

OWNERSHIP STRUCTURE IN THE RUSSIAN INDUSTRY: TRENDS AND EFFECTS ON BUSINESS PERFORMANCE*

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The paper is based on the data from statistical reports of Russian enterprises (1998-2002). The database has been constructed from the results of a structural survey of large and medium-size industrial enterprises, which is conducted annually by the Federal State Statistical Service (FSSS)[†]. The panel sample is made up from a random selection of enterprises in twelve regions of Russia according to structure of industrial production by industry in each region. The sample consists of 1288 enterprises including 917 joint-stock companies.

How Stock Ownership Has Changed since the 1998 Crisis

In the late 1980s, state-owned enterprises were actually under control of work collectives and administration. Voucher privatization led to legalization of control in the initial structure of equity capital [Dolgopyatova, 1995]. By the end of mass privatization, stock ownership of Russian enterprises was reasonably seen by almost all analysts as insider-biased and dispersed (see, for instance, [Blasi, Kroumova, Kruse, 1997]). Under a deep transformational recession and high inflation, shareholders faced limitations to realization of their proprietary rights (shares were illiquid, dividends were nil, company assets were

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taken away by self-dealing managers), and this gave them incentives for concentration of corporate ownership in order to gain legitimate control over joint-stock companies. As the existent legal institutions were imperfect, the Russian corporate sector took a predictable way of emergence of a large shareholder with blocks of shares that could enable him to control the managers [Stiglitz, 1999].

Since the mid-1990s, the Bureau of Economic Analysis, the Higher School of Economics, the Institute for the Economy in Transition, the Russian Economic Barometer and other think tanks focused special attention on the theme of corporate ownership and control in Russian companies in their empirical studies. Their studies revealed the following tendencies, typical of the post-privatization era:

- Participatory shares of federal, regional and local administrations declined along with the progress of privatization;
- Share of managers in enterprise stock increased, while stakes of all employees noticeably declined;
- Share of outside non-state proprietors increased in the course of horizontal and vertical integration and emergence of conglomerates. Integration encouraged transfer of assets to outside owners;
- Concentration of equity capital in the hands of separate groups of individual shareholders (coalitions of shareholders) considerably grew.

The FSSS survey shows that participation share of physical persons in enterprise stock has declined, while the stake of non-financial enterprises has considerably enlarged, and the stake of financial institutions has also increased to some extent. The results of this survey, available since 1999 (Table 1), by definition refer not only to joint-stock companies but also to other business companies (for example, limited liability companies). Structure of charter capital can be calculated only from aggregate data, which imply weighing by its size, so that it is most probably bent towards larger entities. In this context, stronger position of financial institutions is the result of this method of calculation. This method is also responsible for a heavy - up to two thirds - stake of non-

Business Performance

financial commercial organizations in the charter capital. Certain instability of some stakes may be due to this method of calculation, as well as to the possible dissimilarity of enterprises ranges in surveys conducted in different years.

Table 1
Structure of Charter Capital of Industrial Enterprises, by the year-end (% of charter capital)*)

Shareholders and founders	1999	2001	2003	Change over 4 years, p. p.
Public administration - total, including	18.5	13.5	12.4	-6.1
- Federal	10.4	6.6	7.8	-2.6
- Units of federation	7.3	5.1	3.8	-3.5
-Local	0.8	1.8	0.8	0
Commercial organizations (excluding financial)	41.6	65.2	65.6	+ 24.0
Financial institutions	3.2	6.1	9.3	+ 6.1
Non-profit organizations	4.3	1.8	1.4	-2.9
Physical persons - total, including	20.1	13.4	11.4	-8.7
- Enterprise employees	10.3	n.a.	n.a.	n.a.
Total	100	100	100	-
Including foreign physical persons and legal entities**)	6.6 (40.3)	10.0(47.2)	11.0(35.0)	+ 4.4 (-5.3)

*) *In joint-stock and other business companies, excluding small businesses, about 27,000 entities in total.*

***) *In brackets - only in the range of enterprises with foreign ownership.*

Source: Author's calculations based on consolidated data of a structural survey conducted by the Goskomstat of Russia, see: [Goskomstat RF, 2002, pp. 81, 98-99]; [Goskomstat RF, 2000, p.72]; [FSSS, 2005, pp.71, 87].

Data of structural survey by entity within the panel sample, where average structure of capital is calculated as a sum of shares of each entity (Table 2), demonstrate similar results in transition: outside non-state investors, non-financial enterprises in the first place, are increasing their shares. On the other hand, in contrast to aggregate data, increase in the stake of outside physical persons is also seen here. On the other

hand, stakes of employees and public administration are on steady decline.

Table 2

Structure of Charter Capital of Joint-stock Companies in Panel Sample by Shareholder, by the year-end (% of charter capital)

Shareholders	1998	1999	2002	Change over 3 years, p. p
Public administration - total, including	11.3	9.5	6.9	-2.6
Federal	5.9	4.7	3.4	-1.3
Units of federation	4.0	3.4	2.5	-0.9
Local	1.4	1.4	1.0	-0.4
Non-state outside investors - total, including	43.1	45.6	55.2	+ 9.6
Commercial organizations (excluding financial)	21.0	22.2	28.4	+ 6.2
Financial institutions	1.2	0.7	0.8	+ 0.1
Non-profit organizations	4.1	4.2	3.3	-0.9
Physical persons	17.1	18.5	22.7	+ 4.2
Employees of the given company	45.6	44.9	38.0	-7.0
Total of joint-stock companies in panel sample	100	100	100	-
Including foreign physical persons and legal entities	3.0	2.9	3.6	+ 0.7

Source: Author's calculations based on data of a structural survey of about 790 joint-stock companies in the sample (in the comparable range) in 1999 and 2002; the 1998 data are given for 538 joint-stock companies, as an illustrative comparison.

By the end of 2002, employees owned the largest stake in charter capital; the next were non-financial commercial organizations, and in the third place, outside physical persons. Less than 7% of total capital belonged to public administration, and the stake of financial institutions was quite insignificant. The combined stake of outside private investors was 17 percentage points higher than that of company employees.

Unfortunately, structural survey gives no direct evidence of concentration of equity capital. It is appropriate to quote here the results of a questionnaire which we sent out to the panel sample of joint-stock companies in autumn 2002 [Dolgopyatova, 2003]. The average size of a block of shares in the hands of the largest shareholder reached 42% by

Business Performance

2002, it enlarged by over 5 percentage points since the crisis. As a result, more than 38% of the joint-stock companies had a dominant shareholder, and two thirds of them already had a "blocking" shareholder.

Table 3
Percentage Share by Type of Shareholder in Charter Capital of
Joint-stock Companies where the Relevant Type is Present, by the
year-end

Shareholders	1999		2002		Change over 3 years, p. p
	Number of companies	Share, % of charter	Number of companies	Share, % of charter	
Public administration - total, including	197	44.9	171	39.8	-5.1
Federal	94	41.7	89	35.1	-6.6
Units of federation	75	45.9	62	42.5	-3.4
Local	36	41.2	35	29.8	-11.4
Non-state outside investors - total, including	573	63.7	627	70.7	+ 7.0
Commercial organizations (excluding financial)	380	46.9	417	54.9	+ 8.0
Financial institutions	71	11.2	42	15.3	+ 4.1
Non-profit organizations	98	34.8	78	33.2	-1.6
Physical persons	370	29.5	365	32.0	+ 2.5
Employees of the given company	640	55.1	594	51.4	-3.7
Foreign physical persons and legal entities	47	48.3	71	40.9	-7.4
Total in joint-stock companies in panel sample	818	100	806	100	-

Source: Author's calculations

Using the panel sample, we were able to examine structural characteristics of charter capital only at those joint-stock companies where one or another type of shareholders was present in the list of their owners (Table 3). The data on the number of these joint-stock companies clearly show how widespread is the presence of a relevant

shareholder in the sample. Moreover, the relative percentage of this type of investor in the structure of ownership is an indirect characteristic of level of capital concentration.

The most common type is employee shareholders, but their average percentage is about half of the total. The leading type is non-financial commercial enterprises, which are represented at every second joint-stock company, and whose average percentage in the total charter capital has almost reached 55%. The outsider type is financial institutions, which were observed only at 5% of joint-stock companies and had a 15%-block of shares on the average. As for foreign owners, they are present at every ninth enterprise in the sample and possess 40% of its charter capital.

Outside private owners are represented at 77% of the sample of joint-stock companies and have a combined percentage of over 70% in charter capital. Public administrations are represented at about 21% of all joint-stock companies, where they possess about 40% in charter capital. Different levels of government are usually represented at dissimilar enterprises, and their "fields of participation" almost never intersect.

Let us call a group of shareholders a "dominant" one if it owns a larger block of shares than any other group of owners. In our 1999 sample, employees had dominant positions in 44% of all cases, and outside non-state shareholders, in almost the same part of the sample - at 45% of all joint-stock companies. The above mentioned trends in the change of structure of equity capital have transformed the balance of power. By the late 2002, dominant position belonged to outside owners in almost 57%, and to employees, only in 36% of all cases. At 7% of all joint-stock companies, combined percentage of public administrations was higher than that of employees or outside owners.

Consequently, the trend that took shape as early as in the mid-1990s continued after the 1998 crisis. Employees of enterprises continue to give up their position, and outside shareholders, mainly non-financial commercial organizations, are making their positions stronger. So far, employee ownership is still leading. It is represented by dispersed

Business Performance

ownership of rank-and-file personnel and by concentrated ownership of top managers (by origin, either old-time "red directors" or newcomers from de novo business). High share of ownership by non-financial commercial organizations demonstrates property interweaving and complicated structure of capital where ownership of individuals is concealed. Physical persons are also a representative group of shareholders, which includes former employees (and top-managers) of enterprises and outside private shareholders that use hired managers. There are both small and large shareholders in this group. The role of financial institutions is negligible, which is an indication that financial intermediation of securities markets is underdeveloped, and therefore, its function in the Russian economy is limited. The role of foreign investors is also insignificant; they are present mostly in fuel, electric power and metals, and also in food industry.

What Factors Affect Business Performance

We chose labor productivity calculated as gross value added per employee as the main indicator of enterprise performance. In the sample, it is marked by steady rise from year to year (which is partly due to inflation) and by a wide spread of values. The absolute values are the highest at large enterprises, joint-stock companies, also at enterprises in fuel, electric power, metals, and at enterprises in chemicals and petrochemicals in a small distance (Table 4). The poorest situation is in the light industry, logging and pulp-and-paper.

For measurement of dynamics of performance indicator in 1999-2002, we can offer the rate of its change over three years from the base year 1999. Almost three quarters of enterprises in the whole sample have demonstrated positive dynamics of labor productivity, which has increased by a factor of 1.8 at a half of enterprises.

* This indicator was earlier calculated in the database, and at the same time it was established as adequate to a first approximation as a tool for measurement of enterprise performance [Yasin, 2004].

Table 4
Indicators of Business Performance by Main Group in the Sample

	Labor productivity, 1000 rubles, 2002			Dynamics of labor productivity, rate of growth		
	Mean	Median	Rank ^{*)}	Mean	Median	Rank ^{*)}
Sample, total	239.0	92.8	-	6.8	0.8	-
<i>By enterprise size group</i>						
Small, equal or less than 100 employees	287.8	40.7	3	6.2	0.7	2-3
Medium, 101 to 500 employees	212.4	100.1	2	5.9	1.0	1
Large, more than 500 employees	237.9	161.8	1	8.7	0.7	2-3
<i>By main legal type of business organization</i>						
Joint-stock companies	246.1	102.2	1	8.0	0.8	2
State enterprises	124.5	58.3	3	2.6	0.9	1
Limited liability companies	358.0	66.1	2	4.3	0.6	3
<i>By industry</i>						
Fuel and electric power	793.4	196.3	2	2.2	1.0	3
Metals	229.4	235.7	1	0.4	0.3	8
Chemicals and petrochemicals	213.1	189.2	3	0.5	0.5	5-7
Machinery	222.4	109.4	4	5.1	1.3	1
Logging, woodworking, pulp-and-paper	103.3	66.1	7	14.6	0.6	4
Construction materials	168.7	102.7	6	3.3	1.2	2
Light industry	74.0	36.4	8	10.5	0.5	5-7
Food industry	240.6	104.1	5	6.3	0.5	5-7

^{*)} Ranks were calculated from the median indicators as more adequate ones under wide spread of data.

Average rates of growth were better at large enterprises. As for industries, the outsiders - light industry, logging and pulp-and-paper - were those industries that achieved the highest rates of growth, although not high enough to overcome their lag. Meanwhile, turning to median data we see different comparative results. It is hard to distinguish between state enterprises and joint-stock companies, and medium-size enterprises look better than the rest. What appears to be leading industries here are building materials, machinery, fuel and electric power, while chemicals and light industry are outsiders. In dynamics, the

Business Performance

pattern by industry was influenced by employment of underused workforce and operation of idle production capacities, driven by a prospect of stronger demand. Leading industries in terms of their condition in 2002 were outsiders in terms of dynamics of changes, and vice versa.

To examine interrelations between indicators of performance, structural variables and other characteristics of enterprise business activities, we carried out a multi-factor regression analysis. For a dependent variable, we chose:

- Either value of indicator of labor productivity in 2002;
- Or a characteristic of dynamics of this indicator in 1999-2002.

For independent variables we chose the following characteristics:

- Industry affiliation;
- Size group affiliation;
- Location in one of 12 regions;
- Legal form;
- Indicators of structure of equity stock (for joint-stock companies), which are represented by percentages of main groups of shareholders in the stock. As an alternative to this group of variables, we used presence of one out of three types of dominant shareholders - public administration, employees, or non-state outside shareholders;
- Indicators of investment activity of an enterprise: regularity of investing during 4 years and relative scale of investing (in comparison with the volume of fixed assets).

Let us, omitting the details, disclose a number of main results of our regression analysis.

In the first place, basic characteristics of a company - size, industry, location and legal form could describe about 0.38 of variation in the value of labor productivity in 2002. Inclusion of indicators of investments and ownership could increase R-squared up to 0.42. The role of regions has proved to be important. This may be a sign of differentiation of business by region. However, this may also reflect the quality of primary data collected by regional statistical bodies.

We have found that value of labor productivity is positively related to regularity of investing during the period in question. Among characteristics of ownership, percentage of capital belonging to non-financial commercial organizations is outstanding in terms of strong influence, and percentage of capital belonging to public administration, in terms of weak negative influence. No influence was seen in other indicators of ownership patterns (domination of various groups of shareholders). No noticeable signs of the role of employees or outside shareholders as owners were revealed.

Analysis of the second indicator of business performance - rates of growth in labor productivity - produced no significant results. None of regression equations gave a single link equation with explanation of variation reaching 0.1. Dynamics of the indicator of productivity turned to have no relation to characteristics by industry and size and to other factors, including basic level of labor productivity in 1999. Meanwhile, the latter value was related to similar characteristics by size, industry affiliation and location, and also to affiliation either to state enterprises or to joint-stock companies. This demonstrates that relative success of a business depends on factors that are outside our model, and absolute success is connected mainly with some basic characteristics of enterprises.

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Business Performance

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