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VOUCHER PRIVATIZATION IN RUSSIA

First results and experiences

by

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INTRODUCTION

The Russian Federation set very ambitious targets for privatization aimed at privatizing some 75-80 percent of their state owned enterprises (SOEs) by 1996. Because of the relatively few private financial assets available, the apparent limited interest, or the hesitancy of foreign investors, the sale of SOEs in 1991 proceeded very slowly. In that year only 70 enterprises were transferred into a private hands (Chubais 1992). In the nine months of 1992, only twelve thousand establishments, mainly very small ones, out of all 215 thousand SOEs, were privatized. This constitutes a mere five percent of the SOEs designated for privatization (Statisticheskij 1992).

At the same time, the parliamentary opposition to privatization grew putting into question the success of the whole operation. The need for creating strong social support was very urgent.

The group of young economists surrounding Anatolij Chubais in the State Committee for State Property Management (later called GKI, after Russian acronym GossKomImmushchestvo) decided that the speed of privatization, the transfer of the largest amount of property rights from the state sector to private owners, was much more important than the quality of this process. This speed was expected to increase the political support for privatization and reform in general.¹

The program which provided the best opportunity for meeting this goal was the Voucher Privatization Program (VPP). The Russian VPP was launched on October 1, 1992 by the Decree of the President of the Russian Federation (Ukaz 1992). As well as achieving this political goal, it was assumed that the VPP would fulfill these additional goals:

First, vouchers would generate a demand for shares in the privatized enterprises. The population's savings was far too low to buy more than a fraction of state-owned assets, even at the residual value. The capacity of Russia's nascent private business to acquire privatized enterprises was also limited, while the prospects for large-scale foreign participation were low because of the lack of political stability and unclear legal environment surrounding foreign direct investment in Russia. Thus vouchers, it was expected, would create an additional demand for state property.

¹ There is no doubt that the main aim of the Russian VPP was first political and then economic. The first sentence of the President's Decree stressed that the issuance of a system of privatization vouchers was aimed at gaining support of a broad stratum of the population for privatization and reform in general (Ukaz 914, 1992:1). The Economist in 1992 mentioned that "opinion polls indicate that privatization is now the only popular part of Mr. Yeltsin's program... may seem the only way of regaining support" (Russian 1992:44).

Second, it was assumed that vouchers would ensure fairness of privatization. All Russian citizens, not just enterprise workers and managers, old nomenclatura, or those who have money thanks to illegal operations should benefit from privatization.

Third, it was assumed that the VPP would create a new economy with entrepreneurial owners and efficient enterprises.

The preparation of the VPP required the creation of a supply of shares, a demand for shares and distribution methods for shares. The supply side required the prior corporatization of enterprises designated for the program, the adaptation of simplified business evaluation methods (usually the book value method), issuance of shares, and the preparation of simplified financial information for potential investors. The demand side required the distribution of vouchers to citizens. The distribution mechanism assumed the creation of voucher auctions designed to distribute shares among voucher holders, as well as an active involvement by intermediary financial institutions.

This paper's authors attempt to summarize the experience of the Russian VPP three months before the program ended. They attempt to analyze the degree of the program's success, and focus on the balance between the demand for shares and the supply of shares. Therefore, three sides of the program are discussed here. First, how large was the demand for shares expressed in vouchers (demand side); second, how many shares are available (supply side); and third, what type of distribution mechanism was applied to accommodate both the supply of shares and the demand for shares expressed in the vouchers. Two types of markets are analyzed: the market for vouchers and the market for shares. A discussion follows as to what extent the supply of shares meets the demand for shares. The analysis is conducted in dynamic and geographical dimensions.

ROUNDS OF VOUCHER PRIVATIZATION

The main political problem faced by architects of the Russian VPP was the question of satisfying the interests of all partners taking part in privatization: employees, management, citizens and potential strategic investors. Therefore, a very rigid procedure of shares distribution was introduced in the program. This procedure assumed three rounds: closed subscription round, voucher auctions round and investment tenders round.

First Closed Subscription Round

In the first round, the interests of managers and employees are secured. In this round the internal (within the firm) distribution of vouchers takes place. Two privatization variants are utilized.²

In the first variant, 25 percent of the shares of newly commercialized firms are given to employees as preferred stock for free. These are non-voting shares, but they give their holders priority to dividend distribution. A limitation, however, applies here: the total number of shares distributed free to employees cannot be higher than 20 times the legally guaranteed monthly minimum wage per employee. In November 1992 it amounted to 20 thousand rubles, in other words, 20 shares per employee.

In addition to the 25 percent of free distributed shares in this variant, a further 10 percent of shares can be sold to employees at a 30 percent discount of the face value. This way the employees can acquire 10 percent of all shares by paying only 70 percent of their issue value in the ratio of about 13 shares for one voucher. An additional limit applies, however. Employees cannot purchase more than six times the minimum legally guaranteed monthly wage which in November 1992, when data were collected, amounted to 1000 rubles. In other words, each employee can realistically acquire for his vouchers six shares for a total 6,000 rubles.

Furthermore, in this round management has the right to acquire up to 5 percent of the shares in the ratio of one voucher for ten shares.

In the second variant employees and managers can acquire 51 percent of all shares within the framework of the closed subscription of shares. The work force can buy these shares at the price of 1.7 times the nominal value per share. An approval by 2/3 of the employees is required. There are no free shares under this option, no preferential discount is possible, and participants must, according to Russian law, pay with vouchers for 50 percent of their shares (100% payment in vouchers is encouraged). Additionally, to make the whole process more difficult, the entire payment must be made within 90 days.³

² In the Russian privatization program a third variant is apparent, reminiscent of the Polish privatization procedure combined with restructuring. The management group signs a contract with the local division of GKI for the enterprise restructuring and the preparation for privatization. Because only 1.5 percent of the firms adopted this variant and because it plays a marginal role in the VVP, it is not discussed here (Jermakowicz, Pańków 1993:97)

³ The architects of the Russian VPP wanted to introduce the first privatization variant as exclusive for all enterprises. The second and the third variants (not discussed here) were introduced under the political pressure of employee and management lobbies in the Russian Parliament. To limit choice only to the first variant, some obstructions were introduced to eliminate other variants. The 2/3 vote and 90 days payment are some of them. Approximately 77 percent of the Russian firms, however, have chosen the second privatization variant which gives employees and directors controlling stock in their companies.

Summing up, in the first round either 40 percent (first variant) or 51 percent (second variant) of the shares is distributed in closed subscriptions among employees and management. The degree to which this limit is met illustrates, in an indirect way, the confidence that employees display in the enterprise. It can also serve as information for potential investors about the firm's condition; the investment activity of managers can be especially instructive.

Second Voucher Auctions Round

In the second round, shares unsold in the first step are sold at organized auctions where voucher holders (individuals, mutual funds, or venture capital companies) purchase them at market price.⁴ The voucher auctions are organized by local State Property Funds.

The number of shares offered at auctions is determined as the difference between the total number of shares and the number of shares distributed at closed subscriptions. Additionally, a minimum 20 percent of shares must be distributed for cash among strategic investors (to finance the whole operation). Therefore, not all of the issued shares can be available at the organized exchanges (voucher auctions). Because 25 percent of the shares are divided among employees and 20 percent should be designated for the third round, 55 percent of the remaining shares is the most that can be distributed through voucher auctions in the first variant, if employees and management decline the option to acquire the 15 percent of their reserved shares. In the second variant, after distributing 51 percent in the first round, no more than 29 percent of shares may be available to the outside investors. During the two first rounds, however, no more than 80 percent of all shares can be sold.

Third Investment Tenders Round

In the third round, shares unsold at the auctions can be sold through direct sale to potential strategic investors. Decisions about who can acquire these shares are made by the Privatization Funds and by firm management. It is assumed that only 20 percent of these shares can be sold this way and exclusively for cash.

Summing up, in the first round between 25(1st variant) and 51(2nd variant) percent of the shares were distributed. In the second round, through voucher auctions, between 55 (1st variant) and 29 (2nd variant) percent of the shares can be sold. Finally, in the third round, approximately 20 percent of the remaining shares can be sold to strategic investors. The vouchers could be used in the first round within the framework of closed subscription, as well as in the second round, i.e. the

⁴ Russian authorities stepped up the pace of voucher privatization with sales of shares in the historic GUM department store on the Red Square and factories in the industrial city of Volgograd. Russia's most famous store attracted 6 thousand investors holding more than 100,000 privatization vouchers (Russia 1993).

round of voucher auctions. To encourage the maximum usage of vouchers during the first two rounds, the GKI tried to discourage cash payments and preferred the vouchers as a form of payment.

CREATION OF THE SUPPLY OF SHARES (Assumptions and reality)

The Russian voucher program encompasses rather large enterprises. These are SOEs which, according to the Presidential Decree No. 721 issued on July 1, 1992, were chosen to be commercialized and then assigned to the Voucher Privatization Program. The target group covered 4,948 enterprises or 2.25 percent of all SOEs (Svobodnyje 1992). The capital stock of these enterprises amounted to 518.5 billion rubles, which constituted approximately 50 percent of state assets in large firms or approximately 15 percent of all state assets. The average capital amounted to 104.8 million rubles with an average number of 2,835 employees per firm.

Each SOE that expected to be privatized was required to present its own basic privatization program. Potential private buyers were also allowed to present competitive privatization programs. Both basic and competitive programs proposed what portion of the shares would be devoted for each of the three rounds (for employees and management, for voucher auction, and for direct sale).

The aggregated basic information about the firms designated for privatization is presented on the left side of Table 1 (Data according to Decree 721).

Table 1 FIRMS DESIGNATED FOR VPP (Decree 721) AND FIRMS PRIVATIZED WITHIN THE FRAMEWORK OF VP (Data from March 4, 1994, in billion rubles).

Region	Firms Designated for VPP.			Firms Privatized through VP			% Firms	% Found. Capital
	No. of Firms	Found. Capital	Aver. Capital	No. of Firms	Found. Capital	Aver. Capital		
Northern	313	38.8	0.124	640	25.9	0.040	204.5%	66.7%
No. West.	124	10.7	0.086	696	23.2	0.033	561.3%	217.0%
Central	1510	80.1	0.053	1744	75.5	0.043	115.5%	94.4%
Volga V.	305	25.1	0.082	567	28.9	0.051	185.9%	115.1%
C. Chern	293	25.2	0.086	782	20.5	0.026	266.9%	81.2%
Volga	461	50.9	0.110	804	62.6	0.078	174.4%	122.9%
No. Cauc	270	25.7	0.095	931	23.5	0.025	344.8%	91.5%
Ural	480	115.9	0.242	728	91.3	0.125	151.7%	78.8%
W. Siberia	648	63.7	0.098	1114	78.6	0.071	171.9%	123.4%
E. Siberia	216	41.3	0.191	784	35.6	0.045	363.0%	86.2%
Far East	246	36.6	0.149	506	22.3	0.044	205.7%	61.0%
Kalin.	82	4.4	0.054	61	1.1	0.017	74.4%	24.0%
Total	4948	518.5	0.105	9357	489.0	0.052	189.1%	94.3%

* Own calculations based on: Summarnaja (1994).

The results from Table 1 show that the largest number of shares of privatized firms have been issued by firms located in the Ural region, the next largest in the Central and the East Siberia regions, with the smallest number in the Pribaltica (Kaliningrad) and the North Western regions. The highest average capital engaged in one firm was in the Ural region - 241.5 million Rb. per firm; the East Siberia region - 191.4 million Rb.; and in the Far East - 149 million Rb.; with the lowest in the Kaliningrad region - 54 million Rb.; and in the Central region - 53 million Rb.

The results of voucher privatization surpassed even the most optimistic expectations. During the 16 months from December 1992 to March 1994, 9,342 firms were sold, 89 percent more than the plan assumed. The total capital of privatized firms amounted to 489 billion Rb, or 94 percent of the capital of firms designated for privatization.

The absolute record holder, both in the number of privatized firms in relation to those designated for privatization and in the size of privatized capital, appeared to be the North-Western Region. In this region five and half times more firms were privatized than was planned, and the founding capital transferred to private hands was twice the amount planned. The real loser appeared again to

be the Kaliningrad region where only 74 percent of the enterprises was sold, representing one fourth of the total capital assumed for sale.

In absolute numbers the largest number of enterprises was privatized in the Central and West Siberian regions; the most founding capital was transferred in the Ural region and in the Central region. The Ural region also led in the average size of privatized firms.

Generally speaking, it was the smaller firms which were privatized, with an average capital of 52.2 million rubles per firm (50% of that planned) and an employment of 911 employees (37% of that planned). Smaller firms seemed to be more attractive to potential investors and they attracted more buyers. On the other hand, the managers of large firms seemed to be stronger in their defense against any privatization attempts. They usually belonged to stronger ministries which succeeded in excluding entire branches from the privatization process. The larger firms were also more successful in convincing the central bureaucracy that they needed some restructuring activities before they could go public. On the whole, within the framework of the VPP, 47.2 percent of the capital of all firms designated for privatization (approximately 14 percent of all state assets) has been sold, which can be regarded as a success.

DYNAMIC OF SHARE SALES

The process of privatization of the large SOEs started in December 1992 when the first 18 firms were auctioned at voucher auctions. Until the end of April 1993, the fast growth of privatized firms was visible. In the second half of 1993 the process slowed (See Table 2). A renewed acceleration, however, appeared in December 1993 when more than one thousand firms were privatized. This seems to illustrate that the old Communist economy habit of accelerating production at the end of the year and slowing it at the beginning of the year, remains intact. At the beginning of 1994, the number of privatized firms declined to 598.

TABLE 2. DYNAMIC OF PRIVATIZATION AND BASIC DATA ON ENTERPRISES

Date	No. of Firms	Found. Capital (m. Rb)	Aver. Found. Capital	Found. Capital in VPP	%	Aver. Capital in VPP	Employ. (Thou.)	Aver. Employ.
Dec. '92	18	3041	168.9	513	16.9%	28.50	42	2.33
Jan. '93	107	6062	56.7	705	11.6%	6.59	189	1.77
Feb. '93	194	6497	33.5	1489	22.9%	7.68	189	0.97
Mar. '93	439	22554	51.4	5297	23.5%	12.07	532	1.21
Apr. '93	613	30038	49.0	7016	23.4%	11.45	820	1.34
May '93	581	23174	39.9	7482	19.3%	7.71	526	0.91
Jun. '93	896	38502	43.0	8036	20.9%	8.97	793	0.89
Jul. '93	911	35205	38.6	8180	23.2%	8.98	698	0.77
Aug. '93	896	33514	37.4	6909	20.6%	7.71	754	0.84
Sep. '93	776	35498	45.7	7192	20.3%	9.27	732	0.94
Oct. '93	961	45142	47.0	8407	18.6%	8.75	878	0.91
Nov. '93	883	46287	52.4	8474	18.3%	9.60	657	0.74
Dec. '93	1058	50824	48.0	9919	19.5%	9.38	946	0.89
Jan. '94	598	50234	84.0	11456	22.8%	19.16	476	0.80
Feb. '94	411	60266	146.6	14296	23.7%	34.78	858	2.09
Total	9342	486838	52.1	102238	21.0%		9090	0.97

* Own calculations based on: Summarnaja (1994) and Rezultaty (1994).

Another interesting phenomenon is the cyclical pattern in the development of the average size of the firms designated for voucher privatization. The largest enterprises (measured by average capital as well as by average employment), were privatized at the beginning of the program (late '92 and early '93) and at the end of the program (first two months of 1994). At the same time, there exists an inverse proportion: the larger the number of firms auctioned, the smaller the firms. For example, the largest number of firms were privatized in July and in December 1993, and it was in these two months that the average capital of firms was also the lowest.

Generally speaking, the portion of shares designated for voucher auctions stabilized at the level of 21 percent. The deviations from this level, with exception of the first two months, are small and do not exceed 2.7 percent. It is also interesting that the portion increased in the first month of 1994, as did the average size of the firms designated for privatization, which seems to indicate that the central authorities are willing to designate a larger number of shares for voucher auctions to meet the voucher demand before the program expires in middle of 1994.

CREATION OF THE DEMAND FOR SHARES

Each of the citizens of the Russian Federation regardless of age, residence, place of employment, or level of income, had the right to acquire a voucher equal to the nominal value of ten thousand rubles against a 25 ruble fee (Ukaz 1992). Vouchers began being issued on October 1, 1992, and the whole process was finished on March 31, 1993.

Vouchers are bearer securities (not made out to a named person) entitling the holder to buy shares in joint stock companies (JSCs) undergoing privatization. Vouchers are transferable and have a specified validity period. They are not replaced if lost or stolen. The government of Russia guarantees that vouchers issued in 1992 may be used to obtain shares of JSCs undergoing privatization or shares of voucher funds. The government, however, does not guarantee a cash value for vouchers.

The total number of vouchers issued by the State Committee was 151.1 million. Approximately 144 million citizens decided to acquire vouchers, which in itself is a success. The remaining shares were either given to emerging pension funds or were distributed to citizens who lost their vouchers through fraud, or illegal investment funds which later disappeared. Because each voucher had a value of 10,000 Rb., the purchasing power of all citizens was 1.51 trillion Rb.

It was assumed that the second tranche of vouchers would be issued in 1993 and a third in 1994 with a one year validity. During the first year, however, it became apparent that there were more vouchers in circulation than assumed, and more shares were bought for cash than was anticipated, and that the supply of shares was lower than expected. Therefore, the whole program was reduced only to a first tranche. The validity of the vouchers from the first tranche was extended by about a half year until June 30, 1994 (Ukaz 914, Po³o₆eniije "O priwatizacionnom..")

In Table 3 the distribution of vouchers between different regions is presented.

TABLE 3. THE NUMBER OF VOUCHERS DISTRIBUTED AMONG RUSSIAN CITIZENS IN DIFFERENT REGIONS (Data from March 4, 1994)

Region	Vouchers Distributed	%
Northern	6191.1	4.1%
North Western	8270.4	5.5%
Central	30383.3	20.1%
Volga Vyatka	8482.6	5.6%
Cent. Chernoziem	7761.9	5.1%
Volga	16640.9	11.0%
North Caucasus	17245.6	11.4%
Ural	20430.5	13.5%
West Siberia	16888.5	11.2%
East Siberia	9474.8	6.3%
Far East	8445.6	5.6%
Kaliningrad	894.1	0.6%
Total	151109.3	100.0%

* Own calculations based on Summarnaja (1994)

The residents of the Central region comprised of: Moscow, the Moscow oblast, Tula, Tver, Vladimir, and others received the most vouchers (20.1%). Next came Ural (13.5%), North Caucasus (11.4%) and Volga (11.0%). The residents of Pribaltica and Northern regions received the smallest number of vouchers (0.6 and 4.1% respectively). It appears that the number of vouchers is closely correlated with the size of the population in each of the regions.

A disproportion exists between the demand expressed in vouchers and the supply expressed in shares. For example, in the Central region, there was a 4.7 percent surplus of vouchers in relation to shares (20.1% vs. 15.4%). In the Ural region, there is quite the opposite, with the surplus of shares over vouchers amounting to 9.4 percent (13% vs. 22.4%). This indicates the need for an integrated Federal voucher market and voucher auctions.

Voucher distribution was a spectacular success for the privatization authorities in Russia. The sale of 96 percent of the vouchers to the Russian citizens eligible to purchase them was a tremendous achievement impossible to match in other countries privatizing their economies. In Czechoslovakia, for example, only 70 percent of the population acquired their vouchers (they were, however, more expensive).

DYNAMIC OF THE VOUCHER UTILIZATION PROCESS

During the last sixteen months 489.1 million shares were sold, and about 77,549 thousand vouchers were used. This constitutes a little more than 50 percent of all the vouchers in the circulation.

TABLE 4. THE STRUCTURE OF VOUCHER UTILIZATION BOTH IN CLOSED SUBSCRIPTION AND VOUCHER AUCTIONS (In thousand units) (Dynamic Aspect)

Date	Closed Subscript.		Voucher auction		Total Used Vouchers			% Used
	Capital	Dynam. %	Capital	Dynam. %	Capital	Accum.	Dynam. %	
Nov. '92	50				50	50		0.0%
Dec. '92	158	316%	158	--	316	366	332%	0.2%
Jan. '93	315	199%	229	145%	544	910	249%	0.6%
Feb. '93	336	107%	544	238%	880	1,790	197%	1.2%
Mar. '93	1,173	349%	2,268	417%	3,441	5,231	292%	3.5%
Apr. '93	1,562	133%	4,217	186%	5,779	11,010	210%	7.3%
May '93	1,205	77%	3,745	89%	4,950	15,960	145%	10.6%
Jun. '93	2,002	166%	4,440	119%	6,442	22,402	140%	14.8%
Jul. '93	1,830	91%	6,668	150%	8,498	30,900	138%	20.4%
Aug. '93	1,743	95%	4,277	64%	6,020	36,920	119%	24.4%
Sep. '93	1,845	106%	4,786	112%	6,631	43,551	118%	28.8%
Oct. '93	2,347	127%	4,635	97%	6,982	50,533	116%	33.4%
Nov. '93	2,406	103%	2,871	62%	5,277	55,810	110%	36.9%
Dec. '93	2,642	110%	4,383	153%	7,025	62,835	113%	41.6%
Jan. '94	2,612	99%	4,091	93%	6,703	69,538	111%	46.0%
Feb. '94	3,041	116%	4,920	120%	7,961	77,499	111%	51.3%
Total	25,267		52,232		77,499			
%	32.6%		67.4%		100%			

* Own calculations based on Summarnaja (1994) and Rezultaty (1994)

From all used vouchers, two-thirds were used within the framework of voucher auctions and one-third within the framework of closed subscriptions. If at the beginning there was a higher use of vouchers through closed subscriptions, then at the beginning of March 1993, an opposite process is present, with vouchers more often being used as means of payment at auctions, rather than for

internal closed subscriptions. Another easily observable process is the slow down of voucher use in the second half of 1993. From August 1993, the number of vouchers used stays practically at the same level, varying between 5.2 and 7.9 billion Rb. per month.

The distribution of voucher use in the different regions of Russia is also varied (See Table 5).

TABLE 5. THE STRUCTURE OF VOUCHER USE BOTH IN CLOSED SUBSCRIPTION AND VOUCHER AUCTIONS (Regional Aspect)

Region	Vouchers Used	% Used	Vouchers used during:			
			Closed Subscriptions		Voucher Auctions	
Northern	4,108,159	66.4%	1,324,291	32.2%	2,783,868	67.8%
North Western	7,701,095	93.1%	1,316,278	17.1%	6,384,817	82.9%
Central	15,555,015	51.2%	3,653,105	23.5%	11,901,909	76.5%
Volga Vyatka	4,673,354	55.1%	1,692,906	36.2%	2,980,448	63.8%
Cent. Chernoziem	2,878,095	37.1%	1,094,510	38.0%	1,783,585	62.0%
Volga	7,515,159	45.2%	2,329,908	31.0%	5,185,252	69.0%
North Caucasus	4,492,518	26.1%	1,375,386	30.6%	3,117,132	69.4%
Ural	14,129,771	69.2%	5,606,662	39.7%	8,523,109	60.3%
West Siberia	8,791,109	52.1%	3,187,550	36.3%	5,603,559	63.7%
East Siberia	4,789,424	50.5%	2,437,258	50.8%	2,349,165	49.8%
Far East	2,616,983	31.0%	1,168,687	44.6%	1,448,296	55.3%
Kaliningrad	302,177	33.8%	87,110	28.8%	215,067	71.2%
Total	77,549,859	51.3%	25,273,652	32.5%	52,276,207	67.4%

* Own calculations based on Summarnaja (1994).

The largest portion of vouchers were used in the North Western (93.1%), Northern (66.4%), and Ural (69.2%) regions. Relatively, the lowest portion of vouchers were used in the peripherally located regions of Northern Caucasus, the Far East, and Kaliningrad, where until March 1994, fewer than one-third of all vouchers in circulation were used.

Again two-thirds of the vouchers were used in the voucher auctions and one-third in closed subscriptions. In different regions some differences are apparent. A strong positive correlation exists between the degree of the use of vouchers and the share of vouchers used at voucher auctions (See Table 5). This correlation is especially visible in the case of the North Western region. In this region, 93 percent of all vouchers were used and they were mainly vouchers used through voucher auctions (82.9%). The Far East region provides an example at the other extreme, where only 31 percent of all the vouchers were used, and voucher auctions accumulated a little more than half of

the vouchers. It is also interesting that in the eastern peripheries of the Federation, i.e. in the East Siberian and the Far East regions, almost half of all the vouchers constitute vouchers used through closed subscription. Apparently, in these regions, a smaller demand for vouchers exists. This seems to be confirmed by the high purchasing power of each voucher at voucher auctions in these two regions (see Table 8). Each voucher can purchase 3 and 2.5 shares respectively, exceeding the average for the entire Federation which is 1.96 shares per voucher.

Only four months remain until the end of the VP program. During this time, nearly half of all the vouchers remaining in circulation should be used. The GKI expects that in this time the privatization of GASPROM and other refineries will bring a large number of shares to voucher exchanges (about 20% of all demand expressed in vouchers). Nevertheless, this indicates that at the current voucher exchange rate (less than 2 shares per voucher), approximately 20 percent of the vouchers will not find their shares, unless the program is expanded and new firms enter voucher privatization or a dramatic fall in voucher prices occurs.

DYNAMIC OF VOUCHER PRICE FORMATION ON THE SECONDARY VOUCHER MARKET

In the period from October 1, 1992 to March 31, 1993, 151.1 million vouchers were issued. A voucher holder may use his voucher in one of three ways: to buy shares of privatized enterprises in auctions or tenders, to exchange it for shares in mutual funds, or to sell it for cash.⁵ Because of the last option, a secondary market for vouchers has emerged where vouchers can freely be sold or purchased. Firms dealing in trading vouchers have emerged. In Moscow the best know firms are KLIO, CERICH, OLIDA, LERMAN, and FIRSOV. In other regions, REZERW PARTNER in Voronezh, DOCHODNYJE BUMAGI in Pskov, DOCHODNYJ DOM in Saratov, and TRAST INWEST in Chelabinsk are operating.

The voucher price on the secondary market, on one hand, reflects the relation of supply and demand, and on the other hand, provides a rather precise reading of the political situation and atmosphere around privatization activities.

The voucher prices in the discussed period are listed in Table 6.

⁵ A humorous example of vouchers application in real life is provided by the Russian daily Rossiyskiye Vestey. The daily reports that vouchers in the city of Perm are accepted by prostitutes as payment for their services ("Postscripts" 1993).

TABLE 6. DYNAMIC OF VOUCHER PRICE FORMATION IN RUBLES AND IN USD.

Date	Average price Rb	Dynamic in %	Exchange Rate Rb/\$	Average Price in \$
Nov. '92	8565		453	18.91
Dec. '92	7447	86.95%	469	15.88
Jan. '93	5027	67.50%	569	8.83
Feb. '93	4600	91.51%	576	7.99
Mar. '93	4164	90.52%	684	6.09
Apr. '93	4284	102.88%	795	5.39
May '93	5289	123.46%	940	5.63
Jun. '93	8888	168.01%	1085	8.19
Jul. '93	9088	102.27%	987	9.21
Aug. '93	9567	105.27%	985	9.71
Sep. '93	10134	105.93%	1299	7.80
Oct. '93	11648	114.94%	1191	9.78
Nov. '93	28672	246.15%	1214	23.62
Dec. '93	26421	92.15%	1554	17.00
Jan. '94	24762	93.72%	1587	15.60
Feb. '94	22674	91.57%	1689	13.42

* Own calculations based on Pribalov (1994) and D¹browski (1993)

From October 1992 until spring 1994, three stages in the voucher price formation are clearly visible. The first stage covers the time period from October 1, 1992 to March 1993. In this time the voucher price shows a falling tendency, from 8,565 Rb. in November 1992 to 4,164 Rb in March 1993. This period was also characterized by high fluctuations in voucher prices. For example, on December 6, 1992, the highest price was eight thousand Rb and the lowest six thousand Rb. By the end of this stage the voucher price stabilized itself at the level of 4-4.2 thousand rubles with minor fluctuations not exceeding 3 percent in April 1993. The decline in the voucher prices was a result of political destabilization, changes in the government (Chernomyrdin replaced Gaidar), internal conflicts within the government, and strong opposition by the Russian Parliament to the privatization program.

The second stage began in April 1993 and was characterized by the gradual (100-250 ruble daily) increase in nominal voucher prices. If at the beginning of May 1993 this price was at the level of 4,150 Rb., then in June 1994 it was 8.3-8.6 thousand Rb (on some stock exchanges prices reached

12 thousand rubles). In November 1993 as a result of Yeltsin's power consolidation and his dissolution of Parliament, the voucher price increased suddenly to 28,672 Rb. The boom of the second period was a result of the victorious referendum as well as the Presidential decree which set the mandatory minimum quota of shares designated for voucher auctions. An agreement reached between the GKI and the Russian Ministry of Fuels and Energy concerning the sale of a portion of firms' shares for vouchers strengthened this process.

The third period began in November 1993, and was characterized by a slow (about 50 rubles daily) decline in voucher prices. At the end of February 1992, the voucher price fell to the level of 22,674 Rb and showed continuing declining tendencies. Had the November events consolidating Yeltsin's power not taken place, the voucher prices would very probably have reached an equilibrium price of 19 thousand Rb. per voucher. This is a price which is 1.9 times higher than the nominal voucher price, and amounts to a little over \$13.00.

The voucher price expressed in USD also fluctuated. In the first and third stages, there is a visible decline in voucher price expressed in USD. If in October 1992 the price of a voucher was \$23, then at the end of this period, it was only \$5.39. In the second period, the price stabilized at the level of \$8-9 per voucher. In the third period, however, after a sudden increase to \$23, the price again fell in February 1994 to \$13. Because of the expected immediate increase in the number of vouchers introduced into the voucher auctions. maintaining the same number of firms designated for privatization, a dramatic decline in the average voucher price can be expected in May and June 1994. This decline was already visible in December 1993, when it was announced that voucher privatization would definitely end in mid-1994.

GENERAL EQUILIBRIUM BETWEEN THE NUMBER OF VOUCHERS AND THE NUMBER OF SHARES AT THE BEGINNING OF THE PROGRAM AND DURING ITS REALIZATION

There is no doubt that the balance of demand for shares with their supply required a massive sale of privatized enterprises' shares for vouchers during 1993. Experts from the State Committee were aware that a significant number of vouchers should be sold as early as the first half of 1993, well before the vouchers expiration, to create confidence in the VPP (Chubais 1992).

Generally speaking, to create confidence in the program, a minimum of ten shares would be issued for each voucher. In other words, the nominal value of the shares offered on the market would be equal or higher than the face value of the vouchers. The relatively higher value of shares than vouchers creates a buffer and leads generally to higher confidence in the program. And vice versa,

the shortage of shares could lead to voucher inflation and could undermine public confidence in the whole voucher privatization program.⁶

How is equilibrium maintained in the Russian VPP? To answer this question the authors compared the supply of shares with the demand for them. An analysis of this question is made in accordance with the different regions and in relation to the conditions existing in each region. The regionalization of analysis is understandable because the sales of shares takes place, with the exception of shares of very large enterprises, at regional voucher auctions.

TABLE 7. ESTIMATED VOUCHER EXCHANGE RATES AT BEGINNING OF THE PROGRAM (Regional Aspect)

Region	Founding Capital (m Rb.)	Opt. Variant (80%) (m Rb.)	Pes. Variant (29%) (m Rb.)	Number of Vouchers (thous.)	Opt. Exch. Rate (2/4)	Pes. Exch. Rate (3/4)
Northern	38789.1	31031.2	11248.8	6191.1	5.01	1.82
North Western	10692.4	8553.9	3100.8	8270.4	1.03	0.37
Central	80055.7	64044.6	23216.2	30383.3	2.11	0.76
Volga Vyatka	25104.1	20083.3	7280.2	8482.6	2.37	0.86
Cent. Chernoziem	25225.7	20180.5	7315.4	7761.9	2.60	0.94
Volga	50938.3	40750.7	14772.1	16640.9	2.45	0.89
North Caucasus	25652.4	20521.9	7439.2	17245.6	1.19	0.43
Ural	115945.0	92756.0	33624.0	20430.5	4.54	1.65
West Siberia	63730.4	50984.3	18481.8	16888.5	3.02	1.09
East Siberia	41349.8	33079.9	11991.4	9474.8	3.49	1.27
Far East	36603.6	29282.9	10615.1	8445.6	3.47	1.26
Kaliningrad	4413.1	3530.5	1279.8	894.1	3.95	1.43
Total	518499.7	414799.8	150364.9	151109.3	2.75	1.00

* Own calculations based on Summarnaja (1994) and Rezultaty (1994).

The simple comparison of value of shares and the nominal value of voucher shows a strong lack of balance. The total number of shares, 518 million, exceeds the total amount of vouchers, 151.1 million, by only three and half times, much below the required ten times.

⁶ To avoid such a situation, the designers of the Czechoslovak Privatization Program assumed in 1992 that the supply of shares would exceed 16 percent of the voucher demand.

In reality the situation is more complicated. Employees have the right to acquire 25 percent of the shares for free as well as purchase an additional 10 percent. Also, managers can purchase, during closed subscription, an additional 5 percent of shares. In extreme cases either 414.8 million of shares with the total value of 414.8 billion rubles, or 150.3 million of shares with the total value of 150.3 billion Rb. should be designated to the voucher auctions. This depends on which variant would be fulfilled: optimistic or pessimistic. In the optimistic variant, it is assumed that 80 percent of all shares will be sold for vouchers, as according to Presidential Decree 66, a minimum of 20 percent of the shares has to be sold for cash. In the pessimistic variant, it is assumed that 29 percent of shares could be sold for vouchers. The minimal limit was set up by the Presidential Decree entitled: "About the State Guaranties Securing the Citizens' Rights to the Participation in Privatization" (Ukaz 640). These shares had to be provided for auctions within three months of the registration of a new joint-stock company (JSC). In the case of the optimistic variant, an unrealistic assumption was also made that there is no distribution of shares for free, and that all shares (with the exception of these sold for cash in the third round) are designated for voucher auctions.

The comparison of both variants shows that from the beginning a shortage of shares and a lack of nominal equilibrium were apparent. It was impossible for one voucher with a nominal face value of 10 thousand rubles to purchase ten shares at one thousand rubles each. The shortage was between 1 billion and 1.4 billion shares. The program's architects assumed that for each voucher, on average, it would be possible to acquire 2.75 shares in the optimistic variant or 1 share in the pessimistic variant. This was a rather risky assumption, because considering the lack of experience among Russian investors, the lack of equilibrium could lead to a dissatisfaction among voucher holders, stemming from the fact that their vouchers acquired less value than was promised.

The second observation concerns the differences in exchange rates among regions. The vouchers in the Northern and Ural regions achieved the highest coverage at 5.01 and 4.54, respectively. The lowest rate was achieved in the North Western and North Caucasus regions, 1.03 and 1.19, respectively (in the optimistic variant).

The reality, however, was different from the assumptions. The average exchange rate calculated by dividing the value of the funding capital designated for vouchers auctions by the number of vouchers used on the voucher auctions, was lower than predicted in the optimistic variant, but higher than in the pessimistic variant. It settled at an average point between the optimistic and pessimistic rate. Of course, the question arises, that if only 21 percent of the shares were designated for auctions (8 percent lower than predicted in the pessimistic variant), how was such a high exchange rate achieved? If on the supply side for auctions, only-one fifth of the planned shares were provided, then on the demand side in the auctions, only one-third of all vouchers were used. Some of the vouchers were used in closed subscriptions, and half of them are still in private hands.

The voucher exchange rates in different regions were quite the opposite than anticipated. The Northern region, instead of having the highest exchange rates, appears to have a very low rate (1.6), well below the national average. At the same time, the East Siberian and Far East regions which were supposed to have exchange rates slightly above average, finished as leaders, exceeding the national average by 50 percent. Only the predictions about regions with lower than expected exchange rates appeared to be correct. The North Western and North Caucasus regions have low rates of 1.0 and 1.7 shares per voucher respectively.

Another interesting phenomenon was the smaller than anticipated difference between the highest and the lowest rate. The difference between the extremes was expected to be about 1 to 5, between the North Western and Northern regions (.37:1.82). The actual difference was smaller, 1:3, and it was between the North Eastern and East Siberian regions (1.0:3.0). Apparently, in spite of distances and communication difficulties between regions, some integration between auction markets existed.

TABLE 8. THE VOUCHER EXCHANGE RATE BY REGION (In thousand of Rubles)

Region	Founding Capital (m Rb.)	Capital designated for 2nd Round	Average % of shares for 2nd Round	Number of Voucher accepted	Average Exch. Rate
Northern	25,6531	4,442	17.4%	2,784	1.6
North Western	23,100	6,531	27.8%	6,385	1.0
Central	75,541	17,141	27.7%	11,902	1.4
Volga Vyatka	28,905	7,279	25.2%	2,980	2.4
Cent. Chernoziem	20,280	4,342	21.4%	1,784	2.4
Volga	62,608	13,523	21.6%	5,185	2.6
North Caucasus	23,471	5,250	22.4%	3,117	1.7
Ural	91,391	18,541	20.3%	8,523	2.2
West Siberia	78,654	14,518	18.5%	5,604	2.6
East Siberia	35,628	7,105	19.9%	2,349	3.0
Far East	22,325	3,691	16.5%	1,448	2.5
Kaliningrad	1,061	246	23.2%	215	1.1
Total	488,626	102,508	21.0%	52,276	2.0

* Own calculations based on Summarnaja (1994) and Rezultaty (1994).

Undoubtedly, the voucher exchange rates together with the political situation had a decisive impact on the voucher prices in secondary markets (See Table 6). Generally speaking, the positive correlations between voucher exchange rates and voucher prices are apparent. A decline in the exchange rate from December 1992 to May 1993 creates a decline in voucher prices. The boom in the voucher exchange rates in the second half of 1993 also had a positive impact on the average price of vouchers in secondary markets.

DISTRIBUTION OF SHARES IN DIFFERENT ROUNDS OF VOUCHER PRIVATIZATION

Distribution of shares in different rounds of VP gives an answer to who truly becomes an owner of state property. In the calculations, the actual capital of the privatizing enterprises, in the amount of 489,117 million rubles, was used. The calculations are shown in Table 9.

TABLE 9. DISTRIBUTION OF SHARES IN DIFFERENT ROUNDS OF VOUCHER PRIVATIZATION (In Thousand of Rb.)

Region	Founding Capital	First Round of Privatization			Second Round Open Voucher Auctions	Third Round Invest. Tenders
		Variant I Free Distribut.	Closed Subscrip. for Vouchers	Closed Subscrip. for cash		
Northern	25870.5	2257.3	2185.1	7975.4	4442.0	9010.7
North Western	23202.1	1108.0	2171.9	7857.2	6431.0	5634.1
Central	75540.7	5398.0	6027.6	24833.9	17141.0	22140.2
Volga Vyatka	28905.1	2211.6	2793.3	8869.6	7279.0	7751.6
Cent. Chernoziem	20583.1	896.9	1805.9	7177.1	4342.0	6361.2
Volga	62580.7	4711.9	3844.3	21482.5	13523.0	19019.0
North Caucasus	23471.0	1229.6	2269.4	7767.0	5250.0	6954.9
Ural	91315.9	3860.3	9251.0	30720.3	18541.0	28943.3
West Siberia	78634.3	3304.4	5259.5	29180.6	14518.0	26371.8
East Siberia	35627.7	1337.5	4021.5	11742.3	7105.0	11421.4
Far East	22324.6	833.0	1928.3	7954.5	3691.0	7917.8
Kaliningrad	1061.3	44.5	143.7	321.1	246.0	305.9
Total	489117.0	25876.1	41701.5	167198.5	102509.0	151831.8
	100.0%	5.3%	8.5%	34.2%	21.0%	31.0%

* Own calculations based on Summarnaja (1994) and Rezultaty (1994).

In the first round only 5.3 percent of the shares were distributed free within the framework of the first variant due to the fact that only 21.3 percent of the firms chose this variant for privatization. In the framework of the first round of closed subscriptions, 43 percent of all shares were sold with 80 percent sold for rubles and only 20 percent sold for vouchers. 21 percent of the shares were sold at voucher auctions within the framework of the second round, with about 31 percent of all the shares destined for investment tenders (third round).

A few interesting paradoxes are apparent from the Table.

First, according to the Presidential Decree, a minimum of 50 percent of all shares should be sold within the framework of closed subscriptions in the first round for vouchers. So far, only 20 percent of all shares designated for closed subscription were sold for vouchers. Again, this is about 30 percent less than the above mentioned law requires.

Second, according to the Presidential Decree (Ukaz 640), a minimum of 29 percent of all shares of firms designated for privatization should be designated for the VPP. Table 9 seems to show that for vouchers at voucher auctions, only 21 percent of all shares were sold so far, 8 percent less than the Decree requires.

Third, the purchase of vouchers for cash plays a more important role than was anticipated by the architects of the Russian privatization program. A total of 65.2 percent of all shares were sold for cash. This explains why so many of the issued decrees are aimed at forcing voucher holders to make purchases in vouchers, not in cash.

The larger than expected role of cash undoubtedly had a positive impact on the slowing of inflationary tendencies in the Russian economy in the first half of 1993.

Voucher auctions had the largest role in the North-Western region, where 27.7 percent of all vouchers were sold. This was still 1.3 percent lower than the 29% required by law. At the other extreme was the Far East and Northern regions, with only 16.5% and 17.1%, respectively, of vouchers sold. An inverse proportion exists between the portion designated for auctions and the number of shares sold for cash to strategic investors in the third round. A game seems to be played by the management of privatized firms: to sell the largest portion of shares in the third round and the smallest in the second round. In the third round the fictitious firms established by the directors and part of the employees as a rule won the tenders and thus increased the block of shares under the control of management and employees.

RESULTS OF VOUCHER AUCTIONS

The successful introduction of the voucher privatization program required the preparation of an effective system of auctions and tenders, where vouchers are exchanged against shares of privatized JSCs. Undoubtedly voucher auctions play an important role in the VPP as institutions of the primary market.

From December 1992 to March 1994, more than 9 thousand auctions took place and they became a permanent element of the financial market. The number of auctions according to regions is presented in Table 10.

TABLE 10. NUMBER OF VOUCHER AUCTIONS (In Thousand Rb.) (Data from March 4, 1994)

Date	No. of Auct.	Num. of Regions		Found. Capital (m. Rb)	Found. Capital in VPP	% sold in VPP	Vouch. Used	Vouch. Exch. Rate
		Month	Total					
Dec. '92	18	8	8	3041	513	16.9%	158	3.25
Jan. '93	107	21	26	6062	705	11.6%	229	3.08
Feb. '93	194	30	40	6497	1489	22.9%	544	2.74
Mar. '93	439	51	57	22554	5297	23.5%	2268	2.34
Apr. '93	613	61	69	30038	7016	23.4%	4217	1.66
May '93	581	53	72	23174	7482	19.3%	3745	1.20
Jun. '93	896	74	79	38502	8036	20.9%	4440	1.81
Jul. '93	911	62	81	35205	8180	23.2%	6668	1.23
Aug. '93	896	66	81	33514	6909	20.6%	4277	1.62
Sep. '93	776	66	82	35498	7192	20.3%	4786	1.50
Oct. '93	961	74	82	45142	8407	18.6%	4635	1.81
Nov. '93	883	64	82	46287	8474	18.3%	2871	2.95
Dec. '93	1058	64	82	50824	9919	19.5%	4383	2.26
Jan. '94	598	63	83	50234	11456	22.8%	4091	3.00
Feb. '94	411	50	86	60266	14296	23.7%	4920	2.71
Total	9342			486838	102238	21.0%	52232	1.96

* Own calculations based on: Rezultaty (1994).

While in December 1992, only 18 voucher auctions were organized, in January 105 auctions took place, in February 200, in April 600, and in December 1993 approximately 1000. At the same time, the number of regions where auctions were organized grew. In December 1992, only eight regions

organized auctions, yet by April the number expanded to 61 regions, and in October 74 regions. Auctions have already been organized in 86 regions of the 88 regions in Russia.

Auctions are organized at the location of the JSC locations, where shares are emitted. The regions with the highest number of auctions are: Saint Petersburg, Wologda, Stavropol, Woroneż, Ivanowo, Vladivostok, Kurgan, Kursk, and Mordowia. Interregional sale appeared for the first time in March, and was aimed at securing the interests of small investors in the less industrialized regions. These auctions involved only large firms (ZiF, Uralmasz, UAZ). Experience has shown that participation of investors from other regions in the interregional auctions increases the price of the share. At the same time, however, new difficulties arise because of the large differentiation of legal conditions between republics constituting the Russian Federation, as well as difficulties with transferring property rights, issuing vouchers to new owners, and the circulation of shares and vouchers. Moreover, according to the law issued on February 15, 1993, it is impossible to take part in auctions via mail or proxy. Investors are obliged to arrive at auctions personally, which increases the cost of operation and deepens the regional fragmentation of the voucher market.

Another phenomenon, is the oscillation of the voucher exchange rate. The rate was the highest in December 1992, then fell by more than half in July 1993, only to return to its previous level in January 1994. Up until the end of 1993, there was a paradoxical situation of an inverse proportion between the number of shares sold at auctions and the voucher exchange rate: the lower the number of shares designated for voucher auctions, the higher the number of shares one voucher could buy, and thus the higher the voucher exchange rate. While in January 1993, with only eleven percent of shares designated for voucher auctions in the second round, one voucher could acquire an average of three shares. When in July 1993, on the other hand, 23 percent of shares were designated for the voucher auctions, one voucher could acquire only 1.23 shares. At the beginning of 1994 the situation became more logical showing a positive correlation between the number of shares available at auctions and the number of shares which could be acquired by one voucher.

THE PURCHASING POWER OF A RUBLE INVESTED IN VOUCHERS

The ruble's purchasing power is calculated by dividing the voucher exchange rate by the market price of the voucher. A cyclical evolution of the purchasing power of ruble invested in purchase of voucher is clearly discernible. For example, in December 1992 it was possible to acquire in average 3.25 shares for one voucher, or 3,250 Rb. of book value assets. At the same time the voucher price amounted to 7,447 Rb. This means, that for one ruble spend on a purchase of a voucher it was possible to buy 44 Russian cents (kopeks) worth of state assets. Data in a dynamic dimension shown in Tab. 11 reveals that, generally speaking, with time the purchasing power of

rubles decreases. In December 1993, one year later, one voucher ruble could acquire only 9 kopeks worth of assets, and in February 1994 12 kopeks worth, eight times below the nominal value. The decline of purchasing power of a voucher ruble was a result of two processes: an increase in the average price of a voucher and a decline of the voucher exchange rate. The latter resulted from a rise in share prices. In March 1993, the price of one share with a nominal price of one thousand rubles oscillated between 1 thousand and 46 thousand Rb., with an average price of 1,779 rubles. In December 1993, the same share oscillated between 250 rubles and 40 thousand rubles with the average of 11,690 rubles, an increase of 6 and half times.

TABLE 11. FORMATION OF THE PURCHASING POWER OF A RUBLE INVESTED IN THE PURCHASE OF VOUCHERS.

Date	Average Voucher Price	Founding Capital (thou. Rb.)	Capital sold (thou. Rb.)	Accumul. Vouch.	Vouch. Exch. Rate	Purch. power: Rb per Vouch.
Dec. '92	7447	3041	513	158	3.25	0.44
Jan. '93	5027	6062	705	229	3.08	0.61
Feb. '93	4600	6497	1489	544	2.74	0.60
Mar. '93	4164	22554	5297	2268	2.34	0.56
Apr. '93	4284	30038	7016	4217	1.66	0.39
May '93	5289	23174	7482	3745	1.20	0.23
Jun. '93	8886	38502	8036	4440	1.81	0.20
Jul. '93	9088	35205	8180	6668	1.23	0.13
Aug. '93	9567	33514	6909	4277	1.62	0.17
Sep. '93	10134	35498	7192	4786	1.50	0.15
Oct. '93	11648	45142	8407	4635	1.81	0.16
Nov. '93	28672	46287	8474	2871	2.95	0.10
Dec. '93	26421	50824	9919	4383	2.26	0.09
Jan. '94	24762	50234	11456	4091	3.00	0.12
Feb. '94	22674	60266	14296	4920	2.71	0.12

* Own calculations based on: Summarnaja (1994) and Rezultaty (1994)

The fact that, one ruble purchased a mere fraction of the nominal value of shares, had its impact on investor behavior. They preferred to use their rubles either for direct purchase of state assets, which was possible during the closed subscriptions in the first round (officially up to 50 percent, but in reality 80 percent) or for the purchase of strategic interest during investment tenders in the third round. Vouchers were only used in situations when it was absolutely necessary, such as the

voucher auctions or closed subscriptions. This explains the earlier mentioned paradox of the limited utility of vouchers in voucher privatization.

VOUCHER EXCHANGE RATE AND ENTERPRISE SIZE

The voucher exchange rate, illustrating how many shares one voucher can acquire, is a good indicator of the attractiveness of a specific investment opportunity.

In Poland, as well as in other post-communist countries conducting privatization on a large scale, a rule has developed, that the shares of small enterprises usually achieve a higher price than shares of large enterprises. Large enterprises are associated with low effectiveness, red tape, and a production profile very characteristic of socialist enterprises. How is in this respect in Russia?

TABLE 12. RESULTS OF VOUCHER AUCTIONS ACCORDING TO FOUNDING CAPITAL
(Data from March 1, 1994)

Founding capital (m. Rb)	Number of Firms	Total Founding Capital	Capital to be sold	% of shares sold	Vouchers Accepted (Thous.)	Exchange Rate
1-2.5	1804	2842	761	26.8%	868	0.88
2.5-5	1735	6247	1639	26.2%	1399	1.17
5-10	1732	12315	3075	25.0%	2207	1.39
10-25	1913	30261	7245	23.9%	5044	1.44
25-50	891	31602	7680	24.3%	4466	1.72
50-100	555	38462	8731	22.7%	6485	1.35
100-250	412	62540	13558	21.7%	8090	1.68
250-500	156	54286	12009	22.1%	6093	1.97
500-1000	80	54697	9751	17.8%	4965	1.96
1000 -	67	194747	38033	19.5%	12649	3.01
Others	12	627	25	4.0%	10	2.50
Total	9357	488626	102507	21.0%	52276	1.96

* Own calculations based on: Summarnaja (1994) and Rezultaty (1994).

The exchange rates in different size firms in Table 12 illustrate that 76.7 percent of all enterprises designated for privatization are ones with founding capital below 25 million rubles (\$25 thousand) per firm. These enterprises also designate a large portion of shares for sale at the voucher auctions.

From the same table it is also visible that the smaller the enterprise, the higher the price of its share expressed in voucher rubles. For one voucher in small enterprises with founding capital less than 2.5 million Rb., it was possible to acquire less than one share (.88 of share). At the same time, in a case of an enterprise with founding capital amounting to more than one billion rubles, it was possible to acquire 3 shares for one voucher. A very similar phenomenon can be seen when the size of enterprises is measured by the number of employees. (See Table 13).

TABLE 13. RESULTS OF VOUCHER AUCTIONS ACCORDING TO NUMBER OF EMPLOYEES (Data from March 4, 1994)

Number of Employees	Number of Firms	Founding Capital	Capital to be sold	% of shares sold	Vouchers Accepted (Thous.)	Exchange Rate
1-499	5497	42,097	10409	24.7%	8441	1.23
500-999	1308	29,675	6950	23.4%	5014	1.39
1,000-4,999	1578	118,520	26174	22.1%	15099	1.73
5,000-9,999	216	73,208	13178	18.0%	6422	2.05
10,000 -	100	148,578	28635	19.3%	10261	2.79
Others	658	76,547	17162	22.4%	7040	2.44
Total	9357	488,625	102508	21.0%	52277	1.96

* Own calculations based on: Summarnaja (1994) and Rezultaty (1994).

Data in Table 13, similarly to that of Table 12, confirms that the larger the enterprise (measured by number of employees), the larger the number of shares which can be exchanged for one voucher. In enterprises employing less than 500 employees, for one voucher 1.2 shares can be obtained. In enterprises employing more than 10 thousand employees, one voucher could acquire almost three shares.

Small firms with less than 500 employees constitute the largest group (24.7%) among sold enterprises. In second place are firms with 500 to 999 employees (23.4%), and in third place are firms employing between 1 and 5 thousand employees (22.1%). By multiplying the number of employees by the number of firms, it is clear that the largest number of employees are employed in firms belonging to this last category.

EXCHANGE RATE AND INDUSTRY BRANCH

The next problem requiring analysis was the question of the profitability of investment in different branches of industry. In Table 14 we present data concerning the number of firms privatized in different branches, the founding capital of these firms, the number of vouchers designated for the purchase of shares in specific branches, as well as the exchange rate existing in all main branches of industry.

Table 14. VOUCHER PRIVATIZATION ACCORDING TO BRANCHES OF INDUSTRY
(Data from March 4, 1994)

Branch	No. of Firms	Found. Capital	% of total	Aver. Found. Capital	% sold in VPP	Acc-d. Vouch.	% of ac. Vouch.	Exch. Rate
Retail trade	122	1298	0.27%	10.6	26.7%	1551	2.97%	0.22
Computers	48	118	0.02%	2.5	28.4%	77	0.15%	0.44
Spec. Transport	13	117	0.02%	9.0	26.6%	58	0.11%	0.54
Drainage	7	65	0.01%	9.3	34.7%	41	0.08%	0.55
R&D Centers	346	2460	0.50%	7.1	25.5%	987	1.89%	0.64
Publishing	21	207	0.04%	9.9	22.3%	63	0.12%	0.73
Petrol. Refin.	10	3374	0.69%	337.4	15.9%	634	1.21%	0.85
Communication	20	1144	0.23%	57.2	26.0%	350	0.67%	0.85
Food, Tobacco	657	14723	3.01%	22.4	22.4%	3698	7.08%	0.89
Furniture	134	1528	0.31%	11.4	24.6%	392	0.75%	0.96
Catering, Hotel	34	5931	1.21%	174.4	32.3%	1480	2.83%	1.29
Second.Smelting	80	604	0.12%	7.6	25.7%	117	0.22%	1.33
Wholesale Trade	594	8944	1.83%	15.1	25.6%	1551	2.97%	1.48
Handicraft	146	1299	0.27%	8.9	24.3%	213	0.41%	1.48
Mining	50	3523	0.72%	70.5	27.0%	640	1.23%	1.49
Water Transport	56	13377	2.74%	238.9	14.5%	1273	2.44%	1.52
Car Sale Repair	179	1731	0.35%	9.7	22.8%	248	0.47%	1.59
Air Transport	8	1031	0.21%	128.9	15.1%	96	0.18%	1.62
Chemicals	956	51961	10.63%	54.4	21.9%	6794	13.01%	1.67
Transportation	963	6751	1.38%	7.0	25.6%	1024	1.96%	1.69
Wood & Paper	690	20323	4.16%	29.5	21.2%	2539	4.86%	1.70
Agr. Prod.Proc.	75	811	0.17%	10.8	23.1%	104	0.20%	1.80

Branch	No. of Firms	Found. Capital	% of total	Aver. Found. Capital	% sold in VPP	Acc-d. Vouch.	% of ac. Vouch.	Exch. Rate
Service	16	49	0.01%	3.1	27.4%	7	0.01%	1.92
Metallurgy	296	73695	15.08	249.0	22.1%	7654	14.66%	2.13
Sea Food Proc.	33	1579	0.32	47.8	23.7%	167	0.32%	2.24
Car Industry	115	41707	8.54	362.7	30.2%	5432	10.40%	2.32
Elect. Machine.	1221	84824	17.36	69.5	20.9%	7418	14.20%	2.39
Construction	1480	704	4.85	16.0	22.6%	2087	4.00%	2.57
Forestry	3	54	0.01	18.0	29.0%	6	0.01%	2.61
Iron Forging	8	43	0.01	5.4	24.7%	4	0.01%	2.66
Oil & Gas	6	29235	5.98	4872.5	16.9%	1659	3.18%	2.98
Water Supply	19	290	0.06	55.3	28.1%	24	0.05%	3.40
Light Industry	553	31313	6.41	56.6	23.4%	2067	3.96%	3.54
Power Distribut	49	49731	10.18	1014.9	9.9%	1114	2.13%	4.42
Coal Mining	12	158	0.03	13.2	26.1%	9	0.02%	4.58
Others	337	10876	2.23	32.3	15.2%	649	1.24%	2.55
Total	9357	488626	100%	52.2	21.0%	52227	100%	1.96

* Own calculations based on: Rezultaty (1994).

The most enterprises to be privatized were selected from construction, electro-machinery, and chemical industries and from transport. Firms from these four branches constituted half (49.3%) of the total of privatized JSCs. The founding capital of the electro-machinery, metallurgy, chemical, and energy distribution industries constituted more than half of the capital of all enterprises (53.2%). The largest average capital of firms designated for privatization was in the refinery and gas industry, as well as firms from the energy industry; the smallest one from firms in the computer industry. Generally, the demand expressed in the number of invested vouchers and the supply expressed in the number of available shares differ tremendously. The most vouchers were sent for the purchase of shares of trade firms, (7,050, of which 1,551 were accepted), followed by the food and tobacco industry (4,155 - 3,698 accepted). The lowest demand was for shares of firms in the coal mining industry, iron forging and forestry.

This disproportion between voucher demand and share supply lead to serious disproportions in the exchange rate. The upper part of Table 14 contains branches with exchange rates below the average of 1.96 per voucher (more expensive shares). The lower part of the table contains branches with a higher than average exchange rate.

In a comparison of all branches, it is visible that the most attractive investments were in retail trade, publishing, refinery, the food and tobacco industry, and the hotel industry. The least attractive were coal mining, iron forging, and the automobile industry, in other words all the branches which were the pride of the Soviet economy, symbols of its economic power. The highest price was achieved by retail trade firms, where four and a half vouchers were needed to purchase one share. In other words one share of a trade firm, with a nominal value of one thousand rubles, cost 45,454 voucher rubles at voucher auctions. In second place was the computer industry, where shares were sold for 22,727 Rb. each. The least expensive were shares of coal mines. Coal mining shares were sold out for 2,183 Rb. per share (1/5 of the nominal price), energy distribution enterprises - 2,262 Rb. per share (1/5), and light industry enterprises - 2,825 Rb. per share (1/4 of the nominal price).

Many of the sold shares are already listed on Russian stock exchanges. These exchanges are functioning in Russia without any legal regulation and are similar to the Polish commodities markets. Most of them trade commodities in the morning, and vouchers and other securities in the afternoon. Securities circulating on the market are not licensed by the Securities and Exchange Commission.

Approximately 60 stock exchanges are currently operating in the Russian Federation. The largest is in Vladivostok, under name Vladivostok International Stock Exchange, where shares of approximately 30 firms are listed, mostly freight companies. The second largest is the Petersburg Stock Exchange. It is estimated that all of the Russian Stock Exchanges have a combined turnover of approximately \$500 million. The sale of vouchers is currently the most profitable business.

Shares of enterprises usually gain value when they are traded on the stock exchanges. For example, the shares of SOVAVTO were sold at the vouchers auctions at a relation of one share for one and half vouchers i.e. approximately 9,231 Rb per share. One month later, these shares were selling for 20 thousand Rb. and more on the stock exchanges. The shares of the refinery industry will probably give the voucher holders an even higher capital gain (Bolkin 1993).

Another interesting feature of the Russian exchanges is the temporary character of all listings. The firms shares are listed as long, as long the secondary distribution of shares between investment funds takes place. It usually lasts a few months, when funds set up their portfolios according to branch criteria (no anti-cartel law is imposed). After the portfolios are completed, shares are no longer exchanged or listed. Generally speaking, it can be said that stock exchanges in Russia are arenas where investment funds are trying to get control over privatized enterprises. Capital gain plays a marginal role (Klebnikov, 1994).

LESSONS LEARNED FROM VOUCHER AUCTIONS

Vouchers auctions, according to the expectations of the architects of the Russian VPP, had to provide the mechanism of share distribution among voucher holders. They should secure free access to the privatization process and at the same time ensure the broad distribution of state assets among the population. Were these expectations fulfilled?

From the management and employee point of view, the voucher auctions are the least tolerated solution. Thus they use different methods and tricks to avoid voucher auctions, which would make them lose control over the shares sold to external investors.

The voucher auctions are also unattractive to potential investors. The small purchasing power of a ruble invested in the purchase of vouchers causes the investors to prefer making purchases for cash either within the closed subscriptions or in the third round i.e. through investment tenders or auctions. Each ruble spent this way acquires twice as much asset value, than shares purchased for vouchers during voucher auctions. Vouchers are attractive only in situations when shares for external investors can be purchased only through voucher auctions. This most likely decides the high price of vouchers on secondary markets.

The third lesson learned from the functioning of the voucher auctions is that small enterprises are more attractive investment targets than large ones. The shares of small firms are on average approximately three times as expensive as shares of large firms. This seems to illustrate that Russian investors are fast learners. If in the first quarter of 1993 these investors preferred to purchase shares of large firms because of their size and reputation, than by the end of 1993, they apparently preferred small firms, less known to the public, but at the same time more efficient and more controllable.

The fourth lesson learned, especially apparent at the Moscow voucher auctions, is that the price of the shares depends primarily on one factor, regarded as the main advantage of the firms. In Moscow, such an advantage is location. If an enterprise is located in the center, meaning within the Garden's Ring (Sadovyje Kolco), then the price of the shares will increase to a high level. For example, in the case of the JSC SZKOM located downtown, one voucher with a nominal value of 10 thousand rubles and a market price of approximately 7,000 Rb., could only acquire 90 Rb. worth of shares; in the case of the JSC TECHNOSTROJPROM - 30 Rb., and in the JSC NIIZ - 8 Rb.

The main advantage of a firm does not have to be location. Another factor which can be important, is branch efficiency and the resulting export possibilities. For example, firms in the food and

tobacco industry, aluminum industry, or energy industry are more valuable, than those in construction or coal mining. For instance, on the stock exchange in Volgograd, the demand for shares of the brewery industry caused price of the JSC PIVOVAR to soar to the level of three one hundred Rb. shares for one voucher (ca 33.3 Thousand Rb.). At the same time, the shares of a construction company KAMYSZINPROM-ILSTROJ (well-rated by specialists) reached the price of 35 shares for one voucher (ca. 200 Rb. per share), or 117 times less than the shares of the brewery industry. Other factors, such as the degree of equipment obsolescence, profitability, and management experience play a secondary role (Krizis 1993).

The fifth conclusion which can be drawn from voucher privatization in Russia relates to the situation during auctions. The lower the number of small investors in relation to all auction participants, the lower the voucher exchange rate, and the higher the price of the shares. Examples of record prices appear to confirm this. For example in the JSC NIIZ (one share - 87,500 Rb) of the 35,122 vouchers sent to the auction, small (investing less than 50 vouchers) investors successfully placed only 691 vouchers, or less than 2 percent of all vouchers. In the JSC ROSSZTERN small investors successfully invested 714 of the 62,187 vouchers (1.15%); in the JSC TECHNOSTROJPROM (one share - 23,333 Rb) only 310 of the 13,009 vouchers (2.38%). Conversely, everywhere where small investors constituted a large portion of the bidders, the prices of shares were much smaller. For example, in the JSC WNIPP 49.53 percent of the vouchers were invested by small investors, and the price was 6.5 thousand Rb. per share; in the JSC NITERCHLSDTORG 25.56 percent were invested by small investors and the price was 1,650 Rb.; and finally in the case of the JSC MOSPIEC-ELEZOBETON, 22.02 percent resulted in a price of 3,600 Rb. per share. There was only one case, with the sale of the JSC MKTB, where one large investor invested 3 thousand vouchers, with small investors having investing only 65 (2.12%), and the share price was still only 1,375 Rb. In this case, however, the employees constituted the majority, and were responsible for such a low price (Bolkin 1993).

There are a few possible explanations for this phenomenon. Large investors seemed to be more committed to some firms, which they thought are more profitable than others, and therefore were willing to pay higher prices. They were more successful in blocking small investors from bidding for the more attractive shares. Furthermore, the mechanism for determining the striking price prefers type 1 bidders, who do not specify the number of shares they want to buy and who accept any striking price. For large investors (those investing more than 50 vouchers) it was easier to pay 85 vouchers for one share in the JSC NIIZ, than it was for small investors, who tended to state more specific bid prices (number of shares per voucher). These bidders, when bidding below the striking price do not receive shares. The entire bidding process, therefore, supports large bidders.

The sixth lesson is that voucher privatization and the monopolistic position of employees and managers lead to low prices of sold enterprises. In spite of the fact that prices of shares are growing, these enterprises are, for the most part, practically given away. For example, in the Sajansk Aliuminiejnyj Zavod, the assets, based on the book value method, were valued at 1.2 billion Rb. Shares at the voucher auction were sold at the rate of three shares for one voucher. The voucher price was at that time approximately 6 thousand Rb., which means that each share's price was 2 thousand Rb. This also means that the market value of the JSC was 2.4 billion Rb., or twice as much as the official book value. By the official exchange rate at the time, it amounted to approximately \$2.4 million, the price of small airplane on western markets. There is no doubt that the investors purchasing this enterprises can expect a high capital gain in the future. Moreover, the hydro-electrical energy used in the JSC Sajansk Aliuminiejnyj Zavod is very inexpensive, further adding to the attractiveness of the firm.

THE ROLE OF INVESTMENT FUNDS IN THE VPP

An important role in the Russian VP Program was played by the Voucher Funds (VFs). The law allows two types of investment funds: a.) special privatization investment funds, intended to accumulate vouchers (voucher Funds), licensed and regulated by the GKI and local committees, and b.) other Investment Funds (IF) intended to accumulate financial means, licensed and regulated by the Ministry of Finance.

In this paper the focus is placed only on the first type of funds. The assumption is made that the VFs, acting as large investors, are better able than most citizens to obtain information on companies, and therefore secure better returns in the long term.

Voucher funds are closed-end funds organized as JSCs. This means that shareholders cannot demand that the fund redeem (buy back) their shares., but the Fund shares must be tradable.

The requirements for establishing a VF were relatively easy to meet, allowing any citizen or institution the opportunity to establish one. Funds are required by law to have a minimum starting capital of 500 thousand rubles divided into 500 shares of 1,000 rubles each. This capital could be contributed either in the form of financial means or in kind, but it cannot be contributed in the form of vouchers. Moreover the founding capital has to be deposited by the shareholders within 30 days of the registration of the fund. They could operate either as classical funds or as voucher funds which do not operate with liquid financial assets, but only with privatization vouchers. Investment funds were created by domestic banks, private consulting firms, and by some privatized enterprises.

The equity of these funds constituted the shares of the firms acquired by the fund for investment points. A rule of diversification was enacted requiring that VF invest in at least 10 firms and that their investment not surpass 10 percent of the capital of any JSC (this has been increased in the second half of 1993 to 30 percent). VFs additionally were not allowed to invest more than five percent of their assets in any single JSC, and acquire or own 15 percent of any issuer's debt instruments. Additionally funds may not buy, sell or invest in securities or other assets of any subsidiary, borrow money or issue debt obligations, invest in securities issued by manager, invest in debt securities other than government securities, buy options or make futures contracts etc. The investment restriction were modeled after the U.S. investment fund model.

To protect the investor, funds as well as fund managers must be licensed by the GKI, and fund managers must have trained employees.

The funds are managed according to Western practices. Each fund is regulated by a Charter of Voucher Fund. The board of each fund appoints a separate fund manager for each JSC. An agreement with the manager has to be concluded. The manager or any affiliate of the manager must not constitute a majority on the board or directors of the fund. Total payment to the manager, including all fees and expenses, must not exceed 10 percent of the value of the assets of the fund in any one year. The fund must appoint a depository (a bank or other legal entity) to handle cash and securities including vouchers. The depository must not be an affiliate of the fund with whom the fund closes an agreement. Each voucher fund has to issue a prospectus and its credibility has to be evaluated by an independent auditor. The auditor also checks the accounts of the depository and manager.

The role of the fund is to make profit for investors by buying JSC shares at special voucher auctions, by investing directly in shares, through the secondary market (stock exchanges and OTCs) and/or by trading in vouchers - accumulating them and selling them on to investors. Funds make profits for their shareholders in three ways: by accumulating dividends paid to them out of the annual profits of JSCs whose shares they own, by selling shares of the companies, and by selling vouchers at a price higher than their purchase price.

At the same time, the government is also encouraging the establishment of private venture capital companies. These companies use their own financial resources to purchase vouchers from the population for the purpose of acquiring shares of privatized JSCs. In this case, the companies aim at exercising control and management. No data is available on investment funds and venture capital companies. Observation indicates that the second type is more popular than the first one, but both investment companies and venture capital companies are actively taking part in the purchase of vouchers on the secondary market.

DEVELOPMENT OF VOUCHER INVESTMENT FUNDS

The number of investment funds has rapidly increased. The first three were established in Saint Petersburg in November 1992. On February 1, 1993, there were already 300 funds (Wauczer 1993), and in June 1993 more than 450 (Chubais, Vishnevskaja 1993). At the moment (March 1994) 600 funds are officially registered, of which approximately 75 percent are active. Approximately one sixth of the funds are registered in the Federal GKI, and the remainder in the local branches of the GKI. The license given by the GKI provides a guarantee for the credibility of the funds, a guarantee which is very needed, as these funds have a very small founding capital. Of the 600 funds registered by the GKI, a mere 60 funds had founding capital exceeding 50 million Rb. (5 thousand USD).

Table 15 presents the number of voucher funds, as well as the number of vouchers being under the control of the funds, and the number of deposited vouchers in different regions of the Russian Federation. In this table, only the vouchers which took part in voucher auctions are shown. Those vouchers which were used in the closed subscriptions are not included, due to the fact that investment funds could not participate in these subscriptions.

TABLE 15. VOUCHERS DEPOSITED IN FUNDS AND SHARES OF VOUCHER FUNDS (in thousand of vouchers).

Region	Number of issued vouch.	Number invest. in vouch. funds	No. of vou. fun.	Accum. in vouch. funds	% (4/1)	Vouch. invest. thru funds	% (6/2)	Shareholders in vou. funds	Sha. per vou.
Northern	6191.1	2783.9	22	759.1	12.3%	647.7	23.3%	282.3	2.3
N. West.	8270.4	6384.8	26	1367.4	16.5%	941.7	14.7%	355.9	2.6
Central	30383.3	11901.9	102	16294.0	53.6%	9016.5	75.8%	7102.2	1.3
V. Vyatka	8482.6	2980.4	16	598.8	7.1%	463.3	15.5%	255.1	1.8
C. Chern.	7761.9	1783.6	22	680.8	8.8%	590.6	33.1%	320.9	1.8
Volga	16640.9	5185.3	54	1340.4	8.1%	552.9	10.7%	369.4	1.5
N. Cauc.	17245.6	3117.1	42	1756.9	10.2%	1142.6	36.7%	1087.0	1.1
Ural	20430.5	8523.1	63	3901.1	19.1%	2606.5	30.6%	2104.5	1.2
W. Siber.	16888.5	5603.6	47	2290.3	13.6%	1298.7	23.2%	1256.4	1.0
E. Siber.	9474.8	2349.5	30	1269.9	13.4%	994.1	42.3%	815.4	1.2
Far East	8445.6	1448.3	23	1095.5	13.0%	891.2	61.5%	522.9	1.7
Kalinin.	894.1	215.1	1	6.9	0.8%	4.0	1.9%	3.3	1.2
Total	151109.3	52276.5	448	31361.0	20.8%	19149.9	36.6%	14475.3	1.3

* Own calculations based on: Uchastie (1994), Summarnaja (1994) and Rezultaty (1994).

The largest number of funds and largest number of vouchers are concentrated in the Central region, which includes Moscow, Smolensk, Briansk, Tver and Tula. This region contains one fourth of all voucher funds, and half of the vouchers accumulated in funds. 53 percent of all issued vouchers are in this region's voucher funds. Some of these funds are becoming very large. For example, the Moscow Voucher Investment Fund accumulated seven million vouchers (Rossijskaja Gazieta, 13.02.93). Moscow is gradually becoming the financial center of the Russian Federation, which explains such a large accumulation of funds and vouchers in one region.

Similarly, the Central region has displayed the highest propensity to invest. Funds in this region have invested 75 percent of all accumulated vouchers. Also active were the Far East region with 61 percent of all accumulated vouchers invested, and the East Siberian region with 42.3% of all accumulated vouchers invested. Generally, funds seem to be more active in regions less populated, where individual investors are less interested in decision making.

At the same time, however, both the Siberian and Far East regions are characterized by a small number of shares sold within the framework of voucher auctions and a large number of shares distributed through closed subscriptions (First Round). This seems to indicate the employee's strong identification with their own firms and their attempt at taking control of these firms. The lower interest of external investors in firms operating in these regions (great distance to the center of Russia) also contributes to this process. The small number of funds and small propensity to invest is also characteristic of the Kaliningrad region. In this region, small privatization is being introduced very effectively. The privatization of large enterprises is left to its own devices.

Another characteristic phenomenon is the relatively small concentration of capital in the hands of individual investors, measured by the relation of accumulated capital to the number of shareholders. On average, one shareholder invested 2.16 vouchers in the fund. This seems to undermine the thesis about the high concentration of capital by a few owners.

It is also apparent from Table 15 that the investment funds reveal a higher propensity to invest than individual voucher holders. Having 20.8 percent of all vouchers, funds have acquired 36.6 percent of all shares designated for sale within the framework of the voucher auctions. At the same time, the 80 percent of vouchers outside of the control of the investment funds acquired 63.4 percent of all shares.

EXPERIENCES FROM THE FUNCTIONING OF THE VOUCHER FUNDS

The over one year functioning of the funds allows us to perform general observations and evaluations.

The first observation pertains to the investment strategy of the investment funds. These funds generally specialize in selected branches of industry. For example, one of the largest funds, the First Voucher Fund, administering 4.5 million vouchers, specializes in investments in hotel management, artificial fertilizer, precious metals, and the jewelry industry. Up until the end of 1993, this fund has purchased shares of 80 enterprises in these branches. Another example is provided by the Moscow-based Alfa Capital, established in December 1992. By the end of 1993, Alfa Capital administered an investment portfolio containing 2.5 million vouchers with a market value of 60 billion rubles (\$40 million). Alfa Capital invested in 46 enterprises specializing in food processing and production of building materials.

A second interesting phenomenon is that the funds are most often acquiring shares in a manner not always fully clean and legal. Insider trading practices are not only not considered reprehensible,

but represent a reason for pride in one's entrepreneurship. One of the fund managers was bragging to the authors that he had smuggled 60 diskettes with information on the financial situations of firms from the State Committee. This allowed the fund to choose the most profitable enterprises. Another specific characteristic is that transactions very often bypass the law. For example, Mikhail Czebotarev, the head of the First Voucher Investment Fund, purchased 25 percent of the shares of the Cosmos hotel, built for the Olympics in Moscow. To purchase these shares, he bribed the representatives of the Privatization Fund to hold the tender in only two places in Moscow, rather than on the territory of the entire Russian Federation. Next, he bribed the managers of two other investment funds not to participate in the tender. At the same time he gave an interview on television in which he discussed the low attractiveness of investing in the hotel industry due to the bad condition of hotels in Russia (Klebnikov, 1994). The same manager told *Forbes* how he bought shares in the Solikam Paper Factory. First, together with the enterprise manager he convinced the authorities of the Privatization Fund that the tender must take place at the plant site. The plant, however, is located on the territory of another plant producing arms and thus is closed to outside visitors. Only the representatives of the First Fund received free access to the territory of the plant, and thus First Fund purchased 10 percent of the shares in a factory which has an annual production of 200 million USD (Klebnikov, 1994).

A third phenomenon is a lack of control by shareholders and investment funds over the activities of enterprises, the shares of which comprise the investment portfolio. This is very often a result of considerable dispersion (diversifying the portfolio) which causes a large number of funds to administer a small number of shares. This strategy is undoubtedly effective in developed capital markets, yet it does not pass the test in the case of privatizing enterprises in Russia. Even if a fund purchases a controlling block of shares of some enterprise, it does not mean that it will be able to control the management of that enterprise. Most Russian managers feel that outside shareholders do not introduce any new values to the enterprise (vouchers are not money), and these outside investors are perceived as intruders invading their sphere of authority. From this point of view privatization is like a hostile takeover. Some enterprises do not disclose information on the financial situation to the formal owners, nor a list of shareholders. A good example is provided by BOLSZEVIK, a cookie factory privatized as one of the first, back in December 1992. Alfa Capital acquired 25 percent of the shares, but the management did not allow representatives of Alfa to vote at the annual shareholders meeting. In reply, Alfa filed a lawsuit against the management of BOLSZEVIK, but the judges dismissed the case citing a lack of experience in dealing with similar complaints. In response, Alfa began a campaign in the press pointing out the corruption activities of the main manager of the firm, and convinced the State Committee to threaten the manager with dismissal. Nothing, however, provided the desired results. It was only when Alfa, together with the State Committee, promised to invest foreign money in the development of the firm and

modernizing the plant, were Alfa representatives allowed to participate in the meeting of the Board of Directors of the BOLSZEVIK company.

A fourth phenomenon is the high risk involved in investing in the investment funds. A low capitalization of the investment funds greatly increases the risk associated with investment in the shares of the fund. The first Russian cases of fraud, similar to the Grobelny case in Poland, have already become known. The AMARIS company, registered for a symbolic 10 thousand rubles (ca. \$20) was giving high interest on vouchers and personal cash deposits. The scheme was simple. For one voucher given to the disposal of the company, it paid 12 thousand rubles (or twice the market value of the voucher). The voucher could be withdrawn at the first request of the owner. In the first months, AMARIS met its obligations. The attractive conditions of the voucher lending caused a rapid influx of customers. In the beginning of February, however, AMARIS closed all its offices and disappeared without a trace along with 3 billion rubles worth of vouchers, or about 5 million USD (using the exchange rate at the time). A similar situation occurred with the Techniczeskij Progress fund. This fund promised 500 percent return on invested capital. In this manner it enticed around 300,000 small investors. It subsequently disappeared. Many of the funds working on the market do not have formal licenses awarded by the State Committee.

A fifth phenomenon is the unethical advertising by the funds in an attempt to lure potential customers to purchase the fund's shares. For example, the voucher fund "Neft-Almaz-Invest" announced that it will pay 750 percent dividend on deposited capital in the form of vouchers. The fund unfortunately did not inform the viewers that it will pay out the 750 percent only to the founding members of the fund, which established the fund in 1992, and not to the persons which have subsequently bought shares in the fund.

Another trick was used by the First Voucher Fund. It announced that the value of its shares has increased tenfold. The real value, however, did not increase, but was rather raised administratively by the fund management. If at the beginning, January and February 1993, the First Fund offered 10 of its shares for one voucher, then in December it only offered one of its share per voucher. In this manner, the value of the First Fund increased tenfold (Pribalow, Nikolajev, Kaliszczenko, Fadiejev, 1994).

A sixth phenomenon is the uncontrollability of the funds. According to the Presidential Decree no. 1186, funds are to organize annual shareholders meetings, at which decisions regarding the division of profits are to be made. It is also mandatory to maintain a quorum, such as that at least half the shareholders are to be present at the meeting. These regulations, however, are impossible to enforce. For example, it is impossible to hold a general meeting of the First Voucher Fund, as it has over three million shareholders, and there is not a conference hall that size, not to mention the costs of shareholder participation in such a gathering. Various solutions are used to overcome this

problem. Certain funds (i.e. Moskowskij Investicionnyj Fond) organize regional shareholder meetings, in their place of residence. There appears, however, the problem of ensuring unity in the decisions of the meetings. Other funds have written meetings; shareholders vote by choosing the desired option of a resolution. Still other funds allow representatives to vote and participate in meetings, only after they have presented notarized certification by the owner of the shares. This, though, is rather difficult as notary services are little known and expensive. Some funds decide not to hold meetings at all. In such instances, the activities of the fund management are practically uncontrolled. This certainly has its effect on the payment of dividends.

The reluctance of funds to pay dividends in cash is practically proverbial. The most often used evasion is the payment of dividends with additional shares of their own funds. This means that the fund is issuing additional shares which they use to pay their current shareholders. Another frequently used evasion is the payment of dividends with "nieликвидs", which in Russian are shares of companies in the fund portfolio which are in a difficult financial situation. The basic problem arising here is that the shares are not equal, and one person can get a share of a relatively profitable company, and another of a bankrupt company. As a result, certain funds have created small fund portfolios, comprised of shares of many enterprises in poor financial situation, and have kept 50 % of the shares of such portfolios, while dividing up the remaining shares between holders of the fund shares as payment of dividends. In this manner the funds on the one hand clean their investment portfolios, and on the other, at a relatively low cost, avoid paying the dividend in cash.

Another evasion has been utilized by the WPIK fund. This fund announced that the shareholders who have invested their voucher on the first day of the fund's existence will receive a 750 percent dividend payment, the ones who have invested during the first month will receive a 100 percent dividend payment, and the remaining shareholders will receive a 20 percent dividend. The problem, however, lies in the fact that during the first period, potential investors refrained from investing, and in effect 99 percent of the shareholders fall into the category "remaining", which receive only a 20 percent dividend payment. In this instance, that 20 percent amounts to 500 rubles (33 cents), slightly more than the price of a mail stamp.

SUMMARY

The success of the Voucher Privatization Program can be evaluated in two different stages: the stage of voucher distribution and the stage when new share holders take over new responsibilities. In the first stage, the main question focuses on the efficiency of the share distribution mechanism. In the second stage, the main question pertains to the efficiency of the newly privatized firms.

This paper focuses only on the first question. The analysis seems to support the authors' opinion that, although the VP Program designers did not succeed in preparing the number of shares to equal the number of issued vouchers, they did succeed in implementing a fully "market conformed" distribution mechanism. This mechanism compensates for the shortage of shares. As a result, the distribution of vouchers is proceeding faster than was expected by the GKI, and its progress so far can be considered a success.

The goal of the program, to privatize approximately 5 thousand large enterprises in 1993 was surpassed. During this time 8,010 enterprises have been privatized (until March 1994 - 9,342). Total employment in the privatized firms amounts to 9.1 million people, which constitutes about 45% of total employment in industry. For comparison, during the same time 80 large firms have been privatized in Poland (within the framework of capital privatization), and about 140 firms in Hungary.

This success is even more exceptional taking into account that it was achieved with considerable opposition from the management and crews of the privatized enterprises. It would appear that the privatization should be attractive for crews and management, as it provides an increase in the effectiveness of the enterprise, higher wages, and an increase in production efficiency. In reality the situation is different. Privatization for managers and crews signifies a transfer of the responsibility onto them, which in turn increases the danger of losing government subsidies, and on the other hand threatens current firm managers with a loss of employment.

With the current system of selecting enterprises for privatization, industrial branches are organized into three main categories. The first category contains those enterprises which for various reasons will never be privatized. These include some municipal firms, the Central Bank of Russia, cemeteries, etc. The second category contains enterprises which must be privatized. It includes such enterprises as hotels, agricultural processing enterprises, etc. The third category encompasses these enterprises which can be privatized by a decision of the Council of Ministers. This last category also includes enterprises in the refinery and defense industries.

The strategy of the managers of most enterprises is based upon attempts to be included in the third group. In practice this is not difficult, as most Russian enterprises are involved in defense industry production, and being classified as defense industry firms is a matter of accepted procedure. On the other hand, part of the managers want to wait out the voucher privatization by extending the process of establishing the value of the enterprise, and prolonging the procedural activities, etc. If they can do this until July 1, 1994, then the enterprises are shifted to the direct sale method, similar to the Polish capital privatization method. At that point, the privatization process can be dragged out for the next couple, if not tens, of years.

Next, there is the question whether what is taking place in the Russian Federation is truly privatization? Grigory Jawlinsky, author of the Gorbaczov "Reforms in 500 days" program, and currently the leader of a small pro-reform party in the parliament has said about the Voucher Privatization Program:

"What's happened so far is not privatization, it's collectivization, which puts the workers and managers in charge of enterprises. Their interest in increasing wages, not investment. This is a new problem created by this style of privatization." (Russian Privatization, 1994:58)

It is difficult to argue with this statement. Managers and employees of enterprises are in reality becoming the owners of the enterprises. As Boycko, Shliefer, and Vishny write (1994), managers and employees are taking possession of over 70% of ownership in privatizing enterprises. Officially it would appear that the voucher privatization system creates sufficient safeguards against this process, but reality proves more capable than the most thought-out system.

In the first round of privatization, the most often chosen privatization variant is variant II. Of the 7,617 enterprises, 5,881 (77.2%) of them have chosen this variant of privatization, which gives employees and management the right to purchase 51 percent of the shares. The second most popular choice is variant I (1,625 - 21.3%) in which the crew receives 25 percent of the shares for free, and can purchase, along with management, another 15 percent of the shares. This gives the crew a total of 40 percent of the shares and a 16.6 percent block of controlling shares.

In the second round, in which 29 percent of the shares, according to the assumptions of the program, are to be transferred to voucher tenders, a large portion of these shares is bought out by employees and management of the enterprises in the tenders. Recently, a lot of attention has been given to the case of the Gorki automobile plant (GAZ) in Nizny Novgorod, the largest plant of this kind in Europe. The managers of the plant were successful in blocking any privatization activities in 1992 and the first half of 1993. In the autumn of 1993, they suddenly expressed interest in the privatization process and began vigorous preparatory activities. As was later revealed, the

managers took a high government credit for investment, and used the money to purchase their shares for 46 billion rubles (\$27 million). These shares became the property of the enterprise and simultaneously enabled the existing management to maintain control. "The example of the GAZ plant is unfortunately typical" said A. Czubajs, the Chairman of the State Committee (Pragmatic, 1994). Transactions of this kind are a daily occurrence and it was only the political conflict between governor Niemcov from Nizny Novgorod and the GAZ management which forced the case out into the open and caused the entire transaction to be nullified.

In the third round, during the tender, there is the sale of shares (20% according to program assumptions) for cash. The buyers of these shares are firms or persons which present the best investment program for the enterprise and offer an intention of investment in executing this program. In many cases, the winners of these tenders are firms which are comprised of management or employees, who due to their knowledge of the prevailing conditions in the firms, are able to present the best programs and thus win the tender. This is not to mention that very often representatives of the management are on the commissions which decide the choice of the investor, or that up until now there have been no organs capable of controlling the execution of the promises put forth by the strategic investors.

The end effect is such that the management and crews, due to closed subscriptions, controlled sales of shares at the voucher tenders, as well as controlled sales of shares at the investment tenders, are taking control of privatized enterprises. Expanded family clans are being created, and firms are more reminiscent of social enterprises from the Yugoslav self-government experiment.

With the aim of preventing or obstructing this process of concentration of power by the management of enterprises, on January 1, 1994, President Yeltsin introduced, by a decree, a number of limitations which hindered the influence of management on the ownership structure of the enterprises. First of all, intra-enterprise restrictions on selling shares to outside investors were forbidden. Many managers introduced such restriction to prevent the employees from selling shares to third parties. Secondly, a principle was introduced which stated that share-holding employees cannot constitute more than one-third of the board of directors, which, in case of more than 10 thousand shareholders, must be made up of at least 9 members. And thirdly, another principle was introduced which stated that the management must call meetings of the board of directors at least once a month.

The most surprising fact, however, is that the anticipations of the reformers that the privatized enterprises will become advocates of a market economy, in economic reality also proved to be unwarranted. The management of the newly privatized enterprises, in an attempt to save their own positions, work out a peculiar non-aggression pact with the crew. In return for maintaining

management in its existing composition, it usually promises not to reduce employment, refrain from restructuring, and not to limit production. The existence of an enterprise in this condition can only be possible by acquiring additional subsidies from state institutions, such as ministries, associations, etc. This leads to an expansion of these institutions, to a revival of the role of branch ministries and economic associations at the expense of functional ministries, and particularly the State Committee. Branch ministries are significantly gaining importance in the last government of Prime Minister Chernomyrdin. Paradoxically, privatization creates additional pressure to maintain the old hierarchic structures of managing the economy.

The management of newly privatized enterprises do not have a chance of surviving in a situation of strong outside competition. As a consequence, strong pressure has appeared from the privatized enterprises to introduce a monopoly for foreign trade, to increase import duties or to introduce import barriers or quotas.

Newly privatized enterprises are also fearful of internal competition. As a result, there have appeared concepts of creating "integrated financial industrial complexes" converging enterprises in the same branch. This illustrates how alive the unifying concept of GAZPROM, from which Prime Minister Chernomyrdin originates, is a model for such solutions.

Voucher privatization ends on June 30, 1994. What happens then? Currently there is heated debate in the Russian Federation government over the concept for further privatization activities. Opponents of privatization want to suspend the process for three years and give the Russian Federal Property Funds rights to control the execution of investment pledges by strategic investors, which have won the investment tenders. During these three years, these Funds could not only void buying and selling transactions and in doing so take back ownership rights from those investors which have not implemented the pledges, but also could manage that portion of the shares which would still be in their possession. Thus this would revitalize the concept of holdings, organized regionally. Therefore this is a peculiar return to the concept of the Sovnarkhoz put forth by N. Khrushchev in 1958.

The advocates of rapid privatization in the State Committee, on the other hand, feel that the idea of investment tenders where the winner is the one who presents the best investment program and not the one who offers the highest price, should be abandoned. They argue that the preparation of a good business plan takes many months, and its realization is nonetheless dependent on the current economic conditions. Furthermore, this creates a possibility of fraud, and other than business-like behavior. They are proponents of introducing auctions, at which the shares would be sold to the investor who offered the highest price. In the course of three days that investor would become the owner of the shares and would have an actual influence on the functioning of the enterprise. The

social conditions which this investor would have to meet would be limited only to securing places of employment for one year, establishing the conditions for paying off the obligations of the enterprise to banks and other institutions, as well as signing an agreement with the company to realize those investments which the investor has obliged himself to perform. The assumptions of the new program are included in the document prepared by the State Committee entitled "Instruction on the investment tender regarding the sale of blocks of shares in companies." This document is awaiting the approval of the Council of Ministers.

Which option will win? It is unknown at this point. Or maybe, as has been the case in the Russian privatization program so far, both options will be realized simultaneously?

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