

Postcommunist Oligarchs in Russia: Quantitative Analysis

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Abstract

The transition in Russia has not been a revolutionary jump to a market economy and democracy but an incremental process that has so far resulted in a hybrid system aptly called “oligarchic capitalism.” I study the evolution of the first postcommunist oligarchy by examining the careers of the 296 most prominent first-wave postcommunist business tycoons. Forty-three percent of them were insider oligarchs deriving their status from a privileged *nomenklatura* background dating back to the previous regime. The rest were outsider oligarchs with no such background. Compared with insider oligarchs, outsider oligarchs were younger, better educated, and disproportionately Jewish. Their initial business successes tended to happen in sectors neglected in the planned economy, but the overwhelming majority of them subsequently developed their own special relationship with the government. It appears that instead of changing the rules of the socioeconomic game, the new entrants were themselves changed by those rules.

1. Introduction

At least since Alfred Marshall put the famous epigraph *Natura non facit saltum* on the title page of his *Principles of Economics* (Marshall [1870] 1966), economists have realized that institutional change is a continuous and incremental process. The transition from communism to capitalism in the former Soviet Union is a good case in point, since it has been anything but the revolutionary jump from an abstract totalitarian order to a similarly abstract ideal market economy and democracy that was envisaged by the early reformers (Braguinsky and Yavlinsky 2000). In this paper, I study some aspects of the actual transition process from the old social order to a new hybrid system, aptly called “oligarchic capitalism,”

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through systematic empirical analyses of the careers of first-wave postcommunist oligarchs.¹

The study of the actual process of transition from communism to oligarchic capitalism is important if only because it contains valuable lessons about the interaction between economic reform and institutional environment that need to be better incorporated into economic analysis. The communist ideology and the planned economy were widely viewed as the greatest obstacles to normal economic development based on private property and market prices. Once those obstacles were removed, economists saw good reason to predict a smooth transition to a market economy, followed by sustained economic growth (see Roland 2000, p. 3).

Fifteen years after that promise, Russia is still far from a Western-style market economy and even further from a Western-style political democracy. Its most valuable assets and political power are concentrated in the hands of a few privileged (politically connected) owners. A large part of the cold-war rhetoric is back, and, most worryingly, the Russian people who once embraced the new perspective of capitalism and democracy with enthusiasm seem to be disillusioned and retreating into nostalgia and strong nationalistic sentiment. A study that can generate insights into the possible future evolution of this situation and factors that may affect the direction of such an evolution is thus very important from a pragmatic point of view.

While the phenomenon of oligarchic capitalism in Russia has been widely recognized, the debate has continued about the oligarchs themselves and their role, actual as well as potential, in shaping the direction of the transition process. According to one influential view, oligarchs are “crooks, who transferred their skimming talents to the enterprises they acquired, and used their wealth to further corrupt the government and block reforms” (Black, Kraakman, and Tarassova 2002, p. 1731). The opposite view considers them to be representatives of the new entrepreneurial class, the engine of Russian economic revival (Boone and Rodionov 2002). Obviously, the question of which of these two interpretations is closer to the truth has a lot of bearing on whether we can expect the oligarchic capitalism to gradually evolve into a more palatable institutional system and eventually lead to the success of the transition process or whether the economic inefficiencies are going to persist and the slide back into a cold-war-like political confrontation with the West is also likely to continue.

The controversy may at least partly come from the fact that past studies have looked at a very small sample (for example, six oligarchs chosen by Hoffman [2002]) and/or relied mostly on anecdotal evidence. Even the recent more systematic study by Guriev and Rachinsky (2005) covers just 22 of the largest oligarchic groups and for most part presents a snapshot picture. For this paper,

¹ In some recent literature, the term “oligarchs” has been reserved for just a “few tycoons” who acquired large formerly state owned assets at privatization auctions (see, for example, Shleifer and Treisman 2005, pp. 160–61). In this paper, I use this term as a convenient shortcut for any member of the postcommunist business elite.

I have assembled, from a variety of sources, my own data set covering a much larger sample of oligarchs, whose careers I follow for over a decade, with the first postcommunist transition of power from President Boris Yeltsin to President Vladimir Putin in 2000 falling in the middle of my time frame. I can thus employ quantitative methods to study the rise and evolution of the postcommunist oligarchy in its interaction with the fluid institutional environment.

My first insight into the defining characteristics of first-wave postcommunist Russian oligarchs comes from looking into their backgrounds, that is, their pretransition careers and positions held immediately preceding the collapse of the Soviet Union. Ideological garment aside, the salient features of the old Soviet order were its highly politicized and insider-serving property rights system and high discriminatory barriers against outsiders, in particular ethnic Jews. As the communist system gradually decayed following the death of Joseph Stalin, members of the privileged *nomenklatura* class gained more independence in economic decisions and increasingly exploited their positions for personal gain, in particular by teaming up with parallel economy businesses in what became known as the “Soviet Mafia” (Vaksberg 1991). Still, insider political patronage remained the *sine qua non* right until the collapse of the Soviet Union in 1991.² When the showdown between the Soviet government and the populist anticommunist movement led by renegade former party leadership member Yeltsin finally took place in August of that year, a large part of *nomenklatura* rallied behind the populist forces, ensuring their victory. Over the next few years, this opportunistic part of the former privileged class became the first major source of supply into the pool of the oligarchic elite studied in this paper. Since these individuals had the inside track in the race for postcommunist asset ownership, I call them “insider oligarchs.”

The collapse of the Soviet Union also at least temporarily removed many previous discriminatory barriers and opened up opportunities for outsiders. Those who took their chances in the early years of transition while coming from outside the former privileged class faced an intense and often violent war of attrition, but in a few years’ time, the survivors emerged as the second major source of supply into the pool of the oligarchic elite. While many of these individuals were also largely a product of the decaying pretorian communism, the absence of the privileged *nomenklatura* background justifies calling them “outsider oligarchs.”

I find that the differences in backgrounds and sources of initial success between insider and outsider oligarchs were systematically related to differences in basic demographics (such as age and ethnicity), quality of education, and business sectors in which they started their careers (hereafter, start-up sectors). Overall, my findings suggest that outsider oligarchs did indeed, at least initially, possess

² “Wherever the newly-emerging Soviet businessman found support from party and state functionaries, both sides flourished, [while if] separate groups of clever dealers were bold enough to try to operate independently, not sharing with or relying upon the ruling elite, they usually got it in the neck” (Vaksberg 1991, pp. 22–23).

many of the characteristics that could be considered important for representatives of the new entrepreneurial class. However, a vast majority of them subsequently developed their own special relationship with the postcommunist government, making initial differences between them and insider oligarchs to a large degree mute. This is not surprising; as noted by Baumol (1990, p. 894), “[H]ow the entrepreneur acts at a given time and place depends heavily on the rules of the game—the reward structure in the economy—that happens to prevail,” and the salient feature of oligarchic capitalism is that political support is the precondition for exercising effective property rights (Braguinsky and Myerson 2007a; see also Fisman [2001] for the evidence from Indonesia). Thus, the basic structure of incentives from the decaying communist regime was carried over into the transition period and led most outsider oligarchs to adopt rules of the game similar to those under which insider oligarchs had played all along.³

Despite their seemingly successful adaptation to the insider rules of the game, differences between insider and outsider oligarchs can still be observed at the behavioral level. For instance, by examining income-reporting data, I find that outsider oligarchs apparently chose to disclose much less of their actual incomes than did insider oligarchs. Outsider oligarchs were also more likely than insider oligarchs to act as behind-the-scenes owners of their businesses and to seek elected political offices. The latter phenomenon, in particular, can be viewed as evidence of the lack of insider connections that prevent renegeing on preelection promises made by politicians (Gehlbach, Sonin, and Zhuravskaya 2006).

Finally, I look at the factors affecting which oligarchs lost control over their assets (were expropriated) and what happened to them after expropriation (whether they were just sent into retirement or also ostracized, that is, subjected to additional punitive action). The expropriation process of oligarchs in my sample is a continuous one, with its peak occurring between 1998 and 2003. There is a marked difference, however, between the Yeltsin era (before 2000) and the Putin era (after 2000) in terms of factors affecting expropriation and especially ostracism.⁴ Specifically, under Yeltsin, it was mostly insider oligarchs who were expropriated, apparently to allow politically connected outsider oligarchs to take over the prized Soviet-era assets, and ostracisms of expropriated oligarchs were relatively rare. Under Putin, on the other hand, many outsider oligarchs who had a close political relationship with the previous administration lost their positions and were severely ostracized, while a number of insider oligarchs in charge of large state-run companies were sent into retirement to

³ Faccio (2006), looking at listed firms, finds that politically connected firms accounted for 86.75 percent of the Russian stock market capitalization. See also Campos and Giovannoni (2006).

⁴ As explained in Section 2, my sample includes only those oligarchs who had acquired their status before Putin’s ascendance to power.

make way for Putin's own appointees.⁵ While it may seem that the success of outsider oligarchs should have made them more firmly entrenched and harder to overthrow, the actual logic is more complex. Political connections play an all-important role in protecting ownership rights under an oligarchic system, and no matter how rich and powerful an oligarch had become, he or she can lose all his or her assets (and even freedom) overnight after falling out of favor with the powers that be.⁶ It seems that lack of transparency in income reporting is one factor that made outsider oligarchs particularly vulnerable once the new president assumed power. It is also possible, however, that the causality chain is the opposite, namely, that behavioral differences between otherwise similar outsider and insider oligarchs might have at least partly been driven by different perceptions of expropriation risks. There is also evidence that oligarchs of Jewish ethnicity were treated more harshly than other outsider oligarchs under the Putin administration.

The rest of the paper is organized as follows. Section 2 describes the data and methodology. In Section 3, I compare insider and outsider oligarchs in terms of demographics and sources of initial business success, and I examine how they coevolved into a new amalgamated postcommunist oligarchy during Yeltsin's second term in office. In Section 4, I document and interpret behavioral differences between insiders and new members of the amalgamated Yeltsin oligarchy. Section 5 then examines factors affecting the survival of the first-wave postcommunist oligarchs in the wake of the first transition of power after the collapse of communism, while Section 6 takes a closer look at survivors. Section 7 concludes.

2. Data and Methodology

2.1. *The Sample and Sources*

To identify the oligarchs relevant to my sample, I use the rankings of top businesspeople in Russia compiled by various research and news agencies and brought together in the database LABYRINTH (Panorama 2005). The first such ranking coming from a legitimate Russian source was compiled in 1995, and it includes the 20 richest individuals with personal wealth between U.S.\$40 million and U.S.\$150 million. The year 1995 appears to be a reasonable year to start selecting oligarchs for my sample because if a business leader did not survive the immediately preceding period, aptly described as that of the "great mob war"

⁵ I include both owners of privatized businesses and top managers of businesses still formally owned by the state in my sample of oligarchs as long as they qualify according to the criteria discussed in Section 2. Some authors (for example, Guriev and Rachinsky 2005) exclude managers of state-owned firms from the category of oligarchs. My reasons for including them are discussed in more detail in Section 2.

⁶ An independent oligarch's having too much success may be perceived as a threat by the authoritarian system and trigger expropriation. The fate of Mikhail Khodorkovsky, former owner of the largest Russian oil company, now serving a 9-year jail term in Siberia, is the most well known but by no means the only example of this.

(Klebnikov 2000, p. 11), he or she probably has never had a chance to make it into the ranks of the postcommunist oligarchy proper.⁷

Several Russian news agencies and the influential journal *Expert* regularly compiled expert-rated rankings of the top 50 businesspeople in 1996–99. Thirty-six such lists are available from Panorama (2005). For example, the Economic News Agency (AEN) conducted quarterly interviews of 50 experts, asking them to assign ratings between zero and 10 to several hundred nominees using criteria such as the nominee's degree of influence on Russian business and politics, the amount of capital under control, and so on. AEN then averaged those ratings and published the list of the top 50, together with the corresponding mean rating numbers assigned by the experts. The initial cut for my sample consists of all individuals who were included in at least one of the above-mentioned 37 ratings (including the 1995 ranking of the top 20 richest people).⁸

The period 1995–99, which spans the battle for reelecting the first postcommunist president Yeltsin and his second term in office, is widely considered to be the period of emergence and initial consolidation of oligarchic capitalism in Russia. The oligarchic order has been consolidating even further since Putin took office in 2000, but not surprisingly for a system in which ownership rights are still intrinsically linked to political patronage, a lot of new personalities have emerged. Including oligarchs of this second postcommunist cohort ushered in by the new president and his team and comparing them with the first cohort is a fascinating task for future research that is, however, obviously too early to undertake at this point. In particular, the period of observation for the new oligarchic cohort is too short and, even more important, with Putin still in power as I am writing this, serious survival bias cannot be avoided. I thus stop adding new members to my sample after 1999.

Both owners of privatized businesses and top managers of state-owned businesses were included in the experts' rankings in the 1990s, as the experts perceived that there was not much of a difference between those two categories. I also subscribe to this view and include managers and de facto (if not de jure) owners of state-owned firms in my sample of the first-wave postcommunist oligarchic elite.⁹ In the institutional environment of postcommunist Russia, the line separating privatized and state-owned businesses has been blurred at best, and it was especially so during the early years. As the expropriation of the largest private oil company in 2003 demonstrates, privatized businesses could be taken away almost instantaneously. State-owned businesses, on the other hand, formed a

⁷ There were cases in which prominent businesspeople were assassinated or otherwise retired from business during the "great mob war," but the ventures they helped create were carried on by the remaining partners and evolved into oligarchic businesses included in the sample. My sense of the data, however, is that the degree of noise introduced by these omissions is negligible.

⁸ Details of the sample, including a list of the 20 richest people, are available from the author on request.

⁹ In what follows I will occasionally present my results excluding the oligarchs in charge of state-owned businesses to check if the results are affected by their presence (for the most part they are not).

web of private (often offshore) affiliated firms that served as the means of effectively exercising ownership rights (not just in terms of controlling cash flows, but often also in terms of transferring rights to those flows) by their de facto owners. For instance, some of the largest shareholders of the state-owned natural gas monopoly, Gazprom, in the 1990s to early 2000s were politically connected individuals who were not part of the official management team (Faccio 2006).

The number of individual oligarchs included in my sample through the process described above is 176. Subsequent developments have demonstrated, however, that the expert ratings of the 1990s were far from complete. In particular, many of the first-wave oligarchs preferred not to disclose their ownership, to the extent that even experts were not able to identify all or even the most important owners. A variety of more recent sources allow me to identify those owners better than experts could do at the time. For example, it has been revealed only relatively recently that Vitaly Malkin, a permanent fixture in all the 1990s ratings as the oligarch in charge of one of the largest Russian banks, Roskredit, in fact controlled only one-third of the shares, with two-thirds belonging to his senior partner Boris Ivanishvili, who never made it into the expert ratings at the time. In another case, a behind-the-scenes owner of another major bank was revealed in 2002 following an attempt by the bank's chief executive officer (who had been featured in all previous experts' ratings as the oligarch in control of the bank) to sell the bank to another oligarchic group.

In view of this, I amended the 1990s experts' rankings by including individuals who can be identified on the basis of information that has become available more recently as behind-the-scenes owners or at least major partners of the 176 initially selected oligarchs. In addition to examining cases similar to those mentioned above, I also read the biographies of oligarchs in the initial sample and looked at historical compositions of the boards of directors of public companies owned by them. I added 120 more individuals who in my judgment legitimately belong to the same cohort of business leaders as those identified in experts' ratings in the 1990s.¹⁰ Thus, the total number of oligarchs in my sample is 296. I believe that, overall, I have a fairly comprehensive sample of the first cohort of postcommunist business elite.

The main source of biographical information about individual oligarchs and their companies in my sample is LABYRINTH (Panorama 2005). This database contains more than 22,000 biographies, including biographies of all but two of the oligarchs in my sample, and detailed information about 1,470 commercial companies, including most of those relevant to my sample. In cases for which the information in LABYRINTH is too scanty, I complemented it by my own additional research. I also used comprehensive Moscow income and tax databases for 1999–2004 (see Guriev and Rachinsky 2006) to extract information about incomes reported to tax authorities in those years and estimates of personal

¹⁰ The list of names of the additional 120 individuals, along with the relevant explanations, is available from the author on request.

wealth of oligarchs in 2003–6 conducted by Russian experts and published in the magazine *Finans*.

The oligarchs in my sample span a broad range of sectors of economic activity. I employ the following sector classification: (1) finance (banking, investment, insurance), (2) energy (oil, natural gas, coal, utility), (3) metallurgy (including nonferrous metals), (4) telecommunications and engineering (including weapons), (5) consumer goods and services (including retail and wholesale trade, transportation, and construction), and (6) unclassified, composed of oligarchic businesses that defy classification (for example, when the mayor of Moscow is ranked among prominent oligarchs). For the 176 oligarchs who appear in the top-50 rankings, their start-up sector determines the assignment. In some cases, the main focus of the business interests of oligarchs in the sample had shifted considerably over time, but using the classification for the first time they appeared in the rankings allows me to identify the sector of their first major business success. The remaining (nonranked) oligarchs were assigned to the same sectors as their partners who did make the rankings.

2.2. Some Summary Characteristics

The average oligarch in my sample was 42 years old in 1995, with the youngest age 23 and the oldest age 68 (Table 1). Just seven oligarchs were female (2.36 percent), so the population of first-wave postcommunist oligarchs was predominantly male. Individuals of Russian or Slavic (Ukrainian or Belorussian) ethnicity composed 73.12 percent of the sample, while 13.98 percent of oligarchs were of Jewish ethnicity and 12.9 percent were other ethnicities (Georgians, Chechens, Tatars, and so on). These numbers can be compared with the numbers from the 2002 Russian census, according to which the share of Slavic ethnicities in the population of Russia was 82.4 percent, and Jews accounted for about .16 percent of the population.¹¹ The share of Jews in the population of oligarchs is almost 90 times the share in the general population, and, as shown below, this is almost entirely due to the very high share of ethnic Jews in the population of outsider oligarchs.

Table 1 shows that 30 percent of the oligarchs in my sample were born in Moscow and less than a quarter were born in rural areas. Information about parents' background is available for 103 oligarchs: among them, 32 percent were born into families belonging to the former Soviet *nomenklatura*, while an additional 12.6 percent were born to the professorial elite. Still, more than 30 percent managed to become oligarchs despite being born into blue-collar families or even orphaned in childhood.

Formal educational attainment, in contrast, is almost uniformly high. Counting only those who had attended and graduated from college prior to becoming

¹¹ A question in the 2002 census asked respondents to identify their ethnic group. The response rate to this question was 99.0 percent, with 233,439 of 143,705,980 respondents classifying themselves as Jewish.

Table 1
Summary Demographics

Characteristic	Frequency	%
Gender:		
Male	289	97.64
Female	7	2.36
Ethnicity:		
Slavic	204	73.12
Jewish	39	13.98
Other	36	12.90
Place of birth:		
Moscow	71	29.46
Other city	111	36.06
Small town or village	59	24.48
Parents:		
<i>Nomenklatura</i> (civilian and military)	33	32.04
Professors	13	12.62
White collar	26	25.24
Blue collar	25	24.27
Orphaned	6	5.83
Education:		
High school and unknown	16	5.4
College (including some college)	211	71.3
Postgraduate	69	23.3
College:		
Elite	116	39.2
Moscow State University or Institute of Foreign Relations	35	11.8
Professional, Moscow	47	17.3
Professional, province	52	19.1
Other	57	21.0
Education and business related?		
Closely	105	38.2
Somewhat	34	12.4
Not at all	136	49.4

Note. The average age in 1995 was 42.2 years, with a standard deviation of 9.8, a minimum of 23, and a maximum of 68. The total number of oligarchs might be less than 296 because of missing data. Educational attainment is prior to becoming an oligarch.

oligarchs, 280 individuals, or 94.6 percent of my sample, did receive at least some college education (and all but three graduated from the colleges they attended). Several oligarchs had more than one bachelor's degree, and 69 (23.3 percent) had completed postgraduate education.¹²

The qualitative aspect of the oligarchs' educational attainment is also quite impressive. Out of 296 oligarchs, 116, or 39.2 percent, attended elite colleges in

¹² I have excluded degrees obtained by oligarchs after they acquired their business status because of doubts about the merits of such degrees. The practice of buying degrees or simply awarding them to influential people without academic merit has been widespread since the communist era. Inasmuch as some oligarchs seriously studied economics or business management to retool themselves while already working in their oligarchic businesses, Table 1 actually underestimates their true educational attainment.

Moscow and St. Petersburg,¹³ while 35 of them graduated from one of the two most prestigious colleges, Moscow State University (MSU) and the Institute of Foreign Relations (IFR). Ninety-nine graduated from colleges in Moscow and the provinces that offer strong professional education in a particular field, such as oil exploration. Only slightly more than 20 percent graduated from colleges where the quality of education might be suspect.¹⁴

2.3. *Distinguishing Insider and Outsider Oligarchs*

One of the tasks of this paper is to see if the communist-era careers of postcommunist oligarchs had any long-lasting effects on their behavior and evolution. For this purpose, I classify oligarchs into insider and outsider types based on whether or not their rise to prominence in the mid-1990s was related to their careers within the Soviet ruling elite. Three rules were used to determine whether a particular oligarch had an insider track into the postcommunist business elite. The first rule deems an oligarch an insider if he or she had been the top manager or one of the top managers in charge of the main asset that qualified him or her to become a member of my sample prior to the collapse of the Soviet Union in December 1991. These members of the postcommunist business elite have also been called “red directors,” and I retain this appellation for this particular subset of insider oligarchs in my sample. My reading of the oligarchs’ biographies classified 60 individuals into the insider red-director category.

The second rule assigns an oligarch to the insider category if he or she was a prominent politician or a *nomenklatura* functionary before the end of 1991. These include ministers, deputy ministers, and department heads in the former Soviet government; members and staff of the Central Committee of the Communist Party apparatus; regional party and government bosses; managers of the State Bank of the Union of Soviet Socialist Republics (USSR); and military and secret-service top brass who supervised the production and export of military-related goods and equipment. These oligarchs had been in the position to supervise the businesses over which they later gained control, which gave them strong insider connections and influence. An example would be oligarchs in control of the oil company Lukoil, led by Vagit Alekperov, former first deputy minister of the oil and gas industry in the USSR. I also assign to this category elite employees (even if not among the top brass) of the Ministry of Foreign Affairs, Ministry of Foreign Economic Relations, and several Soviet-owned foreign exchange banks because those were also highest level *nomenklatura* appointments giving privileged access to extremely scarce foreign currency assets. The total number of individuals classified as insider oligarchs on the basis of this second rule is 58.

¹³ A list of schools that I deem to be elite is available on request.

¹⁴ “Suspect” college education is assumed if the biography of the oligarch states just “higher education” but does not give the name of the college or any other details. I also include in this category those who attended evening classes in obscure provincial schools.

The third and final rule classifies individuals as members of the insider oligarchy if they are either relatives or long-time colleagues of the oligarchs classified as insiders under the first two rules. Examples include Yelena Baturina, wife of Moscow mayor Yuri Luzhkov, and her brother Victor as well as several junior partners in the Lukoil oil company and the MMK group who were promoted because of long-time relationships with the founding *nomenklatura* partners. There are 14 such individuals in my sample. The total number of oligarchs assigned into the insider category is thus 132.

My examination of the pretransition biographies of the remaining 164 oligarchs reveals that they either had not been in any particularly noticeable position before the onset of transition or had prospered in the late years of the Soviet regime owing not to *nomenklatura* ties but to exceptional personal talent (for example, Svyatoslav Fyodorov, the eye surgeon who founded the Microsurgery of the Eye Institute, or the popular fashion designer Anatoly Klimin). Even though many of these oligarchs (especially those who were particularly successful) subsequently bolstered their careers by close relationships with insider oligarchs and political ties to the postcommunist government, I classify them as outsider oligarchs when those relationships cannot be traced to their pretransition *nomenklatura* careers. The category of outsider oligarchs also includes reformist politicians turned oligarchs (for example, Anatoly Chubais, the architect of Russian privatization who later became chairman of the largest utility monopoly in Russia) and oligarchs whose primary source of power was organized crime.

3. The Postcommunist Oligarchy: Origins and Consolidation

3.1. *New Players and New Businesses*

As the postcommunist oligarchy emerged in the second half of the 1990s, many outsider oligarchs joined the ranks of insider oligarchs (and often surpassed them) in establishing a “special relationship” with the state. Still, even in those cases, there is often a distinction between sources of initial business success and subsequent methods used to further expand and diversify oligarchic businesses. In this section, I concentrate on the former part of the story.

Table 2 presents the breakdown of insider and outsider oligarchs’ start-up sectors. Almost half the outsider oligarchs made their first fortunes in finance and banking. While the same is also true of 31 percent of insider oligarchs, the big difference is that outsider oligarchs established their own banks and/or investment companies, while insider oligarchs often simply continued to preside over privatized former state-owned banks that they had controlled since the Soviet era.¹⁵ The share of outsider oligarchs who made their initial fortunes in

¹⁵ Notable exceptions are Oneximbank, the National Reserve Bank, and Bank Imperial, new banks that, however, were initially established using privileged access to foreign currency assets by members of the *nomenklatura*. None of my results would change qualitatively if I reclassified the few insider oligarchs who established new businesses as outsider oligarchs.

Table 2
Insider versus Outsider Oligarchs: Demographics and Sectors of First Business Success

	Insiders	Outsiders	Red-Director Insider	Jewish Outsider
Average age in 1995	47.8	37.7**	50.1**	38.4
Demographics (%):				
Slavic	84.7	63.9**	82.5	. . .
Jewish	2.4	23.2**	1.8	100
Other	12.9	12.9	15.8	. . .
Born in Moscow	21.2	36.7**	5.8**	40.0
Born in other city	65.5	84.4**	48.1**	96.7**
Elite college graduate	30.3	46.3**	11.7**	33.3*
Moscow State University or Institute of Foreign Relations	6.1	16.5**	3.3	8.3 ⁺
Education and business related? (%):				
Closely	60.8	19.3**	80.7**	14.3
Somewhat	12.8	12.0	10.5	5.7 ⁺
Not at all	26.4	68.7**	8.8**	80.0 ⁺
Sector (%):				
Finance	31.06	48.78**	18.33**	50.00
Energy	31.06	14.02**	46.67**	25 ⁺
Metallurgy	10.61	10.37	13.33	5.56
Telecommunications and engineering	17.42	3.66**	15.0	2.78
Consumer goods and services	4.55	17.07**	5.0	11.11
Unclassified	5.30	6.10	1.67 ⁺	5.56

Note. The full sample of outsider oligarchs is compared with insider oligarchs (second column), insider oligarchs who are red directors are compared with those who are not red directors (third column), and outsider oligarchs of Jewish ethnicity are compared with all other outsider oligarchs (fourth column).

⁺ Statistically significant at the 10% level (two-sample *t*-test with unequal variances).

^{*} Statistically significant at the 5% level (two-sample *t*-test with unequal variances).

^{**} Statistically significant at the 1% level (two-sample *t*-test with unequal variances).

the consumer goods and services sector is more than three times higher than the corresponding share among insider oligarchs (with the difference statistically significant at the 1 percent level). Market-oriented businesses in commercial banking, investment, and consumer goods and services had of course been conspicuous by their absence in the former Soviet Union. Thus, almost two-thirds of outsider oligarchs first qualified for their status through new businesses in new market-oriented sectors. In contrast, nearly half of insider oligarchs derived their status from control over Russia's natural resources, such as oil, gas, utilities, and ferrous and nonferrous metallurgy. In addition, 13 out of 23 insider oligarchs in the engineering sector either represented the old Soviet weapons industry or were red directors presiding over state and/or regional telephone monopolies that did not create any new businesses. Thus, with some exceptions noted above, oligarchs whose status in the new Russian capitalism was derived from their status under the previous regime contributed very little to setting up new businesses and expanding the scope of the market economy in Russia.

Not surprisingly, the role of business pioneers required a different type of human capital than had been demanded by the *nomenklatura* system. Demographic data (Table 2) show that an average outsider oligarch was more than 10

years younger than an average insider oligarch and more than 12 years younger than an average red director. Outsider oligarchs were also almost twice as likely as insider oligarchs and six times as likely as red directors to have been born in Moscow. In terms of quality of education, outsider oligarchs were 50 percent more likely than insider oligarchs in general and 3.5 times more likely than red directors in particular to be graduates of elite colleges, and the gap in the share of graduates of two of the most prestigious colleges is even higher. All these differences are statistically significant at 1 percent level. The data on family backgrounds are more limited, but for those whose family background is known, one or both parents of 16 percent of outsider oligarchs were college professors, while this was true for only 6 percent of insider oligarchs.

But probably the most striking feature revealed in Table 2 is that 23.2 percent of outsider oligarchs were of Jewish ethnicity, while just 2.4 percent of insider oligarchs were Jewish (1.7 percent among red directors). We can think of the collapse of communism as a natural experiment that (at least temporarily) destroyed the mechanism of *nomenklatura*-determined selection of business elite. Thus, the sharp increase in the share of Jews after the collapse of the Soviet regime is consistent with the presence of widespread discrimination against Jews in the Soviet Union and with the literature on discrimination (see, for example, Brenner 1983).¹⁶ In contrast, relative shares of other non-Slavic ethnicities (such as Tatars, Chechens, and Armenians) are quite similar between insider and outsider oligarchs.

Table 2 also shows that outsider oligarchs of Jewish ethnicity are significantly less likely to have graduated from elite colleges, especially from MSU and the IFR, than are outsider oligarchs overall. But rather than point to lower human capital, this instead presents another piece of evidence of discrimination against Jews, not just in *nomenklatura* jobs but also in the admission policies of elite colleges, especially the top two.¹⁷ In the light of this, the fact that the share of graduates of elite colleges among Jewish oligarchs is still higher than the corresponding share among insider oligarchs is perhaps a strong indication that their human capital was rather high (also, 25 percent of Jewish oligarchs for whom I have family background data were born to professorial families).

Finally, it is interesting to note the difference in the relationship between the oligarchs' fields of education and main businesses. The Soviet educational system

¹⁶ In an ironic twist of history, there was an even more disproportionate share of ethnic Jews in the early communist leadership (which replaced the officially anti-Semitic tsarist rule early in the twentieth century). Three out of five members of the first Politburo elected after the Bolsheviks came to power in 1917 were of Jewish ethnicity, and the share of ethnic Jews in the Soviet leadership overall was extremely high at least until the 1930s.

¹⁷ Mikhail Fridman, one of the most prominent outsider oligarchs in my sample, claimed in an interview that he could not get admitted to the elite Moscow Institute of Physics and Technology because of his Jewish ethnicity (Svinarenko 2000, pp. 304–5). While I could not independently verify his story, it was indeed much more difficult (although not entirely impossible) for Jews to gain admittance to elite colleges during the Soviet era. Part of the reason seems to be that Soviet Jews were the only category of former Soviet citizens with at least a theoretical right to apply to emigrate.

placed emphasis on technical and engineering skills (in professional colleges) or, in elite colleges, on fundamental natural sciences and/or basic humanitarian education (heavily indoctrinated by Marxism-Leninism, of course). But nowhere (not even in economic or so-called management departments) did the system provide even the most basic education in economics, business, or market-oriented management. Thus, for those starting new businesses in postcommunist Russia, high-level education was perhaps useful in terms of general human capital acquisition but not for any practical purposes. In line with this, 68.7 percent of outsider oligarchs work in businesses that have nothing to do with their education (for example, a graduate of a performing arts college founding and owning a major commercial bank), and this share is even higher (80 percent) for outsider oligarchs of Jewish ethnicity. In contrast, 60.8 percent of insider oligarchs (and over 80 percent of red directors) control businesses in industries closely related to their education (for example, graduates of oil and gas engineering colleges managing oil- and gas-related businesses). This is another indicator showing that insider oligarchs were mostly old-type professional managers of the Soviet era, while outsider oligarchs were recruited from those who had high levels of intelligence deployable in new directions on short notice.

3.2. Emergence of the Postcommunist Oligarchy

The fact that the postcommunist newcomers to the business elite came from a background unrelated to the previous regime and possessed high-level human capital and entrepreneurial talent seems to be consistent with the hopes widely expressed at the time that privatization would be “a giant step toward efficient ownership” by fostering the emergence of new owners and promoting the restructuring of old and inefficient Soviet enterprises (Boycko, Shleifer, and Vishny 1995, p. 8).¹⁸ The reality, however, turned out to be rather different.

The Soviet ownership system had been administered on the basis of the relationship of political patronage, and while the collapse of the communist regime opened up opportunities for outsiders to start their own independent businesses, the privatization of former state-owned enterprises did not separate them effectively from the government and did not create transparent market-oriented ownership rights. Political uncertainty and a fluid institutional environment gave both insider and outsider oligarchs a similar incentive structure that induced them to favor asset stripping over long-term investment (Campos and Giovannoni 2006; Braguinsky and Myerson 2007b). There was a marked difference between the two groups, however, in that the newcomers possessed financial wealth but had few or no physical productive assets under their control, while insider oligarchs had effective control over productive assets, especially in the most lucrative primary-resource sector.

Oligarchic property rights emerge in “a political-economic equilibrium where certain kinds of property are protected only for a limited group of people who

¹⁸ For an early articulation of the dissenting view, see Yavlinsky and Braguinsky (1994).

have privileged relationships with local political leaders” (Braguinsky and Myerson 2007a, p. 677). In the first postcommunist years, this exclusive club of privileged owners consisted mainly of oligarchs I classify as insiders who belonged to it by virtue of their past political ties coming from a *nomenklatura* background. But the new Russian Constitution of 1993 gave the president sweeping powers (in particular, the power to rule by decree). From that point on, establishing privileged relationships with the president and his inner circle became the single most important factor in gaining and protecting ownership rights over the economy’s assets.

The biggest chance to establish such relationships came in the mid-1990s, on the verge of the first presidential election after the collapse of communism. In late 1995 to early 1996, Yeltsin’s popularity was at a historic low, and the Communist Party seemed to have a real chance of regaining power. Desperate to secure reelection, Yeltsin and his inner circle turned for help to the business elite. In response, the would-be oligarchs orchestrated an extremely well funded campaign to influence Russia’s media and through it the public’s opinion. Re-elected to a second term, Yeltsin then rewarded them by a large-scale asset reallocation in their favor, punctuated by a number of high-level political appointments. The resulting story of the emergence and consolidation of the new oligarchic system during Yeltsin’s second term in office (1996–99) has been told through anecdotal evidence by many sources (see, for example, Klebnikov 2000; Black, Kraakman, and Tarassova 2002). In the next section I will present some evidence that captures this process quantitatively.¹⁹

To identify those who took advantage of the big chance provided by Yeltsin’s reelection campaign, I matched the names of oligarchs in my sample to the lists of individuals commended by Yeltsin for their contributions to his 1996 reelection campaign.²⁰ The names of 47 oligarchs in my sample can be found in those lists. I also consider oligarchs to have potentially benefited from a special relationship with the president and his administration if they were senior partners or relatives of oligarchs who were commended by Yeltsin (for example, Yelena Baturina, wife of Moscow mayor Yuri Luzhkov, who was commended by Yeltsin) and if they were Yeltsin’s own relatives (for example, Valery Okulov, chairman of Aeroflot–Russian Airlines and Yeltsin’s son-in-law). The total number of oligarchs classified as the most active political supporters of Yeltsin using these criteria is 78.²¹

¹⁹ Descriptions of some of the anecdotes are available from the author on request.

²⁰ Shortly after being reelected, Yeltsin signed eight presidential orders (Nos. 358-pn [July 9, 1996], 360-pn and 361-pn [July 11, 1996], 365-pn and 366-pn [July 17, 1996], 396-pn [July 25, 1996], 408-pn [August 1, 1996], and 418-pn [August 12, 1996]) commending a total of 553 individuals for active participation in the reelection campaign. For the full texts of the orders (in Russian), see the official Web site of the President of the Russian Federation (<http://kremlin.ru>).

²¹ The list of names is available from the author on request.

3.3. *Old and New Political Ties as Factors of Success in the Yeltsin-Era Oligarchy*

The storyline outlined in the previous two sections can be summarized in the following two hypotheses:

Hypothesis 1. The higher human capital of new oligarchs with outsider backgrounds (and perhaps the natural depreciation of the importance of political ties inherited from the previous regime) should lead to the increased relative economic success of outsider oligarchs as compared with insider oligarchs over time.

Hypothesis 2. Forging new privileged relationships of political support with Yeltsin and his administration should be an even more important factor in determining the relative success of an oligarchic owner.

The natural measure of success of the postcommunist business elite is the amount of amassed wealth. Unfortunately, more or less reliable estimates of personal wealth for a large enough number of postcommunist oligarchs became available only starting from 2003. Not only is that 3 years after the transition of power from Yeltsin to Putin, but more important, the cumulative attrition rate of oligarchs in my sample at the start of 2003 is already almost 45 percent. I thus use experts' ratings, the only measure of success that is available in the second half of the 1990s on a systematic basis.

When constructing my sample, I initially picked 176 oligarchs included at least once in experts' ratings of the top 50 businesspeople in Russia in 1995–99. Six of them can be found only in the earliest list, 1995, which does not include numerical scores of relative influence assigned by experts. For the remaining 170 oligarchs (89 of them outsiders and 81 insiders), I have measures of their influence from expert polling conducted regularly in 1996–99 and coming from 36 different panels (nine in 1996, 13 in 1997, 10 in 1998, and four in 1999). While not all of the 1990s experts' ratings may have been completely accurate as measures of the true importance of individual oligarchs, overall they give a reasonably good proxy for such importance. Hence, in this section I limit my attention to the 170 oligarchs for whom I have experts' influence ratings, and I employ regression analysis to quantify how these ratings depended on oligarchs' outsider or insider background and political ties to Yeltsin.²²

Since the exact date (within a year) on which each expert polling was conducted is not always known, I averaged ratings from panels from the same year and constructed four yearly unbalanced panels consisting of 389 observations on 170 oligarchs in the sample (83, 101, 120, and 85 observations, respectively, for the

²² Various ratings used different numerical scales to measure oligarchs' influence (from 5 points to 11 points). For the purposes of my regression analysis, I have converted all of them to the 10-point scale.

Table 3
Regression Analysis of Influence

Dummy Variable	Full Sample (1)	Nonstate Sector (2)
Outsider	-.027 (.048)	-.049 (.049)
Outsider × year:		
1997	.091** (.039)	.110** (.040)
1998	.098 ⁺ (.055)	.127* (.058)
1999	.035 (.056)	.071 (.062)
Yeltsin supporter	.228** (.045)	.232** (.047)
Yeltsin supporter × year:		
1997	-.053 (.038)	-.051 (.040)
1998	-.134* (.053)	-.159** (.053)
1999	-.110 ⁺ (.057)	-.128* (.064)
<i>N</i> (clusters)	389 (170)	318 (135)
<i>R</i> ²	.207	.181

Note. The dependent variable is the natural logarithm of experts' influence ratings converted to the same 0–10 scale from 36 unbalanced panels in 1996–99 and averaged for panels in the same year. The estimation method is pooled ordinary least squares with clustered robust standard errors (in parentheses). The correlation between the outsider and Yeltsin supporter dummies is .0229. Both regressions include year and sector dummies.

⁺ Statistically significant at the 10% level.

* Statistically significant at the 5% level.

** Statistically significant at the 1% level.

years 1996, 1997, 1998, and 1999). I then implemented regression analyses in the following specification:

$$\ln I_{it} = \theta_1 + \sum_{j=2}^4 \theta_j d_{jt} + \gamma_1 b_i + \sum_{j=2}^4 \gamma_j b_j d_{jt} + \delta_1 p_i + \sum_{j=2}^4 \delta_j p_j d_{jt} + \mathbf{s}_i \mathbf{d} + v_{it} \quad (1)$$

where I_{it} is the (average) influence rating of oligarch i in year t , d_{jt} are year dummies (with 1996 as the base year), b_i is the background dummy of oligarch i (equal to one if outsider and zero otherwise), p_i is the Yeltsin supporter dummy (equal to one if oligarch i is classified as one of the most active Yeltsin supporters and zero otherwise), \mathbf{d} is the vector of sector dummies, and v_{it} is the composite error term.

Table 3 presents the estimation results using pooled ordinary least squares (OLS) with clustered robust standard errors.²³ In column 1, I present coefficients for outsider background and Yeltsin supporter dummies (and their interactions with year dummies) for the full sample, while in column 2 I present the same coefficients from regressions that exclude oligarchs in charge of state-owned firms. The results are similar but more strongly pronounced when only non-state-sector oligarchs are left in the sample.

²³ Cross-sectional time-series feasible generalized least squares regressions with heteroskedastic panels and random-effects generalized least squares panel regressions with unobserved heterogeneity produce qualitatively very similar results, while the Hausman test strongly rejects the hypothesis that coefficients in fixed-effects and random-effects regressions are systematically different.

The estimations basically support the two hypotheses. Outsider oligarchs start in 1996 with influence ratings that are somewhat lower than those of insider oligarchs (although the coefficient is not statistically significant), but in 1997 and 1998 their average influence ratings are estimated to be 9–13 percent higher than those of insider oligarchs. I will demonstrate (see Section 5) that during this period insider oligarchs were also more likely to lose their assets (be expropriated) than were outsider oligarchs. Thus, I can say that there is at least some partial evidence that new members of the business elite were gaining ground over the old *nomenklatura* elite during Yeltsin's second term in office.

At the same time, estimations show that the impact of close ties to the president and his inner circle was much stronger. Being an active Yeltsin supporter increased the average influence of oligarchs, both outsiders and insiders, by about 23 percent in the base year and by a similar magnitude in 1997.²⁴ Perhaps even more tellingly, quantile regressions (not shown) indicate that the marginal effect of being a Yeltsin supporter was more pronounced at higher percentiles than at lower percentiles (for example, the baseline coefficient on the Yeltsin supporter dummy is .300 in the .75 quantile regression, statistically significant at the .1 percent level, while the same coefficient is estimated at just half that, at .147 in the .25 quantile regression, statistically significant at only the 5 percent level). This is, of course, what is to be expected in an oligarchic system in which economic and political powers are closely intermingled.

The estimation results also indicate that the magnitude of the impact of being an active Yeltsin supporter declined by 50–60 percent in 1998–99 as compared with 1996–97. The increase in the influence of outsider oligarchs relative to insider oligarchs also appears to have stopped or even reversed in 1999. In the wake of the financial meltdown of 1998, Yeltsin had to appoint former Communist Party Politburo member Evgeny Primakov as the new prime minister, and Primakov tried to rein in some of the most prominent outsider oligarchs.²⁵ In addition, most expropriations in the Yeltsin era were of insider oligarchs (see Section 5), and these higher expropriation rates contributed to the survival of the most influential (and most adaptable) among them, as those expropriated also had relatively lower influence ratings.

4. Old and New Political Ties: Impact on Behavior

4.1. Transparency in Income Reporting

In recent years, economists have been paying increasing attention to the role of cultural environment and social interaction in shaping some fundamental

²⁴ Among the 61 oligarchs who were Yeltsin supporters and also rated by experts, 27 are insider oligarchs and 34 are outsider oligarchs. The correlation between the outsider and Yeltsin supporter dummies is .02.

²⁵ In early 1999, the Russian media circulated the so-called Primakov list of potential criminal cases to be brought against many prominent oligarchs, including almost all rated oligarchs in my sample. Although the list appears to be a hoax, it was an ominous sign for many of those mentioned in it.

aspects of human behavior (Bowles 1998). In particular, it has been shown in experiments that individuals coming from different backgrounds or having been exposed to different kinds of experience or information might exhibit systematically different reactions in response to identical situations (Rabin 1998). Evidence of such differences in behavior in nonexperimental settings, however, is much more difficult to obtain and even more difficult to quantify. My data give me an opportunity to do so.

As my analysis of experts' influence ratings in the previous section showed, by the second half of the 1990s, outsider oligarchs, especially those who enlisted themselves as Yeltsin's active supporters, had by and large succeeded in becoming equal or even more influential members of the new ruling class than insider oligarchs who had belonged to this class since the Soviet era. While I do not have systematic data on the oligarchs' personal wealth until 2003, there is no reason to believe that in the late 1990s outsider oligarchs' personal wealth, and in particular the wealth of those who became supporters of Yeltsin, was significantly lower than that of insider oligarchs. Indeed, when in 1997 the *Forbes* list of richest people included six Russian oligarchs for the first time, three of them were outsider oligarchs, including the top two richest individuals with combined wealth estimated at 60 percent of the total for all six (all six were Yeltsin supporters).

In this section, I utilize Moscow income databases for 1999 and 2000 (see Guriev and Rachinsky [2006] for a discussion of these) to see if I can find systematic differences in income reporting between outsider and insider oligarchs and between those who were Yeltsin supporters and those who stayed away from presidential politics.²⁶

Table 4 presents summary statistics with rubles converted to U.S. dollars using the average market exchange rate for the corresponding year. Since some oligarchs in good status in one year will have lost it in a subsequent year, I include only entries for oligarchs not expropriated and not retired at the beginning of each year. I exclude observations for oligarchs whose main businesses and sources of income were outside Moscow, since the databases cover only incomes generated in the capital city. The total number of observations in Table 4 is thus 338, 176 pertaining to 1999 and 162 pertaining to 2000.

The average annual income reported by oligarchs in my sample in 1999 was \$397,179, while in 2000 it was \$343,687. Thirty-three oligarchs reported more than \$500,000 in income in 1999, 15 reported more than \$1 million, and three reported more than \$5 million. For 2000, the corresponding numbers of oligarchs are 22, nine, and one. At the same time, many reported incomes were very modest; for example, an owner of the largest oil company reported receiving

²⁶ The 1999 database is the earliest one available. I do not use the 2001 and 2002 databases because they are available in a slightly different format that makes it difficult to distinguish between gross and net incomes from securities transactions. The 2003 and 2004 databases allow me to make this distinction, so I employ them in Section 6 to see what changes (if any) had occurred between 1999–2000 and 2003–4.

Table 4
Oligarchs' Reported Incomes: Sum of Monthly Net Reported Incomes (\$U.S.)

	N	Mean	SD	Min	Max	Coefficient of Variation
1999	176	397,179	1,342,254	1	11,400,000	3.38
Outsider	101	173,134	514,251	1	4,435,760	2.97
Outsider and Yeltsin supporter	33	60,079	112,600	77	481,137	1.87
Insider	75	698,892	1,934,557	2,165	11,400,000	2.77
Excluding two insider outliers:						
Insider	73	409,697	816,256	2,165	5,252,558	1.99
Insider and Yeltsin supporter	22	490,350	1,126,893	3,677	5,252,558	2.30
2000	162	343,687	1,142,808	46	12,300,000	3.33
Outsider	97	156,358	293,609	46	2,052,418	1.88
Outsider and Yeltsin supporter	28	112,972	210,020	741	933,349	1.86
Insider	65	623,238	1,738,840	3,196	12,300,000	2.79
Excluding one insider outlier:						
Insider	64	440,325	928,602	3,196	4,812,616	2.11
Insider and Yeltsin supporter	19	434,867	1,083,399	6,663	4,812,616	2.49

Note. Oligarchs with main sources of income outside Moscow and oligarchs who had already been expropriated by the end of the previous year are excluded. Incomes include those of family members: while the difference in averages is not very large, in a few cases including family members' income from the same oligarchic business sources seems to be important to get the correct overall picture.

just \$1,220 from his company for all of 1999 (he was since convicted in Russian court of concealing roughly \$4.5 million in personal income in that year). While some variance can be expected in any kind of business incomes, true income is clearly being underreported in cases like this.

Table 4 also reveals that incomes reported by insider oligarchs were on average about four times higher in both years than incomes reported by outsider oligarchs (despite very high standard errors, this difference is statistically significant at the 1 percent level using a two-sided *t*-test with unequal variance). Even excluding the outliers, who reported more than \$10 million of taxable income from selling securities (two such outliers in 1999 and one in 2000), insider oligarchs reported on average incomes almost three times higher than those of outsider oligarchs.

Differences in each group between active Yeltsin supporters and those who did not participate in his reelection are also interesting. Over the 2 years, there is no statistically significant difference between average incomes reported by active Yeltsin supporters who are insider oligarchs and other insider oligarchs. But average incomes reported by outsider oligarchs who were active Yeltsin supporters are on average lower than incomes reported by other outsider oligarchs (the difference is significant at the 5 percent level). Thus, it appears that outsider oligarchs who created new privileged relationships with the president were even less inclined than other outsider oligarchs to report their true incomes.

To test these differences more formally, I employ regressions analysis. I want to see the effect of outsider or insider background as well as the effect of being an active Yeltsin supporter on reported income, while controlling for a number

Table 5
Regression Analysis of Oligarchs' Reported Incomes

Variable	Full Sample	Nonstate Sector	Influence-Rated Oligarchs	
			Estimated Using Equation (2)	Estimated Using Equation (3)
Outsider	-.794* (.395)	-1.219** (.475)	.019 (.570)	1.578 (1.104)
Yeltsin supporter	.781+ (.452)	.491 (.634)	1.091+ (.664)	.356 (.529)
Outsider × Yeltsin supporter	-1.634** (.630)	-1.407+ (.776)	-2.431** (.899)	-1.713* (.752)
Log of total influence	. . .	. . .	. . .	.920** (.1935)
Log of total influence × outsider	. . .	. . .	. . .	-.463+ (.280)
N (clusters)	306 (156)	241 (123)	161 (82)	161 (82)
Adjusted R ²	.160	.155	.186	.319
Outsider:				
Yeltsin supporter	-.812+ (.434)	-.755 (.484)	-1.085+ (.600)	-1.023+ (.584)
Log of total influence	. . .	. . .	. . .	.635** (.211)
N (clusters)	184 (95)	163 (84)	93 (48)	93 (48)
Adjusted R ²	.092	.085	.160	.254
Insider:				
Yeltsin supporter	.817+ (.475)	.576 (.760)	1.649* (.806)	.920 (.588)
Log of total influence	. . .	. . .	. . .	.903** (.297)
N (clusters)	122 (61)	78 (39)	68 (34)	68 (34)
Adjusted R ²	.135	-.020	.133	.392

Note. Values are coefficients on the corresponding variables in equation (2) estimated by pooled ordinary least squares with clustered robust standard errors in parentheses. Oligarchs with main sources of income outside Moscow and those already expropriated or retired by the end of 1999 have been excluded. The correlation between being a Yeltsin supporter and total influence in the subsample of rated oligarchs is .33, and the corresponding variables are jointly significant at the 1% level in all coefficients in the last column. All regressions include demographic, sector, and year dummies.

+ Statistically significant at the 10% level.

* Statistically significant at the 5% level.

** Statistically significant at the 1% level.

of observable characteristics, including demographics and business sectors. I thus adopt the following specification:

$$\ln y_{it} = \theta_1 + \theta_2 d_{2t} + \gamma b_i + \delta p_i + \mu b_i p_i + s_{it} \mathbf{d} + v_{it} \quad (2)$$

where y_{it} is the income reported by oligarch i in year t ($t = 1999, 2000$), d_{2t} is the year 2000 dummy, b_i and p_i are the background dummy and the Yeltsin supporter dummy as defined in equation (1), \mathbf{d} is the vector of demographics (age, gender, and ethnicity) as well as ownership type and sector dummies, and v_{it} is a composite error term.

The first two columns in Table 5 report the coefficients on the outsider back-

ground dummy, Yeltsin supporter dummy, and the interaction of these terms in equation (2) for the full sample and excluding oligarchs in charge of state-owned businesses. The estimation method is pooled OLS with clustered robust standard errors, but panel data methods yield very similar results. The coefficient on the outsider dummy is strongly negative, and its magnitude implies that incomes reported by outsider oligarchs were on average about 55 percent lower than those reported by insider oligarchs (70 percent if only oligarchs in the nonstate sector are included). The impact of having participated in Yeltsin's reelection campaign is even more interesting—while for insider oligarchs the impact is positive and results in reported incomes that are about 20 percent higher than those of their peers who were not among the most active Yeltsin supporters, the situation is completely the opposite with regard to outsider oligarchs. When the coefficients on the outsider dummy and the interaction with the Yeltsin supporter dummy (which are both highly significant) are added together, the estimates imply that outsider oligarchs who were active Yeltsin supporters reported about 90 percent less income than insider oligarchs who were not active Yeltsin supporters. These results can be further confirmed by my estimates of the effects of being an active Yeltsin supporter conducted separately for outsider and insider oligarchs: the effect of being an active Yeltsin supporter has diametrically opposite effects of almost equal magnitude on reported incomes of outsider and insider oligarchs.

Of course, I do not have data on oligarchs' actual incomes, so it is not clear to what extent the estimation results reflect differences in the transparency of income reporting as opposed to differences in actual incomes. Since, however, one of the criteria considered by experts when rating oligarchs was their assessment of oligarchs' personal wealth, and since, more generally, actual incomes can be expected to be positively correlated with the success of the oligarchic business, I can try to at least partly control for true incomes by utilizing influence-ratings data. In the last two columns of Table 5, I present estimation results that include an oligarch's (log of) total influence as an additional control.²⁷ More specifically, I estimate the following regression for the subsample of oligarchs who were rated by experts in 1996–99:

$$\ln y_{it} = \theta_1 + \theta_2 d_{2i} + \gamma b_i + \delta_1 p_i + \mu_1 b_i p_i + \delta_2 \ln I_i + \mu_2 b_i \ln I_i + s_i \mathbf{d} + v_{it}. \quad (3)$$

Here $\ln I_i$ is the log of oligarch i 's total influence, and the regression includes its interaction term with the outsider background dummy (I also tried including the interaction of $\ln I_i$ with the Yeltsin supporter dummy, but the coefficient was zero).

In the third column of Table 5 I first present the results of reestimating equation (2) using only the subsample of oligarchs for whom I have experts' influence

²⁷ Total influence is defined as the sum of experts' influence ratings from all panels in 1996–99. It increases with the number of panels that include a given oligarch and also with his or her ratings in each panel.

ratings in 1996–99. The outsider dummy is no longer statistically significant, but the combined effect with the Yeltsin supporter dummy is even larger than before. This is further confirmed by the separate estimates for outsider and insider oligarchs.

The last column of Table 5 presents estimated coefficients from equation (3). Including influence ratings as a proxy for actual rather than reported incomes does not affect the sign of the coefficient on the interaction term between outsider background and Yeltsin supporter dummies, and the magnitude remains high. The influence variable has a positive and highly significant effect on reported incomes, with the elasticity being close to one, which suggests that influence ratings might indeed be used as a reasonable proxy for actual incomes received by oligarchs. Note, however, that the elasticity of log reported income with respect to influence interacted with the outsider background dummy is negative, and its magnitude is large. When the estimates are conducted separately for outsider and insider oligarchs, the elasticity of reported incomes with respect to influence for insider oligarchs is .903, while it is much lower, .635, for outsider oligarchs.

Overall, the evidence presented here seems to indicate that (1) outsider background had a strong independent negative effect on the transparency of income reporting in the full sample of oligarchs (or, alternatively, that belonging to the former *nomenklatura* class had a strong positive effect on such transparency) and (2) having established a privileged relationship with the president and his inner circle had an additional strong negative effect on the transparency of income reporting by outsider oligarchs, even when controlling for experts' ratings of the importance of the oligarch in the hierarchy.

Past studies have presented anecdotal evidence to the effect that oligarchs who were among the most active supporters of Yeltsin often performed worse than other oligarchs in terms of their respect for the rule of law and the transparency of the market game (as, for example, manifested in loans-for-shares fraud; see Guriev and Rachinsky 2005). My findings support this view by highlighting differences in income reporting. In addition, it was mostly outsider oligarchs among Yeltsin supporters for whom such behavior was especially rampant. Insider oligarchs, who had been part of the country's establishment since the Soviet era, even those among them who were active political supporters of Yeltsin, reported their incomes much more transparently.²⁸

4.2. Visibility and Political Activity

There is more evidence to suggest that, despite convergence in influence and ownership of most valuable assets, outsider oligarchs continued to exhibit systematically different patterns of behavior as compared with insider oligarchs.

²⁸ It might be that, in the perceptions of insider oligarchs, supporting Yeltsin and paying income taxes are important obligations that come with their continued status as members of the establishment. In contrast, outsider oligarchs may view political contributions as payments in lieu of taxes. Exploring these behavioral differences further is a fascinating task for future research.

Table 6
Characteristics of Rated and Nonrated Oligarchs

Variable	Rated	Nonrated Senior	Nonrated Junior
Age in 1995	43.9	39.8**	40.0**
Outsider	.52	.70*	.54
Jewish	.13	.23 ⁺	.11
Other ethnicity	.10	.18	.15
Elite college graduate	.42	.30 ⁺	.39
Born in Moscow	.32	.21	.29
Former reformist politician	.15	.02**	.01**
Ties to organized crime	.04	.22**	.06
Yeltsin supporter	.36	.15**	.13**
Mean reported income (\$U.S.):			
1999	446,334	480,316	251,148
2000	451,128	347,029	245,791

Note. Difference significance refers to statistical significance of the difference between means of nonrated senior oligarchs and rated oligarchs and of nonrated junior oligarchs and rated oligarchs using a two-sample *t*-test with unequal variance.

⁺ Statistically significant at the 10% level.

* Statistically significant at the 5% level.

** Statistically significant at the 1% level.

Here I discuss two more pieces of such quantifiable evidence: the decision to stay out of the public spotlight and the decision to seek political office.

As already mentioned, 126 oligarchs in my sample were not rated by experts in the 1990s. This might have been the case for two reasons: first, nonrated oligarchs might have been known to experts but might have been considered by them to be the lesser partners of rated oligarchs. The second reason, which is of particular interest here, is that the real owner may have made a deliberate decision to stay behind the scenes so that the experts would mistakenly consider a junior or lesser partner to be the main oligarch in control.

On the basis of more recently available information, I classified 46 of the 126 nonrated oligarchs in my sample as real behind-the-scenes owners or at least equal partners in their businesses (hereafter, nonrated senior oligarchs), while the remaining 80 individuals appear to have indeed been junior partners. Table 6 compares various characteristics of nonrated oligarchs with those of the 170 rated oligarchs. Seventy percent of nonrated senior oligarchs are outsider oligarchs, a statistically significant difference from the corresponding shares among both rated oligarchs (52 percent) and nonrated junior oligarchs (54 percent). Nonrated senior oligarchs are significantly younger than rated oligarchs on average and are more likely to be of Jewish ethnicity and have ties with organized crime. They are less likely to be graduates of elite colleges or former reform politicians. It is not difficult to see how each of these characteristics may have contributed to the decision to stay out of the public spotlight. As may be expected, the share of active political supporters of Yeltsin among senior nonrated oligarchs is also much lower than among rated oligarchs.

Reported incomes, on the other hand, are quite similar for rated and nonrated

Table 7
 Probit Regression of Factors Affecting the Decision
 to Seek Legislative Office

Variable	All Oligarchs	Nonstate Sector
Outsider	.112* (.045)	.115* (.048)
Business outside Moscow	.260** (.117)	.228* (.124)

Note. Coefficients show marginal effects. All regressions include business sector dummies. Results are similar for linear probability and logit models. Standard errors are in parentheses.

* Statistically significant at the 5% level.

** Statistically significant at the 1% level.

senior oligarchs, while nonrated junior oligarchs report substantially lower incomes in both years (which in this case probably reflects a difference in actual incomes). Overall, this examination suggests that a relatively large number of outsider oligarchs as compared with insider oligarchs elected to exercise caution in seeking a public profile and that this decision might have had something to do with a self-perception of greater vulnerability.

Outsider oligarchs also tended to seek political office more than insider oligarchs did. The total number of oligarchs in my sample who became elected politicians or joined the government after becoming oligarchs is 67. Almost two-thirds of them were outsider oligarchs, as opposed to a share of slightly over 50 percent among the 229 who did not seek political office (the difference is statistically significant at the 5 percent level). Gehlbach, Sonin, and Zhuravskaya (2006) argue that, in weak institutional environments, election promises made to special interests may not be credible and that business owners have to seek political office themselves instead of lobbying with professional politicians. Insider oligarchs, who had participated in the bureaucratic game since the Soviet era, can be expected on average to have better connections with the bureaucrats implementing business regulations. These connections may substitute for the (lack of) credibility of election promises. The outsider oligarchs would, on the other hand, have to run for office themselves.

To test this prediction, I run a simple regression that makes the decision to seek federal legislative office (membership in the State Duma, the lower house of Russian parliament, or in the Council of Federation, the upper house) a function of background and location of the main business outside Moscow. Table 7 presents probit estimation results, controlling also for business sectors.

As can be seen from Table 7, outsider background tended to increase the probability of becoming a federal legislator by about 11 percent, while having a business outside Moscow increases this probability by a further 23–26 percent. Oligarchs with main businesses outside the capital city appear to find it more imperative to try to influence Moscow politics by directly participating in them.

5. Expropriation and Ostracism

5.1. Basic Evidence

To maintain trust among members of the oligarchy, it is essential that anyone who appears to have violated the terms of trust must lose his or her good status. This makes political risk (risk of expropriation) one of the most fundamental features of the system of oligarchic property rights based on reputational equilibria (Braguinsky and Myerson 2007a).

Such a risk becomes especially high at a time of political change such as the transition of supreme power, which happened in Russia in 2000. This provides an opportunity to examine how the transition of power from Yeltsin to Putin affected the fortunes of Yeltsin-era postcommunist oligarchs and which of them were particularly strongly affected.

I begin by summarizing the basic evidence. During 12 years, from 1995 to 2006, 158 oligarchs, or 53.4 percent of my sample, had been separated from the assets they controlled, but just 28 such separations (17.8 percent) occurred naturally by causes such as death or voluntary retirement, or, at the very least, the information is not conclusive that the separation occurred involuntarily. In all other cases, there is overwhelming evidence that the oligarchs lost control because of adverse government action or a hostile takeover or because they were ousted by their own business partners. I call such cases “expropriation.”

In most of the 130 expropriations, the former oligarch retired peacefully. In 45 cases, however (more than one-third), expropriations were accompanied by bitter fighting, sometimes involving literal seizures by armed security guards and/or law enforcement troops, or they were followed by harsh punitive actions taken against the expropriated oligarch either by the government or by his or her former partners. These punitive actions included but were not limited to arrests and criminal charges, often followed by convictions and jail time, forced emigration, and even assassinations (including attempted assassinations). I call all such events “ostracism.” Clearly, risks of expropriation and ostracism if and when expropriated were no trivial matters for the oligarchs in the sample.

The average yearly empirical expropriation rate in the sample was 5 percent. This average number, however, hides considerable fluctuations from year to year, and the same is true of the empirical conditional ostracism rate. The expropriation rate in Figure 1 appears to exhibit an inverted U-shape, with 1998–2001 being high-expropriation years, 1997 and 2002–3 being in the middle range, and 1995–96 and 2004–6 being low-expropriation years. It is clear from this that expropriation was by no means a phenomenon that started only after Yeltsin had left office; in fact, average empirical expropriation probabilities were almost the same across both the Yeltsin and Putin administrations. The empirical conditional probability of ostracism, on the other hand, increased significantly under Putin. An oligarch who was expropriated under Yeltsin faced a probability of being ostracized of slightly over 20 percent on average, while with Putin in

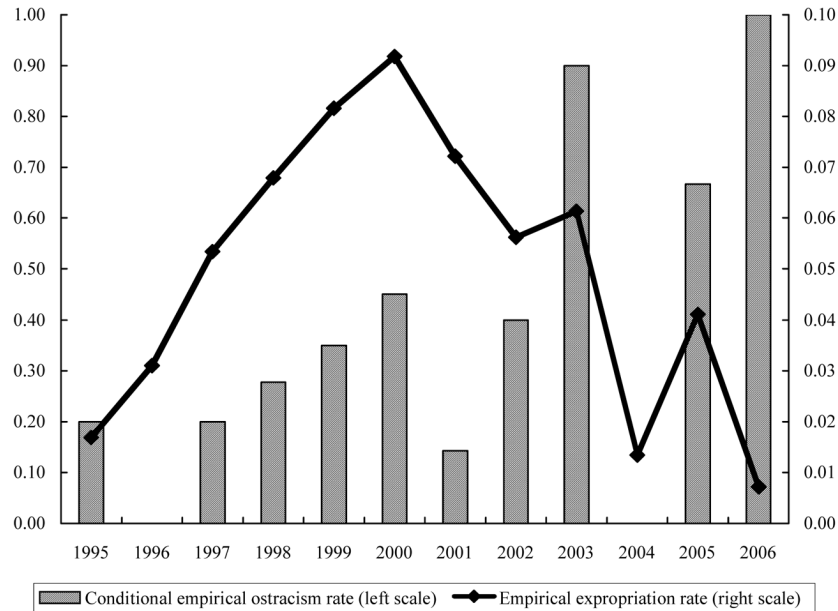


Figure 1. Empirical expropriation and conditional ostracism rates of Russian oligarchs, 1995–2006.

power, the chances of expropriation being followed by ostracism jumped to more than 50 percent on average for 2000–2006.

The characteristics of expropriated and ostracized oligarchs were also different in these two periods. As already mentioned, many of the expropriations in the late 1990s were of insider oligarchs whose assets were taken over by members of the new politically connected elite. More specifically, 63 percent of oligarchs expropriated under Yeltsin were insider oligarchs, compared with only 41 percent of those expropriated under Putin (the difference is statistically significant at the 1 percent level). Similarly, while 50 percent of those ostracized under Yeltsin were insider oligarchs, their share goes down to 25 percent under Putin. Not unexpectedly, more oligarchs politically loyal to Yeltsin found themselves among ostracized under Putin than they did under Yeltsin.

5.2. A Nested Logit Model

The opportunity to expropriate other oligarchs is what gives value to government and other offices held by potential expropriators in an oligarchic economy (Braguinsky and Myerson 2007a). Which particular oligarch is expropriated will depend on various factors, many of them purely random and/or unobservable, but there are some that might be systematically related to the oligarch's characteristics, especially those that determine how attractive (and/or visible) he

or she is as a potential target, on the one hand, and on how strong his or her defenses are, on the other hand.²⁹ The same is true with regard to two possible outcomes after expropriation, peaceful retirement or ostracism. We may expect ostracism to be more likely if the expropriators feel that allowing the former oligarch to simply walk away might spell problems for them in the future, while we expect it to be less likely if the expropriated oligarch retains some political or legal clout.

We can thus expect both expropriation and ostracism outcomes to be correlated with a certain set of observable characteristics (such as the background and political connections of the targeted oligarch), while there may also be other observable characteristics correlated with one but not the other outcome. For example, the probability of expropriation is likely to be affected by the target's visibility. However, once the oligarch has been expropriated, visibility no longer matters, so there is no reason to believe that the conditional probability of ostracism should depend on it. The probability of expropriation without ostracism can also be expected to depend on whether the oligarch runs a state-owned or private business. In contrast, other things equal, oligarchs elected to legislative bodies are probably neither better nor worse protected against potential expropriation, as the most important part of oligarchic privileges comes from informal ties, not formal titles. However, Russian law makes it more difficult to arrest and prosecute a federal or local legislator than an ordinary person, so membership in a legislative body may reduce the chances of ostracism. Similarly, inasmuch as ties to organized crime gave as good a protection against expropriation as did political ties, such ties should not have affected the probability of expropriation, but they were likely to affect the probability of ostracism (for example, by making it easier for courts to take up the case in legal proceedings).

With these ideas in mind, I now construct a simple econometric model of expropriation and ostracism and estimate its parameters. Consider an expropriator choosing whether or not to expropriate an oligarch and whether or not to ostracize him or her if expropriated. This situation has a clear nesting structure, with the first-level choice being whether to expropriate an oligarch, followed by the second-level choice of whether to ostracize him or her, so it is naturally handled in a nested logit framework (see McFadden 1984).

Formally, let the set of choices available to expropriators be partitioned into two first-level groups (indexed by j), where the first group corresponds to the choice of not expropriating a given oligarch and the second group corresponds to the choice of expropriating him or her. Within each group, the expropriators then decide between further alternatives (indexed by k), but in the case of no expropriation the only possible outcome is, of course, that the oligarch remains in good status. In case of expropriation, there are two alternatives: to allow the oligarch to retire peacefully or to ostracize him or her. Thus, there are three

²⁹ Indeed, a number of oligarchs in my sample successfully resisted attempted expropriation and remained in good status. They are not included in the count of expropriation cases in this paper.

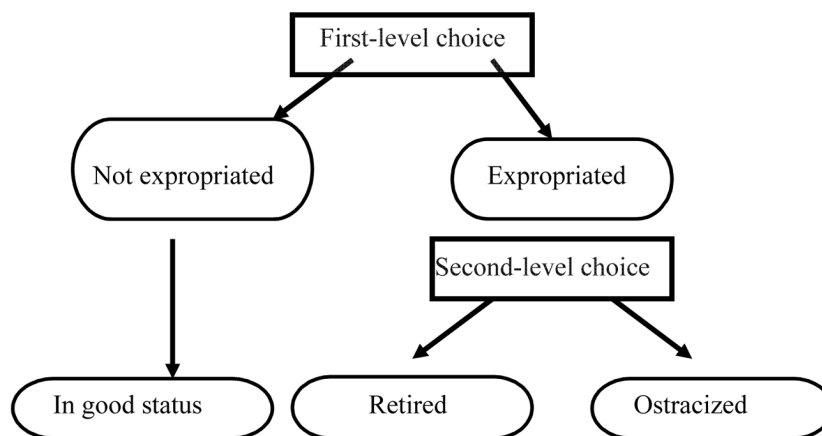


Figure 2. Nested logit model tree showing choices of expropriators and outcomes for oligarchs.

final outcomes jk ($k = 1$ for $j = 1$ and $k = 1, 2$ for $j = 2$): no expropriation, expropriation and peaceful retirement, and expropriation and ostracism (see Figure 2).

The outcome indicator variables y_{jk} equal one if alternative jk is chosen and zero otherwise. Then the joint probabilities $p_{jk} = \Pr [y_{jk} = 1]$ with the standard assumption of generalized extreme value distribution of the error terms can be estimated as follows:

$$\begin{aligned}
 p_1 &= \frac{\exp(\mathbf{z}'\mathbf{a}_1 + \rho_2 I_2)}{\exp(\mathbf{z}'\mathbf{a}_1 + \rho_1 I_1) + \exp(\mathbf{z}'\mathbf{a}_2 + \rho_2 I_2)}, \\
 p_{2k} &= \frac{\exp(\mathbf{z}'\mathbf{a}_2 + \rho_2 I_2)}{\exp(\mathbf{z}'\mathbf{a}_1 + \rho_1 I_1) + \exp(\mathbf{z}'\mathbf{a}_2 + \rho_2 I_2)} \\
 &\quad \times \frac{\exp(\mathbf{x}'_2 \mathbf{b}_{2k} / \rho_2)}{\exp(\mathbf{x}'_2 \mathbf{b}_{21} / \rho_2) + \exp(\mathbf{x}'_2 \mathbf{b}_{22} / \rho_2)}, \quad k = 1, 2,
 \end{aligned}
 \tag{4}$$

where \mathbf{z} and \mathbf{x} are oligarchs' characteristics affecting first-level and second-level decisions, respectively, while \mathbf{a}_j and \mathbf{b}_{jk} are the corresponding regression parameters (oligarchs' characteristics are alternative invariant, so regressor coefficients are allowed to vary across alternatives).

Note that while the benefits of expropriating and ostracizing oligarchs with different characteristics might have been similar throughout the period of this study, the costs were clearly not. For example, close political ties to the Yeltsin administration might have imposed large potential costs on expropriators targeting oligarchs with such ties while Yeltsin was in power, but under Putin such

ties obviously lost a lot of their protective value and may even have become detrimental. In other words, factors affecting the expropriators' decisions were likely to be different before and after the transition of power from Yeltsin to Putin, so I estimate the model separately for these two periods.

I include the main variables of interest (outsider background and active support for President Yeltsin's reelection campaign in 1996) among first-level and second-level regressors for both periods. In addition, the specification for the Yeltsin era includes as first-level regressors a dummy equal to one if a senior partner in an oligarchic business was not included in experts' ratings in the 1990s and zero otherwise as a proxy for visibility, a dummy equal to one if the oligarch was in charge of a state-owned business and zero otherwise, and sector dummies corresponding to the oligarch's start-up sector. Additional second-level regressors include a dummy equal to one if the oligarch was elected to a legislative body and zero otherwise and a dummy equal to one if the oligarch had documented ties to organized crime and zero otherwise.

For the Putin years, I exclude start-up sector dummies from the first-level regression because most oligarchs remaining in the sample by that time were already well diversified across different sectors. I also exclude the dummy for nonrated senior partner for the obvious reason that I could identify those as owners of their businesses in the mid-2000s, which means that they were no longer invisible under Putin.³⁰ Instead, I take advantage of the income-reporting data that became available in 1999 and include the (log of) average income reported by oligarchs in 1999 and 2000 as an additional regressor in both first-level and second-level choices. As shown in the previous section, higher reported incomes were overall rather strongly positively correlated with oligarchs' influence in the 1990s, as measured by experts' ratings. Thus, I use reported incomes as a proxy for influence, which can be expected to contribute to higher chances of both survival (not being expropriated) and avoiding ostracism even if expropriated.

There are several advantages to using income-reporting data rather than influence ratings in estimating the model. The first such advantage is that income-reporting data are available for a larger number of oligarchs. By the start of the Putin administration, I have only 306 observations on 102 oligarchs if I use influence-ratings data, as opposed to 501 observations on 167 oligarchs when using income-reporting data.³¹ The second and perhaps more important advantage is that income reporting (or underreporting) gave the government direct evidence that could be used against the oligarch in legal proceedings. Thus, low

³⁰ Estimates including these regressors produce very similar results.

³¹ I did conduct the estimates with the (log of) total influence over the period 1996–99 replacing reported incomes in both first- and second-level regressions. The estimation results (not shown) are similar to those presented in Table 8. In particular, the influence regressors have a strong and statistically significant negative effect on probabilities of both expropriation and ostracism, while coefficients on other regressors retain the same signs and, for most part, are of quite similar magnitudes.

reported income made an oligarch an easier target for expropriation and made ostracism less costly.³²

I also include a Jewish ethnicity dummy as an additional second-level choice regressor for the Putin administration. Including this regressor in estimations of the model for the Yeltsin years makes no significant difference (if anything, it worsens the fit of the model a bit), which is what one would expect from summary statistics showing that only 8 percent of both expropriated and ostracized oligarchs were of Jewish ethnicity in 1995–99. Under Putin, the ratio of Jewish oligarchs among the expropriated jumps up to 20 percent, while their share among ostracized oligarchs skyrockets to 48 percent. The Jewish ethnicity dummy, however, has no independent effect on the probability of expropriation, only on the probability of ostracism. Indeed, it looks as if since 2000 there were only two possible outcomes for Jewish oligarchs: they could either remain in good status or be ostracized, as no former Jewish oligarch was allowed to retire peacefully after being expropriated.

5.3. Estimation Results and Their Interpretation

The coefficients on regressors estimated from the nested logit model in equation (4) under Yeltsin and under Putin are presented in Table 8. Oligarchs who died or retired voluntarily during the period of observation are excluded, so the number of observations for 1995–99 is 804, which corresponds to three different outcomes for 268 oligarchs. The number of observations for 2000–2006 is naturally smaller, as oligarchs who had lost their good status by 1999 are no longer part of the sample. I also wanted to utilize income-reporting data for estimating the model in 2000–2006, and because these data are not available for all oligarchs, the total number of observations used in estimating the model under Putin is 501 for 167 individuals. To check robustness, I implemented seemingly unrelated bivariate probit regressions of two outcomes (expropriated but allowed to retire peacefully and expropriated and ostracized) with the same regressors and for the same time periods, and the results were very similar.³³

The estimation results show that during the Yeltsin years outsider oligarchs faced significantly lower odds of expropriation than did insider oligarchs. This result is robust in the sense that it survives adding more and/or omitting some of regressors used in the specification presented in Table 8. It also appears to be consistent with the regression analysis of dynamics of oligarchs' influence presented earlier (see Table 3) that showed a growing influence of outsider oligarchs throughout the second half of the 1990s. Close political ties to Yeltsin, on the other hand, are not a significant predictor of lower probability of expropriation (the coefficient on the corresponding regressor is statistically indis-

³² Several legal processes against former oligarchs during the Putin administration explicitly brought charges of personal income tax evasion against them.

³³ These results are available on request. Both the likelihood ratio test of heteroskedasticity for the nested logit model and the highly (negatively) correlated residuals in bivariate probit regressions indicate that the assumption of independence from irrelevant alternatives does not hold.

Table 8
Nested Logit Estimates of Expropriation and Ostracism Choice Parameters

Variable	Yeltsin	Putin
Second-level choice: ostracism parameters:		
Outsider	-.971 (.604)	.362 (.640)
Yeltsin supporter	-1.243 ⁺ (.668)	.980 (.788)
Jewish		7.368 (10.19)
Federal legislator	-1.011 (1.152)	-.031 (.914)
Ties to organized crime	11.256 (111.37)	1.390 (1.590)
Log reported income, 1999–2000		-.155** (.053)
First-level choice: expropriation parameters:		
Outsider	-1.045** (.309)	-.196 (.332)
Yeltsin supporter	-.056 (.331)	.667 ⁺ (.382)
Nonrated senior partner	-.741 (.495)	
Start-up sector	Yes	No
State-owned business	-.241 (.387)	.670 (.413) ⁺
Log reported income, 1999–2000		-.098** (.027)
N	804	501
Log likelihood	-179.5540	-125.554
Likelihood ratio test of homoskedasticity	$\chi^2(1) = 4.63$ Pr > $\chi^2 = .032$	$\chi^2(1) = 8.78$ Pr > $\chi^2 = .003$

Note. Standard errors are in parentheses.

⁺ Statistically significant at the 10% level.

** Statistically significant at the 1% level.

tinguishable from zero and remains so in various alternative specifications). While this result may seem somewhat surprising, note that the estimates of factors affecting the dynamics of oligarchs' influence in Table 3 are, once again, in line with it, as they show that the effect of political ties to Yeltsin has declined steadily since 1996, especially in 1998 and 1999 (which is when expropriations and ostracisms began increasing; see Figure 1). The dummy for nonrated senior partner is negatively related to the probability of expropriation. This dummy is my proxy for the visibility of the oligarch under the Yeltsin administration, and it appears that staying less visible was somewhat effective in reducing the chances of expropriation. Aversion to publicity may also be correlated with better survival skills in a highly fluid environment.

As for the probability of being ostracized (as the second-level final outcome), it is negatively affected by being an outsider and by being an active supporter of Yeltsin, with the latter factor, not surprisingly, more strongly pronounced. The coefficients on being elected to a legislative body and on having ties to organized crime also have the expected signs and are quite large, although lack of variation in outcomes for these categories results in high standard errors.

Estimated coefficients under the Putin administration offer a stark contrast. The most ostensible change is that being an outsider is no longer a predictor

Table 9
 Predicted Average Probabilities of Expropriation and Ostracism by
 Variables of Interest from the Nested Logit Model

	Expropriation		Ostracism	
	Yeltsin	Putin	Yeltsin	Putin
Yeltsin supporter	.268	.444	.046	.276
Non-Yeltsin supporter	.255	.297	.112	.114
Ratio	1.048	1.497	.414	2.416
Outsider	.169	.330	.049	.194
Insider	.369	.348	.151	.095
Ratio	.457	.949	.324	2.032
Jewish	.176	.409	.058	.409
Non-Jewish	.274	.321	.100	.102
Ratio	.645	1.275	.578	3.992

of lower probability of expropriation under Putin, while being a Yeltsin supporter now has a statistically significant effect on an increase in the probability of being expropriated. Oligarchs in charge of state-owned businesses also faced a higher probability of expropriation during the Putin administration, but this is what one would expect after the change of government.³⁴ Lower reported income also has a significant independent effect on increasing the chances of expropriation.

Similar changes can be observed in the coefficients on regressors affecting ostracism. Although high standard errors make the estimated coefficients not statistically significant, outsider oligarchs and Yeltsin supporters now appear to face higher odds of ostracism than do their peers. It is also interesting to note that being elected to a legislative body is no longer a significant predictor of lower probability of ostracism, which probably reflects the tight grip established by Putin over the legislative branch of the government, which was much more independent under Yeltsin. Oligarchs' reported incomes, once again, have a strong negative effect on the chance of ostracism; moreover, the magnitude of this effect is more than 50 percent higher than the magnitude of the effect on expropriation.

To facilitate the interpretation of these results further, Table 9 presents average predicted probabilities of expropriation and ostracism by different groups of oligarchs using coefficients a_j and b_{jk} estimated by the nested logit model. The resulting comparisons can be summarized as follows.

First, comparing predicted probabilities of expropriation and ostracism between the Yeltsin and Putin administrations, we can clearly see that the increase in both risks observed in the aggregate data comes almost entirely from the corresponding increases in the risks faced by Yeltsin supporters. Second, the evidence from comparing risks faced by outsider and insider oligarchs is even more striking. Both predicted probabilities of expropriation and ostracism jump

³⁴ Most of the effect appears to come from the wholesale change of the oligarchic team in charge of the state gas monopoly Gazprom.

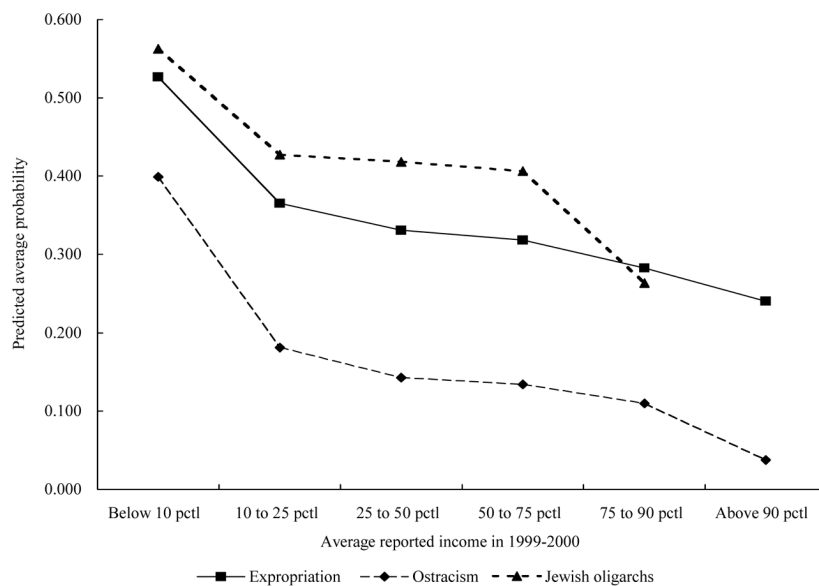


Figure 3. Predicted average probabilities of expropriation and ostracism under Putin by income-reporting percentiles.

two to four times for outsider oligarchs from Yeltsin to Putin, but the corresponding probabilities faced by insider oligarchs actually decline. In other words, the switch from Yeltsin to Putin had no adverse effect on the survival of oligarchs with strong *nomenklatura* ties dating back to the Soviet era, but it did have a very serious adverse impact on the survival of those who were newcomers after the start of the transition to a market economy. Excluding oligarchs of Jewish ethnicity leaves the predicted probability of expropriation virtually unchanged, and while it does reduce the probability of ostracism somewhat, it still remains 2.5 times higher than under Yeltsin.

Third, arguably the most dramatic change in risks was for oligarchs of Jewish ethnicity. As can be seen from Table 9, their predicted probabilities of both expropriation and ostracism were significantly lower than those for non-Jewish oligarchs during Yeltsin's second term in office. Under Putin they face a risk of expropriation that is 27.5 percent higher than that of non-Jewish oligarchs, while their relative risk of ostracism is estimated to be a whopping four times higher. As already mentioned, all Jewish oligarchs expropriated under Putin were also ostracized.

Finally, Figure 3 plots predicted probabilities of expropriation and ostracism by income-reporting percentiles from the nested logit model. Other things equal, the predicted probability of expropriation declines smoothly from 52.7 percent for those whose reported incomes were below the 10th percentile to 24.1 percent for

those whose reported incomes are above the 90th percentile of the distribution. (Note that no Jewish oligarchs reported incomes above the 90th percentile.) The decline is even more dramatic for the probability of ostracism (from almost 40 percent at the bottom decile to just 3.8 percent at the top decile). It is interesting to note that higher reported income mitigates even the risks faced by Jewish oligarchs (the expropriation and ostracism risks are obviously the same for them).

It has sometimes been argued that the change in political regime from Yeltsin to Putin has led to a generally better rule of law (see, for example, Letiche 2007). Boone and Rodionov (2002, p. 2) conclude that since the turn of the century the oligarchs “have . . . turned from promoting lawlessness and low transparency to supporting the rule of law and property rights,” although they attribute this change to the inner logic of evolution of oligarchic businesses rather than an exogenous political change. My analysis provides some insight into this question.

On the one hand, a jump in expropriation and ostracism rates for Yeltsin supporters after 2000 may indicate that the rule of law in the sense of universal protection of property rights that does not depend on political connectedness remains largely an illusion and that oligarchic property rights continue to be the dominant feature of the Russian economy. The fact that mostly outsider oligarchs had higher risks after Yeltsin relinquished power while insider oligarchs’ risks diminished seems to render some credibility to the view that the real motive behind the talk about law and order by the Putin administration might be the desire to turn the clock back on changes implemented during the first 10 years of the transition to a market economy. This impression is reinforced by evidence of a sharp deterioration in the status of Jewish oligarchs. Indeed, I cannot detect the nesting structure in the case of Jewish oligarchs under the Putin administration, which raises a disturbing possibility that they might have been targeted for ostracism from the beginning.

On the other hand, consistently lower predicted probabilities of expropriation and especially of ostracism for those oligarchs who reported their incomes more accurately (including Jewish oligarchs) might be interpreted as evidence in support of the emphasis placed by the Putin administration on the rule of law or, at the very least, on the importance of dealing transparently with tax authorities. Of course, reverse causality might be equally plausible: oligarchs who perceived themselves to be at higher risk than their peers hedged those risks by tunneling more money to safe offshore accounts, resulting in lower incomes reported inside Russia. I will return to this question in the next section.

6. Surviving Postcommunist Oligarchs: Who Were They and What Were They Worth?

6.1. *Who Were the Survivors?*

The analysis in the previous two sections bears on an important broad question: can an oligarchic system evolve on its own into something less oligarchic

and more transparent, and can changes at the top of the political pyramid be a catalyst for such evolution? In principle, an oligarchic system may change its overall characteristics either because of attrition that differently affects oligarchs possessing different characteristics or because of the behavior of those who survive changes. I began following Yeltsin-era oligarchs' careers with 296 individuals in 1995. By the end of 2006, 158 of them were no longer in good status because of expropriation or retirement, a cumulative attrition rate of 53.4 percent. I now take a look at the survivors to see if I can find systematic differences between them and the full initial sample. I also compare the income reporting in 2003–4 of those oligarchs who survived until the end of my period of observation with that of the same individuals in 1999–2000 to see if I can find evidence of changing behavior by survivors.

Table 10 presents the results of estimating the probability of 12-year survival using a simple linear regression for the binary outcome (probit and logit specification produce essentially the same results). The regression includes all the demographic and other controls that are available in the data, but among demographics, the only factor that has a significant (negative) impact on survival is age. Similarly, among start-up sectors, only the finance and banking sector has a statistically significant negative effect on chances for long-term survival, but this is easily explained by the fact that the period under observation includes the 1998 meltdown of the financial sector.

Thus, in terms of demographic and start-up business sector characteristics, 12-year survivors look very similar to the full sample. There are some differences along the lines of pretransition background and political ties to Yeltsin, however. As demonstrated in the previous section, being an outsider and being an active political supporter of Yeltsin had opposing effects on chances for survival during the Yeltsin and Putin years. Estimates presented in Table 10 suggest that over the whole 12-year period higher risks during the Putin administration outweighed lower risks during the Yeltsin administration. It is also worth noticing that former red directors and specialist Soviet-type managers working in the fields in which they were educated were less likely than their peers to survive.

Table 11 shows that average incomes reported in 1999–2000 by oligarchs who survived until 2006 were higher overall than those reported by all oligarchs for whom I have data in those years. But in the most interesting category, outsider oligarchs (who, as seen in Section 4, were clearly underreporting their incomes to a much greater degree than were insider oligarchs), the corresponding difference was small and statistically insignificant.

6.2. Changes in Income Reporting of Survivors

The overall impression from the estimation results presented in Table 10 is that long-term survivors were not much different from the full initial sample in terms of many observable characteristics. Table 11 shows the rapid growth in incomes reported by ultimate survivors in 2003–4 as compared with in

Table 10
Factors Affecting 12-Year Survival: Linear Probability Model

Parameter	All Oligarchs	Oligarchs Reporting Moscow Income
Age	-.019** (.004)	-.022** (.005)
Start-up sector:		
Finance	-.261 ⁺ (.141)	-.309 ⁺ (.160)
Energy	-.200 (.147)	-.245 (.175)
Metallurgy	-.075 (.177)	-.421 (.284)
Telecommunications and engineering	-.219 (.162)	-.134 (.209)
Consumer goods and services	-.155 (.160)	-.188 (.187)
State-owned business	-.138 (.096)	-.138 (.111)
Outsider	-.233** (.094)	-.167 (.117)
Yeltsin supporter	-.079 (.073)	-.150 ⁺ (.085)
Red director	-.190 ⁺ (.108)	-.169 (.152)
Education and job related?	-.034 (.076)	-.152 ⁺ (.092)
Log average reported income, 1999–2000		.023 ⁺ (.013)
N	224	148
Adjusted R ²	.130	.163

Note. Values are ordinary least squares regression coefficients with standard errors in parentheses. The samples include oligarchs for whom data on ethnicity, education, and place of birth are available. The second regression includes only oligarchs who were not expropriated by 1999. Other regressors (not significant and not shown) are gender, ethnicity, elite college, place of birth, a dummy equal to one if included in experts' ratings in the 1990s and zero otherwise, and nonrated senior partner.

⁺ Statistically significant at the 10% level.

** Statistically significant at the 1% level.

1999–2000. These reported incomes grew on the average by a factor of 3.10 for insider oligarchs and by a factor of 5.47 for outsider oligarchs (7.11 for those of Jewish ethnicity). During the same period, the nominal gross domestic product (GDP) in U.S. dollars at the current market exchange rate in Russia increased 2.28 times. Thus, while insider oligarchs' reported incomes were outpacing the growth rate of GDP by about 50 percent (and thus may largely reflect the increase in true incomes, if the rapid increase in oil and other primary-resource prices that heavily favored oligarchs' incomes over those of the rest of the population are factored in), outsider and especially Jewish oligarchs' reported incomes were growing even faster than that.

As observed in the previous section, the higher risks of expropriation and ostracism faced by oligarchs who reported lower incomes than their peers could be interpreted in two ways. They could reflect authorities' increased emphasis on transparency of business transactions (and law and order in general), or they could be the manifestation of unobserved heterogeneity by which some oligarchs who perceived their expropriation risks to be higher would report incomes less transparently in an attempt to funnel more money to safe accounts abroad. A sharp increase in average incomes reported by surviving oligarchs in the high-risk category of outsider and especially of Jewish oligarchs between 1999–2000 and 2003–4 seems to indicate that the former explanation might be more plau-

Table 11
Average Reported Incomes (\$U.S.)

	All		Outsiders		Insiders	
	Initial	Survivors	Initial	Survivors	Initial	Survivors
1999–2000	383,989 ^a	520,392	169,612	185,546	700,607	1,071,126
2003–4	N.A.	1,906,552	N.A.	1,015,758	N.A.	3,324,789
Ratio		3.66		5.47		3.10

Note. Only survivors until 1999 are counted among the initial sample. N.A. = not available.

^aCorresponding differences between the means of the initial sample and survivors are significant at least at the 5% level.

sible. The regression analysis, however, appears to confirm this only in the case of Jewish oligarchs.

The first column in Table 12 presents the estimated coefficients in income regressions in equation (2) already presented in Table 5 while adding the coefficient on the Jewish ethnicity dummy (which can be seen to be statistically insignificant). The last two columns present the results of estimating the same regressions using 1999–2000 and 2003–4 reported incomes only for oligarchs who had survived until the end of the observation period in 2006. There are small differences in the coefficients for background, political support for Yeltsin, and Jewish ethnicity between all oligarchs and eventual survivors in 1999–2000. The only coefficient that really changes between 1999–2000 and 2003–4 in the sample of survivors is the coefficient on the Jewish ethnicity dummy. Thus, it does seem that the increased risk of ostracism faced by Jewish oligarchs during the Putin years induced them to begin reporting their incomes more fully, but I cannot say the same for the category of outsider oligarchs as a whole.

6.3. How Much Wealth Did the Survivors Accumulate?

Finally, I consider survivors' success by looking at how much personal wealth they accumulated and how it was related to the characteristics studied in this paper. *Forbes* regularly publishes its estimates of the world's richest people, and six Russian oligarchs were included in the list for the first time in 1997. After a few years of absence in the wake of the financial crisis that struck in 1998, Russian oligarchs were back in 2001, and since then their presence has been increasingly felt. The *Forbes* list for 2005 counts 33 Russian oligarchs with a total estimated personal wealth of over \$172 billion, or 22.6 percent of the Russian GDP at the market exchange rate in the same year. The personal wealth of the richest of these, Roman Abramovich, was estimated to be \$18.7 billion, or 2.45 percent of the GDP, roughly five times the ratio of Bill Gates's wealth to the U.S. GDP.

Since 2003, the Russian magazine *Finans* has been publishing its own estimates of the personal wealth of the richest people in Russia. These estimates are available for a much larger sample of oligarchs than the *Forbes* estimates, so I employ these in my analysis (the estimates that overlap between the two lists are quite

Table 12
Regression Analysis of Survivors' Reported Incomes

Variable	Good Status, 1999–2000	2006 Survivors	
		1999–2000	2003–4
Outsider	-.794* (.395)	-.831+ (.454)	-.823+ (.445)
Yeltsin supporter	.781+ (.452)	1.162+ (.641)	1.669* (.707)
Outsider × Yeltsin supporter	-1.634** (.630)	-1.633* (.0795)	-1.881* (.874)
Jewish	.380 (.405)	.452 (.502)	1.272** (.449)
N (clusters)	306 (156)	189 (97)	184 (95)
Adjusted R ²	.160	.234	.233
Outsider:			
Yeltsin supporter	-.812* (.434)	-.470 (.524)	-.431 (.546)
Jewish	.445 (.471)	.538 (.587)	1.195* (.518)
N (clusters)	184 (95)	119 (62)	116 (60)
Adjusted R ²	.092	.124	.266
Insider:			
Yeltsin supporter	.817+ (.475)	.986 (.740)	1.082 (.789)
N (clusters)	122 (61)	70 (35)	68 (35)
Adjusted R ²	.135	.089	.169

Note. The dependent variable is log reported income for 1999–2000 and 2003–4, pooled together and including family members' income. Oligarchs with main sources of income outside Moscow are excluded. Robust standard errors controlling for clustering are in parentheses. All regressions include demographic, sector, ownership type, and year dummies.

+ Statistically significant at the 10% level.

* Statistically significant at the 5% level.

** Statistically significant at the 1% level.

similar). I also impute personal wealth for two oligarchs whose shares as partners of oligarchs included in *Finans* lists are well known. Table 13 presents summary data on accumulated personal wealth for 2003–6 for all oligarchs who were in good status at the start of each year, together with the breakdown of this wealth by some important characteristics.

It appears that average accumulated personal wealth was more or less similar across insider, outsider, Yeltsin supporter, and non-Yeltsin supporter categories, although Jewish oligarchs (including Abramovich) appear to have done better than the rest. To test these results more formally, I regressed the natural logarithm of personal wealth on background and Yeltsin supporter dummies and then controlled for age and ethnicity.

The estimated coefficients using pooled OLS with clustered robust standard errors are presented in Table 14. Outsider background does not seem to have a systematic effect on accumulated personal wealth. Being a Yeltsin supporter has a positive effect on accumulated wealth in both regressions, but high standard errors make the coefficients statistically not significant. Being of Jewish ethnicity, on the other hand, has a very strong positive effect on accumulated wealth. As shown above, Jewish oligarchs were subject to much harsher treatment than non-Jewish oligarchs under Putin. Hence, it is not surprising that, conditional on survival, they were richer.³⁵ A negative and significant coefficient on age also

³⁵ Even excluding Abramovich, the coefficient on the Jewish ethnicity dummy is about .8, which is still large and statistically significant.

Table 13
Oligarchs' Mean Estimated Accumulated Personal Wealth (\$U.S. Millions)

Year	All	Insider	Yeltsin Supporter	Outsider	Jewish Outsider
2003	1,392 (1.39)	1,426 (1.17)	1,402 (1.02)	1,373 (1.52)	2,256 (1.40)
2004	1,610 (1.48)	1,765 (1.20)	1,638 (1.42)	1,523 (1.66)	2,814 (1.34)
2005	2,156 (1.60)	1,980 (1.48)	2,465 (1.38)	2,265 (1.66)	3,528 (1.57)
2006	4,123 (1.20)	4,279 (.94)	6,217 (.89)	4,032 (1.36)	5,086 (1.36)

Sources. *Finans* (2007, 2006, 2005, 2004); author's estimates.

Note. Included are oligarchs in good status (not expropriated and not retired) at the beginning of the relevant year. Coefficients of variation are in parentheses.

suggests that, conditional on survival, having been younger at the start of the transition process was another factor contributing to success.

7. Conclusions

We have seen that first-wave postcommunist oligarchs came from two sources, the insider *nomenklatura* elite that managed to maintain control over the assets it had controlled under the previous regime and outsider entrepreneurial oligarchs who started business ventures mostly in the finance and consumer goods and services sectors, which were largely ignored under the planned economy. Outsider oligarchs were younger, had higher levels of human capital, and were disproportionately of Jewish ethnicity.

The subsequent course of events, especially immediately before and after Yeltsin was reelected to his second term in 1996, created opportunities for many outsider oligarchs to forge their own strong political ties with the government, and since that time and until the end of Yeltsin's second term their influence in the postcommunist oligarchy had been growing rapidly. At the same time, new oligarchs appear to have by and large accepted the rules of the game established by insider oligarchs (and the previous "Soviet Mafia"), simply using political influence to their own advantage in the fight for the control of valuable assets. If anything, it appears that new entrepreneurs-turned-oligarchs exhibited an even greater degree of disregard for the rule of law and the need for transparency than did former insider oligarchs, a fact manifested in my data, in particular in much less transparent income reporting.

Not surprisingly, business empires built on the foundation of politically protected oligarchic property rights turned out to be extremely vulnerable to all sorts of political risks, from adverse governmental action to breakdown in trust among business partners. More than half of the postcommunist oligarchs who rose to prominence during the Yeltsin era did not survive in the ranks of the oligarchy until 2006, and almost half among those had lost their status even before the first major transition of power from Yeltsin to Putin. The change at the top of the pyramid of political power, however, did change the nature of the risks faced by the postcommunist oligarchs: if under Yeltsin most expropriations were a result of fights among oligarchs for the reallocation of the most

Table 14
Regression Analysis of Accumulated Personal Wealth

	(1)	(2)
Outsider	.176 (.398)	-.384 (.447)
Yeltsin supporter	.614 (.434)	.515 (.438)
Jewish	. . .	1.023* (.473)
Other ethnicity	. . .	-.101 (.614)
Age	. . .	-.047+ (.024)
N (clusters)	266 (90)	248 (84)
Adjusted R ²	.212	.284

Note. Coefficients are the results of pooled ordinary least squares regression for 2003–6 using all oligarchs in good status at the beginning of each year, with robust clustered standard errors in parentheses. The dependent variable is the natural logarithm of estimated personal wealth. Both regressions include year and sector dummies.

* Statistically significant at the 5% level.

+ Statistically significant at the 10% level.

prized assets and were relatively seldom followed by further punitive action, especially on the part of the government, most expropriations under Putin were initiated by the government and affected especially strongly outsider oligarchs who rose to prominence during the Yeltsin era. I could not find evidence in my data to support the claim that Russia under Putin has made discernible steps toward universal protection of property rights not depending on political connections.

One of the most puzzling aspects of the evolution of political risks in recent years is that while oligarchs of Jewish ethnicity do not seem to have been particularly targeted for expropriation, they do appear to have been targeted for ostracism. It appears that as a result of that, Jewish oligarchs who had behaved very similar to non-Jewish outsider oligarchs during the Yeltsin era started reporting their incomes much more transparently. Those who managed to survive also accumulated significantly higher personal wealth than did other categories of oligarchs. Both these facts are consistent with the consequences of the real or perceived anti-Semitism described in the literature (Brenner 1983).

In the early 1990s it appeared as if Russia had a good chance of joining the club of Western countries with market economies and systems of political democracies. The fact, documented in this paper, that more than half of the post-communist business elite in the 1990s consisted of outsider entrepreneurial entrants possessing high levels of human capital shows that these hopes may not have been completely unfounded at the time. Still, so far they have failed to materialize. The basic message from my analysis appears to be that instead of changing the rules of the socioeconomic game established by the Soviet Mafia, outsider entrepreneurial entrants were themselves changed by those rules. The process of institutional transformation has demonstrated once again that it is impervious to rapid changes.

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