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**Industrial Associations as a Channel
of Business-Government Interactions in
an Imperfect Institutional Environment:
The Russian Case**

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Industrial Associations as a Channel of Business-Government Interactions in an Imperfect Institutional Environment: The Russian Case

Abstract

International lessons from emerging economies suggest that business associations may provide an effective channel of communication between the government and the private sector. This function of business associations may become still more important in transition economies, where old mechanisms for coordinating enterprise activities have been destroyed, while the new ones have not been established yet. In this context, Russian experience is a matter of interest, because for a long time, Russia was regarded as a striking example of state failures and market failures. Consequently, the key point of our study was a description of the role and place of business associations in the present-day Russian economy and their interaction with member companies and bodies of state administration. Relying on the survey data of 957 manufacturing firms conducted in 2009, we found that business associations are more frequently joined by larger companies, firms located in regional capital cities, and firms active in investment and innovation. By contrast, business associations tend to be less frequently joined by business groups' subsidiaries and firms that were non-responsive about their respective ownership structures. Our regression analysis has also confirmed that business associations are a component of what Frye (2002) calls an "elite exchange"– although only on regional and local levels. These "exchanges" imply that members of business associations, on the one hand, more actively assist regional and local authorities in social development of their regions, and on the other hand more often receive support from authorities. However, this effect is insignificant in terms of support from the federal government. In general, our results allow us to believe that at present, business associations (especially the industry-wide and "leading" ones) consolidate the most active, advanced companies and act as collective representatives of their interests. For this reason, business associations can be regarded as interface units between the authorities and businesses and as a possible instrument for promotion of economic development.

Wirtschaftsverbände als Schnittstelle zwischen Wirtschaft und Staat im institutionell unvollkommenen Umfeld: Der Fall Russland

Zusammenfassung

Internationale Studien legen nahe, dass Wirtschaftsverbände in Entwicklungsökonomien als Schnittstelle in der Kommunikation zwischen Staat und privatem Sektor dienen können. Da Russland lange Zeit als treffendes Beispiel für Staats- und Marktversagen galt, liegt der Schwerpunkt dieser Studie auf einer Analyse der gegenwärtigen Rolle der russischen Wirtschaftsverbände und deren Interaktion mit Mitgliedsunternehmen und staatlichen Institutionen. Nach Auswertung von Befragungsdaten, die 2009 in 957 Industrieunternehmen erhoben wurden, zeigt sich, dass große Unternehmen, Unternehmen mit Niederlassungen in regionalen Ballungszentren und Unternehmen, die Investitionen und Innovationen tätigen, häufiger in Wirtschaftsverbänden vertreten sind als Tochtergesellschaften von Großkonzernen und Unternehmen, die sich zu ihren Eigentumsverhältnissen nicht äußern wollten. Die Regressionsanalyse zeigt auch, dass Wirtschaftsverbände Teil dessen sind, was Frye (2002) „elite exchange" nennt – wenngleich dieser Austausch nur auf regionaler und lokaler Ebene stattfindet. Diese „exchanges" beinhalten, dass die Mitglieder der Wirtschaftsverbände auf der einen Seite aktiver die regionalen und lokalen Institutionen unterstützen und auf der anderen Seite auch häufiger Unterstützung von diesen Institutionen erhalten. Dieser Effekt ist jedoch insignifikant für die gesamtstaatliche Ebene. Die Ergebnisse deuten darauf hin, dass Wirtschaftsverbände als Schnittstelle zwischen staatlichen Institutionen und Wirtschaft und somit als mögliches Instrument zur Förderung der wirtschaftlichen Entwicklung beitragen können.

1   Introduction[3]

International lessons from emerging economies suggest that business associations may provide an effective channel of communication between the government and the private sector (Doner & Schneider, 2000; Locke, 2001). This function of business associations may become still more important in transition economies, where old mechanisms for coordination of enterprise activities have been destroyed, but the new ones have not been established yet (Recanatini & Ryterman, 2001). In this context, Russian experience is a matter of interest, because Russia was regarded for a long time as a striking example of state failures and market failures (Stiglitz, 1999).

Consequently, the key point of our study was a description of the role and place of business associations in the present-day Russian economy and their interaction with member companies and bodies of state administration. Within the framework of this general objective, we set a number of specific goals.

First, we wanted to estimate the scale of enterprise membership in business associations in Russia. Such estimates were made in some previous empirical studies, but practically all of them were based on the data of the early and mid-2000s. However, we wanted to understand how these quantitative parameters had changed after the Yukos case (which made a strong impact on relations between business and government), and how they were affected by the economic crisis of 2008-2009.

Second, we wanted to understand what factors influence membership in associations. Here, we mean objective circumstances, such as size of a firm, its ownership form, the period of its establishment, its belonging to a holding group and firm's location, and characteristics of its behavior, including its activities in exports, capital investment and innovations.

Third, we gave special attention to the set of relations of enterprises with administration at the federal, regional and local levels and to the role of business associations in this field. We considered not only different types of support that the firms receive from government but also "counter flows" of social development aid in the regions that the firms give to local and regional authorities.

To achieve of these three goals, we relied on the survey data of 957 manufacturing firms, conducted in 2009 by the Institute for Industrial and Market Studies of the Higher School of Economics on order of the Ministry of Economic Development. Subsequent-

ly, in the spring of 2010, we undertook a series of in-depth qualitative interviews with heads of business associations of various types.

An analysis of the collected data revealed that the proportion of business association members is close to 40% in manufacturing, while over a half of member firms perceive their business association membership to be useful. Regression analysis suggests that business associations are more frequently joined by larger companies, firms located in regional capital cities, and firms active in investment and innovation. By contrast, business associations tend to be less frequently joined by business groups' subsidiaries and firms that were non-responsive about their respective ownership structures.

Business associations are a link in the framework of government-business exchanges, primarily at the regional and local levels. Indeed, business association members are more active in assisting regional and local authorities in the social development of their regions and, at the same time, receive government support more frequently. However, firm participation in business associations proved insignificant for federal support.

The paper is organized as follows. Section 2 reviews the existing literature on the role of business associations in economic development. Section 3 briefly describes recent developments and key trends in the sector of business associations in Russia, while Section 4 reviews earlier empirical research in this area. Section 5 presents data sources used in our analysis. Section 6 evaluates the rates of firm participation in business associations and describes member firms' characteristics. Section 7 puts forth key hypotheses and explains the methodology of econometric analysis, while Section 8 presents the results. Finally, Section 9 sums up the key conclusions of the study.

2 Business Associations' Impact on Economic Development: Review of Previous Studies

It may be noteworthy that for many years, research literature in this area has been dominated by negative presumptions against business associations, following the well-known books by Mancur Olson (Olson, 1965 & 1982). This skepticism was based on Olson's argument that businessmen collectively pursue their private (special) interests and cannot create public goods, and interest groups entrenched in national economies give rise to institutional sclerosis, detrimental to economic performance and growth.[4] These assumptions are in many respects supported by numerous further studies. (A review of approximately 50 empirical studies published during the 25 years following the publication of The Rise and Decline of Nations is provided in Heckelman (2007).)

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[4] Institutional sclerosis is the term used in literature to describe situations in which entrenched interest groups and institutions representing them block entry of new players and resist structural change, for example.

However, there are differences observed in business associations' impact in countries of varying levels of development. Indeed, an empirical analysis in Coates and Heckelman (2003) demonstrates that in OECD countries, the interest group activity (measured by the number of business associations included in the World Guide to Trade Associations) has adverse implications for investment. Alternatively, in non-OECD countries, this correlation is positive, albeit with low significance.[5]

These conclusions are consistent with the findings of some qualitative studies. Drawing on a series of case studies in emerging economies, Doner and Schneider (2000) show that in an environment of imperfect government institutions, business associations may serve the government as a feedback mechanism in its interaction with business, and as a source of information about property rights violations and business barriers. In this case, Doner and Schneider define an association as a 'market-supporting institution.' Moreover, business associations may produce public goods when the economy lacks a developed market infrastructure. In this case, business associations may collect and share with government authorities and economic agents specific market information, ensure inter-firm coordination in the development and maintenance of sector standards, and facilitate local firm entry to new markets (including external markets) and implementation of new technologies. In this context, the association may be viewed as a 'market-supplementing institution.'

However, by no means can all business associations perform these functions: only those compliant with certain requirements can. Specifically, Doner and Schneider note that effective business associations performing public utility functions tend to appear in sectors where firms are exposed to stronger competitive pressures (primarily, external), driving them to collective action. They should also have adequate institutional strength, based on high member density in the sector, effective mediation of member interests and skilled, competent staff members. However, the institutional strength of existing associations largely depends on selective incentives that such associations may provide to their members, due to certain powers delegated to them by the government. Such selective benefits may include access (via the association) to international trade negotiations, influence on legal regulations and setting sector standards, distribution of export quotas, export licenses, government contracts and training programs.

Constraints on economic growth in developing countries traditionally include strong distrust of firms in each other and in government policies. This distrust results in higher risks of new business projects and weaker investment activity of firms. However, as Richard Locke demonstrated by cases from Brazil and southern Italy (Locke, 2001), even against the backdrop of highly imperfect markets and government institutions (including rampant corruption and rent-seeking), business associations may evolve as mechanisms of coordination, facilitating mutual understanding between firms and the government,

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5 Different effects produced by business association activities in advanced and developing economies were also noted in a more recent study by *Coates, Heckelman, Wilson* (2010).

building trust and boosting economic development. In general, studies of "new industrial policy" (Rodrik, 2004 and 2008; Hausmann et al., 2008) especially underscore the need for cooperation of business with government for elimination of market failures in transitional economies.

It is of note that a number of advanced economies have shown in recent years that business associations may emerge as agents that create not only private and club goods but also public goods. Australia, for example, has been widely practicing Industry Action Agendas since the early 2000s. Industry Action Agendas are implemented under the auspices of relevant sector ministries with wide the participation of sector business associations.[6] A review of outcomes produced by using these new approaches to Australia's pharmaceutical industry relations is provided in (Morgan et al (2008).

3 Institutional Context: Main Trends in Business Associations Development in Russia

Membership is voluntary in Russian business associations. The framework of business associations was built in several stages. Business associations were initially developed when the central planning system collapsed in the late 1980s. In the context of increasingly tighter resources and overall economic destabilization, "directors' clubs" developed into places for enterprise heads to exchange information and independently find suppliers and buyers. In 1990, the government attempted to take control of this spontaneous process of cooperation, establishing the Science and Industry Union of the USSR (subsequently renamed the Russian Union of Industrialists and Entrepreneurs – RSPP), the Association of Young Enterprise Leaders and some others.

As the centrally planned economy was dismantled in 1992, ex-sector ministries were used as foundations to build business associations. For example, in 1992, an International Union of Steelworkers was established, with the last metallurgy minister of the USSR Sergey Kolpakov as its head. It is noteworthy that associations came to life not only for sectors but also for regions. In the latter case, they were intended to support contact and interaction with regional and local authorities. Some associations were specifically established to pursue political agendas. An example of this kind of association is the All-Russian Association of Privatized and Private Enterprises, set up in 1993 by party activists of the Democratic Choice of Russia.

The Russian Chamber of Commerce and Industry (TPP) has played a special role in the framework of business associations and its regional affiliates. The TPP case is excep-

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6   For example, see http://www.daff.gov.au/fisheries/aquaculture/agenda which describes the process and outcomes of the Fishing Industry Action Agenda implementation in 1999-2005; and http://www.wfa.org.au/WRAA.aspx regarding the new Wine Restructuring Action Agenda announced by the government and two leading business associations in the wine-making sector in 2009.

tional because TPP has a special legal status, according to the Law on the Chambers of 1993, and a kind of monopolistic entitlement to render certain services to enterprises, related to certification of goods for exports and imports. Many regional TPP branches established in the Soviet era have inherited assets. This made the chambers financially independent and ensured their "autonomy" from their members.

Overall, Russian business associations in the 1990s were weakly organized and highly politicized. Meanwhile, the real influence of business groups on economic policy-making was weak, as larger enterprises preferred dealing directly with the government. This phenomenon was described in the literature as state capture (Hellman et al., 2000).

The situation changed after 2000 (for more detail, see Zudin (2001, 2006)). As Putin's government tried to distance itself from personal relationships with top business leaders in place since the 1990s, they focused their attention on arranging standing consultations with business communities through top business associations. To this end, the presidential administration initiated a reorganization of the Russian Union of Industrialists and Entrepreneurs. The earlier broad-based and loose Board dominated by old-time industrial directors ("red directors") was replaced, with a Board Bureau as its central executive body. Owners of larger private business groups were invited to join the Board Bureau. In this way, the new RSPP was set up as a big business lobby. At the same time, OPORA Rossii and Delovay Rossia were established to lobby the interests of small and medium-sized businesses, respectively. The Russian Chamber of Commerce and Industry also shored up its position, as former Prime Minister Evgeny Primakov became its president.

A specific feature of "peak" business associations is their closer proximity to authority, which is a distinctly important resource for efficient lobbying for members' interests. These "peak" associations usually include the largest or the most active enterprises, but in general, they are organized as "unions of unions" and include industry-wide associations and regional branches in their membership.

In 2000-2003, the top associations were included in deliberations on key economic policy issues, including tax reform, WTO accession and electricity sector reform. It should be noted that RSPP, as the big business lobby, was more visible and audible in this government-business dialogue.

However, the Yukos case in 2003-2004 resulted in a heavy crisis in government-business relations (importantly, Yukos' former president Mikhail Khodorkovsky had been a member of the RSPP Board Bureau since 2000, actively participating in discussions with government officials). The government stopped perceiving big business as an equal partner to be consulted on key economic policy decisions. At the same time, the Yukos case, being a striking example of selective discriminatory law enforcement, aggravated business distrust in government (for more details, see Yakovlev (2006)).

Consequently, since the mid-2000s, government-business consultation has degraded in level but expanded in coverage, with a network of civil society and expert councils established under the federal agencies in 2005 and expanded contact with sector-specific associations initiated by some ministries. In particular, analysis of membership in non-government, advisory and expert councils of "economic profile," created under the Presidential Administration of Russia, the Federal Government, ministries and agencies in the last decade, demonstrates the following pattern. Spokesmen of business were present in 115 out of 135 such associations, and in 96 cases (71% of all councils), they came from business associations. The "leading" associations more often take part in the work of deliberative bodies under the Government and federal ministries, while industry-level associations work in councils under federal services and agencies.

Therefore, Russia has developed a two-tiered structure of business associations. The first, the upper tier, allowing interaction with top officials, included four top "peak" associations by the end of the 2000s: RSPP, TPP, OPORA and Delovaya Rossia. The second tier includes numerous sector-specific and region-specific associations.

Absent any regulation of the activities of business associations in Russia (except for the TPP law), it is difficult to offer any quantitative assessment of the size of the business associations sector. Some experts estimate that Russia has about 5,000 such associations. However, the number of operational associations is apparently smaller.

In our view, the number of collective members of the top associations may be used as a proxy for the number of actual operating sectoral and regional associations. Indeed, as indicated earlier, the top associations are built as "unions of unions," and members have to regularly pay their membership fees. For example, the RSPP membership fee for rank-and-file members is 150,000 rubles, or approximately US $5,000. Furthermore, unlike in the 1990s, associations now monitor and enforce timely payment of fees. Therefore, these costs would be justified only for those organizations that engage in their own core operations and receive meaningful benefits from their membership in top associations.

An analysis of the collective membership data of the top three associations (RSPP, TPP and OPORA), available via the Internet, shows that they include approximately 300 sector-specific and regional business associations. However, this figure may rather indicate the lower boundary of the number of active associations because, judging by our interviews, some smaller regional or sectoral associations with budgets of 1.5-2 million rubles a year may perceive these costs as unreasonable.

Another source of quantitative assessments may be seen in the data produced by the survey of 957 manufacturing firms administered by the Institute for Industrial and Market Studies (IIMS) in 2009. Respondents named about 300 various business associations in response to the following open-end question: "Are you (or other managers of your enterprise) members of any business association/union? If yes, what are these associa-

tions/unions?"[7] Therefore, presumably, Russia at present has about several hundred active business associations.

4   Previous Empirical Studies on Business Associations in Russia

The first empirical study exploring business associations in the Russian economy was arguably an article by Recanatini & Ryterman (2001). Drawing on conclusions from a famous paper by Blanchard & Kremer (1997), the authors assumed that an important characteristic feature of transition economies was disorganization of economic links as a result of collapsed centralized planning and control. In the absence of alternative mechanisms for supplier-consumer coordination, this disorganization results in a dramatic slump in production. In this context, Recanatini and Ryterman view business associations as an institute of self-organization, supporting inter-firm coordination and reducing transformation costs. Their analysis, drawing on the World Bank survey data of 1992-1994, showed that in the early 1990s, Russian firms – members of business associations – saw a lower decline in output, especially in cases when respective associations included both suppliers and consumers. However, these conclusions were based on a very small sample of only 157 firms, of which only 58 were members of business associations.

Thereafter, interaction between Russian enterprises and business associations, including determinants and benefits of their membership, were analyzed in a number of empirical studies, based on more representative samples. Of particular note may be papers by Timothy Frye, William Pyle, Victoria Golikova and Stanislav Markus, drawing on major formalized business surveys.

Using an original survey of 500 firms from all the sectors of the economy (with the exception of agriculture and the social sector) and conducted in eight Russian regions in 2000, Frye (2002) demonstrated that membership in business associations offers firms more lobbying power to influence legislation, especially at the regional and local levels. For example, Frye's data indicated that the probability that a member firm would lobby successfully at the regional level was 0.31, versus 0.11 for non-members (Frye, 2002, p.1027). Frye also showed in this paper that firms enjoying government support have to face additional costs, including price regulation, more frequent inspections by various regulators, and higher business barriers (Frye, 2002, p.1029). Drawing on these findings, Frye argued that a framework of exchange evolves between enterprises and government authorities (first of all, at the regional level).

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7   The list overlapped but did not coincide with the lists of collective members of top business associations, as the survey was focused exclusively on manufacturing, while RSPP, TPP and OPORA include associations from all sectors of the economy.

Pyle (2007 & 2009), using data of the 2003-2004 surveys, shows that member firms are much more frequently asked to participate in "working groups" and advisory boards with government agencies. Moreover, business association members participating in such working groups are observed to have considerable influence on the drafting of laws and regulations. Further on, Pyle explored how enterprises respond to unplanned inspections by government regulators and supervisors (e.g., Fire Safety Service, Sanitary and Epidemiological Service). The survey asked if respondents ever contested disagreeable unplanned inspections or their results and if they ever sought redress. The study showed that, *ceteris paribus*, association members more frequently appealed to arbitration courts and to government authorities to seek protection from the unfair actions of supervisory bodies.

Another paper in this series (Pyle, 2006) explores associations' horizontal coordination functions and their role in facilitating inter-firm information flows and provision of services to firms. Pyle describes how enterprises make use of the opportunities provided by their membership in business associations, including training, sharing new information about relevant markets, facilitation of investment, and introduction of new technologies and innovative practices. It is noteworthy that respondents generally gave a high assessment of the value of services provided by business associations. Further on, the article explores the relationship between association membership and member performance. Regression analysis reveals that association membership is positively associated with an increase in sales. These results offer less than satisfactory evidence of causation. However, they suggest that as far back as the early 2000s, business associations were joined by more proactive enterprises seeking assistance in investment attraction and implementation of innovations. At the same time, these enterprises demonstrated stronger growth.

The literature focusing on firm membership determinants and the role of associations in firm activities and performance includes a noteworthy paper (Golikova, 2009). The paper is based on a 2005 survey of 822 joint stock companies in manufacturing and communications. Further contributing to the results obtained by Pyle, regression analysis of the 2005 survey data showed that an important determinant of association membership is the administrative status of the city or town where the enterprise is based. Indeed, Moscow-based enterprises show the highest membership rates, followed by enterprises located in regional capitals and then come enterprises based in provincial towns and urban communities. Golikova also showed that association membership closely correlated with assistance received by enterprises from regional and local authorities. Membership in several associations was positively related to the probability of receiving both financial and administrative assistance from the authorities (controlling for other variables, including firm size).

A paper by Markus (2009) suggests a hypothesis that in the context of weak legal institutions, various "alliances" of enterprises with their counterparties (foreign investors, government authorities or other firms from the same sector or region) may emerge as in-

formal mechanisms of property rights protection. Guided by this approach, Markus interprets association membership as an indicator of enterprise integration in the business community, ensuring better protection from state predation and dishonest counterparty behavior. This hypothesis was built on earlier theoretical research and an analysis of 67 interviews with business leaders and government officials. The paper cites examples of cases in which business associations actually succeeded in building frameworks of resistance to illegitimate behaviors by bureaucrats.

To test his hypothesis, Markus reviewed the results of the 2007 survey of 516 enterprises (mostly industrial) located in Russia and Ukraine. The findings of the regression analysis suggested that association membership was positively related to enterprise perceptions of security vis-à-vis illegitimate government actions and dishonest behavior of the counterparties.

5   The Data

In our own study, we used data from a survey of 957 Russian enterprises conducted from February to June of 2009 as part of the second round of manufacturing competitiveness monitoring by the Higher School of Economics Institute for Industrial and Market Studies (IIMS) and the Levada Center commissioned by the Ministry for Economic Development.

According to the monitoring program, the survey asked questions about the density of competition, investments, export and innovation activities, ownership and control, business interaction with the authorities, labor and other factor markets. Two questions asked about firm membership in business associations.

The surveyed enterprises represent eight manufacturing industries, classified according to the All-Russian Classification of Economic Activities: food processing, textiles and garments, timber and woodworking, chemicals, metals and fabricated metal goods, electrical, electronic and optical equipment, transport vehicles and equipment and machines and equipment. The enterprises were located in 48 Russian regions, with most surveyed firms based in regional capital cities (45 percent, excluding Moscow) and provincial towns and cities under republican, regional and district jurisdictions (41%).[8] In 68% of cases, questionnaires were directed at general and executive directors, 31% were directed at deputy general directors for economics and finance, and only in 14 cases did respondents hold other positions.

The survey focused on medium-sized and large enterprises rather than on super-large and large ones. About 14% of the sample employed fewer than 100 workers, 55% employed between 100 and 500, and 31% had workforces in excess of 500. Most enterprises (75%) were founded before 1992, while 15% were established between 1992 and 1998.

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[8]   Apart from that, 6% of enterprises were located in Moscow, and 8% in urban or rural communities.

Twenty eight percent of the sample enterprises were part of business groups, 10% had foreign shareholders, and 11% included the state among their owners. To describe regional variation, the survey used the Expert RA regional investment potential rating. Regions with low investment potential hosted 41% of the surveyed firms, while 30% were located in high-potential regions. The surveyed enterprises employed about 8% of the total payroll in manufacturing, producing about 6% of manufacturing output in 2007.

In addition to a formalized survey of businesses in the spring of 2010, we also undertook a series of in-depth, non-formalized interviews with heads of 23 business associations in four Russian regions. The interviews helped us to obtain a better understanding of how enterprises interact with associations.

6   Descriptive Statistics

To assess the rates of firm membership in business associations, the results of the 2009 survey were compared with Pyle's 2003 screening survey data and the findings of two other surveys administered by the Higher School of Economics in 2005 and 2007. Summary membership data for 2005, 2007 and 2009 are presented in Table 1.

Table 1:
Rates of firm membership in business associations (BA)

Sector	2003		2005		2007		2009	
	Average size	Share of BA members	Average size	Share of BA members	Average size	Share of BA members	Average size	Share of BA members
Manufacturing	485	34,2%	1545	45.5%	617	36.6%	587	38.5%
Communications	-	-	5780	38.0%	274	38.9%	-	-
Commerce	-	-	-	-	168	9.7%	-	-
Transport	-	-	-	-	819	25.0%	-	-
Construction	-	-	-	-	256	29.4%	-	-
Other	-	-	-	-	404	43.5%	-	-
Sampling description	1353 industrial enterprises in 48 Russian regions		822 JSCs in 64 Russian regions		507 firms in 8 regions of European Russia		957 manufacturing firms in 48 Russian regions	

The coverage of sectors varied strongly, depending on the year of the survey. In 2003, Pyle's sample included enterprises from seven manufacturing industries. The HSE samples of 2005 embraced manufacturing and communications firms, while the survey of 2007 essentially covered all of the key economy sectors, albeit with a narrower regional coverage. The survey of 2009 focused exclusively on manufacturing (eight sectors overlapping but not coinciding with Pyle's sample).

Further, the sample of 2005 is different by focusing exclusively on joint stock companies. The data in Table 1 show that the sample is largely skewed toward larger firms, which have a traditionally stronger membership in business associations.

The 2007 data are of particular interest because they represent all the key sectors. These data suggest that the lowest participation rate was observable in commerce (under 10%). The highest rate of membership in business associations – about 40% – was seen in industry, communications and other sectors (including banks and other financial institutions and real estate agencies).

The 2009 survey data are generally incomparable with the 2005 and 2007 data. However, because the 2009 study is representative of the total manufacturing sector, while the 2007 survey is representative of appropriate sectors for the eight regions for which it was administered, it may be possible to compare the results of both surveys obtained for manufacturing enterprises. A similar comparison is possible for the 2003 data. Data in Table 2 suggest that these results are quite close, showing a nascent trend for growth: in 2009, 38.5% of surveyed firms reported their engagement in business associations, compared with 37% of industrial respondents in 2007 and 34% in 2003. It should be noted that higher membership rates in 2005 (45.5%) may be related to the considerably larger average size of firms included in that sample.

Therefore, overall, previous survey results suggest that since mid-2000, about 40% of manufacturing companies have belonged to business associations.

Further on in the paper, drawing on descriptive statistics of the 2009 survey, we will review the key characteristics of firms participating in business associations.

Association membership and perception of its value. The 2009 survey not only asked respondents whether they were members of business associations but also to provide the names of the associations to which they belonged. Using the results, a database of business associations was built, with an option to further add data from available sources. Drawing on this database, a classification of associations was constructed to be extensively used in further analysis. In contrast to the previous surveys, this classification may be viewed as more accurate and informative. Specifically, the HSE surveys of 2005 and 2007 and the baseline survey by Pyle in 2004 asked respondents to classify their associations into various categories, e.g., national, sector-specific and region-specific. Indeed, in the absence of data on association names, there was no way to verify the accuracy of such classification.

In addition to the detailed question about the names of associations, respondents were also asked to comment on the value of membership. However, the questionnaires did not offer multiple-choice answers, as the task was to briefly describe in one's own words the benefits of membership for the enterprise. Responses to this question helped to identify those enterprises that found their membership useful. Figure 1 shows that

19% of respondents of the 38% who responded positively to the membership question found their association membership useful for their business.

However, it is noteworthy that about 4% of all the respondents (about 11% of association members) reported membership but found it difficult to provide at least an approximate name of the association to which they belonged. In our view, such responses are evidence that these enterprises not only receive no benefits from association membership, but also do not even participate in their activities, nor do they bear any related costs. Therefore, in further analysis, they were grouped together with non-members.[9]

Figure 1:
Association membership and perception of membership usefulness
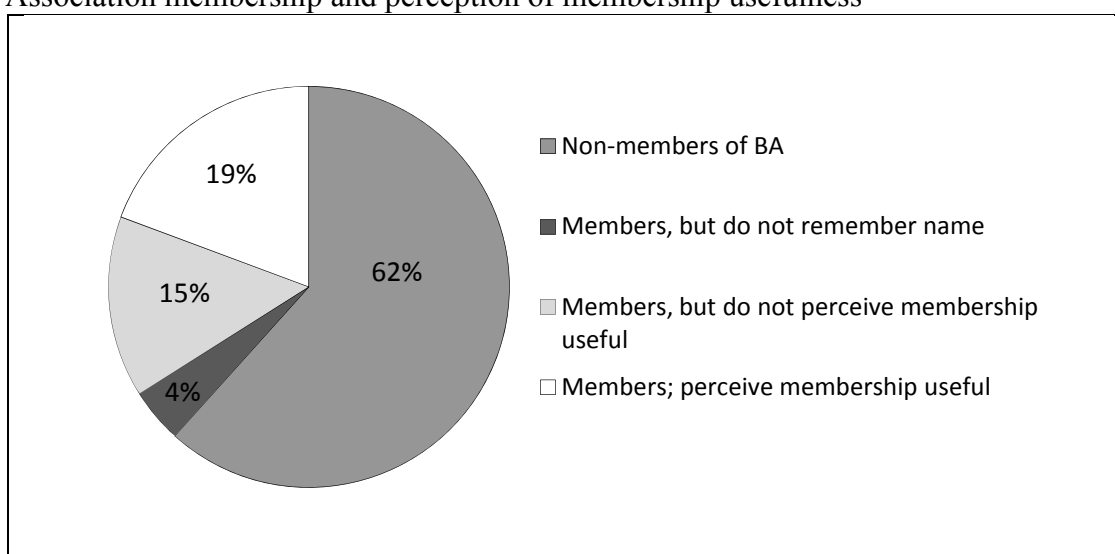
In addition to exploring the overall impact of association membership, this analysis also sought to understand how this impact depends on the characteristics of associations. In particular, with regard to the findings of earlier research and data from in-depth qualitative interviews, we differentiated among the following three categories of associations:

– top nationwide associations (RSPP, OPORA and Delovaya Rossiya, including their regional affiliates), drawing their membership from across sectors and regions;

– sector-specific associations, drawing their nationwide membership from one sector or many regions;

– region-specific associations, drawing their membership from one region and usually only one sector.

A separate group included the Chamber of Commerce and Industry (TPP) and its regional affiliates. This separation was related to a special legal status of chambers of commerce and industry in Russia (they operate on the basis of a special law) and the TPP's monopoly for servicing enterprises in certification of goods for exports and im-

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9   This approach was validated by regression analysis. All the model specifications showed that this category was indistinguishable from non-members.

ports. This circumstance, in particular, explains TPP's weak dependence on membership fees (as revealed by our 2010 in-depth interviews with business associations' officials, membership fees do not account for more than 5-10% of regional TPP budgets).

Our survey showed that 50% of member firms participated in sectoral associations, 37% in regional associations, 20% in TPP and only 14.5% were members of the top three associations (RSPP, OPORA and Delovaya Rossia). Roughly one in every four enterprises was a member of two or more business associations.

Figure 2 presents an estimate of BA membership value, depending on the type of association. The data show that about 64% of firms belonging to TPP or top associations reported their membership to be useful. This share is somewhat lower for sector-specific associations (61%) and significantly lower for regional associations (only 53%).

Figure 2:
Value of membership across various types of associations
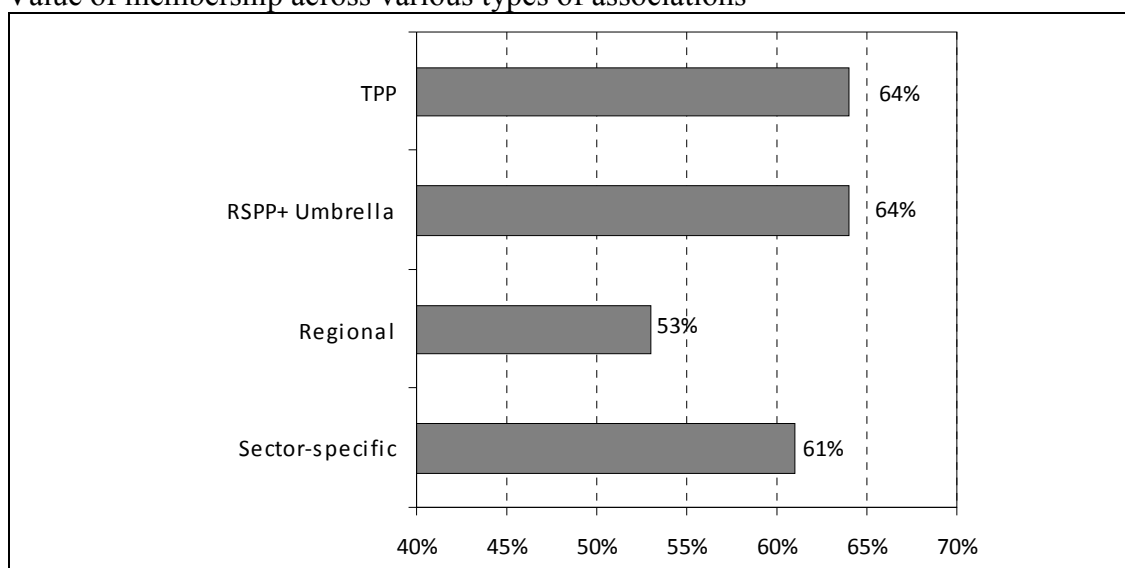
Regional variation. Another important observation relates to considerable variation of association membership across enterprises located in communities of different administrative status. Figure 3 shows that the proportion of association membership is considerably higher – 42% – for firms located in regional and republican capitals (excluding Moscow). Other communities show much lower membership rates of similar levels, 25-28%.

Figure 3:
Proportion of association members in settlements of various types
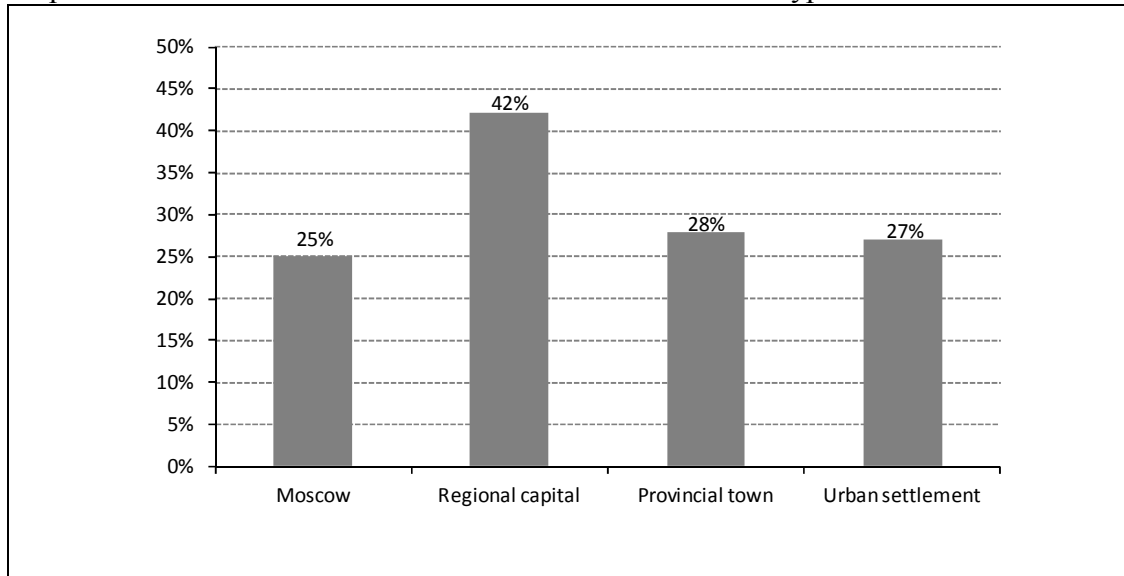
Observing the regional dimension, the Expert RA regional investment rating helped to reveal that involvement of enterprises in business associations tends to decline in more economically developed regions (Figure 4). This observation is broadly consistent with a conclusion by Doner & Schneider (2000) that business associations tend to be more active if exposed to higher external pressures.[10] Further on in the paper, this observation will be verified by regression analysis.

Figure 4:
Share of association members in regions with varying investment potential

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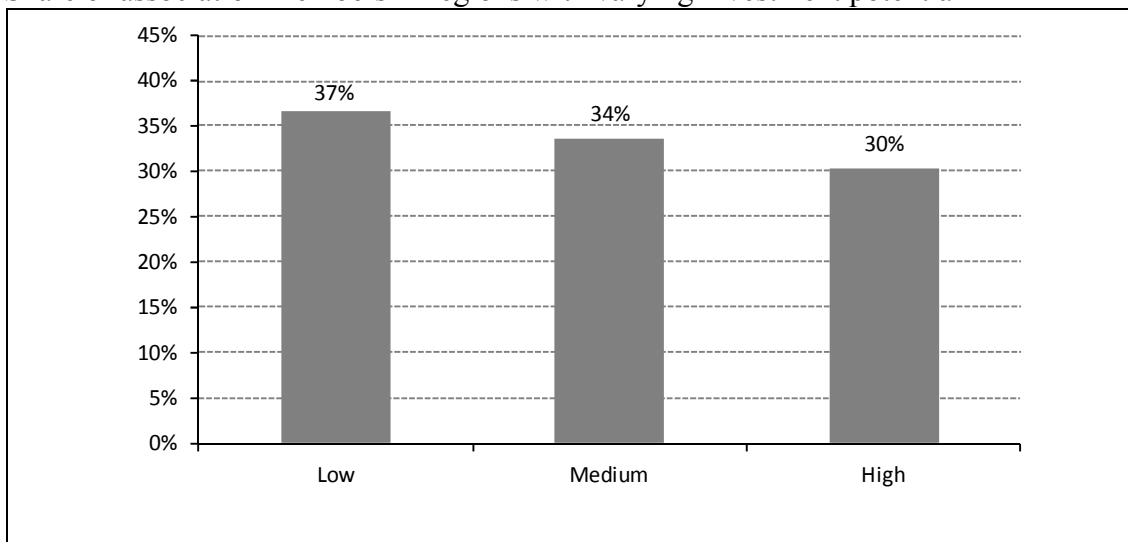
10 We can assume that regions with a high investment potential also show higher demand, while the resident enterprises face easier budget constraints.

Other characteristics of firms participating in business associations. A tentative analysis on the basis of bi-variable distributions (see Table 2) also suggests that members show a significantly higher innovative and investment activity and better management. However, they demonstrate a considerably lower rate of rank-and-file members of business groups (while parent companies are practically equally distributed between members and non-members of associations).

Table 2:
Proportions of various types of enterprises in members and non-members of business associations (BA)

	Members of BA	Non-members of BA
(some) foreign ownership	11%	7%
(some) government ownership	10%	9%
Unitary enterprises	4%	5%
No response to ownership question	10%	20%
Business group member (parent company)	4%	3%
Business group member (subsidiary)	21%	27%
Active in innovations*	41%	24%
ISO certification	57%	45%
Management Quality Index**	4.25	3.14
Investment Activity Index***	1.32	0.98

* The innovators group included firms, which implemented a new product or technology in 2008 and had nonzero R&D costs in 2008 (for more detail see Gonchar, 2009). – ** The index aggregates responses to the question on managerial innovations, takes on the values from 1 through 9. – *** The index is constructed on the basis of the following values of the original variable: 0 = no investment in 2005-2008; 1 = insignificant investments, 2 = major investments

Another interesting observation is related to differences in ownership structure. With a roughly equal (compared with the sample average) share of government-owned companies, association members featured a considerably higher share of companies with foreign equity. On the other hand, association membership was lower in the group of companies that refused to respond to the survey question about their ownership structure.

Business association membership and interaction with state actors. To determine how association membership impacts firm relations with government authorities, the questionnaire included a number of specially designed questions.

First, respondents were asked if their enterprise provided any assistance to regional and/or local authorities in regional social development in 2007-2008 (e.g., maintenance of social facilities and housing or sponsor support to regional/municipal programs).

If the response was affirmative, respondents were asked to provide a rough estimate of the average annual amount of their assistance as a ratio of their sales proceeds. Figure 5 presents a distribution of responses. Only 23% of firms did not provide any assistance to the authorities, while the overwhelming majority of the other enterprises (56.5%) estimated their assistance as marginal: respondents were either undecided about its size or indicated that it was under 0.1% of their sales. For the purpose of regression analysis, we aligned the responses to this question and constructed an ordinal variable taking five values (from 0 through 4).

Figure 5:
Assistance by firms to regional and local authorities
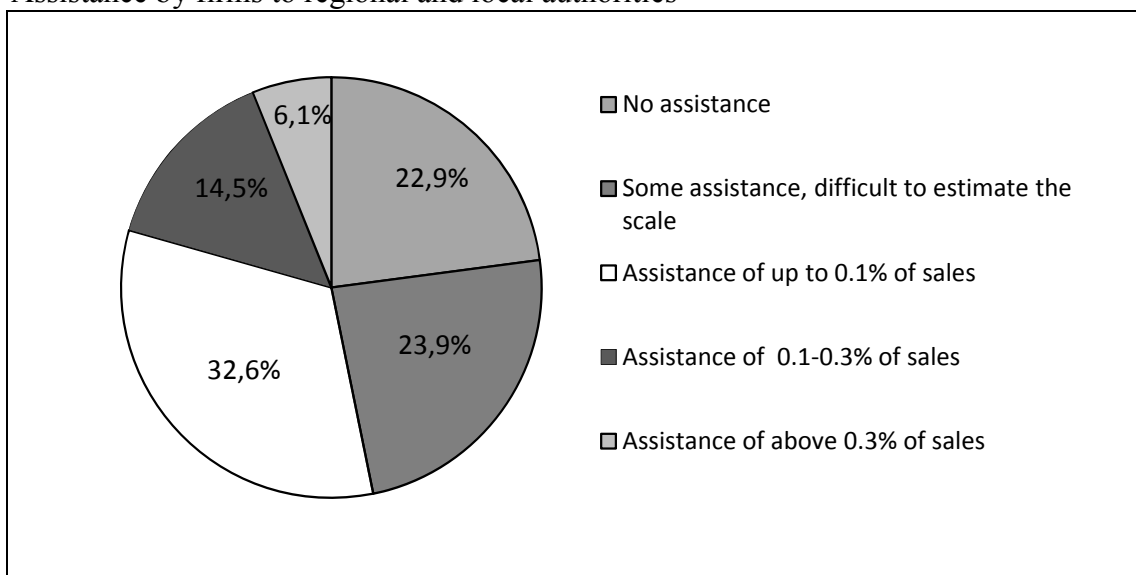
Second, respondents were asked to indicate separately if their enterprise received any financial and/or administrative assistance from federal, regional and local authorities in 2007-2008.[11] Figure 6 shows rates of positive responses.

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11 Administrative support means any non-financial support, including assistance in interaction with other state actors and business partners, becoming connected to infrastructure networks and plots of land.

Figure 6:
Receipt of financial and administrative support from various levels of government
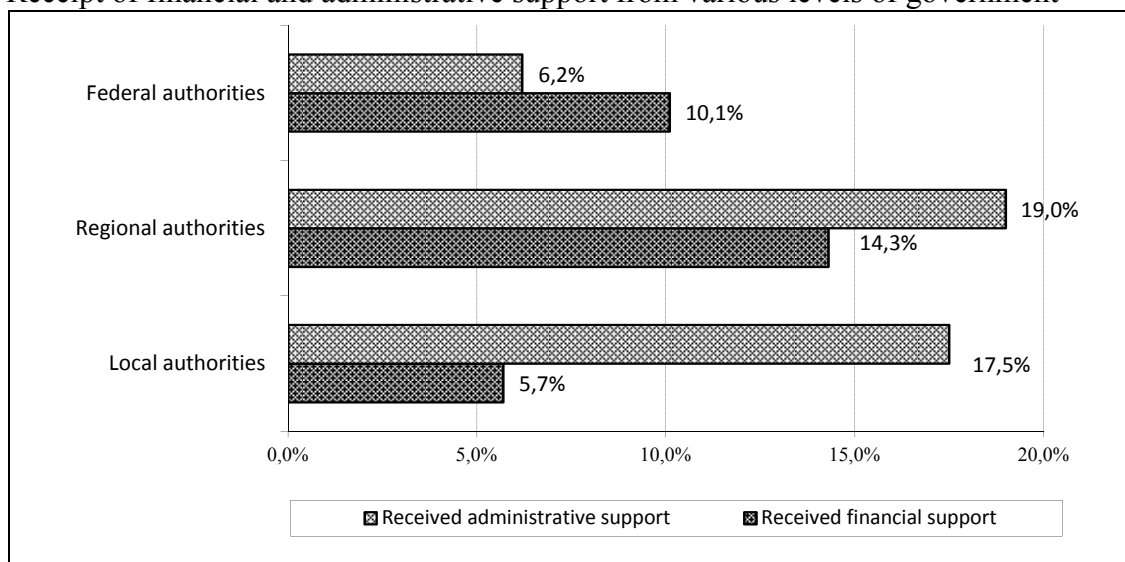
Apparently, local and regional authorities significantly and more frequently provided administrative support to businesses, while federal authorities were largely focused on financial instruments of support. Of greater note, regional authorities were generally more active in supporting enterprises.

Further on, we used three binary variables to reflect the support (financial and/or administrative) received from federal, regional and local authorities, respectively.

Table 3 presents summary data on assistance to the authorities and receipt of government support by member and non-member enterprises.

Table 3
Membership in BA and relations with various levels of government

		Members of BA	Non-members of BA
Provision of assistance to regional and local government authorities	No assistance	17%	26%
	Under 0.1% of sales or no response on the size	57%	57%
	Above 0.1% of sales	27%	17%
Receipt of assistance from government authorities of various levels	Federal level	16%	12%
	Regional level	34%	21%
	Local level	25%	17%

Paired comparisons of averages suggest that association members are broadly more active in providing assistance to regional and local authorities and also tend to receive regional and local government support more frequently. Federal support also shows some bias toward association members, but it is less noticeable.

7   Main Hypotheses and Research Strategy

Drawing on summary results of previous research and our preliminary consideration of the 2009 survey data, we have formulated the following hypotheses to analyze factors influencing decisions to join associations:

1. We assume that business associations are more frequently joined by:

    a) <u>Larger enterprises</u>. This effect relates to the fact that big players find it easier to agree on collective action (Olson, 1965). Moreover, given the sheer scale of their businesses, they can be more strongly affected by changes in the rules of the game, while bearing roughly similar lobbying costs. This effect has been noted in many studies, including those based on Russia's data (Pyle, 2006; Golikova, 2009), but nevertheless, we wanted to test it against our data. Big players should also have a stronger position in the business association. A smaller firm normally would be a rank-and-file member with few chances to advance its interests, while a larger company may be a more efficient lobbyist. In other words, larger companies are better positioned to influence the rules of the game.

    b) <u>Firms located in regional capital cities</u>. In smaller towns, authorities are more accessible. Therefore, medium-sized and large companies do not need special organizations to interact with government officials, while coordination of business activities of enterprises may be achieved via informal meetings of their managers. In contrast, in Moscow, the high number of enterprises is an impediment to collective action, while officials are accessible only to the largest enterprises or to the most high-profile associations. Against this backdrop, regional capitals have a manageable but not too small number of enterprises. Access to the governor for an individual enterprise (especially if it is medium-sized) may be restricted, but collective appeals on behalf of a sector may have effect. On balance, regional capital cities seem to offer an optimal combination of business concentration and access to government. Saving time and transport costs may also play a role: to maintain contacts with the authorities, business association offices should be located in administrative centers (Moscow and regional capital cities). However, in this case, the firms based in the same administrative centers would have lower costs of contacting with associations.

    c) <u>Firms active in exports, investment and innovation.</u> Such "modernizing" activities of firms result in more external restrictions for them in the business environment.[12] This fact has been recorded in many studies (see Golikova et al. (2007), Yakovlev and Frye (2007)), and it may be interpreted as a stronger pressure on ac-

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[12] In particular, investing, exporting and innovative firms inevitably would have more counterparties or would have more complicated relations with them. Therefore, such firms would run higher risks of contractual non-performance and other violations of property rights and, consequently, would have higher requirements to the quality of business environment.

tive enterprises, in the language of Doner & Schneider (2000). Accordingly, such enterprises may be more motivated towards collective action, seeking to change the "rules of the game."

    d) <u>Firms with foreign equity</u>. Foreign investors, who traditionally prefer official and legal channels to address their business problems, may find business associations attractive as an instrument of civilized public interaction with the authorities

2. We assume that business associations are less frequently joined by:
    a) <u>Subsidiaries in business groups</u>. Their lower participation rates in business associations may be accounted for by the fact that their interests are taken care of by their parent companies, which lobby for them at various levels. Additionally, the function of horizontal cooperation development (which is a frequent role of business associations internationally – see Doner & Schneider (2000), Locke (2001)) may be less relevant for enterprises belonging to business groups. Their technological development and more efficient inclusion in value chains will normally occur within their business groups, supervised by the parent company.

    b) <u>Firms that do not respond regarding their ownership structure</u>. Membership in business associations suggests the firm's willingness to cooperate with other companies, to act in a public space and to disclose information about itself. Therefore, we may anticipate that non-transparent companies (identified by no response to the ownership question) would be less inclined to participate in business associations.

Regarding business association membership implications for business-government interface, the following hypotheses were formulated:

3. Business associations are mediators between government and business and serve as a mechanism to facilitate exchanges between business and the state, as explored by T.Frye (Frye, 2002) and supported by further research (Yakovlev, 2007; Yakovlev, 2010). Therefore, we may assume that

    a) <u>Association members provide more frequent assistance to regional and local authorities in regional social development;</u>

    b) <u>Association members more frequently receive government support.</u>

4. Associations of different types will provide different kinds of access to government support for their members. These variations may be related to membership coverage and associations' focus on different activities. In this context we may hypothesize that:

    a) <u>Government support would more frequently go to enterprises belonging to top and sector-specific business associations</u>. Because these associations are more broadbased, they may have a better negotiating capacity in their interaction with gov-

ernment, and therefore, they may be more successful in securing government support for their members.

b) <u>Members of TPP do not enjoy any preferences in receiving access to government support because, judging by in-depth qualitative interviews, the TPP network is more focused on provision of business services rather than on lobbying the interests of its members</u>.

The hypotheses regarding factors influencing association membership were tested in a series of probit-type regressions. Business association membership was a binary dependent variable (0 – non-member, 1 – member). Explanatory variables included firm size, administrative status of their home city/town, ownership structure (state participation, foreign equity, no response), and membership in business groups. Further specifications of the model additionally included export activities, major investments, and technological and managerial innovations. Results were controlled for the sector, economic development of the region (groupings by investment potential ratings) and the time of firm establishment.

To explore interaction with government, during the first stage, we used ordinal probit regressions, where assistance to regional and local authorities in the social development of the region was included as a dependent variable (0 – no assistance; 4 – assistance of above 0.3% of sales). Four dummies capturing membership in a sector-specific, regional, peak associations and TPP were used as explanatory variables. In addition to controlling for the sector, economic development of the region and time of establishment, we also used controls for all the variables earlier included in the membership determinants regression. This exercise resulted in identifying the "net effect" of association membership influencing assistance to government, unrelated to the factors influencing firms' decisions to join business associations.

A similar approach was used during the second stage while assessing factors influencing provision of government support. Respective probit regressions used dummies for receipt of government support from federal, regional and local authorities as dependant variables, and dummies for firm participation in sector-specific, regional, top "peak" associations and the TPP as explanatory variables. For controls, we used all the variables included in the models during the first stage, including the provision of assistance to authorities.

8   Regression analysis Results

<u>Firm-specific characteristics' influence on business association membership.</u> To determine to what extent business association membership is influenced by firm-specific characteristics, we used probit-type assessments. Key results are provided in Table 4.

Regression analysis has confirmed the findings of previous research about a positive relationship between enterprise size and the probability of its membership in a business association. Replacement of the log employees with firm categories by size revealed a threshold, i.e., firms employing over 500 workers tended to participate in associations much more frequently, while differences among other-sized groups proved insignificant.

Location in a regional capital increased the probability of association membership by 13 percentage points vis-à-vis firms from provincial capitals ($p<0.01$) in all the model specifications.

In the group of modernization activity determinants, high significance for association participation was shown by managerial and technological innovation and investment ($p<0.01$ for all these factors), with a lower significance demonstrated by ISO certification ($p<0.10$) and zero significance of exporting operations.

The assumption of a positive relationship between foreign equity and association membership was not confirmed, with the respective coefficients positive but not significant

The hypothesis of a negative relationship between business group membership (as rank-and-file members) and association membership was confirmed at the 5% level of statistic significance.

Finally, no-response to ownership questions proved to be negatively related to business association participation. This correlation was highly significant ($p<0.01$) in all the model specifications. This group of enterprises showed a 15% percentage point lower number of association members, with the sample average of 34% (excluding firms that failed to give names of associations where they belonged).

Assistance to regional and local authorities. Correlation between association membership and assistance to regional and local authorities was explored by ordered probit regressions. The intensity of assistance was described by the ordinal variable described above. Two approaches were utilized to describe association membership. One approach used a binary variable capturing membership in any type of association. The other approach employed a series of binary variables capturing membership in associations of different types (according to the classification above). Thus, effects of membership in these associations can be compared. The computed outputs are shown in Tables 5a and 5b.

A calculation using the aggregated membership variable reveals that, on average, association members tend to more actively assist regional and local authorities. However, a further analysis indicated that the intensity of assistance varies depending on the association type. A stronger and more statistically significant effect is found *exclusively in the case of membership in sector-specific associations*. Membership in regional business associations and TPP shows a statistically insignificant and weak positive effect. Impor-

tantly, the coefficient for the variable capturing membership in nationwide associations (RSPP, OPORA and Delovaya Rossia) has a rather high value while remaining statistically insignificant. This may be related to a relatively low number of such enterprises in the sample

Enterprise size is positively related to business-government cooperation, with a higher share of revenues spent by larger enterprises on assistance to government authorities. Noticeably more frequent is assistance to authorities from innovative enterprises, enterprises active in investment, ISO-certified enterprises and enterprises enhancing management. The fact that the association membership effect is robust to inclusion of control variables implies that association membership as such is positively related to more active assistance to government.

Association membership and support from government. Three dummies for receipt of support from federal, regional and local authorities were used as dependent variables. Association membership was captured in an aggregate variable in one case (member/non-member of any type of association), and in the other case, it is captured in a number of variables describing types of associations. Because government support may be a result of the enterprise's assistance to the authorities, a respective variable was included in regressions as a control. Tables 6 – 8 present results of analyzing the possible influence of various factors on the probability of receiving support from federal, regional and local authorities.

As evidenced by the data, business associations proved insignificant for receiving federal support. Moreover, this result was consistent across all types of associations. However, it may be noteworthy that the assistance provided by the enterprise to regional and local authorities had a very weak effect on getting support from federal authorities. Support was received by enterprises of higher national importance, i.e., large or parent companies. More frequently, federal support went to government-owned enterprises and firms based in underdeveloped regions.

Regarding support from regional and local authorities, association membership was positively correlated with getting support. An analysis by types of associations resulted in the following findings:

Regional authorities tend to much more frequently (by 19 percentage points on average) support national-level association members. Membership in sector-specific associations increased the probability of receiving support by 13 percentage points. The coefficient capturing the effect from regional association membership was bordering statistical insignificance (slightly above seven percentage points). The effect from participation in TPP was negative (though statistically insignificant).

Other significant factors influencing probability of support from regional authorities included assistance to regional authorities in the social development of the region. Overall, regional authorities tended to be more supportive of larger and more proactive en-

terprises (which made major investments in 2007-2008, implemented innovations and demonstrated a higher level of management).

The local level exhibited similar trends. Most frequently, support went to members of national-level associations (+15 percentage points versus non-members), and somewhat less frequently, it was provided to members of sector-specific and regional associations (+7-9 percentage points). TPP members tended to receive support less frequently, as in the case of regional authorities, but the variance remained insignificant.

Apart from association members, support was noticeably more frequently enjoyed by unitary enterprises and companies with foreign equity. Neither the size nor modernization activities of enterprises had any significant impact on local government decisions to provide support.

An interesting finding was received regarding the group of enterprises that did not respond to the question on the ownership structure. As noted above, those enterprises less frequently joined business associations. They also less frequently provided assistance to the authorities in the social development of the region but significantly more frequently received regional and local government support. In sum, it may suggest that this group is dominated by enterprises affiliated with local and regional officials.

9 Discussion and Conclusions

The quantitative analysis suggests the following. The proportion of manufacturing companies belonging to business associations is close to 40%, exhibiting a marginal trend for growth if compared with earlier survey evidence. Over half of the member companies perceive their membership in business associations useful.

Regression analysis of the data of the 2009 survey show that larger enterprises and firms in regional capitals more often join business associations. We can suppose that precisely this type of city offers the opportunity to achieve an optimal combination of concentrated business activity with possible access to authorities. Membership in associations also proved to be related to activity of the firms in investment and innovation. The reason may be that the enterprises that are expanding the scope of their activities are more often facing problems in the business environment, such that they have more incentives to join efforts to change it, using business associations as one of instruments to do so.

In our regression analysis, we also have singled out the factors that lower the likelihood of membership in business associations. One of these factors is belonging to an integrated business group (holding group). We believe that enterprises of this type can more easily solve their problems in their parent companies, which usually belong to nation-wide business associations. At the same time, business groups may we unwilling to see that their subsidiaries independently cooperate with firms of similar profiles in industry-wide and regional associations.

Another "negative" factor is the refusal of our respondents to answer the question about ownership structure. In our opinion, membership in enterprise organizations presumes that a firm is ready to disclose certain information about itself. Thus, the firms that are unwilling to disclose information about themselves would be less inclined to join the associations.

Our regression analysis has also confirmed that business associations are a component of what Frye (2002) calls an "elite exchange"– although only on regional and local levels. These "exchanges" imply that members of business associations, on the one hand, more actively assist regional and local authorities in social development of their regions, and on the other hand, they more often receive support from authorities. However, this effect is insignificant in terms of support from the federal government.

The most active participants in this "system of exchanges" are member enterprises from industry- and nationwide "leading" associations (RSPP, OPORA and Delovaya Rossia). This may be due to their strong bargaining power in their relations with regional and local authorities. However, the "exchange effects" that we have discovered are not related to members of chambers of trade and industry. This may be due to the fact that the system of the Chamber of Commerce and Industry is mostly focused on providing business services rather than on lobbying interests of its members.

In general, our results allow us to believe that at present, business associations (especially the industry-wide and "leading" ones) consolidate the most active, advanced companies and act as collective representatives of their interests. For this reason, business associations can be regarded as interface units between the authorities and businesses and as a possible instrument for promotion of economic development.

References

Blanchard, O. & Kremer, M. (1997) Disorganization // The Quarterly Journal of Economics November 1997, Vol. 112, No. 4, 1091-1126.

Campos, Nauro and Francesco Giovannoni, 2007. "Lobbying, Corruption and Political Influence," Public Choice, 131, 1-21.

Coates D., and Heckelman J.C. (2003) Interest Groups and Investment: A Further Test of the Olson Hypothesis // Public Choice , Volume 117, Numbers 3-4, 333-340

Coates D., Heckelman J.C. & Wilson B. (2010) The political economy of investment: Sclerotic effects from interest groups // European Journal of Political Economy, Volume 26, Issue 2, June 2010, 208-221.

Doner, Richard and Ben Ross Schneider, 2000. "Business Associations and Economic Development: Why Some Associations Contribute More Than Others," Business and Politics, 2, 261-288.

Frye, Timothy, 2002. "Capture or exchange? Business lobbying in Russia," Europe-Asia Studies 54, 1017-1036.

Golikova, Victoria, 2009. "Business associations: incentives and benefits from the viewpoint of corporate governance," in Tatiana Dolgopyatova, Ichiro Iwasaki and Andrei Yakovlev (eds.), Organization and Development of Russian Business: A Firm-level Analysis. Palgrave Macmillan, 258-283.

Golikova, Victoria, 2007. "Membership of Russian Companies in Enterprise Associations," in Svetlana Avdasheva, Victoria Golikova, Fumikazu Sugiura and Andrei Yakovlev (eds.), External Relationship of Russian Corporations. Institute of Economic Research, Hitosubashi University.

Hausmann, R., Rodrik, D., Sabel, Ch.F., 2008, Reconfiguring Industrial Policy: A Framework with an Application to South Africa. HKS Working Paper No. RWP08-031.

Heckelman J.C. (2007) Explaining the Rain: The Rise and Decline of Nations after 25 Years // Southern Economic Journal, 2007, Volume 74, Issue 1, 18-33

Hellman J. S., Jones G., Kaufman D., 2000. Seize the State, Seize the Day: An Empirical Analysis of State Capture and Corruption in Transition. Paper Prepared for the ABCDE 2000 Conference, April 18–20, Washington, D.C.

Locke R.M., 'Building Trust'. Paper presented at the Annual Meetings of the American Political Science Association, Hilton Towers, San Francisco, California, September 1, 2001.

Markus Stanislav, 2009. Firms, Stakeholders and Predators in Weak States. Paper presented at 13th ISNIE conference, Berkeley, June 2009.

Morgan S., McMahon M. & Greyson D., 2008. Balancing health and industrial policy objectives in the pharmaceutical sector: Lessons from Australia // Health Policy, Volume 87, Issue 2, Pages 133-145 (August 2008).

Olson, Mancur, 1965. The Logic of Collective Action: Public Goods and the Theory of Groups. Harvard University Press.

Olson, Mancur, 1982. The Rise and Decline of Nations. New Haven: Yale University Press.

Pyle W., 2006. Collective Action and Post-Communist Enterprise: The Economic Logic of Russia's Business Associations. – Europe–Asia Studies, Vol. 58, No. 4, June, 491-521.

Pyle W., 2007. Organized business, political regimes and property rights across the Russian Federation. – BOFIT Discussion Papers 18.

Pyle W., 2009. Organized Business, Political Competition, and Property Rights: Evidence from the Russian Federation. - Journal of Law, Economics, and Organization, June 2009.

Recanatini, F., Ryterman, R., 2001. Disorganization or Self-Organization? The Emergence of Business Associations in a Transition Economy. World Bank Policy Research Working Paper Series, # 2539, January 2001.

Rodrik Dani, 2008. Normalizing Industrial Policy. The World Bank, Commission on Growth and Development, Working Paper No. 3.

Rodrik Dani, 2004. Industrial Policy for the Twenty-First Century, JFK School of Government, Harvard University, September 2004.

Shleifer, A., & Treisman, D., 2005. "A Normal Country: Russia After Communism." Journal of Economic Perspectives, 19(1): 151-174.

World Bank, 2010. Growth with Moderation and Uncertainty. Russian Economic Report #23. November 2010.

Yakovlev A., 2006. The Evolution of Business – State Interaction in Russia: From State Capture to Business Capture? – Europe-Asia Studies, Vol. 58, No. 7, November, 1033-1056.

Yakovlev A., 2007. The Russian Corporation and Regional Authorities: Models of Interrelations and Their Evolution. – Moscow: HSE, WP13/2007/14.

Yakovlev A., 2010. State-business relations in Russia in the 2000s: From the capture to a variety of exchange models? – Paper presented at ISNIE Conference 2010, University of Stirling, June 2010.

Yakovlev A., Frye T. (2007) Reforms in Russia from the business point of view // Pro et Contra, 2007, No. 4-5, 118-134 (in Russian).

Yakovlev A., Simachev Yu., Danilov Yu., 2010. The Russian corporation: patterns of behavior during the crisis. // Post-Communist Economies. Vol. 22, No. 2, June 2010. 129-140.

Zudin A. (2001) Neo-korporativism in Russia? State and business under Vladimir Putin. // Pro et Contra, Vol. 6, No.4, 171-198 (in Russian).

Zudin A. (2006) State and business in Russia: evolution of interrelations // Neprikosnovenny Zapas, No. 6 (50), p.200-212 (in Russian; http://magazines.russ.ru/nz/2006/50/zu18.html).

Table 4:

Determinants of firm membership in business associations

	BA membership (dummy)					
Log employees	0.076***[a] [0.015][b]	0.058*** [0.016]	0.059*** [0.016]	0.063*** [0.016]	0.068*** [0.016]	0.076*** [0.016]
Type of settlement: Moscow [c]	0.015 [0.078]	-0.023 [0.075]	-0.005 [0.077]	0.009 [0.079]	0.012 [0.078]	0.015 [0.078]
Type of settlement: regional capital	0.134*** [0.034]	0.126*** [0.035]	0.133*** [0.035]	0.124*** [0.035]	0.134*** [0.035]	0.134*** [0.034]
Type of settlement: urban village	0.039 [0.069]	0.056 [0.069]	0.033 [0.069]	0.053 [0.069]	0.042 [0.069]	0.039 [0.069]
Investment potential of the region (low)[d]	0.034 [0.039]	0.039 [0.039]	0.038 [0.040]	0.030 [0.039]	0.027 [0.039]	0.034 [0.039]
Investment potential of the region (high)	-0.027 [0.044]	-0.013 [0.044]	-0.025 [0.045]	-0.037 [0.044]	-0.032 [0.044]	-0.027 [0.044]
(some) government ownership	-0.0004 [0.0746]	0.010 [0.077]	0.032 [0.079]	0.013 [0.076]	0.004 [0.076]	-0.0004 [0.0746]
(some) foreign ownership	0.067 [0.059]	0.057 [0.059]	0.053 [0.060]	0.060 [0.059]	0.066 [0.059]	0.067 [0.060]
Unitary enterprise	-0.046 [0.074]	-0.021 [0.076]	0.006 [0.080]	-0.024 [0.078]	-0.039 [0.074]	-0.046 [0.075]
No response to ownership question	-0.155*** [0.038]	-0.153*** [0.038]	-0.123*** [0.042]	-0.151*** [0.039]	-0.157*** [0.038]	-0.155*** [0.038]
Holding group (parent company)	-0.015 [0.084]	-0.027 [0.082]	-0.005 [0.088]	-0.025 [0.084]	-0.016 [0.084]	-0.015 [0.084]
Holding group (subsidiary)	-0.077** [0.037]	-0.090** [0.036]	-0.081** [0.037]	-0.072** [0.037]	-0.079** [0.037]	-0.077** [0.037]
Time of foundation: 1992-1998[e]	0.016 [0.047]	0.003 [0.047]	0.009 [0.048]	0.014 [0.047]	0.015 [0.047]	0.016 [0.047]
Time of foundation: since 1999	-0.077 [0.054]	-0.075 [0.054]	-0.072 [0.056]	-0.070 [0.055]	-0.076 [0.054]	-0.077 [0.054]
Management quality (medium)[f]		0.119*** [0.037]				
Management quality (high)		0.176*** [0.049]				
Active in innovations			0.090*** [0.021]			
Investment Activity Index				0.115*** [0.040]		
ISO certification					0.062* [0.035]	
Exporter dummy						-0.0004 [0.0382]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**952**	**952**	**928**	**952**	**952**	**952**

[a] Significance levels: *** - 1%, ** - 5%, * - 10%. – [b] Standard errors in brackets. – [c] *Type of settlement: provincial towns* is omitted. – [d] *Investment potential of the region: medium* is omitted. – [e] *Time of foundation: before 1992* is omitted. – [f] *Management quality (medium)* is omitted.

Table 5a:

Determinants of firms' assistance to regional and local authorities

	Assistance to regional and local authorities					
BA membership	0.243*** [0.076]	0.216*** [0.077]	0.204*** [0.077]	0.218*** [0.077]	0.236*** [0.076]	0.243*** [0.076]
Log employees	0.142*** [0.035]	0.112*** [0.036]	0.132*** [0.037]	0.110*** [0.036]	0.123*** [0.036]	0.120*** [0.036]
Type of settlement: Moscow	0.236 [0.177]	0.173 [0.180]	0.223 [0.179]	0.224 [0.177]	0.229 [0.176]	0.220 [0.178]
Type of settlement: regional capital	-0.174** [0.076]	-0.187** [0.077]	-0.167** [0.077]	-0.198*** [0.077]	-0.175** [0.077]	-0.178** [0.077]
Type of settlement: urban village	-0.041 [0.131]	-0.015 [0.132]	-0.054 [0.131]	-0.008 [0.131]	-0.038 [0.130]	-0.049 [0.131]
Investment potential of the region (low)	-0.052 [0.082]	-0.044 [0.083]	-0.063 [0.084]	-0.063 [0.083]	-0.069 [0.083]	-0.062 [0.083]
Investment potential of the region (high)	-0.469*** [0.103]	-0.447*** [0.103]	-0.480*** [0.104]	-0.498*** [0.103]	-0.481*** [0.103]	-0.475*** [0.102]
(some) government ownership	-0.167 [0.155]	-0.158 [0.155]	-0.179 [0.157]	-0.135 [0.155]	-0.16 [0.156]	-0.175 [0.154]
(some) foreign ownership	0.158 [0.126]	0.148 [0.126]	0.131 [0.128]	0.146 [0.127]	0.161 [0.127]	0.128 [0.128]
Unitary enterprises	-0.368* [0.190]	-0.322* [0.190]	-0.304 [0.191]	-0.312* [0.188]	-0.352* [0.190]	-0.333* [0.191]
No response to ownership question	-0.227** [0.100]	-0.224** [0.100]	-0.195* [0.105]	-0.213** [0.100]	-0.227** [0.100]	-0.222** [0.100]
Holding group (parent company)	-0.051 [0.211]	-0.077 [0.210]	-0.029 [0.209]	-0.080 [0.204]	-0.055 [0.211]	-0.063 [0.210]
Holding group (subsidiary)	-0.092 [0.082]	-0.119 [0.083]	-0.105 [0.085]	-0.082 [0.082]	-0.097 [0.082]	-0.086 [0.082]
Time of foundation: 1992-1998	-0.064 [0.107]	-0.077 [0.108]	-0.081 [0.109]	-0.071 [0.107]	-0.065 [0.107]	-0.066 [0.107]
Time of foundation: since 1999	-0.020 [0.120]	-0.022 [0.121]	0.005 [0.120]	0.0006 [0.121]	-0.019 [0.120]	-0.033 [0.120]
Management quality (medium)		0.143* [0.083]				
Management quality (high)		0.308*** [0.100]				
Active in innovations			0.119*** [0.045]			
Investment Activity Index				0.299*** [0.086]		
ISO certification					0.142* [0.077]	
Exporter dummy						0.137 [0.084]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**952**	**952**	**928**	**952**	**952**	**952**

Table 5b:

Determinants of firms' assistance to regional and local authorities

	Assistance to regional and local authorities					
Sector-specific BA	0.248*** [0.095]	0.233** [0.096]	0.205** [0.096]	0.212** [0.096]	0.246*** [0.094]	0.241** [0.095]
Regional BA	0.135 [0.106]	0.115 [0.108]	0.133 [0.107]	0.118 [0.108]	0.125 [0.107]	0.147 [0.106]
RSPP, OPORA, Delovaya Rossia	0.233 [0.166]	0.191 [0.163]	0.207 [0.168]	0.182 [0.167]	0.225 [0.167]	0.239 [0.165]
TPP	0.104 [0.133]	0.070 [0.136]	0.078 [0.134]	0.110 [0.133]	0.106 [0.133]	0.103 [0.132]
Log employees	0.140*** [0.035]	0.111*** [0.036]	0.129*** [0.037]	0.110*** [0.036]	0.121*** [0.036]	0.119*** [0.036]
Type of settlement: Moscow	0.217 [0.178]	0.155 [0.180]	0.208 [0.179]	0.209 [0.177]	0.210 [0.176]	0.203 [0.178]
Type of settlement: regional capital	-0.183** [0.077]	-0.194** [0.077]	-0.175** [0.078]	-0.204*** [0.077]	-0.184** [0.077]	-0.187** [0.077]
Type of settlement: urban village	-0.054 [0.132]	-0.026 [0.133]	-0.065 [0.132]	-0.021 [0.132]	-0.051 [0.131]	-0.062 [0.132]
Investment potential of the region (low)	-0.056 [0.083]	-0.049 [0.083]	-0.067 [0.084]	-0.066 [0.084]	-0.074 [0.084]	-0.066 [0.083]
Investment potential of the region (high)	-0.463*** [0.103]	-0.443*** [0.103]	-0.473*** [0.105]	-0.493*** [0.103]	-0.475*** [0.103]	-0.468*** [0.103]
(some) government ownership	-0.174 [0.156]	-0.163 [0.156]	-0.185 [0.159]	-0.142 [0.155]	-0.166 [0.157]	-0.183 [0.155]
(some) foreign ownership	0.162 [0.126]	0.153 [0.126]	0.133 [0.128]	0.151 [0.127]	0.166 [0.127]	0.132 [0.128]
Unitary enterprises	-0.385** [0.190]	-0.338* [0.191]	-0.317* [0.192]	-0.330* [0.189]	-0.369* [0.190]	-0.350* [0.192]
No response to ownership question	-0.226** [0.101]	-0.224** [0.100]	-0.192* [0.105]	-0.215** [0.100]	-0.226** [0.100]	-0.221** [0.101]
Holding group (parent company)	-0.042 [0.212]	-0.069 [0.210]	-0.021 [0.209]	-0.070 [0.205]	-0.046 [0.211]	-0.053 [0.210]
Holding group (subsidiary)	-0.093 [0.083]	-0.122 [0.084]	-0.106 [0.085]	-0.084 [0.082]	-0.099 [0.083]	-0.087 [0.082]
Time of foundation: 1992-1998	-0.055 [0.107]	-0.069 [0.108]	-0.074 [0.109]	-0.063 [0.107]	-0.057 [0.107]	-0.057 [0.107]
Time of foundation: since 1999	-0.015 [0.120]	-0.018 [0.120]	0.010 [0.119]	0.003 [0.120]	-0.014 [0.119]	-0.028 [0.120]
Management quality (medium)		0.140* [0.084]				
Management quality (high)		0.305*** [0.101]				
Active in innovations			0.121*** [0.045]			
Investment Activity Index				0.289*** [0.086]		
ISO certification					0.146* [0.077]	
Exporter dummy						0.136 [0.085]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**952**	**952**	**928**	**952**	**952**	**952**

Table 6a:

Determinants of receipt of support from federal authorities

	Support from federal authorities (dummy)					
BA membership	0.011 [0.020]	0.008 [0.020]	0.006 [0.020]	0.006 [0.020]	0.011 [0.020]	0.011 [0.020]
Assistance to regional and local authorities (dummy)	0.038* [0.020]	0.035* [0.021]	0.034 [0.021]	0.030 [0.021]	0.038* [0.020]	0.039* [0.020]
Log employees	0.028*** [0.009]	0.024** [0.010]	0.021** [0.010]	0.022** [0.009]	0.028*** [0.010]	0.030*** [0.010]
Type of settlement: Moscow	0.022 [0.052]	0.014 [0.050]	0.019 [0.052]	0.019 [0.051]	0.022 [0.052]	0.024 [0.053]
Type of settlement: regional capital	-0.011 [0.020]	-0.015 [0.020]	-0.007 [0.020]	-0.015 [0.020]	-0.011 [0.020]	-0.011 [0.020]
Type of settlement: urban village	-0.052* [0.027]	-0.049* [0.028]	-0.054** [0.027]	-0.046* [0.028]	-0.052* [0.027]	-0.052* [0.027]
Investment potential of the region (low)	0.023 [0.022]	0.024 [0.022]	0.023 [0.022]	0.020 [0.021]	0.023 [0.022]	0.024 [0.022]
Investment potential of the region (high)	-0.072*** [0.022]	-0.070*** [0.022]	-0.071*** [0.023]	-0.076*** [0.021]	-0.072*** [0.022]	-0.071*** [0.022]
(some) government ownership	0.110* [0.057]	0.114* [0.059]	0.124** [0.061]	0.119** [0.059]	0.109* [0.057]	0.111* [0.057]
(some) foreign ownership	0.027 [0.040]	0.027 [0.040]	0.026 [0.040]	0.023 [0.039]	0.027 [0.040]	0.030 [0.041]
Unitary enterprises	0.163** [0.076]	0.175** [0.079]	0.161** [0.079]	0.185** [0.079]	0.163** [0.076]	0.154** [0.075]
No response to ownership question	-0.014 [0.024]	-0.0121 [0.024]	-0.008 [0.027]	-0.012 [0.024]	-0.014 [0.024]	-0.015 [0.024]
Holding group (parent company)	0.203** [0.082]	0.192** [0.080]	0.216** [0.084]	0.191** [0.083]	0.203** [0.082]	0.205** [0.082]
Holding group (subsidiary)	0.020 [0.023]	0.017 [0.023]	0.017 [0.024]	0.021 [0.023]	0.020 [0.023]	0.019 [0.023]
Time of foundation: 1992-1998	-0.073*** [0.019]	-0.074*** [0.019]	-0.076*** [0.019]	-0.074*** [0.018]	-0.073*** [0.019]	-0.073*** [0.019]
Time of foundation: since 1999	-0.003 [0.032]	-0.003 [0.032]	-0.003 [0.032]	-0.001 [0.032]	-0.003 [0.032]	-0.002 [0.032]
Management quality (medium)		0.033 [0.023]				
Management quality (high)		0.036 [0.033]				
Active in innovations			0.020* [0.012]			
Investment Activity Index				0.058** [0.025]		
ISO certification					-0.001 [0.020]	
Exporter dummy						-0.015 [0.022]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**951**	**951**	**927**	**951**	**951**	**951**

Table 6b:

Determinants of receipt of support from federal authorities

	Support from federal authorities (dummy)					
Sector-specific BA	0.039 [0.028]	0.037 [0.027]	0.035 [0.027]	0.031 [0.026]	0.039 [0.028]	0.040 [0.028]
Regional BA	-0.026 [0.022]	-0.026 [0.022]	-0.027 [0.022]	-0.027 [0.022]	-0.026 [0.022]	-0.027 [0.022]
RSPP, OPORA, Delovaya Rossia	0.033 [0.047]	0.027 [0.045]	0.029 [0.046]	0.022 [0.044]	0.033 [0.047]	0.033 [0.047]
TPP	-0.031 [0.029]	-0.034 [0.028]	-0.033 [0.029]	-0.029 [0.029]	-0.031 [0.029]	-0.031 [0.029]
Assistance to regional and local authorities (dummy)	0.037* [0.020]	0.034* [0.021]	0.034 [0.021]	0.030 [0.021]	0.037* [0.020]	0.038* [0.020]
Log employees	0.027*** [0.009]	0.024** [0.010]	0.021** [0.010]	0.022** [0.009]	0.028*** [0.010]	0.030*** [0.010]
Type of settlement: Moscow	0.010 [0.048]	0.002 [0.046]	0.007 [0.048]	0.009 [0.047]	0.010 [0.048]	0.012 [0.049]
Type of settlement: regional capital	-0.011 [0.020]	-0.014 [0.020]	-0.007 [0.020]	-0.014 [0.020]	-0.011 [0.020]	-0.010 [0.020]
Type of settlement: urban village	-0.052** [0.026]	-0.048* [0.027]	-0.054** [0.026]	-0.048* [0.027]	-0.052** [0.026]	-0.052* [0.027]
Investment potential of the region (low)	0.022 [0.022]	0.023 [0.022]	0.022 [0.022]	0.020 [0.021]	0.022 [0.022]	0.023 [0.022]
Investment potential of the region (high)	-0.070*** [0.022]	-0.069*** [0.022]	-0.070*** [0.022]	-0.075*** [0.021]	-0.070*** [0.022]	-0.069*** [0.022]
(some) government ownership	0.115** [0.058]	0.120** [0.059]	0.130** [0.061]	0.123** [0.059]	0.115** [0.058]	0.117** [0.058]
(some) foreign ownership	0.031 [0.040]	0.031 [0.040]	0.030 [0.040]	0.027 [0.039]	0.031 [0.040]	0.035 [0.041]
Unitary enterprises	0.159** [0.077]	0.173** [0.079]	0.158** [0.079]	0.181** [0.079]	0.159** [0.076]	0.149** [0.075]
No response to ownership question	-0.015 [0.024]	-0.013 [0.024]	-0.009 [0.026]	-0.013 [0.024]	-0.015 [0.024]	-0.016 [0.024]
Holding group (parent company)	0.202** [0.084]	0.191** [0.082]	0.215** [0.086]	0.190** [0.084]	0.202** [0.084]	0.205** [0.084]
Holding group (subsidiary)	0.017 [0.023]	0.014 [0.023]	0.014 [0.023]	0.018 [0.023]	0.017 [0.023]	0.016 [0.023]
Time of foundation: 1992-1998	-0.071*** [0.019]	-0.072*** [0.019]	-0.075*** [0.019]	-0.073*** [0.0184]	-0.074*** [0.019]	-0.071*** [0.019]
Time of foundation: since 1999	-0.003 [0.031]	-0.003 [0.031]	-0.001 [0.032]	-0.001 [0.031]	-0.003 [0.031]	-0.002 [0.032]
Management quality (medium)		0.031 [0.023]				
Management quality (high)		0.038 [0.033]				
Active in innovations			0.019* [0.012]			
Investment Activity Index				0.053** [0.025]		
ISO certification					-0.001 [0.019]	
Exporter dummy						-0.017 [0.021]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**951**	**951**	**927**	**951**	**951**	**951**

Table 7a:

Determinants of receipt of support from regional authorities

	Support from regional authorities (dummy)					
BA membership	0.104*** [0.032]	0.091*** [0.032]	0.089*** [0.032]	0.092*** [0.032]	0.104*** [0.032]	0.104*** [0.032]
Assistance to regional and local authorities (dummy)	0.119*** [0.032]	0.108*** [0.032]	0.111*** [0.033]	0.106*** [0.032]	0.119*** [0.032]	0.115*** [0.032]
Log employees	0.051*** [0.015]	0.038** [0.015]	0.042*** [0.016]	0.039*** [0.015]	0.052*** [0.015]	0.044*** [0.015]
Type of settlement: Moscow	0.171** [0.087]	0.140 [0.085]	0.157* [0.086]	0.170* [0.088]	0.171** [0.087]	0.165* [0.087]
Type of settlement: regional capital	-0.024 [0.031]	-0.033 [0.031]	-0.024 [0.032]	-0.034 [0.031]	-0.024 [0.031]	-0.025 [0.031]
Type of settlement: urban village	0.079 [0.062]	0.092 [0.063]	0.075 [0.063]	0.096 [0.064]	0.079 [0.062]	0.075 [0.062]
Investment potential of the region (low)	0.032 [0.033]	0.035 [0.033]	0.029 [0.034]	0.027 [0.033]	0.032 [0.033]	0.028 [0.033]
Investment potential of the region (high)	-0.185*** [0.034]	-0.181*** [0.034]	-0.186*** [0.035]	-0.197*** [0.034]	-0.185*** [0.034]	-0.188*** [0.034]
(some) government ownership	0.106 [0.076]	0.114 [0.077]	0.132 [0.082]	0.122 [0.080]	0.106 [0.076]	0.103 [0.076]
(some) foreign ownership	0.058 [0.059]	0.056 [0.059]	0.050 [0.059]	0.053 [0.060]	0.058 [0.059]	0.048 [0.059]
Unitary enterprises	0.131 [0.083]	0.156* [0.085]	0.142 [0.088]	0.159* [0.085]	0.130 [0.083]	0.145* [0.085]
No response to ownership question	0.086** [0.043]	0.087** [0.043]	0.113** [0.046]	0.090** [0.043]	0.086** [0.043]	0.088** [0.043]
Holding group (parent company)	0.155* [0.088]	0.139 [0.086]	0.161* [0.090]	0.137 [0.089]	0.155* [0.088]	0.151* [0.087]
Holding group (subsidiary)	-0.0001 [0.034]	-0.010 [0.034]	-0.001 [0.034]	0.003 [0.034]	0.0000 [0.034]	0.002 [0.034]
Time of foundation: 1992-1998	-0.033 [0.041]	-0.039 [0.041]	-0.037 [0.041]	-0.038 [0.041]	-0.033 [0.041]	-0.035 [0.041]
Time of foundation: since 1999	-0.091** [0.042]	-0.092** [0.041]	-0.090** [0.043]	-0.084* [0.043]	-0.091** [0.042]	-0.094** [0.041]
Management quality (medium)		0.088*** [0.034]				
Management quality (high)		0.138*** [0.049]				
Active in innovations			0.055*** [0.018]			
Investment Activity Index				0.127*** [0.037]		
ISO certification					-0.005 [0.031]	
Exporter dummy						0.048 [0.032]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**951**	**951**	**927**	**951**	**951**	**951**

Table 7b:

Determinants of receipt of support from regional authorities

	Support from regional authorities (dummy)					
Sector-specific BA	0.134*** [0.043]	0.126*** [0.042]	0.123*** [0.043]	0.120*** [0.043]	0.135*** [0.043]	0.132*** [0.043]
Regional BA	0.078* [0.046]	0.071 [0.046]	0.073 [0.045]	0.070 [0.046]	0.078* [0.046]	0.083* [0.046]
RSPP, OPORA, Delovaya Rossia	0.202*** [0.077]	0.180** [0.078]	0.192** [0.076]	0.177** [0.077]	0.202*** [0.078]	0.206*** [0.077]
TPP	-0.059 [0.051]	-0.073 [0.049]	-0.067 [0.050]	-0.056 [0.052]	-0.059 [0.051]	-0.059 [0.051]
Assistance to regional and local authorities (dummy)	0.118*** [0.032]	0.108*** [0.032]	0.111*** [0.033]	0.107*** [0.032]	0.118*** [0.032]	0.115*** [0.032]
Log employees	0.049*** [0.015]	0.036** [0.015]	0.040*** [0.016]	0.038*** [0.015]	0.050*** [0.015]	0.042*** [0.015]
Type of settlement: Moscow	0.152* [0.086]	0.121 [0.085]	0.138 [0.086]	0.153* [0.088]	0.152* [0.086]	0.146* [0.086]
Type of settlement: regional capital	-0.028 [0.032]	-0.036 [0.031]	-0.028 [0.032]	-0.036 [0.032]	-0.028 [0.032]	-0.029 [0.032]
Type of settlement: urban village	0.079 [0.063]	0.094 [0.064]	0.076 [0.063]	0.096 [0.064]	0.079 [0.063]	0.076 [0.062]
Investment potential of the region (low)	0.031 [0.033]	0.035 [0.033]	0.029 [0.034]	0.027 [0.033]	0.032 [0.033]	0.028 [0.033]
Investment potential of the region (high)	-0.178*** [0.035]	-0.175*** [0.035]	-0.179*** [0.036]	-0.190*** [0.034]	-0.178*** [0.035]	-0.180*** [0.035]
(some) government ownership	0.105 [0.078]	0.114 [0.079]	0.133 [0.083]	0.12 [0.081]	0.105 [0.078]	0.101 [0.078]
(some) foreign ownership	0.060 [0.059]	0.058 [0.059]	0.051 [0.059]	0.055 [0.060]	0.060 [0.059]	0.049 [0.059]
Unitary enterprises	0.128 [0.082]	0.155* [0.084]	0.142 [0.087]	0.155* [0.084]	0.127 [0.082]	0.143* [0.084]
No response to ownership question	0.089** [0.043]	0.090** [0.044]	0.118** [0.047]	0.093** [0.043]	0.089** [0.043]	0.092** [0.043]
Holding group (parent company)	0.155* [0.089]	0.138 [0.088]	0.159* [0.091]	0.138 [0.089]	0.155* [0.089]	0.151* [0.089]
Holding group (subsidiary)	0.001 [0.034]	-0.010 [0.034]	0.0004 [0.034]	0.004 [0.034]	0.001 [0.034]	0.003 [0.034]
Time of foundation: 1992-1998	-0.028 [0.042]	-0.034 [0.042]	-0.034 [0.042]	-0.033 [0.041]	-0.028 [0.042]	-0.030 [0.042]
Time of foundation: since 1999	-0.087** [0.042]	-0.088** [0.042]	-0.086** [0.043]	-0.081* [0.043]	-0.087** [0.042]	-0.091** [0.042]
Management quality (medium)		0.086** [0.034]				
Management quality (high)		0.141*** [0.049]				
Active in innovations			0.056*** [0.018]			
Investment Activity Index				0.118*** [0.038]		
ISO certification					-0.005 [0.031]	
Exporter dummy						0.048 [0.032]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**951**	**951**	**927**	**951**	**951**	**951**

Table 8a:

Determinants of receipt of support from local authorities

	Support from local authorities (dummy)					
BA membership	0.074**	0.066**	0.071**	0.071**	0.073**	0.074**
	[0.029]	[0.029]	[0.029]	[0.029]	[0.029]	[0.029]
Assistance to regional and local authorities (dummy)	0.080***	0.075***	0.083***	0.077***	0.080***	0.081***
	[0.029]	[0.029]	[0.029]	[0.029]	[0.029]	[0.029]
Log employees	0.006	-0.002	0.004	0.001	0.004	0.008
	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]
Type of settlement: Moscow	0.053	0.035	0.049	0.051	0.053	0.055
	[0.071]	[0.069]	[0.071]	[0.071]	[0.071]	[0.072]
Type of settlement: regional capital	-0.005	-0.009	-0.007	-0.009	-0.005	-0.004
	[0.028]	[0.028]	[0.028]	[0.028]	[0.028]	[0.028]
Type of settlement: urban village	0.012	0.019	0.007	0.016	0.012	0.013
	[0.053]	[0.054]	[0.052]	[0.054]	[0.053]	[0.053]
Investment potential of the region (low)	-0.051*	-0.048*	-0.054*	-0.052*	-0.053*	-0.050*
	[0.029]	[0.029]	[0.029]	[0.029]	[0.029]	[0.029]
Investment potential of the region (high)	-0.134***	-0.130***	-0.132***	-0.137***	-0.135***	-0.134***
	[0.030]	[0.031]	[0.031]	[0.030]	[0.030]	[0.030]
(some) government ownership	0.004	0.005	0.014	0.008	0.004	0.005
	[0.060]	[0.060]	[0.062]	[0.061]	[0.060]	[0.060]
(some) foreign ownership	0.128**	0.126**	0.125**	0.127**	0.129**	0.133**
	[0.058]	[0.058]	[0.058]	[0.058]	[0.058]	[0.058]
Unitary enterprises	0.208**	0.225***	0.205**	0.219***	0.210**	0.202**
	[0.084]	[0.085]	[0.086]	[0.085]	[0.085]	[0.084]
No response to ownership question	0.094**	0.094**	0.111***	0.096**	0.094**	0.093**
	[0.040]	[0.040]	[0.043]	[0.040]	[0.040]	[0.040]
Holding group (parent company)	0.049	0.039	0.053	0.044	0.048	0.051
	[0.068]	[0.065]	[0.070]	[0.067]	[0.068]	[0.068]
Holding group (subsidiary)	0.018	0.010	0.023	0.020	0.017	0.017
	[0.031]	[0.030]	[0.031]	[0.031]	[0.031]	[0.031]
Time of foundation: 1992-1998	-0.019	-0.020	-0.016	-0.020	-0.019	-0.018
	[0.035]	[0.035]	[0.036]	[0.035]	[0.035]	[0.035]
Time of foundation: since 1999	-0.053	-0.052	-0.050	-0.050	-0.052	-0.052
	[0.039]	[0.039]	[0.040]	[0.040]	[0.039]	[0.039]
Management quality (medium)		0.035				
		[0.031]				
Management quality (high)		0.082*				
		[0.042]				
Active in innovations			0.015			
			[0.016]			
Investment Activity Index				0.041		
				[0.032]		
ISO certification					0.013	
					[0.028]	
Exporter dummy						-0.016
						[0.029]
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Sample size	**950**	**950**	**926**	**950**	**950**	**950**