Enterprise land use in the Russian Federation

Economic implications in the post-Soviet landscape

Researchers have evaluated the successes and failures of Russian enterprise privatization at length. However, little has been written to address the effects of land use rights on enterprise performance and behavior.

This study seeks to fill this void in the transition-economy literature and to analyze the implications of ineffective land reform in Russia.

Why did land reform fail in Russia?

What are the economic and other implications of ineffective land policy?

What should be done to better the situation?

Introduction

Введение

Historical context

began in 1991 with the fall of the Soviet Union, political feuding left the question of land privatization unanswered⁹. As privatization ran its course through the 1990s, the vast majority of land beneath newly privatized enterprises was left in either federal or municipal government property; out to the enterprise, or were tenured to enterprises under "permanent (perpetual) use." Under the terms of a permanent use tenure, enterprises may use the land for an unlimited term without also have the right to seize the land at any time in exchange for compensation.

In 2001, Russian Federation president Vladimir Putin pushed through a new Land Code, which among other things, set a January 1, 2004 deadline for all enterprises to either reformulate their terms of land use as a lease or private ownership, or otherwise face punitive fines. When only it seemed that permanent use tenure was soon to see its end, extensions of the deadline in 2003, 2006, and in 2009 have in effect pushed back the date to end permanent use tenure to January 1, 2012.

What is the state of urban industrial land use in

When the process of enterprise privatization and what is more, why does successful reform have yet to land reform in Russia, and are there legal or other effects, considered in order to create effective Russian land policy? those land plots that were not bought-out by the Russian Federation, but also may give direction to the enterprises operating on them were either leased country's legal-political sphere, as well as inform the social

Initial observations and analysis

Compared to other countries that underwent similar tranpaying rent—only land taxes—though they may sitions from communist systems, Russian land privatizanot dispose of the land; the land's state proprietors tion lags behind. Graphic 1 shows the vast expanses of Russian land still held by the government: that only 0.7% of lands zoned for industrial use are privatized stands as further testament to the failure of land reform since the 2001 Land Code¹⁰. Reports from all over the country tell one story explaining why: given the bureaucratic sea of government registrations and land evaluations, varying by region and constantly in flux, it is nearly impossible to restructure land-use away from permanent use tenure; only within the last three years has an actual agency been installed in

> reform has stalled as of late, perhaps. First, short-range concerns like crisis-time land markets coupled with businesses' inability to pay for state-mandated buy-outs of their land have perhaps superceded motivations for long-range land reform^{18.19}. Second, President Dmitri Medvedev's creation of the Residential Construction Development assistance fund in 2009, aimed at seizing unused land and auctioning it to developers of sorely needed residential building, indicates the state's renewed willingness to micro-manage land markets and land ownership¹¹.

Studies show that not only are Russian firms currently performing at lower levels than are firms privatized at similar times in other transition economies, but Russian firms are also failing to converge with world land-use standards⁹. In 1998, firms were even trending towards bartering assets with one another in order to complete transactions due to ample of "tragedy of commons property", the lack of cash and liquidity¹³. Currently, start-ups founded after the transition period perform better than those that went through the process of privatization, and foreign-owned firms outperform all other enterprises¹⁷.

Theoretical Background

Current literature on transition economies indicates that ownership type (state, foreign, or private) alone is weakly correlated with firm performance; rather, intensity of competition and market structure are on average more influential than simple ownership types in determining firm performance³. The weakness of this correlation is echoed in studies that take snapshots of enterprise performance throughout the Russian privatization period, during which only foreign-owned firms are found to have improved performance from preprivatization levels^{2,3,16,17}.

Successful privatization is fully realized when enterprises exhibit qualitative restructuring within firm production and infrastructure, when new institutional structures that support property rights systems are stabilized, and, finally, when the economy displays improvements in management efficiency at the micro and macro levels⁴. It i widely accepted that the characteristics of a fully realized privatized economy will show a more positive effect on firm performance than does ownership type alone.

Correlated with ownership type is ownership concentration. Dispersion of control rights within firms can dilute the effect of ownership type on firm performance; Perevalov, in analyzing the effects of privatized ownership on firm performance and restructuring, finds that variation in firm performance is explained more by concentration of than type of ownership¹⁶.

Michael Heller's theory of the "tragedy of the anti-commons" provides further insight into explaining this dispersion-performance relationship Just as a publicly owned coast with no fishing

regulations can result in loss of productivity if over-fished, fragmented rights to use of resources can also result in productivity loss when many owners block any individual part-owner from productive use. While the over-fished coast is an exlatter, characterized by under-utilization of resources rather than over-utilization, exemplifies the "tragedy" of anti-commons property⁶.

We hypothesize further that permanent use tenure, which splits ownership rights between enterprise buildings (enterprise-owned) and the land on which these buildings and capital stand (stateowned), results in under-use and/or inefficient land use. Complications that permanent use firms face in attempting to lease out unused land are of leasing out land. For example, securing government approvals, registrations, and cadastral evaluations to complete sublet and leasing transactions, in effect, each act as taxes on these transactions, making it difficult for permanent use firms to convert land into cash flow and more efficiently utilize

The fragmented rights within permanent use tenure can also impose costs on the Russian economy through inter-enterprise transaction costs. Lack of access to stable sources of credit and cash impede the timeliness and success rate of inter-enterprise transactions⁷. If firms that hold permanent perpetual use rights to their land do indeed face lack of credit, cash, and liquidity, the inefficiency of these firms in investment transactions also taxes its investment partners that have more defined, concentrated rights to land.

Center v. Provinces | The squabble continues

ot only must private, land-leasing enterprises make themselves heard among their government ndlords, they also must navigate tax wars between their local and federal governments. In Omsk, city administrators lured non-private landowning enterprises paying high lease rates to the federal government with low-buy out prices in 2010, hoping municipal city taxes would boost revenues. Last year in Volgograd, the situation was similar, only a restructuring of the When two of the owners of the anti-commons are state bodies, let alone state

cadastral appraisals served as further complication. In Smolensk, Samarsk, and Rostov Oblasts, cadastral restructuring led to tax rate hikes up to 50 times¹³.

odies with power and budgets to pawn with, the potential "tragedy" is evident.

Russia today? Why did the 2001 Land Code reforms fail, be instated? What are the economic effects of ineffective as well? Most importantly, which amendments need to be

Our study seeks to answer these questions, as their answers not only hold significance for the economy of the climate of post-Soviet Russia today.

Moscow to process such requests for city lands^{1, 12}.

Two recent developments help illuminate why land

Foreign investors on RF land

Ion-Russian firms encounter problems, special interest in assessing opportunity costs for but manage to find success with land.

> ST. PETERSBURG. French supermarket chain, Auchan, decided to ouble-think expanding its store's presence in Petersburg given the igh-demand, high-priced urban land market. Though its stores in ussia are already 50-70% smaller than its European format due to fficulties in obtaining and sustaining large commercial land plots, auchan is rapidly expanding to the provinces and new sectors.1

MOSCOW OBLAST. Swiss cosmetics manufacturer Oriflame purchased a prime industrial plot in the 30-kilometer zone outside loscow in 2007 for 175 million Euro, despite the global economic erash and a highly limited, speculative land market in the Moscow

KOLKOVO. Dmitri Medvedev's newest project is the creation of a licon-Valley-like "techopolis" not far from Moscow in Skolkovo. 14 vestors from abroad like Microsoft, Google, and Siemens have bought in, attracted by tax breaks and cheap land rent: there's no permanent use tenure,

"management board" makes tenure decisions.

Each of these trends underscores the importance of improving the business and land use environment in Russia in order to further the nation's economic potential.

The lack of incentive for businesses to adhere to the 2001 Land Code mandates has left a political unwillingness to push out permanent use tenure or streamline bureaucratic controls. In this stagnation, firms have lost their agency in influencing land policy and conducting land transactions, as the state, also a land market player, unilaterally exercises its political control to facilitate its economic activity, leaving private enterprise to its own means.

Graphic 1 Percentage of land in the Russian Federation under private ownership by province in 2008 (Federal Agency for Real Estate Object Cadastre¹⁰)

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Empirical Background

In our study, analysis was performed on 2009 survey data of 359 privately owned Russian industrial enterprises. We isolate the effects of land tenure on binary response variables that proxy for: investment levels, subletting trends, and level of corporate restructuring after privatization.

51% - 66% land privatized

31% - 50% land privatized

10% - 30% land privatized

less than 10% privatized

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Aggressive investment is defined as a selfreported enterprise response of 4 or 5 on a 1-5 scale where 3 representing an "average" level of investment compared to other like enterprises, and greater than 3 representing above average levels of

The variables "rentfutr" and "rentnow" control for firms that plan to rent land in the future and that are subletting land at the current time, re-

Restructuring levels capture improvements firms have made to the infrastructure located land plots after privatization of the firm; a posi-

359 private enterprises responded to a 141 question survey

tive combination of two of three improvements (buildings were demolished, reconstructed, and/or newly built) proxy for active restructuring of firm infrastructure.

Our models control for firm size; location of land plot (historical city limits, newly developed center, or periphery); the year privatized, region type (land reform progressive or not); whether a firm is located in Moscow; and industry sector (ferrous, nonferrous, chemical, woodworkingpulping, building, textiles, food, and milling).

Methodology

Our general model takes on the following form:

 $\pi_i = \delta_1 \theta_i + \delta_2 \gamma_i + \delta_3 \alpha_I + \beta_4 \ln(emp) + \beta_5 yr(privt) + \mu_i$

 π_i = probability of success for performance indicators

 $\delta_1 = \beta$ coefficient vector for land tenure type

 $\delta_2 = \beta$ coefficient vector for industry sector matrix

 $\delta_3 = \beta$ coefficient vector for land plot location

 β_4 = marginal effect of firm size, where ln(employees) is a proxy for size β_5 = marginal effect of year in which a firm was privatized, where yr(privt) is a binary variable for privatization before 2001

 $\mu_i = \text{error terms}$

Due to small sample sizes of firms with unused land, the models for predicting subletting trends are abbreviated in order to view the marginal effects of tenure type on performance. All coefficients are obtained using the dprobit model for estimating probability of success regarding the three indicators of firm performance and health

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respect to different binary indicators of performance. Effects are measured as comparisons with the effect that private land ownership has on success. For example, the invagg09 = 0.18853 reading means that enterprises with permanent use tenure are almost 19% less likely to be aggressing investors than are those that own land plots. As shown in Table 1, with reasonable significance, permanent use firms are more likely to per-

The coefficients reported in Table 1 represent the

marginal effects that land tenure type has on an in-

dividual enterprise's probability of success with

form worse than enterprises that own land with respect to each of the four indicators of performance. Additionally, it is of note that not only is permanent use correlated with lessened probability of performance success, but permanent use tenure has a more negative effect than does lease tenure.

Furthermore, with significance at the 5% level, firms with permanent use tenure are more likely to report experiencing difficulties in receiving long-term credit than firms with alternative land use rights. We did not estimate the marginal effect of land ownership type on difficulty gaining access to credit. However, cross-sectional tabulations reports a chi2 value of 19.54, indicating that the positive correlation between permanent use ownership and difficulty gaining access to credit is statistically significant.

Though no causal relationships can be drawn between the poorer performance of permanent use tenure enterprises and lack of access to credit, economic theory suggests that the correlation with lack of access to credit could be a function tragedy of the anti-commons. If under permanent use tenure, firms are less likely to rent out land even when portions of the land plot are not in use, they may face an opportunity cost with respect to securing cash flow. Low cash flow can force these firms to seek credit from sources that are perhaps unwilling to lend to firms with split ownership rights over land. Furthermore, because they lack access to credit, these firms may be less likely to reinvest, invest aggressively, or engage in inter-enterprise transactions. Lastly, the unused portions of land plots classified under permanent use tenure results in inefficient land use. Graph 2 indicates that permanent use firms are highly likely to not sublet unused land. Known bureaucratic barriers to subletting permanent use land, reflected in this data, demonstrate inefficient land use under such tenure. Overall, costs are incurred by enterprises with permanent use tenure, firms engaging in transactions with these firms, and by all parties with interests in putting unused land to productive use or reallocating land to a more efficient use.

Conclusions

Permanent use tenure is correlated with low probability of efficient and successful performance This negative effect on performance may impose leads to inefficient land use. Due to the statistical significance of our initial results, we recommend further research in the area of land use rights and enterprise performance in Russia.

Results & Discussion

-0.4441

Note: Coefficients for rentfutr and rentnow are estimated using the subsample of

firms reporting =5% of enterprise land lying vacant or unused at time of survey.

The road to credit and mortgaging in Russia

In the 2006 through 2008 RF Ministry of Economic Development report on the state of land use in Russia, optimistic statistics indicate a rise in

land mortgage and collateral transactions by individuals and enterprises

The 2006 report says, "The doubling of the number of collateral

operations in one year, and the increase of the area of collateralized lands

by 10 times represent a definitive indication of the stabilization of the

stabilization of the economy of

A part (ostensibly the majority) of these mortgages, however, are from

individual citizens, and not enteprises. However, the recent increase of

crediting and mortgaging in the Russian banking sector is hope for

kdensity probability

Graph 2 Enterprises with unused land: Who sublets? (sorted by land ownership type)

Ministry of Economic Development 2006 report

66 a definitive indication of the

the Russian Federation

Lease -0.1068*

* significant at 10% level

** significant at 5% level

*** significant at 1% level

On the right track

across a four year period (2005-2008).

economy of the Russian Federation."

enterprises searching for credit.

Effect of lease and permanent use tenure on indicators

of performance as compared to private land ownership

Investment

invagg09

-0.0665* 0.04818**

0.18853***

In the meantime, we suggest that the Russian government and business community work together to streamline land reform to convert permanent use tenure contracts into lease contracts past year, the federal administration has taken steps towards openness and access to information regarding the land market with the conglomera-

tion of an online database of cadastre information on all RF territories⁵. Increases in the number of public auctions of land plots—including industrial lands and lands seized for under-useunnecessary costs on the Russian economy and are perhaps early evidence of a new wave of change in the land reform climate¹⁰.

Closer coordination of reform efforts between federal administration, regional governments, and municipalities, however, is paramount to facilitating the end of ineffective land tenures (viz., permanent use): federal and municipal tax and lease rates should be structured consistently so that the incentives to restructure tenure away from permanent use are uniform.

Lastly, enterprises themselves should more carefully evaluate or privately owned land. Most notably within the the implications of ineffective land tenure, as our study seeks to demonstrate. We conclude that the goals of the 2001 Land Code are still applicable, and that enterprises should restructure permanent

> With further research and the political will to continue moving in this direction, Russia's economy will be able fully realize the benefits of privatization of a former planned economy.

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