Gerschenkron's New Russia

Nadia Vanteeva and Charles Hickson
Queen's University Belfast

Abstract

In his catch-up theory, Gerschenkron argued that it is possible for a relative backward economy to engineer industrial growth through government intervention. In the case of late 19th century Russia, active state intervention took the form of channelling investments to favoured industries. This included the state's pivotal role of raising inflows of foreign investment capital.

We revisit Gerschenkron's theory, which assumes that a backward economy such as Russia can successfully imitate more advanced market economies. We argue that the Putin regime was designed to offset inefficiencies generated by a weak property rights system, which otherwise led to severe hold-up costs from the desire of oligarchs to divert wealth through asset-stripping. The state also re-asserted control over Russia's natural resources, in order to channel economic rents to subsidise other corporate sectors. Moreover, the state became pivotal in commanding the flow of funds through its direct or indirect control over the banking sector.

We test the significance of the above policies on the performance of Russia's corporate sector. Our findings suggest that the new state-private co-partnership system is positively related to firms' improved performance. We find evidence that energy sector rents are channelled to favoured economic projects, while private investors earn a risk-adjusted competitive return. Furthermore, we find that such rents are channelled through Russia's developing banking sector.

1. Introduction

In his book of essays, Gerschenkron argued that relatively backward economies could achieve rapid industrial growth in the absence of vital prerequisites, such as advancement of technology, skilled labour and availability of domestic savings

(Gerschenkron, 1962). He also believed that economic backwardness was associated with a truculent ruling class, and in the absence of strong market forces, a successful short-cut to economic growth may be realised through state-mandated reforms. Gerschenkron identified the powerful role of the Russian state at the turn of the 20th century as an effective agent for industrialisation.

Towards the end of the 19th century, tsarist Russia was exhibiting a higher degree of economic backwardness compared to that of its European counterparts. It therefore could not facilitate the introduction of a less state-influenced substitute mechanism, such as the new financial system in Germany. The "mixed" German banks, which combined commercial and investment banking, directly financed the developing industry by accepting enterprises' long-term liabilities. According to Gerschenkron, they proved to be an efficient substitute for the availability of domestic savings - a prerequisite for industrialisation Germany did not possess (Harley, 1991; Sylla, 1991).

When contrasted with a significant role of German banks in country's industrialisation process, the Russian banking system was considered to be incapable of generating sufficient capital to jump-start industrial growth. Wealthy landowners, who possessed an adequate amount of funds, were not prepared to invest into relatively backward industries, while the mass population was defined by extreme poverty and scarce savings (Falkus, 2008). Moreover, tsarist Russia was also characterised by dishonest business practices, accompanied by public's distrust towards financial intermediaries (Chandrasekhar, 2005).

Given the inability of commercial banks to support the industrialisation initiative in the late 19th century Russia, the new finance minister, Sergei Witte, introduced a policy which focused on direct state intervention (Willis, 1897; Tompkins, 1933; Drummond, 1976, Gatrell, 1994). The government strategy sponsored large-scale industrial growth through a system of state-aided loans. Russia witnessed a rapid expansion of railways, where growth rates exceeded that of the US. Increased demand for iron resulted in production being increased by four times during the 1887-1899 period. Coal industry had registered almost identical growth rates, while the industrial boom also facilitated construction trade (Geyer, 1987).

In addition, Witte required foreign capital to expand economic development. He was able to demonstrate that Russian industrialising economy could guarantee manufacturing orders, accompanied by large profits. Moreover, the newly erected tariffs increased the demand for domestic goods, contributing to the emerging manufacturing industry. Russia's growing economy proved to be an attractive opportunity for foreign investors, who either provided the much needed financial capital directly, or established subsidiaries of foreign enterprises, as the state granted licenses to such firms (Hogan, 1993). The stability of the ruble, which was partially achieved by Russia converting to the gold standard, also contributed to Witte's objective of obtaining substantial loans for the economy from abroad. Gerschenkron believed that by accumulating a significant proportion of foreign capital, Witte was able to finance a significant part of Russia's industrialisation course.

Many scholars (for instance, Crisp, 1953; Miller, 1967; Gregory, 1991) recognise the significance of foreign capital in Russia's industrialisation process, in that it was a necessary prerequisite for a successful economic expansion in the absence of domestic savings. However, it is also argued that the state's active role in providing the initial subsidised loans to enterprises was crucial to Russia's industrialisation program, as "even when initiative and some private capital were forthcoming, a major part of the bill had to be footed by the government in one way or another" (Crisp, 1973:590).

In short, the active role of the state was central to the industrialising Russia, which at that time was characterised by extreme economic backwardness. It is widely accepted that Gerschenkron's model for jump-starting industrialisation in backward economies offers an intuitive insight. Despite the statistical evidence to the contrary, his model remains a viable alternative for any backward economy when the market forces are too weak to generate prerequisites for economic development (Crisp, 1991; McCloskey, 1991).

In this paper, we argue that the present government strategy can be described as Gerschenkron-esque, in that the state encourages co-partnership with private investors in corporations, combined with active investment targeting to favoured commercial sectors. Such reforms correspond with Russia's improved economic performance, which is not all attributable to the good fortune of rising world prices of commodities during the period.

Significantly, we believe that the state's re-engagement as an active participant in the Russian corporate development has played an important role.

2. The role of the state in the new corporate Russia

In this paper we argue that the reforms introduced under the Putin regime played a significant, if not a dominant role in Russia's dramatically improved performance over the sample period. First, as stated above, the introduction of the state-private co-ownership of firms aims at ameliorating the adverse effects of an imperfect property rights system. Specifically, through the co-partnership system the state is able to reduce the prospect of expropriation, which arises from trading of large lump-sum assets under poorly-defined property rights, where the growth of such productive assets is hampered by high hold-up costs. Consequently, we argue that the above co-partnership has a positive effect on Russia's corporate development.

Second, we cannot ignore the vital role in corporate regeneration played by economic rents produced by Russia's vast natural resources. However, from our perspective, the interesting aspect is the channelling of such rents to underwrite other industrial sectors. Significantly, during the period, much of the private investment in this sector was foreign, and consequently, we would not anticipate the state to commit to an expected return greater than risk-adjusted competitive return. This should have a bearing on industries' observed performance measures.

Third, we argue that the rents, which are used to subsidise investment projects in numerous industries, are channelled through a developing state-directed banking and finance sector. The re-emergence of banks in general and state-influenced financial institutions in particular under the Putin regime led to increased lending to enterprises on favourable terms. The growth of such lending, we believe, underlies the revival of many important industries. Therefore, we expect to find a positive relationship between long-term loans and firm performance, as well as a positive correlation between the presence of domestically-owned financial institution shareholder in company ownership structure and its growth prospects.

2.1. The role of the new state-private co-partnership system

In the early 1990s, the Yeltsin regime attempted to rapidly transform the failed central-planned economy, which had prevailed for almost 60 years, to a "free-market" approach, ostensibly to allow private agents to determine their optimal level of production and investment. Corporate privatisation program, which was also initiated at that time, commenced through a strategy which encouraged the buyout of enterprises by employees and management of small and medium size firms. This was followed with the allocation of vouchers to the general Russian citizenry. The scheme allowed voucher holders to exchange vouchers for former-state companies' shares. The final stage of privatisation reforms included the auctioning-off large enterprises through the "loans for shares" mechanism. The policy was one where banks provided government with loans in exchange for shares in major industries. It was found that by 1996, 77.2 percent of large and medium size firms were acquired by private owners, which corresponded to 88.3 percent of Russia's industrial output (Debardeleben, 1999).

However, Russian commercial restructuring program was unsuccessful and it is widely believed that in large part this was due to the absence of a legal system, which is deemed to have been incapable of imposing well-defined property rights. Hoffman (2002) characterises the first decade of Russia's move towards the free-market and capitalism approach as one plagued by insider dealings, theft and extensive hidden money flows. In a dysfunctional economic environment, characterised by the absence of property rights, the new quasi-private owners tended to overlook investment opportunities as they had a precarious property rights claim over the assets they controlled (Stiglitz, 2002; Hoff and Stiglitz, 2004). Consequently, the controlling elite groups did not create any productive entities (Clarke and Kabalina, 1995; Nellis, 1999; Hoff and Stiglitz, 2004; Goldman, 2003). The funds were taken out of the country once capital markets were opened and assets were viewed as "plunder to be stashed safely abroad" (Ross, 2004:116). Stiglitz (2002) believes that as privatisation occurred without the essential prerequisites, such as a well-defined property rights system, it did not offer incentives for effective private ownership – instead it offered an incentive to "grab" the resources and engage in extensive tunnelling of wealth.

The new regime ushered under Putin concentrated on re-introducing the state as a major player to the Russian economy. We argue that by forming a co-ownership strategy with private investors, the federal government can significantly reduce substantial hold-up costs associated with oligarch rent-seeking behaviour in the absence of a well-enforced property rights system. Given the state's key objective of generating long-run economic growth, which needs to be sponsored by private investment, the government cannot allow the oligarchs to target investor expropriation and wealth tunnelling practices. Thus the state-private co-partnership system can act as an effective substitute to assure private investors of their expected return.[1] Our hypothesis suggests that firms are likely to exhibit higher performance and growth prospects if they have adopted such governing mechanism.

2.2. The underpinning of corporate growth through energy-sector rents

In this section we consider the effect of the government policy towards the energy sector. It is noted above that Russia's economic growth is attributable to fortuitous increase in world energy prices. As we know, Russia is endowed with vast abundance of natural gas and oil reserves and over the past few years the economy has been fuelled by oil and gas exports, which constituted approximately 60 percent of total export earnings. But also, significantly, the energy sector accounted for 30 percent of all foreign direct investment.[2] Furthermore, the revenues from this strategic sector accounted for 30-40 percent of total government's revenues (Rautava, 2004). A significant fraction of energy profits was used to establish a foreign trade Stabilisation Fund. The fund had an expected value of 158 billion dollars by the end of 2007, and this figure constitutes 12 percent of country's GDP. However, the administration also used an extensive proportion of Russia's export earnings in order to generally revive the country's industrial base (Rutland, 2006).

Russia's industrial base suffered greatly because those who managed the major enterprises throughout the 1990s diverted firm assets, and thereby enormous fortunes,

[1] The state itself will not find it profitable to engage in asset-stripping – the government is already the single largest owner of the resources. The state sees it as more rewarding to credibly commit to protect investor funds in order to achieve long-term economic growth, fuelled by private investment

[2] Source: Energy Information Administration (Official Energy Statistics from the U.S. Government)

though such assets were sold for a fraction of their true value (Puffer and McCarthy, 2007). An important conduit for such asset substitution was through the control of managers. As stated previously, these managers became known as the oligarchs, and their primary objective was to liquidate the assets, the proceeds of which ended up in offshore bank accounts (Wolosky, 2000; Hill and Fee, 2002; Hoffman, 2002). Such oligarchs dominated the oil industry, consequently, oil production decreased by approximately 50 percent between 1988 and 1998.

After 2000, the oligarch power was reduced and the central state regained control over strategic industries (Boussena and Locatelli, 2005a, 2005b; Kern, Speyer, Kaiser and Walter, 2007). Barnes (2007) believes that one of government's aims in taking over prime oil assets was to improve the Russian economy.

The state's regained control over the oil industry led to many regulatory changes. For example, the Subsoil Law made the federal government the exclusive owner of the resources, with exploration and production rights being leased to private agents. Over this period, Russia enjoyed an increase in Production Sharing Agreements. Such agreements limit foreign investor involvement in natural resources extraction rights to particular resource deposits. Although international companies were encouraged to enter joint ventures in the Russian hydrocarbon industry, in such ventures Russian firms had to own a majority stake (Erochkine and Erochkine, 2006; Locatelli, 2006).

Nevertheless, despite such restrictions, foreign investors were keen to exploit Russia's natural resources, and perceived their investments as lucrative. In other words, private foreign investors enjoyed substantial earnings, despite the state's policy of diverting specific economic rents. Therefore, the state was careful to offer foreign investors a sufficient share of profits to encourage them to enter long-term projects in Russia's energy sector (Reynolds and Kolodziej, 2007). The specific rents generated by Russia's natural resources were in turn channelled to other industrial sectors through subsidised investment funds.

2.3. The role of financial institutions in channelling funds to target investment projects

As previously noted, the state introduced a policy of employing domestic financial intermediaries to channel funds into numerous favoured investment projects,

leading to enhanced performance in many economic sectors. This is accomplished in part through offering credit on favourable terms. Specifically, we believe that domestically-owned financial institutions predominantly target large investment projects, defined by high asset specificity. Besides subsidising such investment flows, the policy also acts to reduce the risk of investing in large "lumpy" projects in an environment characterised by weak property rights.

Under the Yeltsin regime, as in the late 19th century, the Russian banking system proved to be too inept to stimulate economic growth through the funding of substantial investment projects. Throughout the privatisation era Russia was inflicted with the emergence of "mushroom" banks, which issued poorly-defined financial assets. Such "commercial" banks were founded by private economic agents with political ties to the regime. These banks were undercapitalised and also lacked the essential decision-making expertise (Meyendorff and Snyder, 1997).[3] The management of such banks facilitated the transfer of funds abroad for favoured firms and individuals (Gidadhubli and Kumar, 1999; Berglof and Bolton, 2002), thus colluding in the prevalence of asset-stripping during the period. In general, banks became essential conduits to reallocate wealth from Russian population to influential groups (Laeven, 2001; Thomson, 2002; Spicer and Pyle, 2003; Buyske, 2007). Moreover, albeit the fact that in the early 1990s the government's central bank did act as a loan provider to enterprises, the funds were employed by government officials and other insiders to purchase dollars in the newly liberalised Russian foreign exchange market (Rock and Solodkov, 2001).

The above developments led to the general public's distrust towards financial intermediation. This distrust deepened with the rising prevalence of one Ponzi scheme after another, characterised by promises of implausibly high returns to encourage unsuspecting citizens to part with their savings. The collapse came when banks declared bankruptcy, after having lost their funds (Pistor and Spicer, 1997; Rock and Solodkov, 2001; Bhattacharya, 2003).

In summary, under the Yeltsin regime, the banking sector only served to divert capital to chosen enterprises for the primary purpose of enabling "favourite elites" to

[3] Due to incompetent decision-making and concentrated lending to favoured firms and individuals, defaulted loans represented 10 percent of country's GDP by 1997

deposit funds in insiders' offshore accounts. Consequently, Russia was increasingly incapable of attracting foreign capital to assist its economic development, as foreign investors were discouraged by fraudulent business practices and potential uncertainty of their returns.

During August of 1998, Russia experienced a financial crisis, culminating in the collapse of the currency and the suspension of its payment system. For example, the state postponed payments on foreign debt, and defaulted on its ruble-dominated public debt (Sutela, 2000). Consequently, there was a need for the state's payment system to be restructured in order for it to meet its debt obligation (Scharf, 2006). Part of this restructuring involved Russia receiving substantial loans from world organisations, but more importantly, the re-intervention of the state in financial intermediation, which was initiated with the introduction of the Putin regime, also played a significant role in this development.

Regarding the latter, the role of the Savings Bank of the Russian Federation (Sberbank) was re-established, while it had been extensively diminished during the Yeltsin era. For example, eight of Russia's largest banks were allowed to transfer their funds to Sberbank, while many individual depositors saw Sberbank as the only trustworthy financial institution (Buyske, 2007; Peresetsky, Karminsky and Golovan, 2007). At present, the Russian banking sector incorporates one dominant state bank - Sberbank is reported to hold over 80 percent of consumer deposits, while Sberbank and Vneshtorgbank (state-owned) accounted for 41 percent of banking sector loans by 2005. There are also several large and medium size banks with substantial state involvement. However, there also exist private pocket banks, which tend to be located in natural resource firms, such as metallurgy, and supply funds to enterprises in these economic sectors (Gnezditskaia, 2003).

The pivotal control of investment financing is being increasingly channelled by the central state. For instance, the Central Bank of Russia (CBR) regulates all commercial banks through a system of licensing investment funds to every credit institution. Therefore, with enhanced centralisation of the rationing of investment funds, state control financial intermediation has increased dramatically. Subsequently, many private and most of semi-private (especially large) firms are now financed through government-influenced

loans. Gnezditskaia (2003) notes that Sberbank's main borrowers are generally represented by blue chip firms, although the bank primarily targets natural resources companies. Significantly, between 2000 and 2006, lending by banks had increased by more than 10 times. Notably, there was also a major expansion in long-term credit instruments (Sutela, 2005). In addition, domestic financial institutions have also become the main suppliers of equity capital to corporations (Filatotchev, 2006).

It was previously illustrated that state-sponsored loans stimulated Russia's backward economy a century ago, an important aspect of which was government's ability to attract the much needed foreign capital to generate industrial growth. In contrast to the Yeltsin "hands-off" strategy, the incoming regime adopted Witte's policy of allocating subsidised loans to favoured enterprises. From the above discussion, if the outlined reforms have been effective, we should observe a positive relationship between firms' long-term debt and their performance. Furthermore, we believe that in order to secure private investment in industries characterised by substantial hold-up costs, the government may have introduced state-influenced domestically-owned financial intermediaries to firms' shareholder structure, in order to assure investors against expropriation, as well as continuity of subsidised debt.

3. Data description

3.1. Data sources

The aim of this study is to capture the effect of the new state-private co-ownership strategy, the role of financial institutions and energy-sector revenues on firms' performance and growth prospects during the Putin regime. The regime was implemented in 2000; however, our study also assesses company performance during the 1998-1999 period, as it incorporates privatisation outcomes associated with the Yeltsin administration. Our dataset consists of firms which trade on the Russian Trading System (RTS) stock exchange (one of Russia's leading stock exchanges) between the beginning of 1998 and the end of 2006. We record companies' annual key financial indicators, their ownership structure and other intangible characteristics (for e.g., firm's age). A more detailed description of data employed follows below.

The dataset is based on hand-collected information, provided by SKRIN records. SKRIN offers Russia's joint-stock companies' annual and quarterly reports. At the time of data collection, 329 companies were listed on RTS stock exchange; however, due to the absence of information for several companies, the final sample was reduced to 257. Our data contains market capitalisation figures (provided by RTS); key balance sheet figures (provided by SKRIN), ownership data, and other firm-specific information (also provided by SKRIN). Both SKRIN and RTS prove to be dependable Russian sources, however, if outliers were suspected to be caused by misleading information, alternative sources such as company websites and news reports were employed.

3.2. Definition of variables

In order to identify the key determinants of Russia's corporate development, one needs to establish what factors influence firms' profitability and growth prospects. We test the significance of the new state-private co-partnership system on firms' corporate value, in the presence of several control variables. We also assess the function of long-term debt and the role of financial intermediaries in companies' shareholder structure.

Valuation of the firm

The essential measure of firms' corporate value, which captures growth prospects, is Tobin's Q (our dependent variable in regressions), which, by definition, is "the ratio between market value of the firm's assets and the replacement value of those assets" (Wolfe, 2003:156). It is calculated by dividing market value of outstanding stock and debt by replacement value of production capacity. Nevertheless, it is often the case that such measures are not directly accessible, hence substitute determinants were introduced. There are three Tobin's Q proxies employed in this study. The first proxy is constructed according to Fama and French (2005), which is the sum of book value of debt and market value of equity, divided by total assets (such measure was also used by Chen, Frank and Wu, 2005; and Aggarwal and Samwick, 2006). The second proxy employed in this study was introduced by Chung and Pruitt (1994) - it is the market value of all shares plus book value of long term debt and the difference between current liabilities and current assets, divided by the total value of firm's assets. Finally, the third proxy serves as an extension

of the first proxy – it is the annual change in the above variable (delta Tobin's Q), which is believed to be a more robust measure of firms' corporate value sensitivity to changes in independent variables.

Size

Size of the firm is often considered to be an important indicator of company performance. One of the most widespread indicators remains the natural log of total assets (Salancik and Pfeffer, 1980; Berger and Ofek, 1995). However, because this paper addresses the significance of company's fixed assets and subsequent hold-up costs, we measure size as the ratio of fixed assets to total assets.

Leverage

The amount of debt a company holds is also commonly used in evaluating firm's value. A widely suggested indicator is the ratio of book long-term and short-term debt to total assets (Rajan and Zingales, 1995; Lang, Ofek and Stulz, 1996; Boubakri and Cosset, 1998). However, short-term debt component is omitted from leverage variable in this study in order to eliminate the short-term effect and assess the implication of long-term loans. These, we believe, represent subsidies, which are channelled by the state to firms in order to enhance industry growth. As a result, we define the variable as the book value of long-term debt over total assets.

Profitability

We employ the profit margin variable as a measure of firm book-value profitability. The variable is constructed in accordance to Machin and Van Reenen (1993), Schranz (1993) and Loughran and Ritter (1997) indicator, where it is calculated as net profit before interest and taxes, divided by sales.

Age of firm

The age of firm dummy variable is introduced in order to capture the effect of company's age on its performance. "Old" firm represents a company which already existed in the Soviet era, while "new" firm is created during or after the privatisation

initiative. We assign the value of 1 to the dummy variable if the company was formed prior to the 1992 restructuring policy, while a value of 0 corresponds to a firm which was created during or after the privatisation period.

Ownership

The main shareholders of Russian enterprises are reported to consist of central state firms or financial institutions, regional state, domestic firms, domestic financial institutions, foreign investors (firms or financial institutions), individuals (management), and subsidiaries (firms owns itself and, most likely, through a managerial position). Because this study is focused on the significance of state (direct or indirect) ownership, several dummy variables were introduced to capture government's influence. The key explanatory variable we are interested in is the newly implemented state-private co-ownership system. This effect is captured by introducing the state re-acquisition dummy variable into the regressions. The variable was given a value of 1 if the state has re-instated itself as one of the key shareholders in the firm under the Putin administration, and 0 otherwise.

In addition, the value of 1 was assigned to the dummy variable if the state was reported to be firm's major shareholder, the value of 0.5 was given if the state co-owns the firm with another large investor, and 0 otherwise.[4] Similarly, using the equivalent method, we assess the influence of regional state and foreign investor. In this paper we argue that regional state shareholder may have a negative impact on firm performance due to wealth accumulation practices adopted by regional officers in the earlier period. The influence of foreign investor can signal whether superior Western-type corporate governance regime offers greater shareholder protection and subsequently results in increased firm value, and also whether the availability of foreign investment funds leads to higher profitability.[5]

[4] In theory, the value of 0.5 also corresponds to the new state-private co-partnership system. However, such mechanism predominantly prevails under the Putin administration, where it is captured by another variable (outlined previously in the text). The 0.5 value is allocated to a very small number of companies, which were partially owned by the state during the Yeltsin period. Significantly, it is also assumed that state co-ownership was not as effective in the earlier period due to a diminished power of the central state

[5] It is evident from the companies' reports that all foreign owners are registered in developed countries, hence are associated with a strong property rights system, and good standard of corporate governance practice

The increased state ownership dummy variable is employed in order to determine whether enhanced ownership stake of the central state results in superior firm performance. The value of 1 is assigned to the variable if the state has increased its company ownership share, and 0 otherwise.

We also examine the influence of domestic and foreign financial institutions in firm capital structure. We primarily concentrate on domestically-owned financial intermediaries, as foreign institutions are thought not to be required to provide loans on favourable terms to the Russian industry. Consequently, a dummy variable with a value of 1 corresponds to domestic financial intermediary being firm's major shareholder, and 0 otherwise. The influence of foreign financial institution is determined applying the same technique.

Finally, we measure firm ownership concentration level by the percentage of capital owned by the largest shareholder. It is noted that companies in Russia are defined by remarkably concentrated control, where the average stake held by the largest investor amounts to approximately 50 percent.[6]

Energy sector firm

The energy firm dummy variable is incorporated into the regression analysis in order to account for profits which can solely be attributed to a specific sector of the economy. Namely, we try to establish whether firm value and growth prospects are likely to be higher due to characteristics which are exogenous to the firm – in other words, whether energy sector company performance is wholly influenced by a rising world price of oil (and gas). Therefore, a dummy variable with a value of 1 corresponds to energy companies, and that with a value of 0 to other industries.

[6] The firm is reported to have more than one owner only if the key shareholders own a very similar stake of capital. Hence, for instance, if it is noted that the largest shareholder owns 40 percent of the company, and two separate owners are identified, it is assumed that each of the two owners have claims on 40 percent of firm's value

Table 1 below provides a summary description of variables used in the regression analysis.

Table1. Definition of variables

Variable	Description
Tobin's Q	i. $(V_t + LTD_t + STDt) / A_t$. The market value of equity plus book value of debt, divided by total assets (Fama and French, 2005; Chen, Frank and Wu, 2005; Aggarwal and Samwick, 2006).
	ii. $(V_t + LTD_t + (CA_t - CL_t)) / A_t$. The market value of equity plus book value of long-term debt and the difference between current assets and current liabilities, divided by total assets (Chung and Pruitt, 1994).
	iii. $\Delta (V_t + LTD_t + STDt) / A_t$. Annual change in (i).
Size	FA_t / A_t. The ratio of fixed assets to total assets.
Long-term debt	LTD_t / A_t. The ratio of book value of long-term debt to total assets.
Profitability	$E_t / Sales_t$. The ratio of earnings before interest and taxes to sales (Machin and Van Reenen, 1993; Schranz, 1993; Loughran and Ritter, 1997)
Ownership concentration	Fraction of capital owned by the largest shareholder, expressed in %.
Age of firm	Equals 1 if the firm had existed during the Soviet era; 0 otherwise.
Energy firm	Equals 1 if the firm belongs to the energy sector; 0 otherwise.
Continuous state ownership	Equals 1 if the firm is owned by the central state directly or indirectly; equals 0.5 if the state has joint ownership with another large investor; and 0 otherwise.
Increased state ownership	Equals 1 if the central state increased its ownership in the firm; 0 otherwise.
State re-acquisition	Equals 1 if the state has re-established its position as firm's major shareholder during the Putin regime; 0 otherwise.
Regional state ownership	Equals 1 if regional state is firm's main shareholder; equals 0.5 if regional state has joint ownership with another large investor; 0 otherwise.
Foreign ownership	Equals 1 if foreign corporation/financial institution is firm's main shareholder, equals 0.5 if foreign entity has joined ownership with another large investor; 0 otherwise.
Domestic financial institution	Equals 1 if the firm has domestic financial institution as its major shareholder; 0 otherwise.
Foreign financial institution	Equals 1 if the firm has foreign financial institution as its major shareholder; 0 otherwise.

4. Findings

4.1. Summary statistics

Table 2 presents descriptive statistics for firms trading on RTS during the 1998-2006 period. The time period is split into three segments in order to gain more insight into firms' changing characteristics. The first segment (Panel A) provides the statistics for years 1998 and 1999, which partially absorb the Yeltsin regime and the privatisation process. This is contrasted with the introduction of the Putin regime in 2000, where the second time segment (Panel B) consists of years 2000, 2001 and 2002. These years correspond to the initial policies of the Putin administration. Lastly, the third segment (Panel C) consists of years 2003, 2004, 2005 and 2006, which represent the more stabilised Putin regime.

As expected, Panel A exhibits the outcomes associated with Yeltsin's corporate reforms, as well as August 1998 crisis. Tobin's Q values are particularly low, which also capture low market capitalisation, signalling investors' distrust towards the Russian capital market. One must also note the limited number of firms listed on the stock exchange. The next period displays a somewhat improved corporate performance - Tobin's Q had grown steadily, accompanied by significantly increased market capitalisation. Finally, Panel C presents firm performance indicators consistent with the establishment of the Putin regime. One must recognise a dramatic increase in Tobin's Q. Market capitalisation has augmented accordingly, while profitability has also increased. The size ratio has slowly declined over the 1998-2006 time period. This, however, can be explained by a steady firm formation, where numerous companies, which are not characterised by large fixed assets, have entered the market (for e.g. service firms). The proportion of long-term debt in the firm has been increasing. This is consistent with firms' decision to use bank loans to finance new investments being influenced by special lending conditions, or subsidies, which are provided by banks and financial institutions under Putin's policies. The level of ownership concentration in Russia remains high throughout the given period. As is widely known, concentrated ownership serves as a safeguard against potential hold-up costs in transition economies.

Table 2. Summary statistics for firms trading on RTS between 1998 and 2006

Variable	No. of obs	Mean	Standard deviation	Min	Max
		Panel A: 1998-1999			
Tobin's Q1 $(V_t + LTD_t + STDt) / A_t$	165	0.357	0.490	0.003	3.644
Tobin's Q2 $(V_t + LTD_t + (CA_t - CL_t)) / A_t$	176	0.275	0.564	-2.071	3.599
Size (FA_t / A_t)	267	0.669	0.179	0.066	0.976
Market capitalisation (ln)	186	12.971	2.017	7.275	19.267
Leverage (LTD_t / A_t)	269	0.033	0.084	0.000	0.598
Profitability ($E_t / Sales_t$)	139	0.080	0.418	-3.263	0.805
Ownership concentration (%)	270	41.304	17.679	7.000	100.000
		Panel B: 2000-2002			
Tobin's Q1 $(V_t + LTD_t + STDt) / A_t$	379	0.432	0.555	0.0009	4.303
Tobin's Q2 $(V_t + LTD_t + (CA_t - CL_t)) / A_t$	407	0.284	0.533	-0.926	4.188
Size (FA_t / A_t)	513	0.630	0.207	0.00002	0.969
Market capitalisation (ln)	417	13.647	2.340	4.950	20.243
Leverage (LTD_t / A_t)	519	0.052	0.112	0.000	1.494
Profitability ($E_t /Sales_t$)	457	0.093	0.327	-5.159	0.904
Ownership concentration (%)	512	43.363	17.009	6.000	100.000
		Panel C: 2003-2006			
Tobin's Q1 $(V_t + LTD_t + STDt) / A_t$	1264	0.844	1.082	0.0009	17.931
Tobin's Q2 $(V_t + LTD_t + (CA_t - CL_t)) / A_t$	1337	0.664	1.048	-2.071	17.202
Size (FA_t / A_t)	1655	0.626	0.232	0.000	0.999
Market capitalisation (ln)	1366	14.522	2.496	4.926	22.733
Leverage (LTD_t / A_t)	1671	0.064	0.121	0.000	1.494
Profitability ($E_t /Sales_t$)	754	0.096	0.312	-3.980	0.980
Ownership concentration (%)	1621	47.751	19.101	6.000	100.000

4.2. Corporate ownership

Table 3 summarises the number and type of owners present across Russia's corporate sector between 1998 and 2006. In the table, "state ownership" corresponds to a number of companies in which the government held a majority stake throughout the given period. Significant presence of the state shareholder is attributed to a large number of electricity companies in the firm sample, which are the subsidiaries of the United Energy Systems of Russia (where the state is the largest investor). The increasing number of such companies is consistent with the development of new electricity plants in 2005 and 2006.

Table 3. Major shareholders of firms trading on RTS during 1998-2006

State ownership / co-ownership	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
State	64	74	71	69	65	59	63	80	82
New state-private co-ownership	6	9	17	20	20	29	25	26	45
Non-state ownership									
Domestic firm/financial institution	15	41	53	54	63	74	73	70	72
Foreign firm/financial institution	14	27	21	19	27	24	25	27	34
Individual	3	8	7	9	8	8	3	8	9
Regional state	8	11	11	11	10	7	4	3	3

The "new state-private co-ownership" denotes the number of firms, which adopted the state-private co-partnership system. Here private investors generally take form of corporations or financial institutions (we also find that the central state-regional government partnership is present twice in the earlier period, and once in the later years). Central state can participate through direct or indirect holdings. For instance, from 2002 onwards, the government owned shares in many enterprises through financial institutions, in which it had partial control. It is evident from the table that since the advent of the Putin regime, the number of firms characterised by the state-private co-partnership mechanism increased dramatically, which is consistent with the government's strategy of regaining a certain degree of control over the Russian industry.

The "non-state ownership" status describes firms without central state presence in their ownership structure. We identify four types of private owners – domestic corporation or financial institution, foreign corporation or financial institution, individuals and regional state (2 subsidiaries were also recognised and were grouped together with individual ownership). It is important to note that approximately 80 percent of corporate ownership structure is represented by two or more large investors (for e.g. the firm is owned by a foreign corporation and a domestic financial institution). Such combination of shareholders accounts for a relatively high number of domestic and foreign participants in the market. We also note the decline in regional government investor type in the later period. This is consistent with the new policy of corporate control being transferred back to the federal government.

4.3. *Regression analysis*

4.3.1. The role of the state-private co-partnership system

In our analysis we employ a random effects model.[7] As stated previously, at the time of data collection, 329 companies were listed on the RTS stock exchange; however, due to the absence of information for several companies, the final sample was reduced to 253, resulting in 1,737 observations.[8] Our regression takes the following form:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta'_3 X_{3it} + \varepsilon_{it} \quad (1)$$

Tables 4, 4.1. and 4.2. display the results obtained from the above regressions. Our findings show that the state-private co-ownership system, which is captured by the state re-acquisition variable, has a positive impact on firm Tobin's Q, as the variable is consistently positive and statistically significant at 1-5 percent level. As previously outlined, this paper develops the idea that the government's new policy of introducing a corporate co-partnership system between the state and private investors can serve as an effective substitute for poorly-defined property rights, which still persist in contemporary

[7] A Hausman test was used to determine if a fixed or a random effects model was suitable. The test showed that the null hypothesis of both estimation methods yielding similar coefficients was not rejected, hence the random effects model was used as it produced more efficient estimators

[8] Because of the missing observations for both at least one time period and at least one entity, we have an unbalanced dataset

Russia. By becoming one of firm's major shareholders, the government may assure private investors against wealth diversion practices, associated with the new oligarch quasi-owners of the 1990s. The evidence shows that the state's involvement in running the firms is viewed as a positive signal by investors, who perceive the state as being able to credibly commit to their interests. We believe that a limited amount of research has been conducted to test the influence of such co-partnership on firm corporate value. Nevertheless, Chernykh (2004) confirms that private-state investor coexistence improves company performance due to enhanced monitoring mechanism.

Our results also show that the state-private co-partnership is the only significant form of ownership. Continuous state ownership, regional state ownership and foreign ownership do not influence firms' Tobin's Q. Furthermore, our findings signal that encouraging the central state to increase its ownership stake in the firm does not lead to its enhanced corporate value.

Continuous state ownership does not affect firm performance. The variable coefficient is found to be negative but very small in magnitude. Perhaps the negative sign can be explained by the interaction of the economic growth period with the period of economic stagnation throughout the 1990s, during which the state was reported to be "old" firms' major shareholder, while new private companies did not enter the market.

Although the increased state ownership variable displays a positive coefficient, its insignificance demonstrates that while the government's co-ownership policy plays a valuable role in company performance, the strategy of owning a larger fraction of firm's capital does not impact the value of the enterprise from investors' point of view.

Regional state ownership variable reveals a negative coefficient of a substantial magnitude in all regressions, despite being insignificant. As stated earlier, regional state ownership is thought to be consistent with opportunistic behaviour of regional officials in the initial period of economic restructuring.

It is sometimes suggested that foreign ownership can be positively related to firm performance in transition economies due to superior standards of corporate governance code and availability of foreign capital. For instance, Yudaeva, Kozlov, Melentieva and Ponomareva (2003) find that foreign firms tended to be more productive than their domestic counterparts during Russia's privatisation process. Carlin, Van Reenen and

Wolfe (1995) show that firms in Russia, Czech Republic, Hungary and Bulgaria benefited from major investment programs introduced by foreign investors during economic restructuring in the early transition period. Smith, Cin and Vodopivec (1997) find similar evidence for Slovenia. However, we argue that if firms operate in a dysfunctional economic environment characterised by insecure property rights, both domestic and foreign entities may find it difficult to maintain an advanced corporate governance code, as well as protect their investment funds, which can elucidate the insignificance of the foreign ownership variable.

We find a positive and statistically significant relationship between firm's long term debt and its Tobin's Q. In addition, we note the large magnitude of the variable coefficient. Many scholars suggest that a significant presence of debt in a firm can act as a monitoring tool. For instance, Diamond (1984) states that financial intermediaries have cost advantages in monitoring economic agents due to their economies of scale in information gathering. Jensen (1986) concentrates on the ability of debt to control future cash flows, in that the managers of corporations are tied into paying out earnings. However, we believe that long-term debt in Russian enterprises has an alternative role. We argue that under Putin administration policy, many financial institutions provide long-term loans to corporations on favourable terms, thus companies choose to utilise subsidised debt, which leads to better performance and higher growth rate.

We cannot clearly determine whether the size of the firm, or its fixed assets, has a positive effect on firm's corporate value. In published research, the size effect can be interpreted as somewhat ambiguous, as many report large firms intuitively generating bigger cash flows, while large enterprises also correspond to "old" firms with limited growth potential. Generally, we believe that fixed assets should have a favourable impact on firms' value; however, presence of significant fixed assets leads to potential hold-up costs in an economy characterised by weak property rights. Perhaps more research is needed to determine the influence of fixed assets across Russia's various economic sectors.

Our results show that more profitable firms exhibit higher Tobin's Q. Many studies document a favourable market reaction to positive earnings announcements. For instance, Barberis, Shleifer and Vishny (1998) and Daniel, Hirshleifer and

Subrahmanyam (1998) show that investors tend to over-react to a series of good news, even if only in the short-term period. The phenomenon, however, is more widespread in countries with a well-defined legal system, which is characterised by superior insider trading regulations and strong shareholder protection (DeFond, Hung and Trezevant, 2007). Bhattacharya, Daouk, Jorgenson and Kehr (2000) believe that unrestricted insider trading can lead to all information being absorbed into stock prices prior to the actual announcement. Perhaps in our case, the positive effect of firm's earnings on its corporate value can be attributed to the fact that the Russian capital market is not dominated by insider dealings and offers an acceptable level of regulation in terms of share trading.

A high degree of ownership concentration is also positively correlated with firms' enhanced corporate value, although the magnitude of ownership concentration variable coefficient is small. These findings are consistent with the theory that concentrated ownership can act as a safeguard mechanism against wealth tunnelling behaviour in developing economies with weakly enforced property rights, where the absence of shareholder protection results in profits being absorbed by the managerial class. Similarly, Xu and Wang (1999) find a strong positive correlation between ownership concentration and profitability in China. After assessing the performance of 5,829 Korean firms, Joh (2003) reports that firms with low ownership concentration tend to exhibit low profitability. We believe that Russian corporations also use concentrated ownership to limit opportunistic behaviour of insiders.

We determine that the age of firm variable has a negative and significant impact on firm performance. A widely accepted theory states that "old" firms have already exhausted their growth opportunities, hence one would expect to see a low Tobin's Q, and many studies correspondingly find a negative correlation between firm's age and its growth prospects (Evans, 1987a, 1987b; Variyam and Kraybill, 1992). However, we argue that such theory does not explain the findings produced by this study. Many "old" Russian enterprises (for instance, utility) received substantial investment funds under the Putin regime, which contributed to numerous projects, and subsequently, industry revival. The negative effect can, perhaps, be attributed to the fact that new corporations did not enter the Russian capital market until economic conditions were favourable, hence the adverse privatisation process, alongside with the August 1998 crisis effect were absorbed

by the "old" firms, and reflected in the regression analysis. Moreover, the fact that age of firm does not affect the annual change in Tobin's Q signals that firms' value is perhaps less sensitive to this variable than originally suggested.

An alternative hypothesis, which can explain a striking improvement in the performance of the Russian corporate sector, is focused on the rising world price of oil and gas, which increasingly benefited Russia.[9] The energy sector firm variable is integrated into the regressions to take account of any abnormal profits and growth opportunities associated with this industry. However, our results show that the energy firm effect is insignificant in all of our regressions. Consequently, we believe that rents from oil and gas industries are channelled to other economic sectors, thus private investors do not expect to receive anything above risk-adjusted competitive return.

[9] This study does not include a recent fall in energy prices, as the given time period is 1998-2006

Table 4. The effect of state-private co-partnership system on firms' Tobin's Q1

Variable	**1**	**2**	**3**	**4**	**5**
Size	0.225	0.217	0.248*	0.212	0.209***
	(0.149)	(0.148)	(0.148)	(0.148)	(0.148)
Long-term debt	1.308***	1.316***	1.314***	1.315***	1.315***
	(0.252)	(0.250)	(0.249)	(0.250)	(0.251)
Profitability	0.387***	0.390***	0.385***	0.386***	0.384***
	(0.072)	(0.072)	(0.072)	(0.072)	(0.072)
Ownership concentration	0.009***	0.009***	0.008***	0.009***	0.008***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Age of firm	-0.979***	-0.989***	-1.009***	-0.972***	-0.971***
	(0.112)	(0.113)	(0.113)	(0.113)	(0.113)
Energy firm	0.166	0.182	0.177	0.186	0.168
	(0.168)	(0.169)	(0.168)	(0.169)	(0.167)
Continuous state ownership	-0.229				
	(0.071)				
Increased state ownership		0.159			
		(0.110)			
State re-acquisition			0.362***		
			(0.105)		
Regional state ownership				-0.224	
				(0.173)	
Foreign ownership					0.059
					(0.104)
Constant	1.045***	1.060***	1.053***	1.045***	1.035***
	(0.152)	(0.151)	(0.149)	(0.150)	(0.152)
No. of observations	1088	1088	1088	1088	1089
R-squared	0.209	0.207	0.217	0.208	0.209
Wald chi squared value	161.89***	161.85***	173.78***	161.75***	159.70***

*, ** and *** denote significance at the 10, 5 and 1 percent level, respectively

Table 4.1. The effect of state-private co-partnership system on firms' Tobin's Q2

Variable	1	2	3	4	5
Size	0.835***	0.833***	0.861***	0.837***	0.823***
	(0.141)	(0.140)	(0.140)	(0.140)	(0.140)
Long-term debt	1.075***	1.083***	1.079***	1.094***	1.078***
	(0.241)	(0.240)	(0.239)	(0.239)	(0.240)
Profitability	0.324***	0.327***	0.323***	0.325***	0.322***
	(0.069)	(0.069)	(0.069)	(0.069)	(0.069)
Ownership concentration	0.008***	0.008***	0.007***	0.008***	0.008***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Age of firm	-0.948***	-0.954***	-0.969***	-0.944***	-0.938***
	(0.104)	(0.105)	(0.105)	(0.104)	(0.104)
Energy firm	0.167	0.181	0.178	0.187	0.167
	(0.162)	(0.163)	(0.162)	(0.162)	(0.161)
Continuous state ownership	-0.021				
	(0.067)				
Increased state ownership		0.124			
		(0.103)			
State re-acquisition			0.282***		
			(0.098)		
Regional state ownership				-0.240	
				(0.159)	
Foreign ownership					0.083
					(0.099)
Constant	0.507***	0.515***	0.507***	0.501***	0.490***
	(0.141)	(0.140)	(0.139)	(0.139)	(0.141)
No. of observations	1122	1122	1122	1121	1123
R-squared	0.225	0.224	0.231	0.226	0.227
Wald chi squared value	167.82***	167.63***	176.26***	170.76***	166.50***

*, ** and *** denote significance at the 10, 5 and 1 percent level, respectively

Table 4.2. The effect of state-private co-partnership system on firms' Tobin's Q3

Variable	1	2	3	4	5
Size	0.218*	0.218*	0.241*	0.214*	0.201
	(0.127)	(0.125)	(0.125)	(0.124)	(0.124)
Long-term debt	0.404*	0.411*	0.416*	0.411*	0.431*
	(0.235)	(0.231)	(0.231)	(0.231)	(0.232)
Profitability	0.311***	0.312***	0.310***	0.312***	0.312***
	(0.094)	(0.093)	(0.093)	(0.094)	(0.094)
Ownership concentration	0.003**	0.003**	0.003*	0.003**	0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age of firm	-0.002	-0.006	-0.022	-0.002	-0.005
	(0.086)	(0.087)	(0.087)	(0.086)	(0.087)
Energy firm	-0.077	-0.072	-0.075	-0.073	-0.068
	(0.108)	(0.106)	(0.106)	(0.106)	(0.106)
Continuous state ownership	-0.006				
	(0.060)				
Increased state ownership		0.052			
		(0.097)			
State re-acquisition			0.206**		
			(0.092)		
Regional state ownership				-0.025	
				(0.156)	
Foreign ownership					-0.062
					(0.089)
Constant	-0.191	-0.188	-0.187	-0.191	-0.169
	(0.129)	(0.129)	(0.129)	(0.129)	(0.131)
No. of observations	937	937	937	937	938
R-squared	0.022	0.022	0.026	0.022	0.021
Wald chi squared value	20.79***	21.08***	25.88***	20.81***	20.87***

*, ** and *** denote significance at the 10, 5 and 1 percent level, respectively

4.3.3. The role of energy-sector rents

Our results have shown that energy enterprises do not outperform the remaining industries. Nevertheless, it is widely recognised that Russia's corporate sector is principally driven by the success of oil and gas corporations. Consequently, if energy firms' perspectives are not reflected in the industry type dummy variable in the regression analysis, one can suggest that not all revenue earned in this strategic industry is allocated with private investors. Therefore, it is believed that the central state collects, and subsequently channels economic rents generated by these firms to other industries in order to promote economic growth, while still offering private investors an expected rate of return on their funds. The assumption that private investors receive their expected profit is based on the fact that the energy firm dummy variable does not have a negative impact on firms' Tobin's Q, as it would have in the case of investor expropriation.

In order to demonstrate that the Russian energy sector is associated with significant corporate value, we calculate the Market Value Added (the difference between the market value of the company and capital contributed by its investors) of energy firms during the 1999-2006 period.[10] As can be seen from Figure 1, MVA has been rising rapidly since 2000, and also exhibited a sharp increase in the 2005-2006 period, which can be attributed to an increased world demand for oil and its corresponding growing price. Thus energy companies signal that they represent "created added value". Yet, Figure 2 also shows that energy firms' net profit margin ratio has decreased since the implementation of the Putin regime, indicating that energy corporations are reluctant to pay out their earnings. Therefore, we argue that the "created added value", or energy-specific rents are accumulated by the government, who is the major owner of the resources, instead of being transferred to private investors.

[10] No sufficient data was available for 1998

Figure 1. Energy sector firms' Market Value Added during 1998-2006

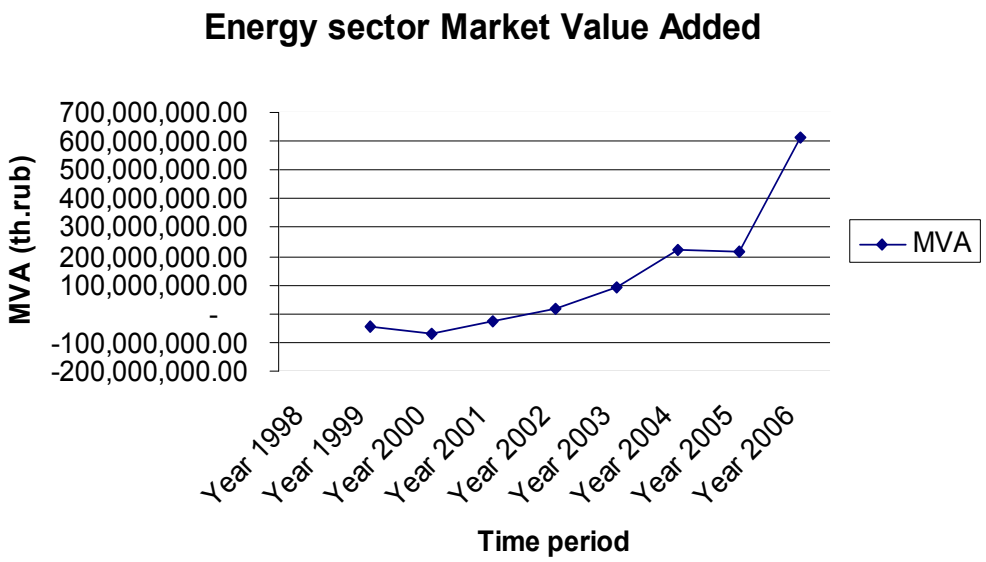
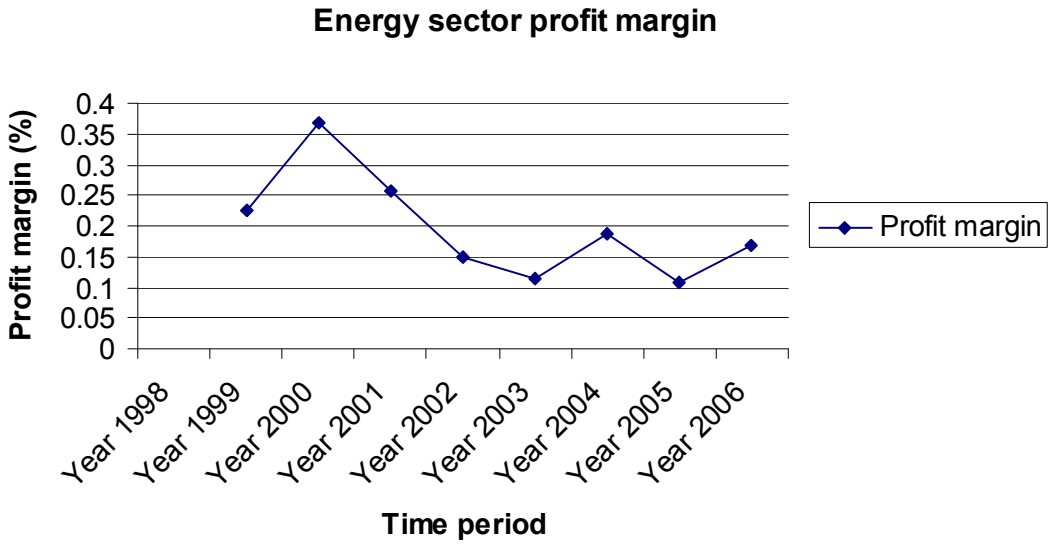


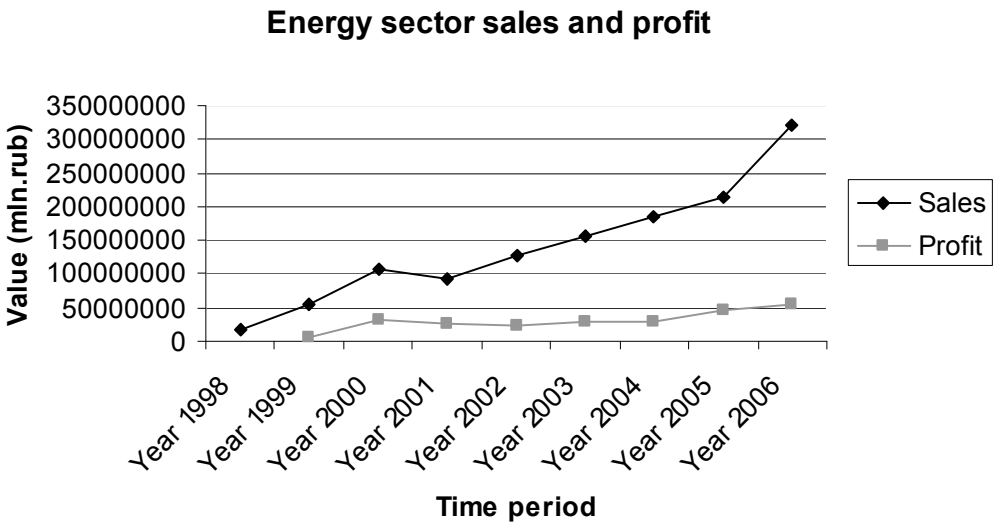
Figure 2. Energy sector firms' profit margin during 1998-2006



Moreover, we argue that the state collects energy rents through a system of enterprise ownership, rather than through taxation mechanism. In other words, a large fraction of oil and gas sales revenues is diverted to other economic uses before companies report their annual profits, which are then taxed and redistributed among private

investors. Figure 3 shows an increasing discrepancy between energy firms' revenues and the reported final profits over the given period. From the diagram it can be seen that sales and profit trends exhibited a similar pattern until the early 2000s. However, with the advent of the Putin regime we note a growing divergence between energy revenues collected and proceeds being paid out. Such widening "gap" can indeed be explained by an extensive proportion of gains being re-directed by the state before taxes are imposed, in order to invest in other important economic sectors and thereby accelerate Russia's overall economic recovery.

Figure 3. The difference between sales and profit trends of energy firms during 1998-2006



In future research, we will consider substituting Tobin' Q as firm performance measure with Economic Value Added, or Market Value Added indicator. It can be suggested that energy sector dummy variable will have a positive significant effect on firms' growth prospects in the regression analysis, as the new performance measure can potentially integrate the effect of energy-sector rents.

4.3.2. The role of emerging financial institutions

We have previously established that long-term debt is positively correlated with firms' improved Tobin's Q, which is consistent with private investors' strategy of

associating subsidised loans with decreased project risk and corresponding enhanced growth prospects. Consequently, we seek to determine the effect of financial institution investor type in firm shareholder structure on company performance. As financial intermediary shareholders play an important role in distribution of subsidised funds, we expect this type of investor to have a favourable impact on firm corporate value.

Table 5 displays a breakdown of firms trading on the RTS over the period of 1998-2006 into industrial sectors. As can be seen, the sample consists of eight major industries, however, it is skewed towards natural resources, utility and manufacturing sectors. We note that the number of companies listed on the RTS has increased by 71 percent between the beginning of 1998 and the end of 2006, with a significant rise of firms entering the banking and services sector and a noteworthy formation of utility companies. The number of financial intermediaries registered as firms' major shareholder has also amplified from 12 in 1998 to 87 in 2006 (Table 6). The financial intermediaries are reported to be owned either by private economic agents, or wholly or partially by the central state.

Table 5. Breakdown of firms trading on RTS during 1998-2006 into industrial sectors, and a corresponding number of firms in each industry

Year	Manu	Utility	Metal + Mining	Energy	Transport	Communic	Banking + Services	Food + Trade	Total
1998	34	54	15	18	7	12	5	5	150
1999	40	58	20	19	7	14	8	6	172
2000	41	58	19	19	7	15	9	7	175
2001	41	58	19	19	7	15	14	9	182
2002	42	58	19	19	7	15	16	10	186
2003	43	58	22	19	7	15	17	13	194
2004	43	63	23	19	7	15	21	13	204
2005	46	101	24	19	7	15	23	14	249
2006	46	108	24	19	7	15	24	14	257

Table 6. Number and type of financial intermediaries registered as firms' major shareholder during 1998-2006

Year	No. of firms with domestic non-state financial intermediary as largest shareholder	No. of firms with state-influenced financial intermediary as largest shareholder	Total no. of firms with domestic financial intermediary as largest shareholder
1998	11	1	12
1999	18	5	23
2000	26	8	34
2001	28	14	42
2002	35	13	48
2003	53	19	72
2004	60	17	77
2005	57	20	77
2006	51	36	87

Subsequently, Table 7 and Table 8 show the number and type of domestic financial intermediary owners across eight industries specified above. Non-state financial institutions are predominantly present in the manufacturing sector, as well as natural resource industry (energy and metallurgy and mining sectors). A significant presence of financial institutions is also noted in the transport sector.

Table 7. Number of domestic non-state financial intermediaries registered as firms' major shareholder, as is represented by each industry

Year	Manu	Utility	Metal + Mining	Commun	Energy	Banking + Services	Food + Trade	Transport
1998	4	1	2		2		1	1
1999	8	1	3		4		1	1
2000	12	1	5		3	1	2	2
2001	9	2	4	1	6	2	2	2
2002	13	3	6	2	4	4	1	2
2003	19	7	7	1	6	4	4	5
2004	20	10	8	2	8	4	4	4
2005	22	7	5	2	7	6	4	4
2006	18	9	6	3	6	4	4	3

It is evident from Table 8 that state-sponsored financial institutions can primarily be found in the utility industry. This sector is defined by large initial investment outlays and high asset specificity. The potential hold-up costs associated with large electricity projects may be somewhat reduced due to strict government regulation. However, because all utility prices are still heavily subsidised in Russia, such profit ceilings make this economic sector less lucrative for private investors. Thus by becoming companies'

largest shareholder, state-influenced financial intermediaries provide funds on favourable terms to firms, in order to reduce under-investment in this strategic industry.

Table 8. Number of state-influenced financial intermediaries registered as firms' major shareholder, as is represented by each industry

Year	Manu	Utility	Metal + Mining	Commun	Energy	Banking + Services	Food + Trade	Transport
1998		1						
1999		5						
2000		8						
2001		12					1	1
2002	1	12						
2003	1	15			2	1		
2004	2	13	1		1			
2005		18	1		1			
2006	2	31	1		1			1

When we incorporate two separate dummy variables into our regression – namely domestic financial institution and foreign financial institution, we can see from Table 9 that the presence of domestic financial institution investor has a consistent positive effect on firms' Tobin's Q. In contrast, the foreign financial institution variable is only significant at 10 percent level in one set of the regressions, where it has a positive impact on firm performance. Such findings are consistent with the above hypothesis, in that the Putin regime employs domestic banks and other financial intermediaries as firms' major shareholders as a conduit to offer credit on favourable terms to enterprises, thereby promoting growth in many economic sectors. As predicted, foreign financial institutions play a somewhat less important role in the provision of subsidised funds.

An extensive amount of literature supports the theory that presence of financial institution in firm's shareholder structure has a positive effect on its corporate value. This is particularly the case in countries (notably Germany and Japan), where financial intermediaries play a significant corporate governance role across firms, where they represent large equity holders. Gorton and Schmid (2000) report a positive relationship between bank control rights stemming from equity ownership and improved firm performance in Germany. Thomsen and Pedersen (2000) find that European firms, which have strong ownership ties to financial institutions, exhibit higher shareholder value, as is

measured by market-to-book ratios. Claessens, Djankov and Pohl (1997) examine voucher privatisation scheme in Czech Republic and find that ownership associated with bank-sponsored funds results in higher profitability of firms.

Table 9. The effect of domestic and foreign financial institution shareholder on firms' Tobin's Q

Variable	TQ1	TQ2	TQ3	TQ1	TQ2	TQ3
Size	0.238***	0.306**	0.228*	0.201	0.269*	0.205*
	(0.148)	(0.143)	(0.125)	(0.148)	(0.143)	(0.124)
Long-term debt	1.292***	0.283	0.404*	1.310***	0.297	0.409*
	(0.250)	(0.243)	(0.231)	(0.250)	(0.243)	(0.231)
Profitability	0.387***	0.372***	0.312***	0.384***	0.369***	0.310***
	(0.072)	(0.069)	(0.094)	(0.072)	(0.069)	(0.094)
Ownership Concentration	0.008***	0.008***	0.003**	0.009***	0.008***	0.003**
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)
Age of firm	-0.993***	-0.895***	-0.011	-0.963***	-0.865***	0.003
	(0.113)	(0.109)	(0.087)	(0.113)	(0.109)	(0.086)
Energy firm	0.167	0.201	-0.083	0.165	0.194	-0.079
	(0.168)	(0.170)	(0.106)	(0.168)	(0.171)	(0.105)
Domestic financial institution	0.160***	0.141**	0.092*			
	(0.072)	(0.056)	(0.052)			
Foreign financial institution				0.175	0.214*	0.048
				(1.122)	(0.118)	(0.121)
Constant	1.009***	0.823***	-0.216*	1.032***	0.842***	-0.189
	(0.150)	(0.144)	(0.130)	(0.150)	(0.144)	(0.129)
No. of observations	1089	1120	938	1089	1120	938
R-squared	0.217	0.187	0.024	0.208	0.178	0.022
Wald chi squared value	168.17***	127.68***	23.52***	161.14***	123.55***	20.53***

*, ** and *** denote significance at 10, 5 and 1 percent level, respectively

We then proceed to divide our firm sample into three major industries, in accordance to their asset specificity and initial investment costs. The first industry group consists of energy and utility companies, and such represent highest asset specificity and largest preliminary outlays. The second industry group contains metallurgy, mining, manufacturing and transport enterprises. The third industry incorporates banking, services (including telecommunications and retail) and food firms, and these companies are considered to have few unique assets and do not require substantial start-up costs. It was suggested earlier that domestically-owned financial institutions are likely to play a dominant role in economic sectors characterised by large fixed investment outlays, as the level of risk associated with such investment in a country with poorly-defined property rights can potentially be reduced by subsidised loans.[11]

It can be seen from Table 10 that domestic financial institutions have a primary function in energy and utility sectors, where their subsidised loans have a notable impact on companies' performance. Domestic banks and similar institutions are less influential across metallurgy, mining, manufacturing and transport enterprises. Lastly, the presence of domestic financial institution investor in firm shareholder structure does not alter the performance of banking, services and food companies. Consequently, our findings are consistent with the proposed hypothesis that in Russia, domestic financial intermediaries principally target enterprises characterised by large sunk costs and associated project risk. By offering loans on favourable terms, such institutions subsidise numerous projects and attract private investors, thereby increasing corporate value of enterprises and enhancing economic development.

[11] We do not include the foreign financial institutional variable as we primarily focus on the role of domestic financial intermediaries. However, we include the foreign owner dummy variable to control for any effects associated with foreign ownership

Table10. The effect of domestic financial institution shareholder on firms' Tobin's Q across industry

Variable	Energy + Utility (TQ1)	Energy + Utility (TQ2)	Energy + Utility (TQ3)	Manu+ Metal and Mining +Transport (TQ1)	Manu+ Metal and Mining +Transport (TQ2)	Manu+ Metal and Mining +Transport (TQ3)	Banking+ Services+ Food (TQ1)	Banking+ Services+ Food (TQ2)	Banking+ Services+ Food (TQ3)
Size	0.698***	0.761***	0.510***	-0.201	-0.150	-0.161	0.118	0.207	-0.055
	(0.210)	(0.207)	(0.197)	(0.243)	(0.236)	(0.193)	(0.411)	(0.377)	(0.326)
Long-term debt	0.717	-0.203	0.304	1.177***	0.136	0.047	1.949***	0.898*	1.295**
	(0.544)	(0.537)	(0.593)	(0.301)	(0.295)	(0.247)	(0.564)	(0.491)	(0.585)
Profitability	2.101***	2.190***	0.955**	0.299***	0.286***	0.263***	2.887***	1.370***	0.104*
	(0.456)	(0.452)	(0.465)	(0.063)	(0.060)	(0.080)	(0.775)	(0.518)	(0.162)
Ownership Concentration	0.014***	0.014***	0.006**	0.008***	0.007***	0.002	0.002	0.007	0.0001
	(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.005)	(0.004)	(0.004)
Age of firm	-1.138***	-1.086***	-0.037	-1.016***	-0.948***	-0.871***	-0.790***	-0.539**	-0.067
	(0.157)	(0.155)	(0.132)	(0.243)	(0.230)	(0.304)	(0.271)	(0.255)	(0.153)
Foreign owner	-0.175	-0.178	-0.363*	0.103	0.142	0.053	0.018	0.105	-0.061
	(0.236)	(0.235)	(0.205)	(0.123)	(0.123)	(0.098)	(0.254)	(0.224)	(0.209)
Domestic financial institution	0.234***	0.218**	0.124	0.135*	0.131*	0.014	0.145	0.111	0.104
	(0.087)	(0.085)	(0.082)	(0.079)	(0.077)	(0.070)	(0.186)	(0.156)	(0.162)
Constant	0.364	0.217	-0.552***	1.367***	1.196***	0.960***	1.141***	0.750**	-0.183
	(0.243)	(0.241)	(0.207)	(0.296)	(0.279)	(0.348)	(0.104)	(0.361)	(0.334)
No. of observations	524	532	461	396	404	334	169	184	143
R-squared	0.281	0.270	0.048	0.234	0.199	0.062	0.237	0.150	0.052
Wald chi squared value	97.23***	94.21***	19.35**	80.33***	60.07***	21.51***	38.30***	19.90***	9.15

*, ** and *** denote significance at 10, 5 and 1 percent level, respectively

4.3.4. Summary of findings

In this paper we have argued that for the period immediately preceding the recent financial crisis, dramatically improved performance of the Russian economy can in large part be attributed to its gas and oil trade fortunes. However, the government had re-introduced its role in this strategic economic sector in order to collect energy rents, while still providing expected returns to private investors. The state channels these rents in the form of subsidised investment funds to many alternative industries to promote an overall economic development.

A significant number of financial intermediaries emerged during the Putin regime. Under the new state policy the domestically-owned financial institutions offer loans on favourable terms to firms, which in turn employ subsidised debt to enhance their performance and growth prospects. We also found that financial institutions are likely to hold a major ownership stake in firms characterised by large fixed investments, and their presence can be associated with greater availability of subsidised long-term funds and reduced project risk.

Finally, our findings have shown that the new state-private co-ownership system has a positive impact on firms' corporate value. We believe that such co-partnership ameliorates high hold-up costs associated with rent-seeking behaviour of firms' insiders, who target short-term horizon profit-maximisation agenda in the absence of a well-defined property rights system.

5. Conclusion

The ills of the privatisation process throughout the 1990s had led to continuous asset-stripping, as the new oligarch quasi-owners were uncertain about their future claims over assets they controlled. Russia had undergone a period of stagnation as production and living standards had severely declined. The new regime instituted under Putin called for oligarch displacement and increased the role of the state in the Russian economy, as well as having a better-functioning legal system with stronger property rights.

Our findings indicate that the newly instituted state-private co-ownership of enterprises has a positive effect on firms' Tobin's Q, in that it can significantly reduce potential hold-up costs stemming from rent-seeking behaviour of private economic

agents. We also detect a positive relationship between firms' performance and its long-term debt, which signals that financial institutions, under the new state policy, offer loans on favourable terms to promote economic development. The presence of domestically-owned financial intermediary in companies' shareholder structure also leads to improved firm performance in industries characterised by large fixed investments. Lastly, we believe that Russia's energy sector plays a crucial role in its economic success. In order to boost the economy, the government channels energy-sector rents in order to subsidise numerous investment projects.

After studying Gerschenkron's model of rapid industrialisation in the absence of necessary prerequisites in relative backward economies, we believe that Russia's significantly improved economy can be once again attributed to the dominant role of the state. Government's active intervention proved to be an effective substitute for absent market forces, and was successful in sponsoring rapid economic development, mirroring its achievement one century ago.

References

Aggarwal, R.K. and Samwick, A. (2006) "Empire-Builders and Shirkers: Investment, Firm Performance, and Managerial Incentives", *Journal of Corporate Finance*, Vol. 12, No. 3, June, pp. 489-515

Barberis, N., Shleifer, A. and Vishny, R. (1998) "A Model of Investor Sentiment" *Journal of Financial Economics*, Vol. 49, No. 3, September, pp. 307-343

Barnes, A. (2007) "Industrial Property in Russia: The Return of the State and a Focus on Oil", *SAIS Review*, Vol. 27, No. 2, Summer-Fall, pp. 47-62

Berger, P.G. and Ofek, E. (1995) "Diversification's Effect on Firm Value", *Journal of Financial Economics*, Vol. 37, No.1, January, pp. 39-65

Berglof, E. and Bolton, P. (2002) "The Great Divide and Beyond: Financial Architecture in Transition", *Journal of Economic Perspectives*, Vol. 16, No. 1, Winter, pp. 77-100

Bhattacharya, U. (2003) "The Optimal Design of Ponzi Schemes in Finite Economies", *Journal of Financial Intermediation*, Vol. 12, No. 1, January, pp. 2-24

Bhattacharya, U., Daouk, H., Jorgenson, B. and Kehr, C.H. (2000) "When an Event Is Not and Event: The Curious Case of an Emerging Market", *Journal of Financial Economics*, Vol. 55, No. 1, January, pp. 69-101

Boubakri, N. and Cosset, J.C. (1998) "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries", *The Journal of Finance,* Vol. 53, No. 3, June, pp. 1081-1110

Boussena, S. and Locatelli, C. (2005) "The Bases of a New Organisation of the Russian Oil Sector: Between Private and State Ownership", [online] http://upmf-grenoble.fr/iepe/textes/SB-CL_bases_JlofEnergyandDev05.pdf

Boussena, S. and Locatelli, C. (2005) "Towards a More Coherent Oil Policy in Russia?", *OPEC Review*, Vol. 29, No. 2, June, pp. 85-105

Chung, K. H. and Pruitt, S. W. (1994) "A Simple Approximation of Tobin's Q", *Financial Management*, Vol. 23, No. 3, [online] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=957032

Buyske, G. (2007) Banking on Small Business: Microfinance in Contemporary Russia, Cornell University Press, Ithaca and London

Carlin, W., Van Reenen, J. and Wolfe, T. (1995) "Enterprise Restructuring in Early Transition: the Case Study Evidence from Central and Eastern Europe", *Economics of Transition*, Vol. 3, No. 4, pp. 427-458

Chandrasekhar, C.P. (2005) "Alexander Gerschenkron and Late Industrialisation" in Jomo, K.S. *The Pioneers of Development Economics*, Zed Books Ltd., London

Chen, H., Frank, M.Z. and Wu, O.Q. (2005) "What Actually Happened to the Inventories of American Companies Between 1981 and 2000?", *Management Science*, Vol. 51, No. 7 , July, pp. 1015-1031

Chernykh, L. (2004) "New Evidence on State Control and Corporate Performance in Russia", [online]
http://www.fma.org./Chicago/Papers/State_control_Russia.pdf

Chung, K. H. and Pruitt, S. W. (1994) "A Simple Approximation of Tobin's Q", *Financial Management*, Vol. 23, No. 3, [online]
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=957032

Claessens, S., Djankov, S. and Pohl, G. (1997) "Ownership and Corporate Governance: Evidence from the Czech Republic", *Policy Research Working Paper Series 1737*, The World Bank

Clarke, S. and Kabalina, V. (1995) "Privatisation and the Struggle for Control of the Enterprise", in Lane, D. (ed.) *Russia in Transition: Politics, Privatisation and Inequality* Longman Group UK Limited, Harlow, Essex

Crisp, O. (1953) "Russian Financial Policy and the Gold Standard at the End of the Nineteenth Century", *The Economic History Review*, New Series, Vol. 6, No. 2, pp. 156-172

Crisp, O. (1973) "Review: The Economic History of Pre-Reform Russia", *The Slavonic and East European Review*, Vol. 51, No. 125, October, pp. 582-593

Crisp, O. (1991) "European Industrialisation: Russia" in Sylla, R. and Toniolo, G. (ed) *Patters of European Industrialisation During the Nineteenth Century*, Routledge, London

Daniel, K., Hirshleifer, D. and Subrahmanyam, A. (1998) "Investor Psychology and Security Market Under-and Overreactions", *The Journal of Finance*, Vol. 53, No. 6, December, pp. 1839-1885

Debardeleben, J. (1999) "Attitudes Towards Privatisation in Russia", *Europe-Asia Studies*, Vol. 51, No. 3, May, pp. 447-465

DeFond, M., Hung, M. and Trezevant, R. (2007) "Investor Protection and the Information Content of Annual Earnings Announcements: International Evidence", *Journal of Accounting and Economics*, Vol. 43, No. 1, March, pp.37-67

Diamond, D.W. (1984) "Financial Intermediation and Delegated Monitoring", *Review of Economic Studies*, Vol. 51, No. 3, July, pp. 393-414

Drummond, I.M. (1976) "The Russian Gold Standard, 1897-1914", *The Journal of Economic History*, Vol. 36, No. 3, September, pp. 663-688

Erochkine, V. and Erochkine, P. (2006) Russia's Oil Industry: Current Problems and Future Trends, The Centre for Global Studies, Westminster, London

Evans, D.S. (1987) "The Relationship Between Firm Growth, Size, and Age: Estimates for 100 Manufacturing Industries", *The Journal of Industrial Economics*, Vol. 35, No. 4, June, pp. 567-581

Evans, D.S. (1987) "Tests of Alternative Theories of Firm Growth", *The Journal of Political Economy*, Vol. 95, No. 4, August, pp. 657-674

Falkus, M. (2008) "Aspects of Russian Industrialisation Before the First World War", *Australian Journal of Politics & History*, Vol. 12, No. 3, pp. 330-340, [online] http://www3.interscience.wiley.com/journal/119725182/abstract?CRETRY=1&SRETRY=0

Fama, E.F. and French, K.R. (2005) "Financing Decisions: Who Issues Stock?", *Journal of Financial Economics*, Vol. 76, No. 3, June, pp. 549-582

Filatotchev, I. (2006) "Corporate Governance and Business Strategies" in Jain, S.C. (ed.) *Emerging Economies and Transformation of International Business. Brazil, Russia, India and China*, Edward Elgar, Cheltenham

Gatrell, P.(1994) Government, Industry and Rearmament in Russia, 1900-1914, Cambridge University Press, Cambridge

Gerschenkron, A. (1962) Economic Backwardness in Historical Perspective: A Book of Essays, Harvard University Press, Cambridge, Massachusetts

Geyer, D. (1987) Russian Imperialism: The Interaction of Domestic and Foreign Policy 1860-1914, Berg Publishers Ltd., Leamington Spa

Gidadhubli, R.G. and Kumar, R. S. (1999) "Causes and Consequences of Money Laundering in Russia", *Economic and Political Weekly*, Vol. 34, No. 48, November-December, pp. 3395-3399

Gnezditskaia, A. (2003) "Russian Banks' Profit Strategies: The Evidence from Various Types of Banks", *Communist and Post-Communist Studies*, Vol. 36, No. 2, June, pp. 163-191

Goldman, M.I. (2003) The Piratisation of Russia: Russian Reform Goes Awry, Routledge, London

Gorton, G. and Schmid, F.A. (2000) "Universal Banking and the Performance of German Firms", *Journal of Financial Economics*, Vol. 58, No. 1-2, January, pp.29-80

Gregory, P.R. (1991) "The Role of the State in Promoting Economic Development: The Russian Case and its General Implications" in Sylla, R. and Toniolo, G. (ed) *Patters of European Industrialisation During the Nineteenth Century*, Routledge, London

Harley, C.K. (1991) "Substitution for Prerequisites: Endogenous Institutions and Comparative Economic History" in Sylla, R. and Toniolo, G. (ed) *Patters of European Industrialisation During the Nineteenth Century*, Routledge, London

Hill, F. and Fee, F. (2002) "Fueling the Future: The Prospects for Russian Oil and Gas", *Demokratizatsiya*, Vol. 10, No. 4, Fall, pp. 462-487

Hoffman, D.E. (2002) The Oligarchs: Wealth and Power in the New Russia, Public Affairs, New York

Hoff, K. and Stiglitz, J.E. (2004) "After the Big Bang? Obstacles to the Emergence of the Rule of Law in Post-Communist Societies", *The American Economic Review*, Vol. 94, No. 3, June, pp. 753-763

Jensen, M.C. (1986) "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers", *American Economic Review*, Vol. 76, No. 2, May, pp. 323-329

Joh, S.W. (2003) "Corporate Governance and Firm Profitability: Evidence from Korea Before the Economic Crisis", *Journal of Financial Economics*, Vol. 68, No. 2, May, pp. 287-322

Kern, S., Speyer, B., Kaiser, S. and Walter, N. (2007) "Sovereign Wealth Funds – State Investment on the Rise", Deutsche Bank Research, [online] http://www.dbresearch.com/PROD/CIB_INTERNET_EN-PROD/PROD0000000000215270.pdf

Laeven, L. (2001) "Insider Lending and Bank Ownership: The Case of Russia", *Journal of Comparative Economics*, Vol. 29, No. 2, June, pp. 207-229

Lang, L., Ofek, E. and Stulz, R.M. (1996) "Leverage, Investment, and Firm Growth", *Journal of Financial Economics*, Vol. 40, No. 1, January, pp. 3-29

Locatelli, C. (2006) "The Russian Oil Industry Between Public and Private Governance: Obstacles to International Oil Companies' Investment Strategies", *Energy Policy*, Vol. 34, No. 9, June, pp. 1075-1085

Loughran, T. and Ritter, J.R. (1997) "The Operating Performance of Firms Conducting Seasoned Equity Offerings", *The Journal of Finance*, Vol. 52, No. 5, December, pp. 1823-1850

Machin, S. and Van Reenen, J. (1993) "Margins and the Business Cycle: Evidence from UK Manufacturing Firms", *The Journal of Industrial Economics*, Vol. 41, No. 1, March, pp. 29-50

Miller, M. (1967) The Economic Development of Russia 1905-1914, Routledge, London

McCloskey, D.N. (1991) "Kinks, Tools, Spurts and Substitutes: Gerschenkron's Rhetoric of Relative Backwardness" in Sylla, R. and Toniolo, G. (ed) *Patters of European Industrialisation During the Nineteenth Century*, Routledge, London

Meyendorff, A. and Snyder, E.A. (1997) "Transactional Structures of Bank Privatisation in Central Europe and Russia", *Journal of Comparative Economics*, Vol. 25, No. 1, August, pp. 5-30

Nellis, J. (1999) "Time to Rethink Privatisation in Transition Economies?", *Discussion Paper Number 38, International Finance Corporation*, The World Bank, Washington, D.C.

Peresetsky, A.A., Karminsky, A.M. and Golovan, S.V. (2007) "Russian Banks' Private Deposit Interest Rates and Market Discipline", BOFIT Discussion Paper 2/207, [online]
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1002286

Pistor, K. and Spicer. A. (1997) "Investment Funds in Mass Privatization and Beyond: Evidence from Czech Republic and Russia", in Lieberman, I.W., Nestor, S. and Desai, R.M (ed.) *Between State and Market: Mass Privatization in Transition Economies*, World Bank Publications

Puffer, S.M. and McCarthy, D.J. (2007) "Can Russia's State-Managed, Network Capitalism Be Competitive?: Institutional Pull versus Institutional Push", *Journal of World Business*, Vol. 42, No. 1, March, pp. 1-13

Rajan, R.G. and Zingales, L. (1995) "What Do We Know About Capital Structure: Some Evidence from International Data", *The Journal of Finance*, Vol. 50, No. 5, December, pp. 1421-1460

Rautava, J. (2004) "The Role of Oil Prices and the Real Exchange Rate in Russia's Economy – a Cointegration Approach", *Journal of Comparative Economics*, Vol. 32, No. 2, June, pp. 315-327

Reynolds, D.B. and Kolodziej, M. (2007) "Institutions and the Supply of Oil: A Case Study of Russia", *Energy Policy*, Vol. 35, No. 2, February, pp. 939-949

Rock, C.P. and Solodkov, V. (2001), "Monetary Policies, Banking, and Trust in Changing Institutions: Russia's Transition in the 1990s", *Journal of Economic Issues*, Vol. 35, No. 2, June, pp. 451-458

Ross, C. (2004) Russian Politics Under Putin, Manchester University Press, Manchester

Rutland, P. (2006) "Oil and Politics in Russia", Annual Meeting of the American Political Science Association, Philadelphia, September [online] http://prutland.web.wesleyan.edu/Documents/apsa1.pdf [accessed 2 March 2007]

Salancik, G. R. and Pfeffer, J. (1980) "Effects of Ownership and Performance on Executive Tenure in U.S. Corporations", *The Academy of Management Journal*, Vol. 23, No. 4, December, pp. 653-664

Scharf, S. (2006) Russia and the WTO: Reasons for the Delay in the Accession Process, Lightning Source UK Ltd., Milton Keynes

Schranz, M. (1993) "Takeovers Improve Firm Performance: Evidence from the Banking Industry", *The Journal of Political Economy*, Vol. 101, No. 2, April, pp. 299-326

Smith, S.C., Cin, B.C. and Vodopivec, M. (1997) "Privatization Incidence, Ownership Forms, and Firm Performance: Evidence from Slovenia", *Journal of Comparative Economics*, Vol. 25, No. 2, October, pp. 158-179

Spicer, A. and Pyle, W. (2003) "Institutions and the Vicious Circle of Distrust in the Russian Household Deposit Market 1992-1999", *William Davidson Institute* [online], http://ssrn.com/abstract=577764 [accessed 15 October 2005]

Stiglitz, J.E. (2002) Globalisation and its Discontents, Norton, New York

Sutela, P. (2000) "The Financial Crisis in Russia", in Bisignano, J., Hunter, W.C. and Kaufamn, G.G. (ed) *Global Financial Crises: Lessons from Rrecent Events*, [online] http://books.google.co.uk/books?hl=en&lr=&id=HXiKgFYMF-MC&oi=fnd&pg=PA63&dq=russian+financail+crisis+sutela&ots=XzjZMMNPMb&sig=S5fz9yDk1JKPnDsCXFKYnmH1jdM

Sutela, P. (2005) "Did Putin's Reforms Catapult Russia to Durable Growth?", *BOFIT Online*, No. 6, Bank of Finland, BOFIT, Institute for Economies in Transition, [online] http://www.suomenpankki.fi/NR/rdonlyres/AF5FA8F7-3837-4879-9430-39EF1AD8747A/0/bon0605.pdf

Sylla, R. (1991) "The Role of Banks" in Sylla, R. and Toniolo, G. (ed) *Patters of European Industrialisation During the Nineteenth Century*, Routledge, London

Thomsen, S. and Pedersen, T. (2000) "Ownership Structure and Economic Performance in the Largest European Companies", *Strategic Management Journal*, Vol. 21, No. 6, June, pp. 689-705

Thomson, W. (2002) "The Present and Future of Banking Reform" in D. Lane (ed.) *Russian Banking Evolution, Problems and Prospects*, Edward Elgar, Cheltenham

Tompkins, S.R. (1933) "Witte as Minister of Finance, 1892-1903", *The Slavonic and East European Review*, Vol. 11, No. 33, April, pp. 590-606

Variyam, J.N. and Kraybill, D.S. (1992) "Empirical Evidence on Determinants of Firm Growth", *Economic Letters*, Vol. 38, No. 1, January, pp. 31-36

Willis, H.P. (1897) "Monetary Reform in Russia", *The Journal of Political Economy*, Vol. 5, No. 3, June, pp. 277-315

Wolfe, J. (2003) "The Tobin's Q as a Company Performance Indicator", *Developments in Business Simulation and Experimental Learning*, Vol. 30, [online] http://sbaweb.wayne.edu/~absel/bkl/.%5Cvol30%5C30at.pdf

Wolosky, L.S. (2000) "Putin's Plutocrat Problem", *Foreign Affairs*, Vol. 79, No. 2, March-April, pp. 18-31

Xu, X. and Wang, Y. (1999) "Ownership Structure and Corporate Governance in Chinese Stock Companies", *China Economic Review*, Vol. 10, No. 1, Spring, pp. 75-98

Yudaeva, K., Kozlov, K. Melentieva, N. and Ponomareva, N. (2003) "Does Foreign Ownership Matter?: The Russian Experience", *Economics of Transition*, Vol. 11, No. 3, September, pp. 383-409