciated by more than 70%) as well as "certain objects of the productive and social infrastructure" to its labor collective free of charge. Thus, the collective idea was the dominant theme of this document.

At the end of 1990, before the publication of the draft privatization law but after it had already become clear that the branch system of administration was living out its last few months, the government began promoting "spontaneous privatization". This process has often been labelled "nomenclatura-bureaucratic", since one of its principle aims was to preserve the power of ministerial bureaucrats. Ministries were reorganized into concerns or associations with the right to administer state property; for example, in March 1991 the Ministry of Light Industry of the RSFSR became the Russian Light Industry (Roslegprom) Association, uniting 378 firms and organizations [Radygin (1992)]. There was yet another important motive behind spontaneous privatization: the aspirations of labor collectives in light industry, retail trade, and consumer services to legitimate the ownership of their enterprises. The most popular methods of privatization were leasing with a final purchase option and, beginning in 1991, selling by auction or by competitive bidding. A number of enterprises were transformed into private joint-stock companies; during this process the distribution or sale of shares went first to their workers and managers.

Spontaneous privatization hastened the disintegration of the system of state ownership and strengthened the power of the collectives.[17] As a consequence, the Russian president issued a decree declaring a number of newly formed concerns and corporations the property of the state, leasing with a final purchase option was prohibited, and private joint-stock companies were directed to reorganize themselves into public ones. The Russian government that came into power in November 1991 decisively opted for the creation of an economy based on private property that was modelled on the American and European system. The adoption of this new program was preceded by an intense public debate between government ideologues [Chubais (1992)] and the proponents of collective firms [Piyasheva et al. (1992, Selyunin (1992)], which was primarily a continuation of earlier discussions on the subject. The "self-managers" considered it fairer to transfer

[17] In [Chastnaya sobstvennost' (10 March 1993)], Anatoliy Chubais is quoted as saying: "State property in Russia, as it has been traditionally understood, had in fact ceased to exist still earlier [i. e., earlier than the end of 1991] in connection with the demise of the so-called command methods of administration. Various groups began to view themselves as property owners-labor collectives, directors, city officials, branch ministries, the state..". Apparently, it is no coincidence that Chubais mentioned labor collectives in the first place.

enterprises either free of charge or on a long-term credit to the employees who worked in them. If state property were to be sold, they argued, it would fall into the hands of dishonest people who had large sums of capital at their disposal. The "liberals", on the other hand, objected that "the giving away of property does not make one a proprietor" and pointed to the unsucessful Yugoslavian experiment with economic self-management to buttress their argument.

The State Program on the Privatization of State and Municipal Enterprises in the Russian Federation in 1992 [Ekonomicheskaya gazeta, (July 1992) pp. 15–18] declared its primary objective as the formation of a stratum of private property owners. Under the guidelines of the program, small enterprises were to be sold off at auction or competitively, and large enterprises were to be transformed into joint-stock companies; medium-sized firms could choose either possibility. While not all enterprises were made subject to privatization, it was compulsory for a large part of them. Since the reform would clearly be unviable without the cooperation of the labor collectives, it was suggested that they choose from among the three options available to enterprises set out in the privatization program. Under the first option, the labor collective would receive up to 25% of equity free of charge as non-voting preference stock (with each worker receiving a total value of no more than twenty times the minimum wage) and would have the option to purchase a further 10% of ordinary stock in installments at a 30% discount from the book value (with each worker receiving a total value of no more than six times the minimum wage). Furthermore, the first option allowed top managers to acquire an additional 5% of ordinary equity at book value (with the total value not to exceed the number of shares multiplied by 2,000 times the minimum wage).

The second option gave the labor collective the right to purchase a controlling interest – 51% of ordinary equity – at the price determined by the State Committee for Property. It was subsequently set at 1.7 times the 1991 book value.

The third option allowed up to 20% of equity to be sold in installments at book value to a group of workers of an enterprise, provided they had committed themselves to privatizing the firm and had received the agreement of the two-thirds of the labor collective.

If an enterprise that was subject to privatization had not chosen an option within a specified period of time, then, in agreement with the guidelines of the program, it was privatized according to the first option. The first option did not require large expenditures and provided the employees with a significant share of the enterprise's profity but failed to give them a real voice in its administration (with the exception, of course, of the managers). The second option, which guaranteed the labor collective control over the enterprise, was deliberately high-priced: the government was clearly banking that this option would turn out to be too expensive for the majority of labor collectives.

This calculation, however, turned out to be misguided. Within six months from the time of the adoption of the state program, the average wage in industry had risen threefold. Whereas wages continued their rapid ascent during the first quarter of 1993, by the end of December 1992 the exchange price of a voucher had fallen below 6,000 rubles and was continuing to decline. In order to increase the demand for vouchers and thereby bolster their value, it was decreed that 80% of all company shares could be sold in exchange for vouchers. This development greatly eased the task of the labor collectives. "... in January 1993 labor collectives and the administrations of privatizing firms remained virtually the only final purchasers on the market of privatization checks" [Shmarov et al. (1993)]. Moreover, many enterprises began making deductions from profits for the purpose of establishing privatization accounts for their workers, especially since low tax rates had been introduced for this type of expense.

By 1 April 1993, 52.3% of the 88,200 enterprises in the trade, consumer services, and public catering branches had been privatized. Of those, 67% went into the hands of the labor collectives, 23.3% were acquired by juridical persons, and only 9.7% were acquired by physical persons. In Moscow, where the price of land and buildings was substantially higher than the national average, 95% of the privatized enterprises in those same branches became the property of their labor collectives. Medium and large-sized enterprises very clearly indicated their preferred way of undergoing privatization: Of the 4,100 joint-stock companies registered on 1 April, 74.2% had chosen the second privatization option, 24.2% – the first option, and 1.6% – the third option [Bessonov et al. (1993) p. 17). Thus, the process of privatization gave a legal basis to the de facto ownership of enterprises by their labor collectives. It should be further noted that, under the first option, the labor collectives were able to retain their dominant position, since shareholders were disorganized and the welfare of an enterprise was still only marginally dependent on the price of its equity.

The struggle between the government and labor collectives is still continuing. The draft privatization program for 1993 suggested that the advantages of the first option be increased so as to make it more attractive. The proponents of self-management, on the other hand, put forward a fourth option of privatization that envisaged the sale of up to 90% of an enterprise's equity to its labor collective in exchage for payment in installments over a period of three to five years; that is, an effectively gratuitous transfer of ownership to the labor collective. Thus, it appears highly likely that the labor collectives will turn out to be the victors in this struggle.

6 On the Path to an Economy of Collective Monopolies?

The analysis given above shows that Russian enterprises are in actuality the property of their work collectives, the welfare of which they are striving to improve. An extensive body of literature, which was pioneered by B. Ward [1957], has been dedicated to the subject of labor-managed firms. Ward proposed that the goal of collective firms was not to increase profits but rather to maximize the

value added per worker:

$$(pf(1)-r)\setminus 1$$

where 1 represents the number of personnel, f is a function of production, p is the price of the product, and r represents fixed costs. He noted that such a firm conducts itself in a completely unorthodox way; in particular, it reduces the supply of a product as the price of that product rises.[18] E. D. Domar [1966], J. Vanek [1970], and a number of other authors (see in particular [Dreze (1989)] have further developed the theory of collective firms in several new directions. One of the most important stimuli for their work was the Yugoslavian reform program of 1950, which provided the basis for the application of the principle of worker self-management.

Domar pointed out the principal shortcoming of Ward's model, according to which the firm reacts to changes in external conditions by changing the number of its personnel. Domar showed that collectives should lay off employees only in extreme circumstances. As a consequence, a series of models was advanced that took into account this particular conclusion (see, for example, the references in [Berman and Berman (1989)], which was believed to mitigate the effect of the non-standard reaction of supply to changes in price. In theory, this effect should disappear if the collective of workers-proprietors uses freelance workers to whom property rights do not extend and at whose expense the number of employees is regulated. However, the entire empirical study undertaken in [Berman and Berman (1989)] demonstrated that, in comparison with the typical American firm, a collective enterprise – even when situated in a competitive environment and utilizing freelance workers – is still characterized by inelastic supply for the commodity it produces and by a low capital/labor ratio that grows more slowly over time. Many observers of labor-managed firms in Yugoslavia have also noted a shortage of capital investment and a relative surplus of personnel in such firms.

A number of authors, beginning with Ward [1957], have examined the case of the collective monopolistic firm which, in maximizing the marginal productivity of labor, takes into account the dependence of the product price on the size of its output. This type of model is particularly interesting in light of the high degree of monopolization in the Russian economy, the real scale of which has been insufficiently studied.

Whether or not a firm is recognized as a monopoly is usually dependent on its percentage of the total sales volume of a particular product. This approach assumes the presence of a single Russian market; such a market, however, does not in fact exist. The absence of the requisite transport, trade, and informational

[18] It can be directly deduced from the conditions governing the optimization of supply if f is concave.

infrastructures means that few consumers have the possibility to choose their suppliers. According to a recent survey of the managers of 153 enterprises in various branches, the results of which were presented in [Gurvich, Levin et al. (1993)], 63% of those polled believed that, if necessary, they could find new sources of supply for no more than 10% of their deliveries; only every eighth manager surveyed had alternate suppliers for more than 30% of the goods he received. However, the high expenditures needed to create new firms (owing, in particular, to the underdeveloped markets for land and buildings as well as to bureaucratic obstacles) render rapid demonopolization impossible.

In order to distinguish the types of firms specific to Russia from other variants of collective enterprises, it is convenient to introduce the use of a special term: the artel. *I have defined an artel as a firm whose aim is to increase the prosperity of its work collective by providing it with job security, among other things. In contrast to regular enterprises, the artel regards the payment of its workers as a way of realizing this aim rather than as an expenditure. The distinction between proprietors and freelance workers is absent in an artel; for economic considerations it is possible to hire but not to dismiss personnel. An artel can be considered an artel monopoly when the consumers of its output do not have alternate suppliers.*

To elucidate this rather vague definition, I have put forward a very simple model for the optimal behavior of a firm that possesses the particular traits describd above:

$$\max\,(p(y)y - qx - r)/l, \qquad y = f(x, l), \quad l \geq l_0 \tag{1}$$

where $p(y)$) represents the price of production as a function of its output y; l and l_0 are desired and the initial number of personnel, respectively; f is a function of production; q and x are the price and volume of variable financial costs, respectively; and r represents fixed costs.

Model (1) is a small modification of well-studied constructions, and a detailed examination of it is not within the scope of this article. If $p(y)$, q, and r such that $l = l_0$, then the firm conducts itself like a regular monopoly in determining the volume of its financial resources; in the opposite case, its behavior is guided by a set of more complicated rules [Domar (1966) and Vanek (1970)]. I have noted below several particular traits that can be considered typical of the system of artel monopolies.

Since it is not possible to dismiss the members of an artel, they tend to have more employees than necessity dictates. The awareness of this fact on the part of managers leads to inelastic demand for labor even in situations when it would be economically expedient to increase the number of workers. The absence of vacancies in the system contributes to stability even in relatively unprofitable collectives. Bankruptcies are rare, since workers are willing to temporarily sacrifice their wages for the sake of preserving the firm. Wage differentials are large even among enterprises within the same economic branch, and labor resources are

distributed inefficiently. Young people who have graduated from educational institutions are forced to join the ranks of the unemployed.

A rise in the price of output does not lead to an increase in employment and consequently stimulates output only insignificantly. Attempts to invigorate an stagnating economy by weakening tax pressures is also not a recipe for success, since the tax savings tend to be used to increase wages. (In particular, lowering lease payments or property taxes reduces r; thus, within the framework of model (1), such steps can lead only to a fall in the demand for labor.)

Managers, being completely dependent on their collectives, are afraid to lower wages. When faced with a difficult situation, they prefer instead to use the funds earmarked for capital investment.

In a system of artel monopolies, the usual strategy for containing inflation – austere credit and monetary policies – should encounter additional difficulties. The efforts of firms to retain all their workers and maintain high wage levels impede a reduction in the rate of growth of prices. When there is a shortage of credits, high prices increase the probability of nonpayment, which, in a monopolistic market, in turn spurs inflation.

Thus, let $p(y)$ be the dependence of the price of a product on the output of a particular monopolistic firm, and ∂ be the probability of payment, independent of y, so that the firm receives $p(y)y$ when probability is ∂ and receives nothing when probability is $1-\partial$. Let us assume that the firm maximizes its average profit $\partial p(y)y - qx$ when $y = f(x, l_0)$. It is not difficult to show that, as ∂ decreases, demand falls and, consequently, the price $p(y)$ rises. This occurs thanks to the monopolistic effect coupled with uncertainty.[19]

7 Concluding Remarks

An attempt has been made in this article to show that the failure of the government plan for a rapid transition to a western-style economy was caused not by the intrigues of the former *nomenklatura* or of the communists, but by a much more basic reason: the resistance of labor collectives, which justifiably regarded the actions of the government as attempts to encroach upon the established system of collective property.

In my opinion, the struggle between the government (which adopted the point of view of a large part of the intelligentsia) and the labor collectives was in essence

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[19] It is assumed that the function $p(y)y$ is concave, that f is concave, that both functions are growing, that $p(y)$ is decreasing, and that all functions are smooth. It is worth noting that the opposite conclusion is correct in the seemingly equivalent determinant model with the price $\partial p(y)$, if the function $p(y)y$ is considered to be positively uniform. A rise in price is not excluded for monopolistic firms with special production functions, even in conditions of full certainty (one can take, for example, $p(y) = 1/\sqrt{y} - 1, f(x, l_0) = x$).

the cause of the political battle that took place in 1992. The defense of the interests of the labor collectives is an aim that is present in one form or another in the programs of many politica opposition parties, several of which plainly state their goal as the building of an economy based on collective property (see, for example, [Livshits (1993)]. The political aspect of this problem is deserving of a detailed analysis, which, however, is outside the scope of this article.

The unorthodox reaction of Russian firms to the macroeconomic developments that took place in 1992 was consistent with the behavior of collective monopolies; hence, it is likely to be repeated in the future.

The authors of works on economic self-management have often been inspired by socialist ideas and theoretical strivings to demonstrate the possibility of effective economic organization in the absence of private property. Interesting proposals have been advanced along these lines, although the models that have been put forward contain serious flaws that cast doubt upon their viability. They appear condemned to failure, as was the attempt to build a collective economy in Yugoslavia. It would seem that this type of economy emerges from a centrally planned system as an inevitable consequence of the collapse of state control. Those former socialist countries that failed to prepare themselves for the transition to a market economy based on private property (unlike Hungary and, to a lesser degree, Poland[20]) while the old system was still in sway have been doomed to live under socialism – albeit in a new incarnation – even after the introduction of a reform program.

Consequently, efforts should be made to neutralize as much as possible the negative traits of artel organizations and to take advantage of their positive aspects. I believe that the Japanese economic system, which represents a classic example of the merger of collective culture with a competitive market, could serve as a reference point for Russia (see, for example, [Aoki (1988)]. The mere regulation of macroeconomic forces, however, would be insufficient; a comprehensive microeconomic policy must also be elaborated.

It would be advisable to introduce a system of long-term contracts ("lifetime hire") into collective enterprises, fixing from the outset low limits on the rate of growth of wages and on the size of severance pay. Such contracts could be concluded for the majority of workers, although decisions should be made dependent upon a worker's qualifications and his or her level of conscientiousness. Under such a system, dismissals of employees who do not have long-term contracts with the firm for reasons of economic expediency would acquire a certain legitimacy. It would also facilitate the creation of a competitive labor market, accelerate growth, and – ultimately – stimulate job creation.

[20] The reaction of Polish enterprises to price liberalization was analogous to the reaction of Russian firms (e. g., nonpayment, the unwillingness to dismiss workers), although it was much less clearly expressed there [Kolodko].

The state is not in a position to create on demand a vigorous private sector, although it is able to influence its formation in more ways than by simply giving support to private entrepreneurs. A new sector consisting of joint-stock enterprises in which the government holds a controlling interest is now developing; it is very important that it be modelled on the private sector so that the activities of managers can be evaluated according to standard market criteria. Also, the conrolling shares of equity for the majority of firms should eventually be sold off. Furthermore, collective enterprises should be required to compete with private and state enterprises in every possible market. In many cases, this is happening automatically as the necessary infrastructure is developed. It is to be hoped that, as a result of this competition, new ways to efficiently organize production that are specific to Russia will emerge.

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