

Lobbying at the local level: social assets in Russian firms

Tuuli Juurikkala and Olga Lazareva¹

This version: February 9, 2006

Abstract

In the planned economy firms were made responsible for providing their workers with social services, such as housing, day care and medical care. In the transforming Russia of the 1990s, social assets were to be transferred from industrial enterprises to the public sector. The law on divestment provided little more than general principles. Thus, for a period of several years, property rights concerning a major part of social assets, most notably housing, were not properly defined, as transfer decisions were largely left to the local level players. Strikingly, the time when assets were divested varied considerably across firms. In this paper we utilize recent survey data from 404 medium and large industrial enterprises in 40 Russian regions and apply survival data analysis to explore the determinants of divestiture timing. Our results show that in municipalities with higher shares of own revenues in their budget and thus weaker fiscal incentives, firms used their social assets as leverage to extract budget assistance and other forms of preferential treatment from local authorities. We also find evidence that less competitive firms were using social assets to cushion themselves from product market competition. At the same time, we do not find any role for local labor market conditions in the divestment process.

¹ Bank of Finland Institute for Economies in Transition (tuuli.juurikkala@bof.fi) and Centre for Economic and Financial Research, Moscow (olazareva@cefir.ru). A previous version of the paper under the title “*To Divest or not to Divest? Social Assets in Russian Firms*” was presented at the V International Scientific Conference “*Competitiveness and Modernization of Economy*”, State University- Higher School of Economics, Moscow, April 2004; at Stockholm School of Economics SHEE/SITE Workshop on Transition and Institutional Analysis, April 2004; and at the Congress of European Regional Science Association, Porto, Portugal, August 2004. The work reported here is part of the project “*Infrastructure and Welfare Services in Russia: Enterprises as Beneficiaries and Service Providers*” financed by the Academy of Finland (project number 200936), the World Bank, and Yrjö Jahnsson Foundation. The project has also received support from the Bank of Finland Institute for Economies in Transition. We thank Pertti Haaparanta, Pekka Ilmakunnas, Stas Kolenikov, Jukka Pirttilä, Jakob Svensson and Ekaterina Zhuravskaya as well as FDPE seminar participants and colleagues at the Helsinki School of Economics, BOFIT, CEFIR and SITE for substantial help and guidance. Special thanks to Alexei Makrushin for help with municipal data. All errors are our own.

1. Introduction

Of the reforms that Russia has undergone during the transition period, the municipalization of social assets has been perhaps undeservedly neglected in the past few years. By the end of the Soviet era some 40% of total housing stock was held by industrial enterprises. The situation was similar for day care, medical care, recreation facilities and other social assets.² Despite formally belonging to the state, these assets were in fact operated by firms and in this sense were in firms' ownership, *de facto* if not *de jure*.

From the beginning of the 1990s, the Russian Federation government has been three-tiered, with federal, regional and municipal layers. In principle, the social service provision is delegated to the local level. During the mass privatization of industrial enterprises (1991-1994), the major part of social assets operated by enterprises should have been transferred to municipal ownership. The institution of municipal ownership itself was created at the same time. Federal legislation on the municipalization of social assets provided only general principles and much was left for local authorities to decide. Thus, for a period of several years, property rights concerning the major part of social assets, most notably housing, were not properly defined. Previous literature emphasizes the importance of property rights for economic development and growth (Libecap 1989, Murphy, Shleifer and Vishny 1993).

In this paper we use data from a recent survey of 404 medium and large Russian industrial enterprises to study the transfer of property rights on social assets from firms to municipalities. The data shows that there is much variation across firms in the timing of transfer to municipalities, which started already in 1991 and for some firms continued even into 2003 and beyond. According to the survey results, even within a single municipality, the timing of divestment can vary considerably. We exploit this variation to study the interaction of firms and government in a weak institutional environment.

The focus of our analysis is thus on the political economy of reform, in particular on the relations between firms and municipalities. Firms and local authorities are often involved in bilateral bargaining over the distribution of benefits such as budget subsidies and tax cuts, and especially so in the transition environment with poorly defined property rights (see e.g. Shleifer and Vishny 1994, Sonin 2003, Slinko, Yakovlev and Zhuravskaya 2005). We argue that the timing of divestiture of social assets in part depends on the ability of firms to use the assets as leverage in bargaining with municipalities. This ability arises from the fact that

² See Leksin and Shvetsov (1999)

social assets are a financial burden to the municipality just as they are to the firm, since housing and utilities, and social services in general, were and still are heavily subsidized for Russian consumers ³. The municipality is obliged to either accept the assets and cover all the costs or to bear the risk that the firm will underfinance the assets or abandon them altogether, which would have grave social and political consequences at the local level.

Anecdotal evidence suggests that in return for holding social assets longer, firms have received various kinds of state budget support ranging from restructuring of tax arrears to direct subsidies to favorable prices on inputs or purchases. Indeed, our data shows that firms which still held housing after 2000 were receiving more in terms of budget assistance, were more likely to have tax arrears, and were more involved in trade with the public sector (presumably on favorable terms). Although there are examples of firms and municipalities achieving formal agreements on the use and joint financing of social assets, a significant share of these issues has been governed by informal relations.

In our analysis we also draw on the recent literature on fiscal incentives at regional and municipal levels of government. Zhuravskaya (2000) has shown that the fiscal incentives of municipalities in Russia were quite weak during the 1990s, which had an adverse effect on public service provision and the development of local businesses. Further, Makrushin et al. (2003) have shown that weaker fiscal incentives are found in larger and richer municipalities which are able to collect more own incomes, as any additional income they collect is taxed away by regional governments in the form of reduced transfers. Consequently, such municipalities have no interest in developing their tax base. Instead, they may allow large local firms to divert taxes from upper level budgets in return for certain benefits (Sonin 2003), in our case - upkeep of social assets.

Our results corroborate these previous findings. In municipalities with higher shares of own budget revenues (mostly larger cities) firms divested their housing assets later. Moreover, within these municipalities, firms having greater political power (ability to influence laws and regulations) were also holding on to housing for a longer time and thus extracting more benefits. We also find that firms facing more competition in product markets divested later, which may indicate that social assets are used by uncompetitive firms to lobby for protection by the authorities. Thus the presence of social assets, for some firms, turned out to be a special kind of soft budget constraint that should have a negative effect on their performance and restructuring.

³ E.g. for housing and communal services the federal standard for the percentage of costs covered by users was 90% in 2003, while the actual average rate was around 60%, with substantial variation across regions.

In the following, we first describe in general the social asset divestment process in Russia and touch briefly on the current state of social service provision as revealed by survey results. We then take up the theoretical basis for our analysis and the hypotheses to be tested. The empirical section includes a description of the data and methodology, and a discussion of our findings. We show that firms that held on to housing did receive benefits from the public sector. We then move on to study the variation in divestment timing: which types of firms and in which localities were better able to exploit the advantage of having assets. The last section concludes.

2. Social asset divestment in the 1990s⁴

2.1 Divestment process in the literature

According to Leksin and Shvetsov (1998, 1999), in 1992 not more than a third of the total housing stock in Russia was privately owned (mostly individual houses). The rest was considered public housing and included municipal housing and departmental (*vedomstvennoe*) housing that existed within branch ministries and was managed by enterprises. In 1994, a third of the firms with fewer than 500 employees provided housing while all enterprises with more than 10 000 employees did so. In the beginning of the 1990s, some 70% of large and medium-sized enterprises offered medical services while over 75% of large and 50% of medium-sized enterprises provided day care.

In fact, by the start of the transition period, the social infrastructure within firms had already long ago become semi-municipal (Leksin and Shvetsov, 1998). Up to 50% of those who used these social services were not employees of the enterprise in question. Thus firms financed the municipal social infrastructure.

Basic legal documents requiring divestiture of housing and the bulk of social assets within six months after the enterprise was privatized were adopted in 1992-1993⁵. A gradualist approach was taken in the sense that, instead of immediate privatization, the assets were to be divested to local authorities, which were made responsible for the provision of the services. It is important to note that the social assets within firms were never legally in these firms' ownership: at the time of mass privatization in the early 1990s, they were in federal

⁴ Most of this section is based on Haaparanta et al. (2003).

⁵ See Appendix 1 for the legal basis of the transfer of social assets from firms to municipalities

state ownership and were to be transferred to municipal ownership. Local authorities had considerable discretion over the organization of the divestiture process.

The transfer of social assets was supposed to be completed by the end of 1997 and indeed the majority of assets were transferred by then (Leksin and Shvetsov 1998, Commander and Schankerman 1997). Roughly 80% of the housing stock, medical services, day care, sports facilities and children's summer camps, as well as 60 -70% of recreation facilities became municipalized during 1993-1997.

Starodubrovskaya (2002) accredits the perceived success in asset transfer to a large extent to the 1.5% local turnover tax introduced in 1995-1996 to finance housing and social facilities. As long as enterprises continued to hold the social assets, they could deduct their social expenditures from this tax. Before its abolishment in the 2000 tax reform, the turnover tax provided a mechanism allowing municipalities to receive additional funding after transfer with no mediation by regional or federal governments, and was actually the "only serious local tax in the Russian tax system". After the tax reform, federal subsidies remained the only source of financial compensation for housing that was approved for municipal ownership. Municipalities could also make formal agreements with firms for joint financing of transferred assets.

Importantly, the pace of divestiture of housing varied considerably in different locations - the share of municipalized assets could be between 15% and 100%. Starodubrovskaya (2001, 2002) argues that this was a result of complex relationships and incentive structures between the main players- enterprise management, local and regional governments, trade unions (in some cases), and different segments of the population.

2.2 Social Assets in Firms - Survey Results

Of the 404 firms that were surveyed ⁶, over 90% report having at least some kind of social assets in 1990, and over 90% still provided or supported at least one service in 2003, though the scale of firms' participation in social service provision has diminished significantly during the last decade (see Table 1). In general, there has been a switch from holding assets to other forms of support, such as direct subsidies to employees. Larger firms in terms of employees are more likely to still be holding social assets and bear higher costs

⁶ See data description in Appendix 2

relative to wage bill. Moreover, general managers of larger firms are less eager to divest their current social assets than managers of firms with fewer than 500 employees.

In 1990, almost 80% of the 404 surveyed firms provided *housing* to their employees. Of those that did, nearly 60% have subsequently fully divested and almost all have divested either fully or partially.⁷ In most cases, divested assets went to the municipality, but for more than 20% of the firms that held housing in 1990 at least some apartments have been sold to other parties. In the spring of 2003, over half of the surveyed social managers reported that their respective firms still owned housing or provided housing support in some other form, mostly through direct subsidies. It is also striking that for over half of the firms offering this benefit, the occupants are not only employees and their families. This is a result of the peculiar functioning of the Soviet housing “market”, where people could not buy or sell apartments but could exchange them.

Similarly to housing, close to 80% of firms provided *medical care* in 1990. However, only slightly more than 20% had ceased to provide it fully, and over 90% continue to support medical services in some form in 2003. Two-thirds of all surveyed companies still own these assets, mostly by having a so-called *medpunkt* on site⁸.

Approximately 90% of the firms report having divested *day care* service, fully or partially. The transfer was almost always to the municipality. About 90% report full divestiture of day care, compared to 60% for housing. This service thus lost its relative importance in the social benefit package that firms offer their employees, in part because of demographic changes and a lower demand for the service.

In line with previous studies, our data indicate that both the speed and scope of divestiture differ by asset type and locality. The majority of day care facilities were divested in the middle of the 1990s, while housing divestment has continued quite actively to the present time. Figure 1 shows the annual number of firms that carried out their last divestment of assets between 1990 and 2003⁹. Only a few firms have divested medical facilities in general. The average firm in the sample had by 2003 divested 75% of its housing and 86% of its day care capacity.¹⁰

⁷ Full divestment includes firms that closed down operations, even if they did not actively divest related assets, e.g. buildings

⁸ A *Medpunkt* is an on-site medical service, often simply a room in an administrative building. This partially explains the low figures on active divestment of medical assets.

⁹ The firm may have divested before this year and may still have some assets left (though the majority was divested) but it did not divest after this date.

¹⁰ Slower divestment of housing relative to day care may also be due to the fact that the share of expenses covered by user fees is typically higher for housing than for day care.

When asked about the main reasons for the divestments that took place during the last three years, a clear majority of the general managers said that the assets were an excessive burden on the firm. Of the firms that provided certain services in 2003, less than 5% of the general managers per asset deemed them profitable. As Table 1 shows, the majority of firms that still held housing in 2003 wanted to divest it, and approximately a half of those few that still provided day care wanted to divest that as well. Only a handful had the opportunity to sell the assets profitably, whereas many – about a third for housing, medical care, and day care - had been waiting for the municipality to finally accept the assets. Many managers still think their relations with municipalities would worsen should the firm sell the assets. More than a third of those who would like to divest their housing and day care faced legal or administrative barriers to selling them in the market, as they did not legally own them.

In the following empirical analysis we focus on the divestment of housing. There are three reasons for this: first, housing divestment timing shows the largest variation between firms; second, housing is the most burdensome of the social assets – in 2003 maintenance costs of housing stock were by far the largest item of firms' social service expenditures; third, housing is arguably more important for the local community from a social point of view than are other types of assets, making it a powerful bargaining tool.

3. Theoretical Framework

We next formulate predictions about the determinants of social asset divestment timing. We focus on the decision of the firm to divest or to keep social assets for which property rights are not properly defined. Poorly defined property rights create possibilities for bargaining over benefits for both firms and local authorities, which may result in suboptimal allocation of resources (see Murphy, Shleifer and Vishny 1993).

3.1 Special treatment of firms by the public sector.

Of course, keeping social assets comes with a cost for the firms. Why would firms then agree to keep social assets? One reason is that they can extract rents from the municipality in exchange for providing services. Rents may come in the form of tax reductions, tax arrears, budget subsidies, better access to supplies, selling at non-market prices, and other preferential treatments. We thus hypothesize that firms that hold on to social

assets longer receive more budget assistance and have in general closer ties to the public sector than those that have already divested them.

Why would a municipality want firms to provide social services, i.e. to postpone divestment? Obviously, this is a way to shift costs of providing services to the firms. It is also an instrument for diverting tax revenues from upper-level budgets when municipalities' fiscal incentives are weak (incentives of local authorities are modeled elsewhere; see Shleifer and Treisman 2000, Zhuravskaya 2000, Sonin 2003, and Haaparanta and Juurikkala 2004).

As shown by Makrushin et al (2003), it is usually the larger and richer municipalities that have weaker fiscal incentives, as any additional budget income they collect can be expropriated by regional government through cuts in subsidies or shared taxes. Since most of income of municipalities comes from firms, not from individuals¹¹, this gives rise to special-interest-group politics. Municipalities are not interested in collecting more taxes from the firms; instead they collude with firms to give them tax reductions or other forms of assistance in return for certain benefits, in this case – upkeep of social assets.

Also Sonin (2003) argues that in regions with high shares of productive enterprises, i.e. extensive own tax bases, the governor of the region can protect enterprises from federal taxes in return for bribes or other concessions from the firms. The same logic is applicable to the local level. Our expectation would thus be that in municipalities with higher shares of own budget revenues, firms hold social assets longer. Or, more generally, in municipalities where fiscal incentives are weak and hence there are incentives for rent extraction, the firms bargain for holding the assets longer.

Finally, the interaction of firm with municipality over social assets depends largely on the firm's bargaining power, which is manifested in its ability to capture the state, i.e. influence the public decision-making (Slinko et al. 2005). The firm's bargaining power can be used in two opposing ways: to push for faster transfer of assets or to extract rents in return for keeping assets longer. We test also for the effects on divestment timing of other possible sources of bargaining power, such as a dominant position in the local labor market or being a major tax payer in the community.

¹¹ For example, of the major local taxes, the property tax is collected both from firms and individuals. However, the share of property tax coming from firms is on average around 10% of local tax income and may run as high as 85%, while individual property taxes constitute less than 1% of incomes.

3.2 Labor and product market pressure

Another reason for a firm to hold on to assets is the benefits it can obtain by providing some of its employees' compensation as social services. This may help to reduce the wage bill, attach workers (see Friebel and Guriev 2005, Grosfeld et al 2001) and/or attract new workers in a tight labor market. The size of this benefit for a firm will depend on the quality of its assets, e.g. on whether they are old or new, the costs of running the assets, the share of outside users of the assets, and the availability otherwise of social services in the locality. We test whether concentration in the local labor market and tightness of the labor market postpone divestment.

As the main object of our analysis is the firm and its incentives, we also want to investigate how product market competition enters into the picture. Do competitive forces make firms get rid of assets faster? Faced with strong competitive pressure, firms may try to reduce their non-productive costs via faster divesting of assets. On the other hand, if the potential for rent extraction is large, firms facing tough competition may try to cushion themselves from competition by keeping assets and extracting budget assistance or other forms of protection in return.

4. Evidence on divestment timing

4.1 Data and methodology

In this section we analyze the determinants of social asset divestment timing using survey data from 404 medium and large industrial enterprises in 40 regions of Russia collected in 2003. We also utilize Goskomstat enterprise registry data as well as selected information on the municipalities in which the firms are located.¹² Whenever municipal level data is used, Moscow and St Petersburg are excluded. Municipal data does not exist for them and they are in general very special cases. Most of the analysis deals with housing, as it is by far the largest and most important social asset which firms were obliged to transfer.

In analyzing the determinants of divestiture timing, we use a survival data approach (see Lancaster 1990), alternatively called duration analysis. Survival analysis is used for analyzing the run-up time to an event. It models the risk of a change in the state of an object.

¹² For data description see Appendix 2, for variable definitions Appendix 3

It is used e.g. in the analysis of unemployment duration and in medical research. The reason ordinary least squares (OLS) is not generally applicable in this kind of analysis is that it assumes normal distribution of residuals, which is in many cases unreasonable with respect to time. We want to determine how quickly an enterprise will transfer its housing to the municipality, or more precisely, what is the probability that this happens in the next time interval, in our case a year, given that the firm has held the housing (i.e. remained in its original state) thus far.

Parametric models of survival analysis apply certain assumptions regarding the distribution of residuals. In contrast, semiparametric models do not make any assumptions about the distribution of event time, though they do parameterize the effects of regressors. Thus these models are more suitable for changing circumstances such as the economic and regulatory environment during transition.

We utilize the Cox proportional hazards model, which is a semiparametric estimator. We thus do not make any parametric assumptions as to exactly how the pressure to transfer assets changes over time. This method also accounts for the censoring problem, i.e. the fact that some firms still held housing in 2003, and we do not know when the change is going to happen.

At the core of survival analysis is the estimation of the hazard function, which measures the risk of (or the contemporaneous probability of) a change in the object's state:

$$h(t) = \frac{f(t)}{1 - F(t)}$$

where $f(t)$ is the density and $F(t)$ the cumulative distribution function of the time of event.

The resulting coefficients of the explanatory variables are thus hazard ratios (exponentiated coefficients from the model), which measure the risk of divestment. For example, a coefficient or hazard ratio of 1.2 indicates that a one-unit change of the corresponding variable increases the risk of divestment by 20%, i.e. it leads to faster divestment. In general, a coefficient greater than unity means that the variable speeds up divestment, while a coefficient less than unity means that the variable delays divestment.

4.2 Timing of divestment and preferential treatment

In this section we set out to prove that firms have indeed received preferential treatment in return for holding on to social assets. Also anecdotal evidence in the Russian

media suggests that firms solve social problems of regional authorities and, in return, authorities do not collect taxes from them. In some cases the un-paid taxes may even have exceeded the value of firms' provisions for social purposes. Further, it has been argued in public that the most common way to "pay" firms for holding assets is preferential restructurings of tax arrears and that more than half of the firms involved are not formally eligible for them.

In addition to the above claims, we found a 1998 decree by the mayor of the city of Izhevsk (the center of the Udmurt republic) stating that the city administration should suggest ways for "partial reimbursement of costs borne by industrial enterprises and other organizations in holding non-transferred housing via reductions in taxes on housing and profits and by writing off their arrears from the city budget".

We utilize our data to show that this is not an exceptional case. Table 2 presents regression results where the dependent variables include a dummy that indicates whether a firm was receiving budget assistance in any form (subsidized credits, tax benefits or direct subsidies) during 2000-2002, a dummy indicating whether the firm had tax arrears in 2002, and one for the share of the firm's sales going to the state in 2002. As the table shows, firms that transferred their housing late were more likely to have tax arrears and to have sold a higher share of their products to the state. They were also more likely to receive direct subsidies but as a whole, the results for budget assistance are not significant.¹³

This evidence suggests that firms were holding on to social assets for a good reason: they were "reimbursed" through subsidies and other forms of preferential treatment. Still, some firms divested their assets early on - apparently not being able to obtain such benefits. In the next section we examine the firm and locality characteristics that define a firm's ability to extract benefits in return for upkeep of housing, as manifested in the timing of divestiture.

4.3 Determinants of divestment of social assets

To study the determinants of divestment timing we apply survival data analysis as described above. The dependant variable in the Cox regressions is the time, in years, from 1989 to the year when the firm divested its housing for the last time. It takes values from 1 for firms that divested in 1990 to 14 for firms that divested in 2003 or still held housing at that

¹³ Moreover, firms that still held housing in 2003 received more state budget assistance, in particular restructuring of tax arrears and direct subsidies, and were also trading more with the state. Service provision in 2002- 2003 is analyzed in more detail by Juurikkala (2006) and Juurikkala and Lazareva (2006)

time. Coefficients in the regression in Table 3 are hazard ratios and should be interpreted as noted above in the methodology section.

Whatever the benefits a firm receives for not divesting its housing, it still must bear some costs for the upkeep of the housing. The more housing the firm has, the higher these costs are. Alternatively, the amount of housing a firm had represents its threat point, at which the firm could at worst simply abandon its assets, as anecdotal evidence indeed suggests was possible. We find that the higher the firm's amount of housing per employee in 1990, the faster the firm divested it (see Table 3). Thus firms that inherited a lot of assets pushed for faster transfer in order to shift costs to municipalities.

As discussed above, the willingness of local authorities to enter into bilateral bargaining with firms depends on municipalities' fiscal incentives. Makrushin et al. (2003) have shown that larger and richer municipalities, which are able to collect more own incomes, have weaker fiscal incentives, as any additional income they collect is taxed away by a higher level government. We thus proxy fiscal incentives by size of municipality and by share of own incomes in the local budget¹⁴. The share of own budget income is positively related to the timing of divestiture though the effect is insignificant (Table 3). Quite naturally, the bargaining power of the firm should also affect the bargaining outcome. We asked the firms directly whether they can influence the laws and regulations adopted at the local, regional or national level¹⁵. We then studied the interaction of this variable with the municipality's share of own budget income. As column 2 in Table 3 shows, ability to capture the state is not significant per se but the interaction term is positive and significant, indicating that in municipalities with higher own budget income politically influential firms were holding on to housing for a longer time. Also, poorer municipalities could have been more willing to accept housing, as they were more likely to receive additional support from a higher level government for covering the costs involved.

Another proxy for fiscal incentives – population of municipality – has robust and significant effects. In larger municipalities, firms held assets for a longer time. This effect is visible even at the level of simple means: in municipalities with less than 300,000 inhabitants, the average time it took firms to divest their housing was 8.6 years, with a median of 8 years; in larger municipalities, the average transfer time was 10.2 years, with the median firm divesting its housing in 11 years (differences are statistically significant).

¹⁴ Own budget income includes property and land taxes, sales tax, locally defined taxes and non-tax payments.

¹⁵ Interestingly, these are not only huge firms. Though the average size of a firm in this group is larger, there are a number of firms with 100-500 employees that are able to influence the state.

Consequently, while in 1990 firms in larger municipalities were less likely to hold housing (bigger cities had a higher share of municipal housing), by 2003 this relationship had been reversed: firms in larger municipalities were more likely to hold housing.

Thus we show that weak fiscal incentives of municipalities, coupled with firms' ability to influence authorities, lead to the bilateral bargaining outcome. An alternative sign of a firm's bargaining power is its relative importance to the municipality, i.e. the role of the firm as a local employer or taxpayer. We can measure this by the firm's share of total industrial employment in the municipality and by the share of the firm's taxes in the total municipal budget income. The problem with the latter measure is its possible endogeneity regarding the timing of divestiture, as opposed to municipal level variables, which we consider to be exogenous. We hypothesize that a firm that holds on to social assets longer may receive tax reductions in return, which in turn reduces the share of its tax payments in the local budget. We do find negative correlation between time of divestiture and the share of the firm's taxes in the local budget, but the direction of causality is not clear.

The share of the firm in local employment is less subject to this problem since, at least until the 1998 financial crisis in Russia, firms were reluctant to shed labor and the level of employment was quite stable. We include this variable in the specification in column 4 of Table 3 but do not find any significant effect. In general these measures of a firm's importance to a locality are highly correlated with our proxies for weak fiscal incentives, in particular municipality size: the larger the municipality, the smaller the firm's share of employment and budget. That is why it is difficult to disentangle the effects of these factors from those of municipalities' incentives.

Apart from the temptation to use social assets for lobbying, firms in transition also face pressures to restructure. Do competitive forces in the product market make firms get rid of assets faster? We find that the firms which operated initially in less competitive markets (measured by Herfindahl-Hirschman index in 1990) actually divested housing faster (Table 3, column 2) ¹⁶.

This seemingly surprising result may have the following explanation: if the potential for rent extraction is great, firms facing tough competition will try to cushion themselves from competition by holding assets and extracting budget assistance in return. Indeed, the interaction term between product market concentration and municipality's own budget income indicates that in municipalities with high own budget income (high potential for rent

¹⁶ As a robustness check we use another measure of industry level concentration – the share of the two largest firms in the industry. This measure gives the same results as HHI.

extraction) firms that face more competition hold housing for a longer time. It is thus the less competitive firms that use social assets to cushion themselves from competition by bargaining for budget assistance.

We also want to differentiate our “relations with municipalities” story from the hypothesis that firms in transition use in-kind compensation, including social services provision, to attach their workers, particularly in highly concentrated local labor markets (Friebel and Guriev 2005, Grosfeld et al. 2001). We do not find that the concentration in the local labor market *per se* or the tightness of the labor market (measured by estimated time needed to find new employees) has any effect on the timing of divestiture (Table 3, column 5). The reason that we do not find any significant effect for the structure of the local labor market on the timing of transfer of housing may be that, during the 1990s, most apartments were privatized over to the people living in them¹⁷. Moreover, already before the reforms began, many apartments in enterprise housing were occupied by people other than employees of the enterprise in question. Thus housing inherited from the Soviet era may not have been an effective instrument for attaching employees¹⁸.

5. Conclusions

Industrial restructuring in Russia is clearly a complex issue. In this paper we do not limit our analysis to restructuring but take a political economy view of enterprises' divestment of social assets to municipalities over the last decade or so. We argue that under poorly defined property rights, it is bargaining between firms and local authorities over costs and benefits from service provision that drives the divestment process.

The rents the firms and the municipalities may bargain over consist mainly of firms' profits and public sector budget flows, but also firms' survival and political support. Bargaining is aggravated by the fact that social assets present a financial burden to both firms and municipalities, due to the social service sector being heavily subsidized. Although there are examples of firms and municipalities concluding formal agreements over the use and joint

¹⁷ Though the privatization law allowed privatization of both municipal and departmental housing, according to some evidence firms were reluctant to let their workers privatize apartments in buildings under their control. By the end of 1993, only 20% of these apartments were privatized, as opposed to close to 40% for municipal housing (see Stryk and Kosareva, 1994).

¹⁸ In a companion paper by Juurikkala and Lazareva (2006) we find that the structure of the local labor market does have an effect on the *current* provision of social services by firms, which includes not only assets owned by the firm but also other forms of provision, such as financial support to employees in obtaining these services.

financing of social assets, a significant part of these issues has been governed by informal relations.

We utilize a recent survey of 404 firms in 40 regions to study the determinants of divestment timing decision and the effects it has had on firms' performance. Our results show that firms which divested assets later received more benefits from the local authorities, especially in places where there are more rents to extract (i.e. where municipalities' fiscal incentives are poorer, which usually is the case in larger and richer municipalities). We also find that the firms facing more competition in product markets divested later, which could indicate that social assets are used to lobby for authorities' protection from competition.

Finally, poorly defined property rights may have an adverse effect on incentives to invest in social assets and hence on the quality of public service provision. There is ample anecdotal evidence of housing which was kept in a disastrous condition for years before firms actually divested it. Given the essence of both a competitive private sector and the quality of public services for sustainable development and growth, our findings indicate that attention should be paid to the institutional aspects when designing economic reforms. The importance of the institutional environment for implementation of reforms cannot be underestimated. Our story is not the only one in which much-needed reform was impeded by poor incentives for the institutions actually in charge of implementing the reform.

References

- Angelucci M., A. Bevan, S. Estrin, J. Fennema, B. Kutznetsov, G. Mangiarotti and M. Schaffer (2002): The Determinants of Privatized Enterprise Performance in Russia. CEPR Discussion Paper No 3193.
- Brown , J. D. and J. S. Earle (2000): Competition and Firm Performance: Lessons from Russia. CEPR Discussion Paper No 2444.
- Commander S. and M. Schankerman (1997): Enterprise restructuring and social benefits. *Economics of Transition*, Vol. 5, No. 1, pp.1-24.
- Freinkman, L. M. and I. Starodubrovskaya (1996): Restructuring of enterprise social assets in Russia: Trends, problems, possible solutions. *Communist Economies and Economic Transformation*, Vol. 8, pp.437-469.
- Friebel, G. and S. Guriev (2005): Attaching Workers through In-Kind Payments: Theory and Evidence from Russia. *The World Bank Economic Review*, Vol. 19, pp. 175-202
- Haaparanta, P., T. Juurikkala, O. Lazareva, J. Pirttilä, L. Solanko and E. Zhuravskaya (2003): Firms and public service provision in Russia. BOFIT Discussion Paper No 16/2003.
- Haaparanta P. and T. Juurikkala (2004): Property rights and local service delivery in Russia. Paper presented at the BOFIT-CEFIR Workshop on Transition Economics, Helsinki, April 2004.
- Juurikkala, T. (2006): Determinants of social service provision by industrial firms in Russia. Unpublished draft.
- Juurikkala, T. and O. Lazareva (2006): Non-wage benefits, costs of turnover and labor attachment: evidence from Russian firms. Forthcoming as a BOFIT Discussion Paper.
- Lancaster, T. (1990): *Econometric Analysis of Transition Data*. Cambridge University Press, Cambridge.
- Leksin, V. and A. Shvetsov (1998): “Nezametnaya reforma”: peredacha sotsial’nyh ob’jectov predpriyatiy v munitsipal’nyu sobstvennost’ (transfer of social assets of enterprises into municipal ownership), *Russian Economic Journal*, Issue 1, 2 .
- Leksin, V. and A. Shvetsov (1999): *New Problems of Russian Cities*, Moscow.
- Libecap, G. (1989): *Contracting for Property Rights*. Cambridge University Press, New York.
- Makrushin A., Yakovlev Y. and E. Zhuravskaya (2003): Reasons for emergence of bad fiscal incentives. CEFIR policy paper
- Murphy K., A. Shleifer and R. Vishny (1993): Why Is Rent-Seeking so Costly to Growth? *American Economic Review*, Vol. 83, No.2, pp. 409-414.
- Shleifer, A. and D. Treisman (2000) *Without a Map: Political Tactics and Economic Reform in Russia*. MIT Press, Cambridge, MA and London, England.
- Shleifer A. and R. Vishny (1994): Politicians and firms. *Quarterly Journal of Economics*, Vol. 109, No. 4, pp. 995-1025.
- Slinko, I., E. Yakovlev, and E. Zhuravskaya (2005): Laws for Sale: Evidence from Russia. *American Law and Economics Review*, Vol. 7, pp. 284-318
- Sonin, K. (2003): Provincial Protectionism. William Davidson Working Paper No. 557, University of Michigan Business School.
- Starodubrovskaya, I. (2001) Housing and Utility Services, in Granville, B. and P. Oppenheimer (Eds.) *Russia's Post-Communist Economy*, Oxford University Press.
- Starodubrovskaya, I. (2002): Trends in divestiture: Issues, Instruments and Outlook for Russia. Presentation at IFC Workshop on Local Management of Mineral Wealth, June 10 – 11, 2002.
- Stryk R. and N. Kosareva (1994): *Reform of Housing Sector in Russia in 1991-1994*. Urban Economics Institute, Moscow
- Zhuravskaya, E. (2000): Incentives to provide local public goods: Fiscal federalism, Russian style, *Journal of Public Economics*, vol. 76, No. 3, pp. 337-368.

Figures and Tables

Figure 1 Number of firms reporting last divestment, yearly

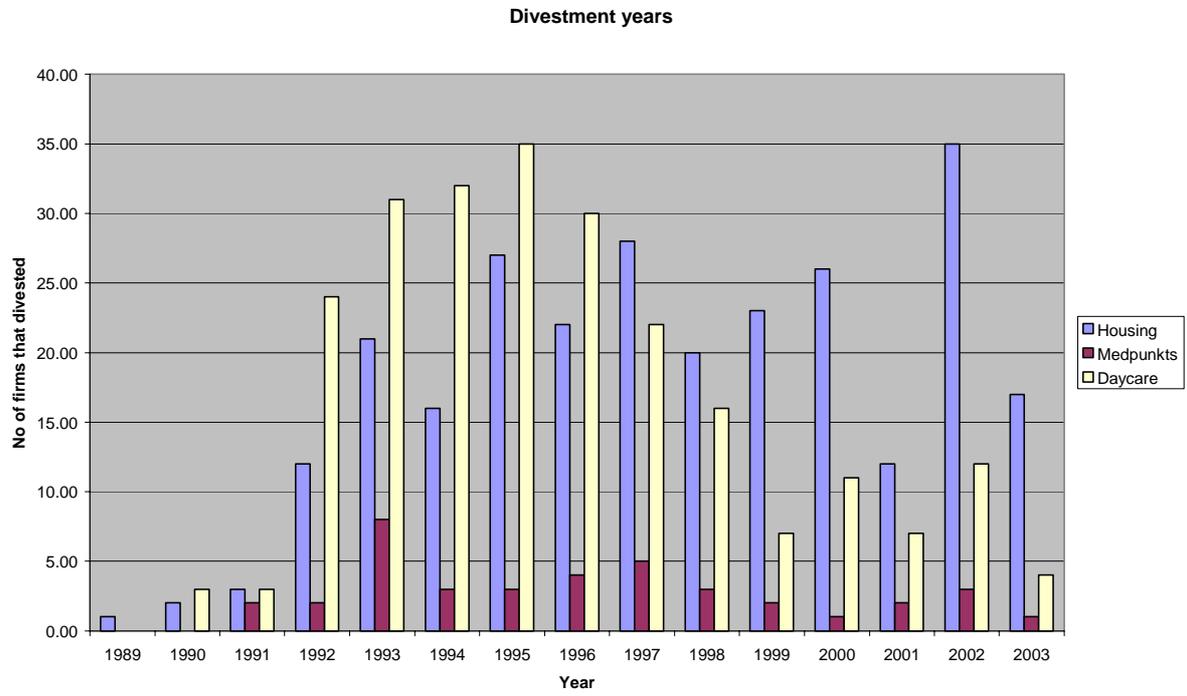


Table 1 Social asset provision: information from firm survey

<i>Percent of total 404 firms that...</i>	Housing	Medical care	Day care	Recreation
Had in 1990	78.5	76.7	69.8	38.2
Have in 2003	39.5	78.5	11.9	25.9
Spent money on municipal assets in 2002	11.6	15.4	16.6	5.7
<i>Of those who have:</i>				
Deem it profitable	1.9	1.3	2.1	4.8
Want to get rid of (sell or transfer)	70.7	12.4	46.8	29.4
<i>Of those who want to get rid of:</i>				
Local authorities would agree to accept	42.7	35.9	63.6	40.0
Have legal or admin. barriers to selling	38.9	35.9	31.8	23.3

Table 2 Timing of divestment and preferential treatment

	Any budget assistance in 2000 - 2002	Tax arrears end of 2002	Sales to state in 2002
	<i>Probit</i>	<i>Probit</i>	<i>OLS</i>
Log employment 2002	0.142 (0.101)	-0.356*** (0.132)	-1.397 (2.707)
Housing transfer after 1998	0.159 (0.179)	0.401** (0.199)	8.635** (4.317)
Ownership controls	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes
Observations	227	188	161

* significant at 10%; ** significant at 5%; *** significant at 1%
Standard errors in parentheses

Table 3. Cox proportional hazard model for factors determining housing divestment timing

	(1)	(2)	(3)	(4)	(5)
Log employment 1998	0.919 (0.073)	0.929 (0.074)	0.869 (0.089)	0.945 (0.075)	0.960 (0.083)
Hous1990_per_employee	1.002** (0.001)	1.002* (0.001)	1.002* (0.001)	1.002** (0.001)	1.002** (0.001)
Own_budget_income_share1999	0.371 (0.225)	0.568 (0.513)	0.603 (0.430)		0.434 (0.301)
State_capture	0.896 (0.121)	1.751 (0.707)	0.882 (0.128)	0.849 (0.117)	0.932 (0.132)
HHI1990	2.590* (1.307)	0.148 (0.231)	2.651* (1.560)	2.889** (1.461)	2.588** (1.246)
Own budget income*State capture		0.140* (0.153)			
Own budget income*HHI1990		1.086** (0.043)			
Empl_share1998			1.956 (0.940)		
Log municipal population				0.865*** (0.044)	
HHI_labor_market1992					1.220 (0.711)
Tight labor market					1.017 (0.014)
Observations	211	211	189	212	197

Robust standard errors in parentheses; industry dummies included; hazard ratios instead of coefficients reported

* significant at 10%; ** significant at 5%; *** significant at 1%

Appendix 1. Legal Basis for Transfer of Social Assets to Municipalities ¹⁹

In spite of the obvious importance of large scale transfer of social assets by enterprises to municipality ownership, there was never a federal law regulating this process. Instead, the reform was regulated by a series of legal acts, enactments, decrees etc at all levels of government. Many important acts were introduced with delays, sometimes only several years after start of the actual process of transfer, when the most acute problems had surfaced.

The formation of municipal ownership of social and infrastructure assets started before mass privatization in 1991-1992. *Enactment by Higher Council of Russian Federation № 3020-1 on December 27, 1991* established the division of state ownership into federal ownership, ownership of subjects of federation and municipal ownership. This act defined the categories of assets which should be transferred to municipal ownership irrespective of who owned them or had them on their balance sheets previously. They were:

- housing and other buildings
- enterprises servicing housing and other social assets
- infrastructure objects, city transport etc

Another *Enactment by President № 114-RP on March 18, 1992* established the procedures for transfer of social and infrastructure assets, according to which the municipal level property committee compiled a list of objects to be included in municipal ownership, and a higher level government confirmed the list.

As for the social assets held by enterprises, enterprises never owned them during the Soviet era, as all assets were state owned, but they kept assets on their balance sheets. With the start of mass privatization of enterprises, these assets should have been either privatized or transferred to municipalities. *Presidential Decree № 8 on January 10, 1993* listed the objects which could be included in the privatized assets of the firm with the requirement of keeping their profile. These included social and cultural objects (health, education, culture and sports facilities), consumer services (laundry, hairdressers etc.). Decree also listed the assets that could not be privatized by firms:

- Buildings occupied by trading, catering, consumer services establishments, organizations of social security for children, elderly and disabled
- Daycare and summer children's facilities
- Regional transport and electricity infrastructure
- Medical facilities servicing population of city/region
- Housing and related service facilities

All these assets were defined to be under federal state ownership and should have been transferred to municipal ownership. Further, several legal acts of the State Property Committee were issued to clarify the procedures for transferring the assets listed above from firms to municipalities (again, municipalities were responsible for compiling the list of objects to be transferred to municipal ownership). The Decree and further acts also enabled agreements between municipality and firm on joint usage and financing of transferred assets. There were other provisions on means of financing transferred objects. *The State Privatization Program* introduced at the end of 1993 did not add anything new to previous

¹⁹ Based on Leksin and Shvetsov (1999)

legal acts except that it set the time limit: the municipality was obliged to accept non-privatized social assets during the six months following acceptance of the firm's privatization plan. The adoption of a firm's privatization plan then in practice initiated the process of transfer of these assets to municipal ownership. Further problems and questions arising during the process of municipalization of social assets were solved through multiple minor acts issued by different government bodies at all levels of government and in some cases through the courts.

Appendix 2. Data Description²⁰

The results are based on a survey of 404 middle-sized and large manufacturing firms from 40 Russian regions in April-June 2003. In the survey we examined the extent of social service and infrastructure provision by the firms and the firms' assessment of the quality of public infrastructure and regulatory environment. Background information on ownership, investment, performance, competition, and financing decisions of the firms was also gathered.

The source of information for the population of firms is the enterprise registry maintained by Goskomstat (State Committee of the Russian Federation on Statistics). In the construction of our sample we concentrated on the industrial sector, and within it manufacturing firms for which energy production is not a regular line of business. We set a minimum size limit of 400 employees, as pilot interview rounds indicated that smaller firms are unlikely to provide infrastructure or social services. Constructed in such a way, our sample frame contained 3523 firms. Our sampling technique includes a combination of clustering by region and systematic sampling by size. In the firms in our final sample, the general manager and managers responsible for social and infrastructure affairs were interviewed face-to-face. Reporting of accounting information was left to the chief accountant.

In our sample, compared to the population of Russian firms, the majority of industries are adequately represented in terms of share of firms, as are the federal districts. The fact that we surveyed medium and large enterprises explains the bias towards metallurgical firms regarding the distribution of industrial employment. The size distribution of our final sample is close to the population with the median establishment having 784 and average over 1600 employees.

Only 5 % of the firms in the sample are relatively new, created during the 1990s. The majority of firms in the sample are open joint stock companies, which is not surprising as most of the formerly state-owned firms were turned into open joint stock companies during the mass privatization of the early 1990s and some 80 % of the sampled firms were privatized during 1991-1994. Lastly, similar to many previous surveys, the sample contains some degree of selection bias towards the better-performing firms.

In addition to the survey data, we use Goskomstat enterprise registry data on sales, profits, employment and capital to construct measures of industry-level concentration, labor market concentration, and firm performance measures. We also use data on municipal budgets, and some municipal- and regional-level indicators.

²⁰ For details see Haaparanta et al (2003)

Appendix 3 Description of Variables

Variable name	Description
Hous1990_per_employee	Tens of square meters of housing the firm had in 1990 per employee
Own_budget_income_share1999	Share of own revenues in total income of municipal budget in 1999 (takes values from 0 to 1)
State_capture	Dummy equal to 1 if firm admits its ability to influence laws and regulations at local or regional level
HHI1990	Herfihdahl-Hirschman index for 5 digit industries in 1990
Empl_share1998	Share of firm's employment in total industrial employment in municipality in 1998 (takes values from 0 to 1)
HHI_labor_market1992	Herfihdahl-Hirschman index for local labor market in 1992
