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на тему:

Political Connections and Firm Performance

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Аннотация

Дипломная работа “Влияние присутствия членов Правительства в Правлении компании на деятельность компании” исследует современные политические связи между правительственными органами и корпоративными компаниями частного сектора. В работе проанализировано влияние на результаты деятельности компании наличия тесной связи с высшими государственными органами власти.

В процессе исследования была собрана база данных по бывшим и нынешним членам Федеральных государственных органов и ведущим менеджерам и директорам, входящим в Советы Директоров и Правлении компаний. Общее число выборки составило 5199 государственных деятелей и 1011 директоров корпоративного сектора экономики. На ее основе были найдены директора компаний, руководящие компанией и занимавшие в прошлом или занимающие государственные должности. Такие компании определены как “политически связанные”.

В работе используется предпосылка о том, что близкая связь с государственными органами позволяет компании получать определенные выгоды от этой связи. На ее основе, автором выдвигается гипотеза, что назначение политического деятеля из Высших государственных органов власти в руководство компании воспринимается рынком как положительный сигнал и ведет к краткосрочному увеличению стоимости акций.

В исследовании используется эконометрическая методология изучения событий. Совокупные доходности сверх нормы в течение периода около даты назначения тестируются на статистическое отличие от показателей нормальных доходностей. Параметрические тесты подтверждают положительный результат, однако, дальнейший анализ выявил нежелательные характеристики данных доходностей. Доходности акций в рассматриваемом периоде не соответствуют нормальному распределению, поэтому альтернативные применяются непараметрические тесты. Результаты данных тестов не подтверждают сформулированную гипотезу.

Результаты данного исследования были смещены в силу ограниченности информации и сокрытия реальных взаимоотношений между представителями крупнейших корпораций и политической государственной элитой. Данная область требует дальнейшего изучения, что возможно исключительно при увеличении прозрачности бизнеса в Российской Федерации.

Abstract

In the paper I demonstrate the presence of political connections on Russian market. Own collected database and improved definitions of political connections are implemented to establish the political ties of the largest Russian public companies. The short-term performance implications of these connections are derived by performing ex-ante event study's methodology around the date of nomination of politically connected representative to a firm. The research provides insight on the performance measurement topic in particular country in financial economics.

Contents

Introduction

Firms deal with a multiple economic agents such as suppliers and customers, other market players and competitors, regulators and governments in a variety of operations (Granovetter, 1985). The interactions between corporate and governmental sectors play an important role in business environment and strategy in modern economics (Hillman et al. 2004). It is impossible and unreasonable to explore economy in the isolation from politics. Recent studies showed that politically connected firms are widely spread globally and attract more attention in scientific literature nowadays (Faccio, 2006).

Large number of research papers in different fields of science is dedicated to exploring the relationships between the companies and the public workers. The authors set up the question: "Does the presence of political connection help a company to perform better?" They are searching for the answer on the local markets, implementing specific methodologies within separate countries, like Indonesia (Fisman, 2001), Malaysia (Johnson and Mitton, 2003), China (Wu et al. 2012), the USA (Jayachandran, 2006) and others; or globally, trying to derive common characteristics of politically connected firms in a global context (Faccio, 2006; Faccio et al. 2006).

It is a controversial issue to state that connected companies exploit "political capital" and are preferential for investor choices. Not all researchers derive evidences of connections being advantageous. Recent studies, for instance, tend to express doubts in positive effects of being close to government (Hersch et al. 2008; Aggarwal et al. 2012); while some earlier ones support them (Fisman, 2001; Jayachandran, 2006). Thus, the issue requires additional research.

Russia is not a random choice for the research. Political life is a social and actively debated question in Russia. Concealment of ownership and real incomes of political elite and their relationships with business is covered with mystery.

Evidences on connections tend to be stronger in countries with higher level of corruption (Faccio, 2006). Transparency International organization ranked Russia on 133rd place of total 174 countries in corruption level in 2012[1]. This is the worst result out of top 20 developed countries.

[1] http://rating.rbc.ru/article.shtml?2012/12/14/33843988

Another organization - World Justice Project – ranked Russia 85th out of 97 in Rule of Law Index ranking[2].

Lack of research data on this topic is a challenge for the thesis paper and it should also be a valuable contribution to the research literature.

In my thesis paper I discuss circumstances, current situation and outcomes of connections between corporate businesses and the political governmental elite in Russia.

Two main objectives of the research are defined:

- Prepare a thorough analysis of situation around political connections in Russia;
- Model the effects of connections on a companies' performance by event study methodology.

In order to achieve the objectives I collected new data set of companies and revised it to find out the presence of connections.

Two hundred largest companies by market capitalization criterion were the starting point. Firms' final beneficiaries were defined and state-owned companies were excluded. Database of former and current members of Federal Assembly of the Russian Federation, Government of the Russian Federation, Presidential Office and the other Committees was collected. For the remaining privately-owned companies in a dataset the definition of political connection was implied. Finally, event study's methodology was implemented to derive if stocks demonstrated abnormal returns around the nomination date.

The procedure implied doesn't support expected results. Parametric tests should be considered with concern due to bad assumptions. Following prescribed methodologies in research literature I checked the normality of stock returns and reject the null hypothesis being normal. Non-parametric tests relax the assumption of stock returns normality. I imply several commonly used specifications. They conclude that the event of interest has no influence on stock performance. Test criteria failed to reject the hull of cumulative abnormal returns being zero. I discussed possible biases and test weaknesses due to data limitations.

My thesis paper contributes to finance literature in several ways.

[2] http://worldjusticeproject.org/rule-of-law-index

First of all, it enriches the literature on political connections. I improved the definition of politically connected firms and enlarged the sample to distinguish connections. In particular, I reviewed all the members of Board of Directors and Board of Management of every company to identify the presence of connections. This modification allowed me to get more relevant sample of political connections and develop the identification process more thoroughly.

Secondly, thesis paper adds insight on the problem in particular regions – Russia and Russian market. Though, the presence of government directors in corporate Boards is broadly presented in Russia, the topic attracts little attention. Faccio (2006), Frye and Iwasaki (2011), Dolgopyatova et al (2009), Yakovlev et al. (2010) implicitly discuss related topics. In particular, Faccio (2006) included Russia in her 47 countries analyses, but the market was not analyzed deeply (only 25 companies under investigation). Frye and Iwasaki (2011) used dividend payments as the long term indicator of firm performance to measure the effect of political ties. Dolgopyatova et al. (2009), Yakovlev et al. (2010) demonstrated detailed characteristics of corporate governance issues in Russian economy.

I expected the results to be positive for the event of interest. However, the result doesn't go along the researches that evidence political connections have positive effect on company's value in short-term horizon as it was expected.

The remaining thesis paper is organized as follows. Section 2 shows in details the existing literature on the topic. Section 3 provides definition specification and theoretical methodology. Section 4 describes data and descriptive statistics. Section 5 reports empirical results. Section 6 concludes.

Literature review

A numerous number of research papers on corporate-government relationships exist in academic literature. Political science, economics, sociology, management and financial studies contribute to the development of the topic. This part of the thesis paper categorizes existing literature, utilized methods and tested hypothesis. It also explains the rationale behind the choice of the topic and implied procedures of thesis paper.

The review is structured as follows: brief description of sciences and theoretical concepts on the topic is given. This part is extremely important, since the techniques and concepts differ among earlier and later researches. Recent papers on financial economics will be discussed after that. Review ends up with the explanation of potential improvements and caveats of the thesis.

Early researches relate to corporate political action literature (CPA). It supports the idea of increase of corporate activity in political sector and describes the variety of activities implemented. Theoretical frameworks emphasize the reasons to become politically involved and strategies to establish the connection (Schuler et al. 2002). Evidence concludes that nurturing political connections is an essential element of corporate policy strategy (Baysinger, 1984).

Theoretical concepts behind the topic are categorized and presented in Table 1.

Field of study	***Key theories***
Political science	***Interest group theory*** Government public policy is responsible for presenting and preserving interests of the whole society. Businesses form groups of alike interests to lobby and protect their favors. Competition between groups motivates companies to be politically connected ***Limitations*** The theory lacks the explanation of benefits and doesn't reflect reality properly ***Source*** Mundo,1992; Plotke,1992
Economics	***Collective action theory*** "Political good" has similar properties with collective goods. In small or highly concentrated sectors/industries there are no place for free riders, so participants are active. In large markets the amount of participants is high, so some of them might "free ride" on donations of others ***Limitations*** The theory doesn't take into account several aspects, for instance, specific industry characteristics, country differences, and other

	Source Keim and Zeithaml,1986
	Public choice theory Corporate-political sector relationships form an "exotic" type of market. Public services represent supply side. Corporate companies are consumers of public services. The price is considered to be the amount of money or other resources delegated to establish desired political circumstances in economy. Based on the expectations of public workers behavior companies vary their contribution trying to optimize the degree of participation ***Limitations*** Expectations matter a lot. When theory is inefficient, when public workers do not completely represent interests of its supporters. The price paid doesn't always reflect the purchased service. The practical value of the theory is significantly limited ***Source*** Grier and Munger,1993
	Transaction cost theory The theory developed by Olivier Williamson represents institutional approach in economy. It states that the company acts in most possibly rational way aiming to minimize transaction costs coming from participating/non participating in politics ***Limitations*** Public policy value estimation when acting in a coalition with other less similar firms is not possible ***Source*** Williamson,1985
	Game theory Company's actions are based on expectations about the actions of other market players and public policy makers. The model of two companies competing for public influence is introduced ***Limitations*** Competitor's behavior is overestimated in final decision making process ***Source:*** Austen-Smith and Wright,1996
Sociology	***Resource dependence theory*** Economic agents are considered to be interdependent from each other's decisions (in particular, from policymakers). This dependence is considered to be negative. Successful corporate political strategy reduces the degree of dependence as well as the level of uncertainty ***Limitations*** The assumptions do not distinguish between companies with different specific firm characteristics ***Source***

	Baysinger,1984
	Institutional theory Institutional theory suggests that a company participates in political life to acquire and maintain "political capital" – nonmaterial resource (network in government structures, knowledge of law, governmental projects) that might be transformed into material advantage ***Limitations*** It is hard to separate and measure political capital within regular terms of business due to its non-materiality ***Source*** Oberman,1993
Management	***Agency theory*** The interactions between government and corporate sector represent agent-principal relationship. Firms are active in establishing public sector relationships in order to control agents – government; ***Limitations*** Entering politics will not completely secure a firm from unfavorable agent's behavior ***Source*** Keim and Baysinger,1993

Table 1. Review of theoretical concepts

The key takeaways of the initial theories on political connections are:

- earlier papers explain the rationale behind political connections;
- authors tend to ask what policy strategy could be imposed;
- theories conclude that close relationships with government have value for a company.

The assumptions of thesis paper are based on foundations of the described theories. Recent researches on Russian market support the theory that connections have value for a firm as well as government. Government allows collecting rents from companies for a group of politicians, instead guaranteeing their support. Companies' performance increases due to availability of additional resources within preferential governmental treatment (Frye and Iwasaki, 2011). Also, the results of the thesis paper provide support for positive nature of connections.

Measurement and quantitative estimation of the effects performing political actions remained unexplored till then. Basically, recent financial economics literature focuses on particular occasion on the market that relates closely to political life and scrutinizes it in more detail. The effect of this event on the company's performance is derived.

Let's categorize and structure the academic literature on topic by hypotheses tested, methodology used and the market of the research.

1. Hypotheses tested

Researchers used many different types of hypotheses in recent literature and some of them might be surprising. Three most common directions are related to stock prices fluctuations after political events, preferential treatment when searching for extra capital and benefits from regulatory easing.

- *Stock prices are affected by the presence of political connection (Jayachandran, 2006; Fisman, 2001)*

Stock price fluctuations caused by an event is a popular approach to measure political influence.

Sudden switch in May 2001 in Senate power from republicans to democrats caused by Vermont senator James Jeffords' departure from the Republican Party was followed by a fluctuation in an amount of 97 billion dollars in the market capitalization of 500 largest US companies (Jayachandran, 2006). Jeffords effect's results were positive (0,5% increase) for ones companies, since they were supporting democrats, while they were negative (-1% decrease) for those, supporting republicans. This fact provides strong evidence that the values of a firm are correlated with unexpected political events and the ruling party. Standard event study's methodology was used around the date of retirement.

- *Capital structure of the firm differs among connected and unconnected firms (Faccio, et al. 2006; Claessens et al. 2008; Khawaja and Mian, 2005)*

Faccio et al. provide evidence that politically connected companies are perceived by investors and banks as more preferred borrowers compared to unconnected firms. The reason for that is that investors believe politically connected firms will get significant bailouts from government in case of default. This motivates lenders to finance such companies more actively. That is why the leverage ratio of politically connected companies tends to be larger.

State-owned banks grand advantageous access to long-term financing to politically connected companies in Brazil (Claessens et al. 2008). This tendency was also evident in Pakistan (Khawaja and Mian, 2005).

- *Connected firms exploit regulatory benefits (Charumulind et al. 2006)*

Banks allowed providing less collateral for politically connected companies to obtain more long-term financing in Thailand, than for unconnected firms (Charumulind et al. 2006)

Methodology used

The most commonly used methodological approach in empirical research on the topic is event studies. It is used on ex-ante basis, meaning that the prices of stocks are known around the required date. It allows pricing the effect of government connection as a signal on political occasion of concern around its date.

The main hypothesis of the thesis paper is stated as follows:

Nomination of politically connected director or manager is considered as a positive signal for investor and leads to stock price increase around the date of announcement.

The hypothesis is tested and cumulative abnormal returns explicitly represent the measure of influence of connection on company's performance. As shown, the implemented tools are commonly approved and widely used. Several papers exist that use the same techniques of estimating the effects of different events on firm's market capitalization around nomination date (Jayachandran, 2006; Fisman, 2001; Cooper et al. 2010).

Some recent studies tend to prove the indifferent or even negative effects of political connections on company's performance.

Aggarwal et al. (2012) exploit agency conflict idea. Theoretically, firms are willing to perform political actions trying to support the public workers that offer them desired legislative, economic or other conditions. That might result in positive response on firm's performance. On the other side, management pursuing own goals might be the initiator of these political involvement. That leads to complicating agent's problem for shareholders and negative performance expectations. During 1991 – 2004 periods in USA the authors analyzed donations trying to separate two effects. They conclude that donations negatively affect the returns of the firm. "Worse corporate governance is associated with larger donations. A $10,000 increase in donations is associated with a reduction in annual excess returns of 7.4 basis points" (Aggarwal et al. 2012, Abstract).

The effects of being politically connected are difficult to materialize. However, they have value as previous analysis shows. It concludes that they might be considered as a sort of intangible assets. This assumption forced Hersch et al. (2008) to apply Tobin q measure to estimate the value of the connection. "If political capital exists, it is an intangible asset. However, we find little relation between q and political contributions, suggesting that campaign contributions may not have long term effects on political markets" (Hersch et al. 2008, p. 396).

Geographical differences

The vast majority of the literature covers separate countries individually. Literature explores different markets in developed and developing countries.

There are differences in techniques used. In developed countries, like USA, UK, Japan, the information on elections and procedures of accounting disclosure is highly prescribed what allows researchers to build a reliable database. For instance, Cooper et al. (2010) were able to collect data on 25 years long period in the US elections and contributions.

Developing countries attract researchers of the topic because of other reasons. They are relatively higher role of government as an economic player (Wu et al. 2012), presence of patronage and informal relationships (Charumulind et al. 2006). In particular, many researchers choose Brazil as the most suitable market to analyze different issues related to political connections. Government plays an important role in economic development in Brazil; "political institutions favor particularistic relationship between politicians and firms" (Bandeira-de-Mello and Marcon, 2008, p. 1).

The literature on Russian market is limited. However, the market is a good choice for analyzing political connections.

Yakovlev et al (2010) provide evidence on the specific features of corporate governance in Russia. They state that Russian market is characterized by high "concentration of ownership and control, rapid pace of corporate integration (with integrated business groups dominating the Russian economy) and tendency to "personify" Russian business" (Yakovlev et al. 2010, p. 131). Authors present two model of corporate governance, where one is for large companies and corporations. Such companies tend to use close informal ties with other market and public players. Based on these specifications, I believe that largest public companies dataset has the best fit for the analyses.

Political elite has enormous power in the country. Weak law system, concealment of ownership and real incomes of politicians, high level of corruption are key features of Russian economy (Transparency International; World Justice Project). It is relevant, since the number of political connections tend to grow in countries with higher level of corruption and weaker regularities (Faccio, 2006).

Frye and Iwasaki (2011) provided theoretical description of business–government relationships in Russian economy. They differentiated three categories of relationships: managerial discipline, rent-extraction ideal type and "collusion" type. Using the survey of Hitotsubashi University and the Higher School of Economics of 2005, they concluded that the most common format of relationships is a "collusion type". It happens when a state representative governs the corporate firm, which tends to have relative high performance. Such appointment allows the state to control the firm and benefit from it (like in rent-extraction type) and also to stimulate its performance (like in managerial discipline). This conclusion confirms the literature on positive effects of political connections.

In the conclusion, I would like to point out potential improvements and critics of the research. Firstly due to implied procedures the performance implication effects are considered to be short-term. However, it would be useful to perform additional research on longer terms implications of the political connections. Secondly, the research might be improved by controlling for changes in Board of Directors and Board of Management. The implemented procedure uses fixed time period dataset of Boards member – the ones that were heading companies at the beginning of 2012. The changes in Boards member in previous years might also be considered as political connections. Finally, inclusion of public service structures on regional level might help to find out other connections.

Definition of political connections

Several patterns exist in the research literature to identify whether the firm is politically connected or not.

One participation method allows identifying the political connection when the company is supporting or sponsoring the nomination of a particular candidate or a party in the elections. It is done indirectly, without nomination of firm's own representative. Firms donate soft or hard money or other resources to political parties or candidates during election times (Claessens et. al. 2008).

Another participation method occurs when the company's representative (most commonly from top management or directors) directly offers his candidacy for election in the country. By succeeding in elections, the representative will gain an official public position and a firm he will be working for will be defined as politically connected one. If he fails then the firm will remain being unconnected.

A company is searching for possibilities of exploiting benefits from political connections and nominates its own representative and supports public workers, who represent favorable interests of the companies. It is possible to identify when and what firms were willing to gain political connections by collecting the elections and candidates' data

It might be the case, when the directors or managers are personally related to some public officer. This method is called social network approach. The key idea behind the social network approach is that a "firm is connected to a politician if one of its directors shares the same educational background with a politician" (Do et al. 2011, p. 1)

Methods described above are highly instructive. These methods allow understanding of nature of connection. It means that it explains why, when and at what circumstances the firm got connected. The key drawback of these methods is a difficulty of implementation. They are most commonly used for analyses of developed countries, where the political system is mature; the elections are highly prescribed and completely transparent.

Finally, a current director or manager might be a previous public worker. It is called firm representatives' method and is commonly used in many researches (for instance, Faccio, 2006).

The firm representatives' method is a cross-sectional method of political connections identification. It assumes that in particular point of time a sample of firms by whatever criteria is gathered. Then a company is inspected if it is connected through its representatives. It is so if the representatives (such as directors or managers) are political workers and also simultaneously are holding a public place. It is often the case when they are not political workers in a moment, but were earlier, before being appointed to the company. This is also a criterion for connection, because previous public experience is also relevant and might give preferences to a company.

The advantage of the method is its relative simplicity comparing to direct or indirect participation methods. However, there are several drawbacks. It assumes specific point of time when a cross-section company's data is gathered. It might be the case when the company was already previously connected and have sustainable governmental relationship, but there are no direct representatives in a firm's Boards at this particular point of time. Another issue is that we don't get the reason and circumstances when the firm became connected. This methodology is more commonly used in developing countries since less information about the politics and elections is disclosed.

In my thesis paper firm representatives' method is implemented.

The definition used is based on the identification procedure introduced by Mara Faccio (2006). She used two main criteria to identify the political connection: "at least one of its top officers (CEO, president, vice-president, chairman, or secretary) or large shareholder is a member of parliament, a minister, or is closely related to a top politician or party. Close relationships include: (i) friendship, (ii) former heads of state or prime ministers (and their relatives), (iii) directorships covered by current politicians in 1997, who recently left the firm, (iv) connections with foreign politicians, and (v) well known cases of relationships with political parties" (Faccio, 2006, p. 371).

Some degree of subjectivity exists in the criterion of close relationship, when considering friendship and connections with former politicians.

I improved the criteria of political connections in order to get more relevant and suitable results. Instead of four of top officers' positions, I implied the criterion to the full composition of Board of Management and Board of Directors.

I also introduced the time frame of the definition. I added not only the current members of governmental authorities, but also the former ones. Time period used is 1991 till nowadays. More details on that are in the next part of thesis.

Finally, I would formulate the definition in the following way:

The company is defined as politically connected if:

- ***It is a privately-owned company;***
- ***At least one of its final beneficiaries or a member of Board of Directors or Board of Directors is a previous or current minister or member of a parliament.***

Data and methodology

Due to limitations of reliable databases on Russian market, a new database was created. Creating own database has several challenging problems; however, a number of assumptions was implied that aimed to make the analysis consistent and complete.

In response to the defined objective and chosen method – to estimate the share price fluctuation around announcement date – the first limitation on data was stated.

Assumption 1: The database consists only of public companies

The most reliable dataset of public Russian companies is published by RA Expert Ranking Agency. Top-200 companies by market capitalization criterion for the 2012 year end compiled the initial database. According to RA Expert estimates, the total capitalization of 200 largest companies comprises 743 billion dollars[3]. According to RIA Rating, total market capitalization of the second hundred of companies compose only 1,5% of the total value of the first hundred companies[4]. Own calculation based on RA Expert data shows this ratio is equal to 1,7%. Assuming that there are several differences between RA Expert and RIA Rating ratings, but they do not distort the figures significantly, it might be concluded that 200 companies compound almost the whole Russian market of public companies.

The analyzed sample includes both state-owned and private-owned companies. As stated above the goal of the model is to distinguish whether the designation of a politically connected director is a positive signal on the stock market. State-owned companies are by definition closely politically connected, so they are out of interest. For such companies the nomination of a public worker to a director position will not gain extra value, since it is state-owned. In order to properly estimate the impact of a designation, the beginning sample must contain only private-owned firms.

Assumption 2: State-owned companies are excluded from the sample

Two filters are used to identify the state-ownership. The first filter is when the state possesses at least 10% share of stocks of the company. By implying this criterion on a sample of 200 companies, 28 companies were excluded.

[3] http://www.raexpert.ru/ratings/expert400/2012/part03/p08/
[4] http://riarating.ru/corporate_sector_study/20130204/610537465.html

The second filter is implemented for the companies whose primary or further shareholders are state-owned companies. It occurs quite often when a company is owned by state not directly, but through other state-owned structures. In order to identify these relationships, I traced the shareholders one by one in order to find the final beneficiaries of each firm. If the final beneficiary was a state-owned company, then the explored company was also defined as politically connected. For instance, let's take a look at Rostelecom. Federal Agency for State Property Management (FASM) owns only 7% of the company directly. By the first filter, the criterion is not met. Implying the second filter, I found out that the largest shareholder of Rostelecom is Svyazinvest, a fully state-owned company. State ownership is detected through one additional chain link.

Two filters are used in order to be as much restrictive as possible. A company might have strong connection with government through its beneficiary and this will distort the results. It is assumed that even in this case the state will want to offer own director or manager to the company.

By implying this criterion 51 companies were excluded. Finally, the sample consisted of 121 private-owned companies.

Quarterly reports (1Q 2013) and list of affiliates (1Q 2013) provided the information about the beneficiaries. It was a challenging task to find out the final beneficiaries, because they are not willing to be disclosed.

Cyprus is the largest country by the amount of investments in Russia. It is partially so, because the owners of the largest Russian companies are Cyprus-registered firms. Another jurisdiction allows the owner of such companies being disguised. This is one of the reasons, why management has large shares of firms through several offshore artificial companies.

The next step was to identify the political connections.

According to the definition, the dataset of Board of Directors and Board of Managers members is needed. Quarterly reports (1Q 2013) and list of affiliates (1Q 2013) provided the information about the Board of Directors and Board of Managers members. This dataset composed of 1011 current members of Board of Directors and Board of Management.

Federal Assembly of Russian Federation database

Dataset of former and current members of Federal Assembly of the Russian Federation was collected. Federal Assembly consists of State Duma and Federal Council.

Six convocations of State Duma were operating since 1991. The current one consists of 450 people, while the former ones include a bit less. It is being reelected every 4 years. Totally, it compounded of 2853 persons. The data was found on official site of State Duma[5].

First convocation of Federal Council was initiated in 1994. Four periods of formation were established since then. I collected data on all members during that time period. Nowadays, Federal Council consists of 166 federal Councilors.

In order to make the research more consistent I added current members of all related Committees, which included Chamber of the council, Chairman and Deputy Chairman. Members of 10 committees were included:

- The Council of the Federation Committee on Constitutional Legislation, Legal and Judicial Affairs and Civil Society Development;
- The Council of the Federation Committee on the Federal Structure, Regional Policies, Local Self-Governance and Affairs of the North;
- The Council of the Federation Committee on Defense and Security;
- The Council of the Federation Committee for Foreign Affairs;
- The Council of the Federation Budget and Financial Markets Committee;
- The Council of the Federation Committee on Economic Policy;
- The Council of the Federation Committee for Agrarian and Food Policy and Environmental Management;
- The Council of the Federation Committee on Social Policy;
- The Council of the Federation Committee on Science, Education, Culture and Information Policy;
- The Council of the Federation Committee on the House Rules and Parliamentary Performance Management;

Finally, members of the council that don't go into committees included:

- Temporary committees;
- Head and Council establishment;
- Secretariats of the chairmen and council establishment;

[5] www.duma.gov.ru/

- Committees establishment;
- Authorities of council establishment;
- Chairman committees;
- Council agencies;
- Council Legislative agency.

The Committees include public representatives from different federal parts of federation, allowing me to broaden the geographical coverage of politicians. Official web-sides provide this information[6]. This dataset composed of 1819 persons.

Government database

To check the presence of ministers in the Board of Directors or Managers, I collected data of former and recent members of Government, Ministers and Presidential authorities.

Since 1991 there were 14 compositions of the Government. The database included:

- Chairman;
- Deputy Chairman;
- Federal Ministers;
- State Council;
- Security Council;
- Presidential Administration.

I added 522 persons. Official web-site information was used[7].

As a possible direction of further research, regional members of regional governmental agencies could be included. Most companies in a dataset operate in many regions of Russian Federation. The companies under consideration are the largest ones, so I assume that their representatives, if connected, should be on the highest federal level. As I mentioned, I scanned top officers and found several cases, when representatives are presented in regional authorities. For instance, Aleksandrovich Vladlen is a member of Norilsk town council. Such cases are also included in analyses.

[6] www.council.gov.ru/
[7] www.government.ru/

Finally, the dataset was completed. It consisted of 5199 first and last names of political workers of the most important Federal regulatory authorities and 1011 corporate directors and managers.

Identification procedure

To identify the connections, I used Excel functions to find the intersections in lists of public workers and corporate directors.

I used VlookUp function in Excel to get the intersections in names between lists of public and corporate workers. For similar family names, I scanned the similarity of first name and middle name. Logical and conditional functions were used.

To define the connection I used the following assumption.

Assumption 3: There is a connection if first, last and middle name are completely identical

This criterion is the most restrictive one. Certainly, there might be close relatives in the sample. But the information on biographies is very scarce. That is why I relied only on maximum objective criteria.

To explore the connections in more details, I also scanned the biographies of companies' CEO and Chairman of Board of Directors in internet sources (Forbes, Commersant, Lenta, Vedomosti etc) and search engines (Factiva, Public.ru). Results from both connections were added to the final sample.

Direct relationships between companies and government are not disclosed. First of all, politicians use different sophisticated ways to conceal incomes and ownership. Family members are often involved; however, it is impossible to collect consistent dataset on all family members and their ownership. It is required for politicians to disclose their incomes and ownership, but there are no strict legal requirements to disclose the incomes and ownership of relatives and family members, that is why there is always an opportunity to work it around. Secondly, informal and unofficial connections could take place.

I suppose that it is one of the most important limitations of the presented procedure. There exist a large number of cases, when people, who are close to political elite, were appointed as firms' heads discussed in press. These cases are definitely political connections, however, there is no legal

prove of being politically connected. Such criteria are highly subjective, so I exclude them completely.

Due to this reasons, the number of identified connections by described procedure could be small. Analysis based on smaller than true number of politically connections produces downward bias on the effect of political connection.

Model and descriptive statistic

The number of political connections found is 23 firms, 19% of total number of public private companies and 15% of total market capitalization. It is much larger than average 2,68% and 7,72% of total number and capitalization of listed companies in the world correspondingly (Faccio, 2006). It is consistent with Faccio (2006) that in Russia over 10% of listed companies are connected. However, it doesn't support the fact that politically connected firms represent 86,75% (Faccio, 2006). The possible explanation for that is a small number of firms under consideration in her analysis – 25 only.

Firm characteristics are summarized in Table 2.

	Company	***Industry***	***Event Date***	***Connection authority***	***Company's representative***
1	Lukoil	Oil and gas industry	28.06.2007	State Duma, Federal Council, Government	Shokhin Aleksandr, BoD
2	Norilsk Nickel	Nonferrous-metals industry	17.12.2012	Government	Potanin Vladimir, BoM
3	Bashneft	Oil and gas industry	29.06.2011	State Duma	Mikhail Gutseriev, BoD
4	Baltica	Food industry	14.08.2008	Duma, Gov, Fed Con	Shokhin Aleksandr, BoD
5	Polyus Zoloto	Precious metals and diamonds	27.06.2008	State Duma	Suleiman Kerimov, shareholder
6	Fosagro	Chemical and petrochemical industry	24.01.2013	Federal Council	Guriev Andrei, BoM
7	TMK	Iron industry	27.06.2008	State Duma, Federal Council, Government	Shokhin Aleksandr, BoD
8	Akron	Chemical and petrochemical industry	29.05.2008	Federal Council	Aleksandr Dynkin, BoD
9	LSR Group	Constructions material industry	14.08.2006	Federal Council	Molchanov Andrei, shareholder
10	IDGC of Centre	Power sector	11.12.2012	Government	Isaev Oleg, BoM
11	Fortum	Power sector	30.05.2008	State Duma, Federal Council, Government	Shokhin Aleksandr, BoD
12	Bank Saint-Petersburg	Banks	18.05.2006	Federal Council	Karmazinov Felix, BoD
13	GAZ Group	Engineering	30.06.2010	Government	Shantsev Valeiry, BoD
14	Korshunov Mining Plant	Iron industry	12.05.2008	Regional authorities	Alekseev Boris, BoD
15	Sollers	Engineering	03.06.2008	Government	Yasin Evgeniy, BoD
16	ChelPipe	Iron industry	30.06.2011	Government	Khristenko Valeriy, BoD
17	Abrau-Durso	Food industry	22.06.2012	Government	Titov Pavel, BoD
18	Tattelecom	Telecommunications industry	24.06.2005	Regional authorities (Tatarstan)	Shafigulin Lutfulla, BoM
19	Sofrinsk Experimental-Mechanical Plant	Engineering	29.06.2012	Government	Nechaev Andrei, BoD
20	GUM	Trade industry	05.06.2007	Government	Malyshev, BoD

21	Permskaya Energosbytovaya Company	Power sector	30.06.2008	Government	Urinson Yakov, BoD
22	Primorie Bank	Banks	02.06.2011	Government	Sergei Darkin, shareholder
23	Yaroslavl Sbytovaya Company	Power sector	-	Federal Council	Rogotskiy Victor, BoD

Table 2. Politically connected companies

It could be concluded from the sample that the companies from different industries are politically connected. For instance, four companies represent power sector, three of them represent iron industry. Reason for this evidence is that government is interested in pursuing control in several strategic corporations, especially in resource industries. If we take a look on a sample of politically connected firms that were excluded by second filter, we can conclude that 17 out of 20 connections are operating in resource sector.

To find out if political connections have value on stock performance, I implemented event study's methodology. Cumulative abnormal returns around the date of announcement should be positive to represent the desired result. I use the same procedure as described in Brown and Warner (1985), Campbell et al (1997) and implemented by Faccio (2006).

Event definition

Assumption 4: Event of interest is a nomination of a former or current politician to the Board of Directors or Management.

Collecting the data on politically connected firms, I came across with several limitations in methodology.

Revising shareholders is important, since the connections might be established through them. However, there are limitations on data about the ownership of companies. Besides, most shareholders are holding the shares for a long time. These are the cases, when a company was headed in the beginning of 00^{th} and top manager is the key shareholder. It doesn't allow estimating the effect of political connection, since the companies were not public at the time of initial shareholder acquisition. In order to be consistent, I excluded connections, where it is not possible to distinguish, when a shareholder starts to head a company. As discussed previously, it could possibly lead to downward bias. However, it commonly occurs that an initial shareholder is a top manager or director of a company simultaneously. The modified methodology considers all members of Boards, so it decreases the influence of described bias.

Several sources were used to determine the date of directorship announcement. Company's lists of affiliated persons were primary sources. Usually the members of Boards are reelected annually. It happens sometimes when the board memberships change more frequently. Information about changes in Boards' memberships must be disclosed and is reflected in internal documents. The date of accidence of directorship is disclosed as well.

I scanned information in press to double check the date of announcement[8]. For instance, the day when Vladimir Potanin officially entered Board of Directors of Norilsk Nickel is 17.12.2012. It is often the case when a press reports the designation a day or two before the official entrance day. To account for that I use (-2;+2) event window to capture price movements around these dates.

Assumption 5: Event window is (-2;+2) around the announcement date.

Selection criteria

The sample of interest is politically connected companies. However, not all 23 companies provide necessary stock prices data for analyses. After adjustment, the final sample is left with 12 companies.

I collected stock prices for firms. Daily common stock prices were taken from Finam.ru and I calculated daily lognormal returns. The formula for lognormal returns is

$$\text{Ln Ret}_{it} = \ln (P_{it}) - \ln (P_{it-1}),$$

where P_{it} and P_{it-1} are stock prices on day and previous day for every t in estimation period and for every stock i.

Nowadays RTS and MICEX are operating as one exchange. Previously companies could be traded on either one of the exchanges or both. I included MICEX exchange database, because it demonstrates number of trades. Higher liquidity of trades is necessary for collecting daily price rates.

Bashneft, Gaz Group, Korshunov GOK prices rates were taken from RTS stock exchange: stocks were not traded on MICEX during the required period. I used RTS stock prices data only, when MICEX exchange didn't provide me with required information. In all other cases I used MICEX rates.

[8] Public.ru, Factiva search engines

There exists a thread of potential upward bias in rejection of null hypothesis, when the trading liquidity is low (Brown and Warner, 1985). They state that the variance of returns around the event date might be overstated, when the stock trades poorly. I decrease the quality of performance, since increasing the probablility of null hypothesis. For this reason, I exclude Bashneft and Permenergosbyt. I also exclude GAZ Group and Korshunov GOK, since the number of trades during the year is too small – less than 65. Such small number of trades will not represent daily returns properly and will lead to biased and inconsistent estimator (Brown and Warner, 1985).

Several companies were excluded since stocks were not trading during the whole year estimation period. For instance, Abrau Durso begins 19.06.2011, but it started trading only since 11.04.2012. The sample doesn't represent enough observations to build reliable normal returns model. Bank Primorie was excluded by the same reason.

I also exclude Tattelecom since politically connected director, Timur Akulov, entered the company before it was public. There are no price rates around the date of nomination. Bank Saint-Petersburg and LSR Group were excluded for the same reason.

It was not possible to distinguish the actual date of announcement of Victor Rogotskiy designation to Yaroslavl Sbytovaya Company, since the information in list of affiliated persons defines only the year – 2006 and no exact date. The information in web is also unavailable.

These limitations in data are necessary for proper analysis; however, they decrease the sample size significantly. The sample size is low, and it is a drawback of the sample. However, tests might be implemented, since the event study might be even implemented for one particular company.

Normal and abnormal returns

To calculate abnormal returns around the announcement date, the measure of normal returns on estimation window is necessary.

Assumption 6: Estimation period is equal to 1 year. This is necessary to get 250 daily rates.

This is a standard period of time to estimate the normal stock performance. It allows building a reliable and significant regression on the stock returns.

The basics of event study's procedure are described in Campbell, Lo, MacKinley (1997). They are standardized and the researchers implement the same procedure (Faccio, 2006;

Jayachandran, 2006). Normal returns are defined as "returns that would be expected if the event didn't take place" (Campbell, Lo, MacKinley, 1997, p. 151). Abnormal returns are calculated using the formula:

$$e^*_{it} = R_{it} - E(R_{it}|Xt),$$

where e_{it} Rit, $E(Rit)$ are abnormal, actual and normal returns respectively for time period t and stock i.

Market model is chosen to build an estimation period model. Market model bases on a stable linear relationship between an individual firm's return and the market return. For each firm *i*, I estimate the following equation using stock price data for each day *t* during estimation period:

$$R_{it} = \alpha + \beta * MktRtn_{it} + \varepsilon,$$

where R_{it}, $MktRtn_{it}$ are actual and market return for time period t and stock i correspondingly.

The proxy for market return is MICEX index. The index is a daily composite value-index, which comprises 50 largest public companies. To calculate log returns on MICEX index, I used the following formula:

$$Ln\ Returns_t = ln\ (I_t) - ln\ (I_{t-1}),$$

where I_t and I_{t-1} are market index values of that and previous day for each t.

The returns of the market are adjusted to the same time period; this allows avoiding non-synchronous trading bias (Brown et al. 1985). For instance, GUM stocks were not traded between 4.08.2006 and 8.08.2006. The stock price on 7.08.2006 is not available, so the market return is adjusted to the same days – 4th and 8th.

The parameters of regressions are estimated during estimation window based on 250 observations of stock and market returns. Cumulative abnormal return in a particular event window day is described as the sum of previously compounded abnormal returns plus the abnormal return of this day.

After performing regression I designed the testing procedures based on multivariate distribution of 12 stocks returns. The details are presented in the following topics.

Results

Estimation period regressions were prepared in Eviews. Full list of statistics and regression coefficients are shown in Appendix B.

I tested the significance of the normal returns model for each stock. I used the p-values of the regression coefficients and R squared to check if the regression fits well the estimation period model. Summary of the coefficients is presented in Table 3.

Stock	Coefficient α	Coefficient β	P-value α	P-value β	R squared	P-value F-stat
Akron	0.005297	0.465298	0.0012	0.0000	0.087280	0.000002
Baltica	-0.001434	0.198802	0.0519	0.0000	0.089274	0.000002
ChelPipe	0.000468	0.975386	0.6871	0.0000	0.284990	0.000000
Fortum	0.000134	0.219762	0.9038	0.0008	0.044106	0.000834
GUM	-0.000246	0.298075	0.8900	0.0009	0.043618	0.000893
IDGC	-0.001166	0.875371	0.4187	0.0000	0.190611	0.000000
Lukoil	-0.001136	1.013883	0.0640	0.0000	0.761957	0.000000
NorNik	0.000194	0.901479	0.7745	0.0000	0.525997	0.000000
Polyus Gold	0.000563	0.864141	0.7621	0.0000	0.195840	0.000000
SEMZ	-0.001579	0.305726	0.7003	0.1468	0.008471	0.146762
Sollers	0.002043	0.370963	0.055	0.0000	0.124322	0.000000
TMK	-0.000905	0.752217	0.5260	0.0000	0.239818	0.000000

Table 3. Regression statistics

It could be seen from the table that β coefficients are significant at 99% significance level in all regressions, except SEMZ. We also observe that R squared is not so high, but F-statistic shows significance at 99% significance level for the whole regression for every stock, except SEMZ. It doesn't matter if α coefficient is not significant in some cases. We could use excess returns

regressions instead to eliminate non-significance of intercept. I exclude SEMZ regression, in order to get unbiased estimates of abnormal returns.

Based on the estimated coefficients of α and β, I define abnormal returns for each stock and for each day in event window. The summary is presented in Table 4.

	Akron	Baltica	ChelPipe	Fortum	GUM	IDGC	Lukoil	Nickel	Sollers	TMK	Fortum
Day 1	0,039	0,027	-0,010	-0,002	-0,002	0,001	0,008	-0,002	0,037	0,110	-0,025
Day 2	0,047	0,013	0,000	-0,006	-0,016	0,011	0,005	-0,001	0,046	0,051	0,029
Day 3	0,037	0,019	-0,004	-0,003	-0,032	-0,011	-0,002	0,034	0,044	0,087	0,008
Day 4	0,041	0,038	-0,023	-0,006	-0,020	-0,015	-0,010	0,036	0,056	0,060	0,008
Day 5	**0,064**	**0,048**	**-0,006**	**-0,003**	**-0,017**	**0,020**	**-0,022**	**0,046**	**0,045**	**0,075**	**0,016**

Table 4. Daily cumulative abnormal returns

Day5 line represents cumulative abnormal returns around the whole event window.

To perform the testing procedures, I calculate J1 and J2 statistics which are used for inference. Both statistics are based on cross-sectional hypothesis about abnormal returns. I also calculated the individual event significance in Excel spreadsheet, but I am more interested in average cumulative abnormal returns significance.

Under the null hypothesis the average cumulative abnormal returns for the observed stocks are equal to zero. It means that under null hypothesis the event doesn't have statistically significant effect on stock performance. The alternative hypothesis might be different. First one is based on two-sided test and states that there was an effect of event on stock prices dynamics. The second one is a one-sided test that is why it is stricter. It states that the effect of observed event is positive on stock returns.

J1 and J2 statistics are aggregate measures. In this meaning they average the critical value through time and among assets. The formulas are the following:

$$J1 = \frac{\overline{CAR}(\tau_1;\tau_2)}{\sqrt{\hat{\bar{\sigma}}^2(\tau_1;\tau_2)}} \sim N(0;1)\,,$$

where

$$\overline{CAR}(\tau_1;\tau_2) = \frac{1}{N} * \sum_{i=1}^{N} \widehat{CAR}(\tau_1;\tau_2)$$

$$\widehat{CAR}(\tau_1;\tau_2) = \sum_{t=\tau_1}^{\tau^2} AR_t$$

$$\hat{\bar{\sigma}}^2(\tau_1;\tau_2) = \frac{1}{N^2} * \sum_{i=1}^{N} {\sigma_i}^2(\tau_1;\tau_2) = \frac{1}{N^2} * \sum_{i=1}^{N} \frac{RSSi}{N}$$

J2 statistic is calculated as following:

$$J2 = \sqrt{\frac{N(L1-4)}{(L1-2)}} * \overline{SCAR}(\tau_1;\tau_2) \sim N(0;1),$$

where

$$\overline{SCAR}(\tau_1;\tau_2) = \frac{1}{N} * \sum_{i=1}^{N} \widehat{SCAR}(\tau_1;\tau_2)$$

$$\widehat{SCAR}(\tau_1;\tau_2) = \frac{\overline{CAR}(\tau_1;\tau_2)}{\sqrt{\hat{\bar{\sigma}}^2(\tau_1;\tau_2)}}$$

The calculation is showed in Excel spreadsheet.

J1 statistic is equal 1,7577.

J2 is equal 2,019.

Both statistics are significant at 95% confidence level. It means that the null hypothesis is rejected and cumulative abnormal returns were influenced by event occurred.

One sided test has critical value of 1,96 for 95% confidence level. We conclude that we fail to reject the null hypothesis and the event doesn't have positive effect.

Following the literature prescriptions, stock returns should be tested for normality. Lognormal returns are distributed on average closer to normal compared to net simple returns. However, a drawback of the dataset was found out here. Several normality tests metrics were implied to return distributions and provided evidence on strong non-normality. The summary of the tests are presented in Table 5.

Stock	Skewness	Kurtosis	Skewness test p-value	Kurtosis test p-value	Jarque-Bera	JB p-value
Akron	0.929518	7.112576	0,0000	0,0000	212.1801	0,0000

Baltica	-1.347958	9.381986	0,0000	0,0000	499.9762	0,0000
ChelPipe	0.049847	3.889157	0,3738	0,0021	8.338940	0,0000
Fortum	0.900898	6.819345	0,0000	0,0000	185.7695	0,0000
GUM	2.749821	28.94400	0,0000	0,0000	7326.427	0,0000
IDGC	0.018636	4.951186	0,4521	0,0000	39.67204	0,0000
Lukoil	-0.135772	3.964856	0,1904	0,0009	10.46545	0,0000
NorNik	0.336022	4.983596	0,0150	0,0000	45.69057	0,0000
Polyus Gold	-3.202174	45.60324	0,0000	0,0000	19333.87	0,0000
Sollers	0.826888	4.762092	0,0000	0,0000	60.83279	0,0000
TMK	0.189360	4.820290	0,1108	0,0000	36.00920	0,0000

Table 5. Normality tests

Jarque-Bera statistic and its p-value is 0,0000 for each stock return. It means that the null hypothesis of being normally distributed is rejected. Skewness tests demonstrate the rejection of normality hypothesis. It is rejected for 7 out of 11 stocks. Kurtosis tests also demonstrate the rejection of normality hypothesis. It is rejected for all 11 stock returns.

Uncorrelated returns as well as multivariate normality of returns are key assumptions of event study's tests. Normality testing procedures indicate a violation of assumption of event study's tests. The event study results must be considered with the degree of doubt.

It is widespread problem, when stocks returns are not normally distributed (Brown and Warner, 1985). Corrado and Zivney (1992) state that non-parametric tests are more commonly used than parametric tests since they overcome sample distribution drawbacks.

Non-parametric tests relax the assumption of normality distribution (Corrado, 1989). Sign and rank tests are most popular ones. I imply both of them to the sample.

Sign tests require two assumptions: abnormal returns must be independent across stocks and the proportion of expected positive abnormal returns is equal to proportion of negative returns and equal to 0,5. Sign tests are based on the signs of abnormal returns. They are were simple to

implement and so not fit well for a daily data, since daily data is highly skewed (as we can see previously). Skewness distorts equal proportion assumption and weakens the test inferences. For demonstrative purposes I performed it in analysis.

J3 test statistic is calculated by the following formula:

$$J3 = \left[\frac{N^+}{N} - 0{,}5\right] * \frac{N^{\frac{1}{2}}}{0{,}5} \sim N(0;1),$$

where N^+ is a number of positive cumulative abnormal returns in a cross-section, N is a number of stocks.

In my sample, there are 7 positive cumulative abnormal returns.

J3 statistic is equal to 0,5527708.

The result is not significant; meaning that null hypothesis of having positive cumulative abnormal returns is rejected.

Another test used is rank test. It improves the weaknesses associated with sign tests. In particularly, it allows applying the test to daily data samples.

There are two specifications of rank tests. They have the same assumptions, but the size of the used sample data varies. The first specification ranks abnormal returns during event window. The other includes also ranks of estimation period returns. The ranks are appointed in ascending order. That means the lowest return gets the first rank.

The statistic is calculated by the following formula:

$$J4 = \frac{1}{N}\sum_{i=1}^{N}\frac{\left(K_{io} - \frac{L_2+1}{2}\right)}{s(L_2)} \sim N(0;1)$$

$$s(L_2) = \sqrt{\frac{1}{L_2}\sum_{t=T_1+1}^{T_2}\left(\frac{1}{N}\sum_{i=1}^{N}\left(K_{io} - \frac{L_2+1}{2}\right)\right)^2},$$

where K_{it} is a rank of stock I at time t (t=0 is event date), L_2 is a event period length.

The sample J4 is equal to -0,53452[9] and is insignificant. The null hypothesis of positive effect is rejected at 95% significance level.

[9] Calculation include SEMZ company

The second specification includes ranks of return series in estimation period. Excel spreadsheet calculates the critical value of test. The formula used is the same as described above.

Calculated J4 equals -0,3301. It means that null hypothesis is rejected. The is no positive or negative effect of event on stock prices.

I also applied non-parametric GRANK test, which has many benefits: "First, it is robust to event-induced volatility. Second, the empirical power of the test proves to dominate popular parametric tests as well as existing rank tests of cumulative abnormal returns. Third, it is reasonably robust to autocorrelation of abnormal returns. Fourth, it is robust against a certain degree of cross-correlation caused by event day clustering. Fifth, and last, it is distribution free and thus less sensitive to distributional assumptions than parametric counterparts." (Kolari and Pynnonen, 2011, p. 2)

The test statistic is follows

$$t_{grank} = Z\left(\frac{T-2}{T-1-Z^2}\right)^{1/2} \sim Student\ t(T-2),$$

where Z ratio is properly normalized (Equation (13 Kolari et. al 2011) using cross-sectional variance in rescaled ranks of GSAR, which series is given below

$$GSAR_{it} = \begin{cases} SCAR_i, & for\ event\ window \\ SAR_{it}, & for\ estimation\ window \end{cases}$$

In my case t_{grank} is equal to 1.14 (p-value is 0.2). We fail to reject the null of no mean event effect.

Concluding the estimated procedures, I would state that the estimated results do not support the states hypothesis. Tests based on parametric assumptions provide support, but do not rely on required assumptions. They should not be considered as the proper ones. Non-parametric tests do not support the hypothesis that political connection affects the stock price around nomination date.

There are several reasons for that.

First of all, it is a lack of data on unofficial and personified connections. Connections through relatives are also not captured by the methodology. The absence of this data decreases the number of politically connected sample and understates the possible positive effect. The connection might be established and some effect exists, but it is not identified. For instance, Novatek might be a good

example. It is known from press that Gennadiy Timchenko, the head and shareholder of the company, is a close friend of Vladimir Putin. The connection and preferences might be provided by these relationships. However, he doesn't hold any official public position, so the methodology ignores it.

Secondly, the results are not proved, because connections are established long time ago. In the yearly 2000th businessmen acquired state companies during the privatization. Some of them hold top managers positions simultaneously and remain key shareholders till nowadays. During the time of privatization business elite was very close to governmental. Since then corporate-political relationships could be established and existed till now. Long lasted relationships will not be reflected in stock price fluctuations. In this case the implemented procedure will not capture these effects.

Finally, the connections might be established not only through federal authorities, but also through regional ones. This issue might be an object of further research.

Conclusion

Thesis paper presents the analysis of political connections on firms' performance implications. It focuses on Russian market and describes the presence of political connections among largest Russian public companies.

To perform the research I collected broad database on public workers and corporate directors. The number of current and former public workers comprised 5199 persons. The data includes current and former members of Government, Federal Assembly of Russian Federation, Presidential Office and related committees. I studied firms' quarterly reports and lists of affiliated persons to find out the members of Board of Directors and Board of Management. The total number of members of both Boards comprised 1011 officers.

I used Excel functions to search for similarities in the names between two lists. Finally, I found out that the connections are established in 23 companies out of total 121 analyzed private public companies. These companies represent 43% and 15% of market capitalization of total number of private companies and total number of all analyzed companies correspondingly.

Event study methodology was implemented to test the effect of political connection on stock price fluctuations. The event of interest was the nomination of politically connected representative to the company.

I assumed that the firm is able to exploit several benefits when it is being close to the government based on the review of academic literature. I expected to observe short-run abnormal price increases during the event window. In this case the announcement of public worker's nomination to companies Boards is expected to be positive signal for investors and the prices should go up.

Stock returns around the announcement date were explored. Using the event study's procedures I tested cumulative abnormal returns for being affected by the event of interest. J1, J2 parametric tests were performed. They conclude the rejection of null hypothesis, meaning that the returns experiences abnormal returns around the event date. However, the implementation of these tests is limited and is under concern, since financial data doesn't support the required properties. I checked the normality of the return series and rejected the hypothesis, that returns are normal and multivariate normal. This is a matter of concern and limits the proposed results.

I implemented non-parametric tests to test the same hypothesis. Non-parametric tests relax the assumption of normality of returns and are appropriate methods for the analysis. J3, J4 and expanded J4 metrics are used to make inferences. I also calculated GRANK-T test statistic introduced by Kolari, Pynnonen (2011). Unfortunately, the hypothesis of positive abnormal returns was rejected by these procedures.

I conclude the thesis paper with the caveats and potential directions of research.

First of all, the methodology of the research could be expanded.

- Dynamics of Boards members could be introduced. It means that former Boards members might also be connected. Introduced procedure doesn't capture dynamics and is relies on current cross-sectional data.
- Members of regional authorities could be added to the database. Additional connections could be identified within this data.
- Relatives and friendship relationships could be introduces. It is a matter of subjectivity though, but the existence of informal and friendship relationships are quite spread and press could be analyzed for that issues. I excluded it, since it brings the degree of subjectivity in research.

Secondly, the empirics and econometric models could be improved.

- Parametric procedures are criticized and are under concern since the weaknesses of stock series data characteristics. Non-parametric tests fit well, but do not prove the expected hypothesis. I suggest that the research could be improved by developing customized statistics for implication of parametric tests.
- Introduced methodology captures short-term effect of political connections. Though it remains popular among academic researchers, long-term effects are also estimated and described in literature. The concepts of the research could be modified in order to experience those effects.

Concluding that, thesis paper research adds insight on the situation on Russian market, which previously remained almost unexplored. It doesn't support expected results, nevertheless, it derives the result of neutrality in short term effect of politically connected officer nomination to the firm Boards.

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Appendix

Appendix A. Second filter state companies

Company	***Industry***	***Connection authority***	***Company's representative***
Rosneft	Oil and gas industry	Government	Sechin Igor, BoM, BoD
TNK-BP	Oil and gas industry	Government	Sechin Igor, BoM
Novatek	Oil and gas industry	Government	Vardanyan Ruben, BoD
Uralkali	Chemical and petrochemical industry	State Duma	Kerimov Suleiman, shareholder
Gazpromneft	Oil and gas industry	Fed Council, Regional structures	Golubev Valeriy, BoD, Serdyukov Valeriy, BoD
Bank of Moscow	Banks	Government	Zadornov Mickhail, BoD
Transcreditbank	Banks	Government	Zadornov Mickhail, BoD
Irkutskenergo	Power industry	Government	Kovalchyuk Boris, BoD
OGK-3	Power industry	Government	Kovalchyuk Boris, BoD
OGK-1	Power industry	Government	Kovalchyuk Boris, BoD
AvtoVaz	Engineering	Government	Vardanyan Ruben, BoD
Kamaz	Engineering	Government	Vardanyan Ruben, BoD
Dalnevostochnaya Energetic Company	Power industry	Regional structures	Milush Victor, BoM
Mosenergosbyt	Power industry	Government	Kovalchyuk Boris, BoD
Petersburg Sbytovaya Company	Power industry	Government	Kovalchyuk Boris, BoD
Ufa Engine Industrial Association	Engineering	Regional structures	Artuykhov Aleksandr, BoM
TGK-11	Power industry	Government	Kojhemyako Sergey, BoM
TGK-2	Power industry	Regional structures	Aleksandrovich Vladlen, BoM
Central Telegraph	Telecommunications	Government	Bulgak Vladimir, BoD
Nizhnekamskshina	Chemical and petrochemical industry	Regional structures	Akulov Timur, BoD

Appendix B. Estimation models

1) Akron

Dependent Variable: RETURNS_AKRON
Method: Least Squares
Date: 06/17/13 Time: 01:07
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.005297	0.001613	3.283128	0.0012
MICEX_AKRON	0.465298	0.095547	4.869851	0.0000

R-squared	0.087280	Mean dependent var	0.005614
Adjusted R-squared	0.083600	S.D. dependent var	0.026624
S.E. of regression	0.025487	Akaike info criterion	-4.493317
Sum squared resid	0.161099	Schwarz criterion	-4.465145
Log likelihood	563.6646	Hannan-Quinn criter.	-4.481979
F-statistic	23.71545	Durbin-Watson stat	1.780481
Prob(F-statistic)	0.000002		

2) Baltica

Dependent Variable: RETURNS_BALT
Method: Least Squares
Date: 06/17/13 Time: 01:19
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.001434	0.000734	-1.953078	0.0519
MICEX_BALT	0.198802	0.040320	4.930548	0.0000

R-squared	0.089274	Mean dependent var	-0.001594
Adjusted R-squared	0.085602	S.D. dependent var	0.012132
S.E. of regression	0.011601	Akaike info criterion	-6.067460
Sum squared resid	0.033377	Schwarz criterion	-6.039288
Log likelihood	760.4325	Hannan-Quinn criter.	-6.056121
F-statistic	24.31031	Durbin-Watson stat	2.158416
Prob(F-statistic)	0.000002		

3) ChelPipe

Dependent Variable: RETURNS_CHELPIPE
Method: Least Squares
Date: 06/17/13 Time: 01:24
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000468	0.001160	0.403271	0.6871
MICEX_CHEL_PIPE	0.975386	0.098105	9.942247	0.0000

R-squared	0.284990	Mean dependent var	0.001087
Adjusted R-squared	0.282107	S.D. dependent var	0.021619
S.E. of regression	0.018317	Akaike info criterion	-5.153989
Sum squared resid	0.083209	Schwarz criterion	-5.125817
Log likelihood	646.2486	Hannan-Quinn criter.	-5.142650
F-statistic	98.84828	Durbin-Watson stat	1.727209
Prob(F-statistic)	0.000000		

4) Fortum

Dependent Variable: RETURNS_FORTUM
Method: Least Squares
Date: 06/17/13 Time: 01:27
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000134	0.001106	0.120952	0.9038
MICEX_FORTUM	0.219762	0.064965	3.382758	0.0008

R-squared	0.044106	Mean dependent var	0.000240
Adjusted R-squared	0.040252	S.D. dependent var	0.017836
S.E. of regression	0.017473	Akaike info criterion	-5.248318
Sum squared resid	0.075718	Schwarz criterion	-5.220146
Log likelihood	658.0397	Hannan-Quinn criter.	-5.236979
F-statistic	11.44305	Durbin-Watson stat	2.583362
Prob(F-statistic)	0.000834		

5) GUM

Dependent Variable: RETURNS_GUM
Method: Least Squares
Date: 06/17/13 Time: 01:31
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000246	0.001777	-0.138501	0.8900
MICEX_GUM	0.298075	0.088630	3.363129	0.0009

R-squared	0.043618	Mean dependent var	-5.87E-05
Adjusted R-squared	0.039762	S.D. dependent var	0.028651
S.E. of regression	0.028076	Akaike info criterion	-4.299849
Sum squared resid	0.195486	Schwarz criterion	-4.271677
Log likelihood	539.4811	Hannan-Quinn criter.	-4.288510
F-statistic	11.31064	Durbin-Watson stat	2.503992
Prob(F-statistic)	0.000893		

6) IDGC

Dependent Variable: RETURNS_IDGC
Method: Least Squares

Date: 06/17/13 Time: 01:34
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.001166	0.001439	-0.810092	0.4187
MICEX_IDGC	0.875371	0.114544	7.642252	0.0000

R-squared	0.190611	Mean dependent var	-0.001054
Adjusted R-squared	0.187347	S.D. dependent var	0.025234
S.E. of regression	0.022748	Akaike info criterion	-4.720743
Sum squared resid	0.128329	Schwarz criterion	-4.692571
Log likelihood	592.0928	Hannan-Quinn criter.	-4.709404
F-statistic	58.40401	Durbin-Watson stat	1.656249
Prob(F-statistic)	0.000000		

7) Lukoil

Dependent Variable: RETURNS_LUK
Method: Least Squares
Date: 06/17/13 Time: 01:36
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.001136	0.000611	-1.860191	0.0640
MICEX_LUK	1.013883	0.035985	28.17499	0.0000

R-squared	0.761957	Mean dependent var	0.000191
Adjusted R-squared	0.760998	S.D. dependent var	0.019700
S.E. of regression	0.009631	Akaike info criterion	-6.439726
Sum squared resid	0.023003	Schwarz criterion	-6.411554
Log likelihood	806.9657	Hannan-Quinn criter.	-6.428387
F-statistic	793.8303	Durbin-Watson stat	1.596120
Prob(F-statistic)	0.000000		

8) Norilsk Nickel

Dependent Variable: RETURNS_NIK
Method: Least Squares
Date: 06/17/13 Time: 01:39
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000194	0.000678	0.286761	0.7745
MICEX_NIK	0.901479	0.054341	16.58926	0.0000

R-squared	0.525997	Mean dependent var	0.000400
Adjusted R-squared	0.524086	S.D. dependent var	0.015530
S.E. of regression	0.010713	Akaike info criterion	-6.226661
Sum squared resid	0.028465	Schwarz criterion	-6.198489
Log likelihood	780.3326	Hannan-Quinn criter.	-6.215323

F-statistic	275.2036	Durbin-Watson stat	1.734859
Prob(F-statistic)	0.000000		

9) Polyus Zoloto

Dependent Variable: RETURNS_POLZOL
Method: Least Squares
Date: 06/17/13 Time: 01:43
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000563	0.001859	0.303104	0.7621
MICEX_POLZOL	0.864141	0.111194	7.771499	0.0000

R-squared	0.195840	Mean dependent var	0.000741
Adjusted R-squared	0.192597	S.D. dependent var	0.032707
S.E. of regression	0.029389	Akaike info criterion	-4.208409
Sum squared resid	0.214204	Schwarz criterion	-4.180237
Log likelihood	528.0511	Hannan-Quinn criter.	-4.197071
F-statistic	60.39620	Durbin-Watson stat	2.057426
Prob(F-statistic)	0.000000		

10) Sollers

Dependent Variable: RETURNS_SOLLERS
Method: Least Squares
Date: 06/17/13 Time: 01:49
Sample: 1 250
Included observations: 250

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002043	0.001060	1.928176	0.0550
MICEXSOLLERS	0.370963	0.062518	5.933731	0.0000

R-squared	0.124322	Mean dependent var	0.002341
Adjusted R-squared	0.120791	S.D. dependent var	0.017847
S.E. of regression	0.016735	Akaike info criterion	-5.334713
Sum squared resid	0.069451	Schwarz criterion	-5.306541
Log likelihood	668.8391	Hannan-Quinn criter.	-5.323374
F-statistic	35.20916	Durbin-Watson stat	2.084213
Prob(F-statistic)	0.000000		

11) TMK

Dependent Variable: RETURNS_TMK
Method: Least Squares
Date: 06/17/13 Time: 01:50
Sample: 1 250
Included observations: 250

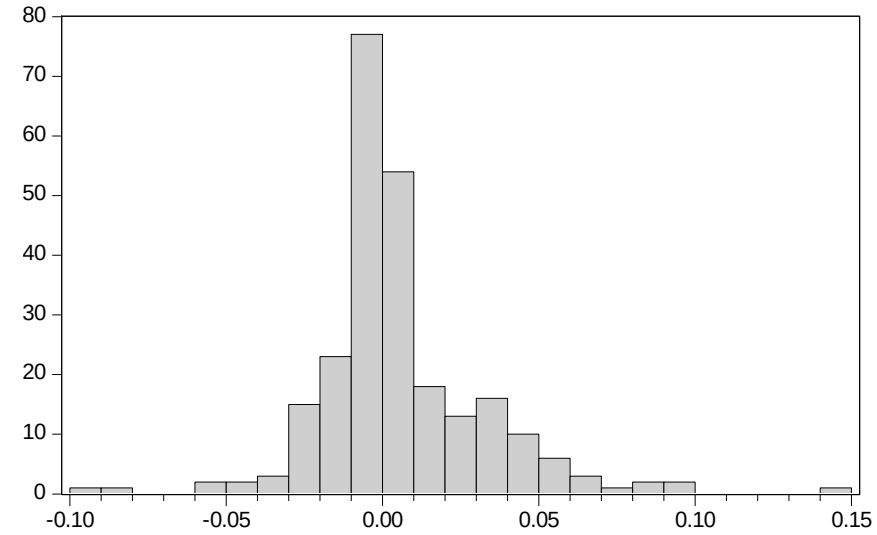
Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	-0.000905	0.001425	-0.634970	0.5260
MICEX_TMK	0.752217	0.085042	8.845209	0.0000

R-squared	0.239818	Mean dependent var	-0.000744
Adjusted R-squared	0.236753	S.D. dependent var	0.025788
S.E. of regression	0.022530	Akaike info criterion	-4.739983
Sum squared resid	0.125883	Schwarz criterion	-4.711812
Log likelihood	594.4979	Hannan-Quinn criter.	-4.728645
F-statistic	78.23772	Durbin-Watson stat	2.264788
Prob(F-statistic)	0.000000		

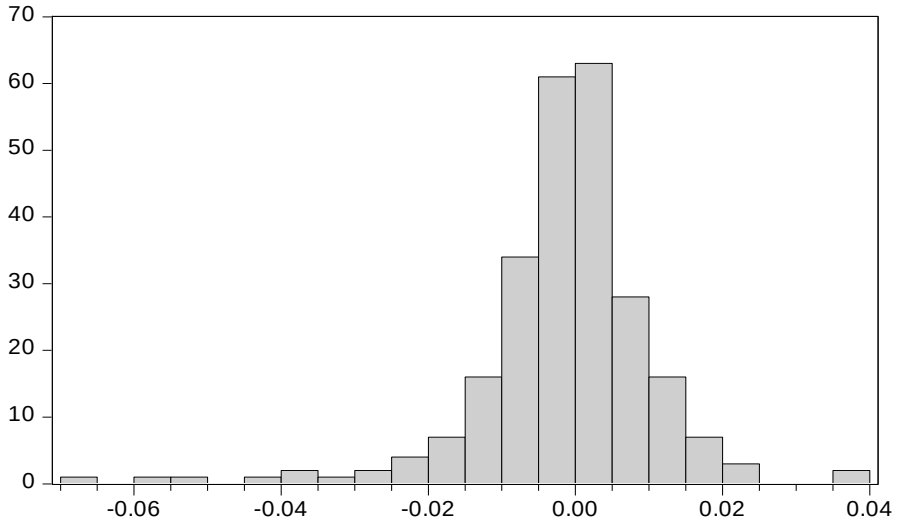
Appendix C. Returns Distribution

1) Akron



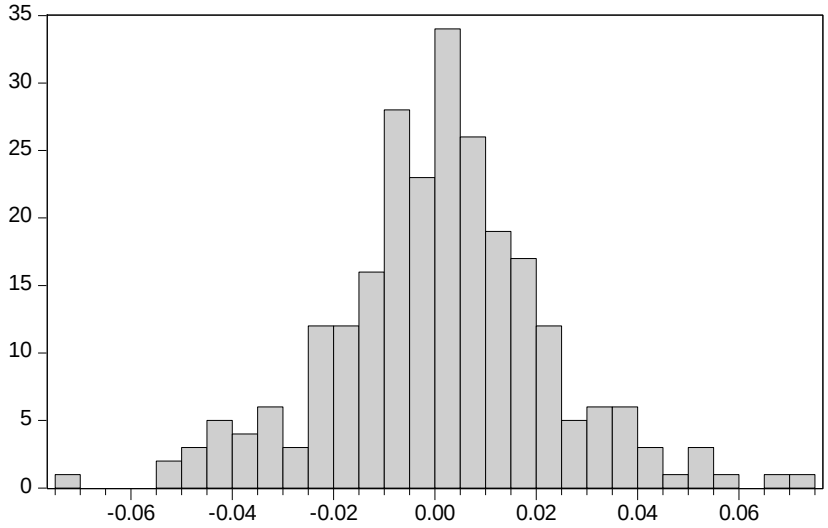
Series: RETURNS_AKRON	
Sample 1 250	
Observations 250	
Mean	0.005614
Median	0.000000
Maximum	0.140371
Minimum	-0.093227
Std. Dev.	0.026624
Skewness	0.929518
Kurtosis	7.112576
Jarque-Bera	212.1801
Probability	0.000000

2) Baltica



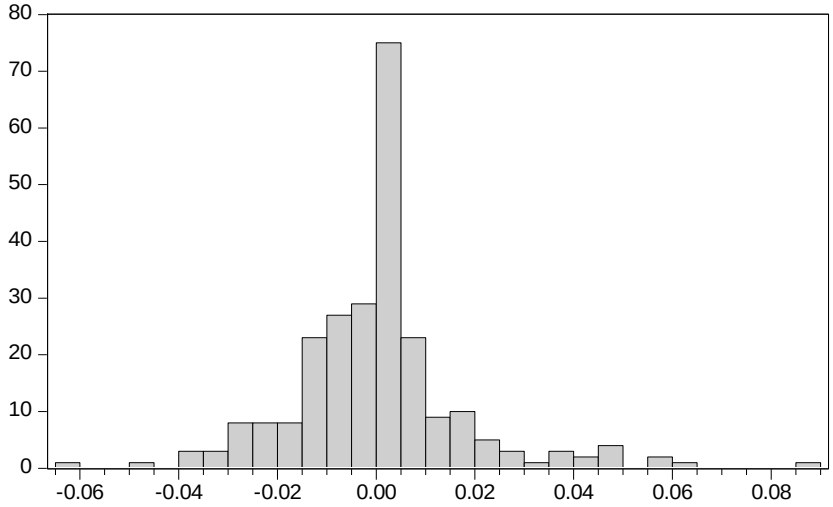
Series: RETURNS_BALT	
Sample 1 250	
Observations 250	
Mean	-0.001594
Median	-0.000829
Maximum	0.036796
Minimum	-0.068470
Std. Dev.	0.012132
Skewness	-1.347958
Kurtosis	9.381986
Jarque-Bera	499.9762
Probability	0.000000

3) ChelPipe



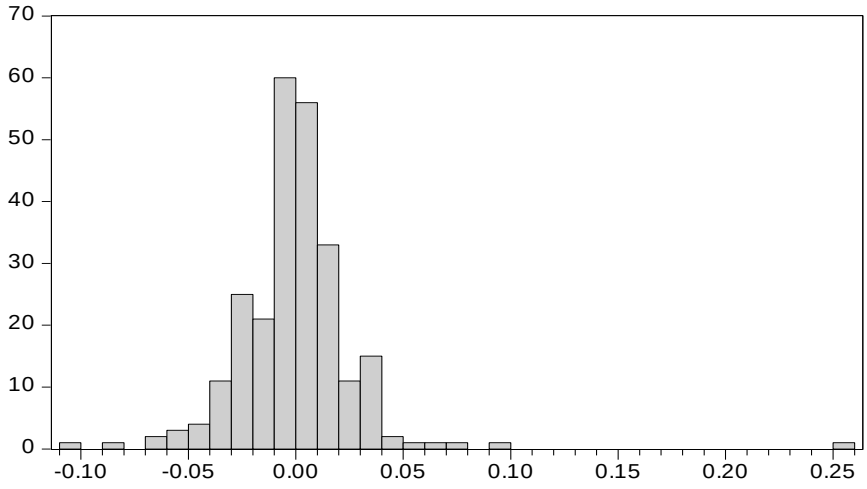
Series: RETURNS_CHELPIPE	
Sample 1 250	
Observations 250	
Mean	0.001087
Median	0.000540
Maximum	0.072519
Minimum	-0.071667
Std. Dev.	0.021619
Skewness	0.049847
Kurtosis	3.889157
Jarque-Bera	8.338940
Probability	0.015460

4) Fortum



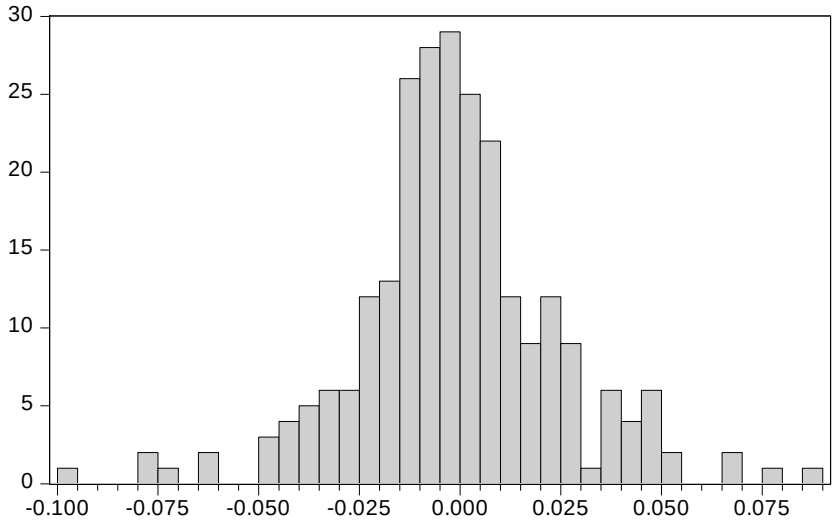
Series: RETURNS_FORTUM	
Sample 1 250	
Observations 250	
Mean	0.000240
Median	0.000000
Maximum	0.087585
Minimum	-0.061065
Std. Dev.	0.017836
Skewness	0.900898
Kurtosis	6.819345
Jarque-Bera	185.7695
Probability	0.000000

5) GUM



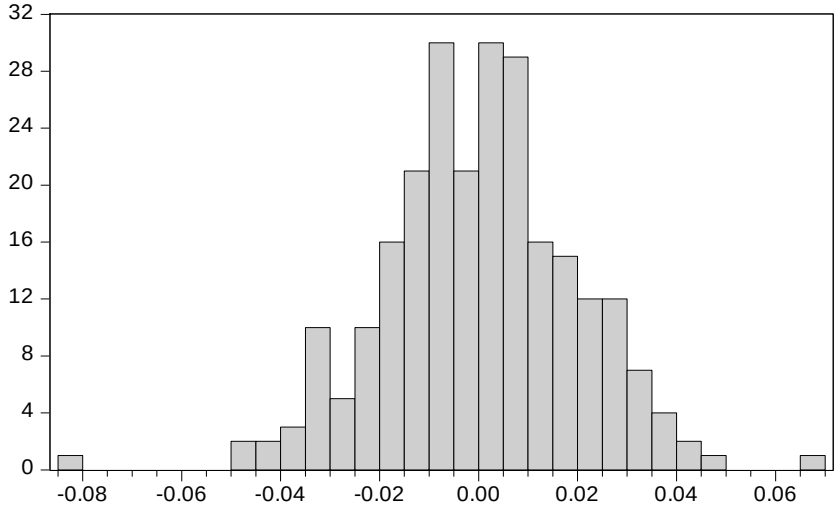
Series: RETURNS_GUM	
Sample 1 250	
Observations 250	
Mean	-5.87e-05
Median	-0.000159
Maximum	0.256945
Minimum	-0.105572
Std. Dev.	0.028651
Skewness	2.749821
Kurtosis	28.94400
Jarque-Bera	7326.427
Probability	0.000000

6) IDGC



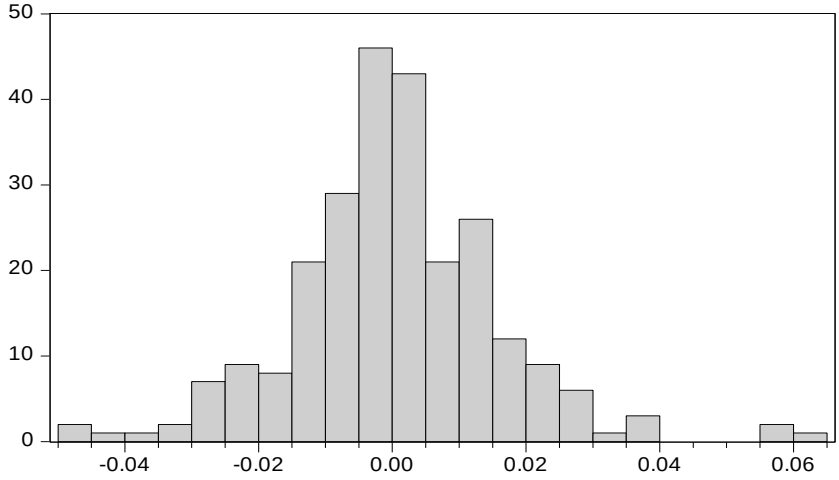
Series: RETURNS_IDGC	
Sample 1 250	
Observations 250	
Mean	-0.001054
Median	-0.003325
Maximum	0.086855
Minimum	-0.098911
Std. Dev.	0.025234
Skewness	0.018636
Kurtosis	4.951186
Jarque-Bera	39.67204
Probability	0.000000

7) Lukoil



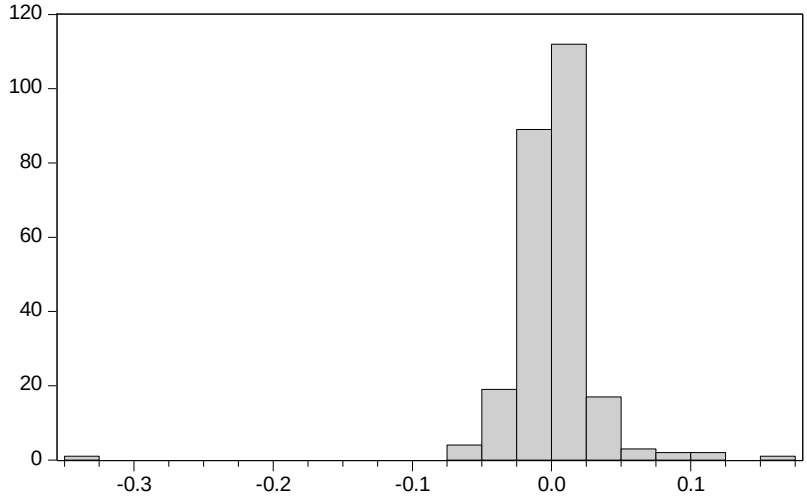
Series: RETURNS_LUK	
Sample 1 250	
Observations 250	
Mean	0.000191
Median	0.000498
Maximum	0.069693
Minimum	-0.081382
Std. Dev.	0.019700
Skewness	-0.135772
Kurtosis	3.964856
Jarque-Bera	10.46545
Probability	0.005339

8) NorNick



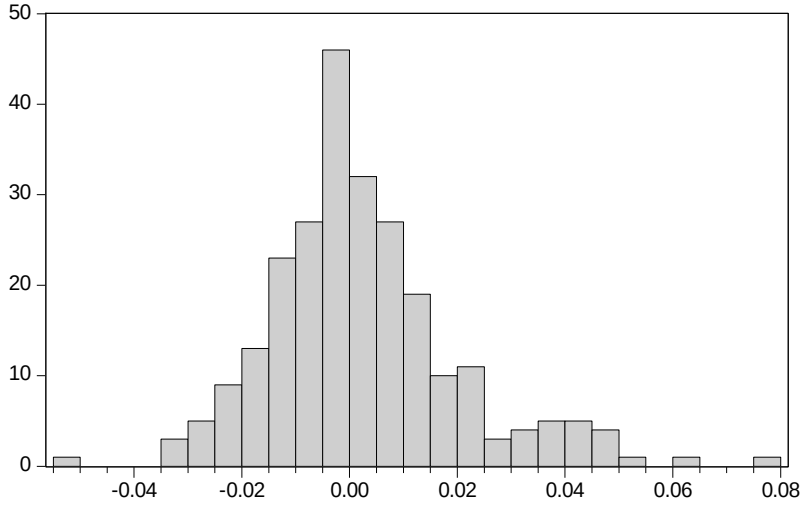
Series: RETURNS_NIK	
Sample 1 250	
Observations 250	
Mean	0.000400
Median	-0.000315
Maximum	0.061252
Minimum	-0.046761
Std. Dev.	0.015530
Skewness	0.336022
Kurtosis	4.983596
Jarque-Bera	45.69057
Probability	0.000000

9) Polyus Zoloto



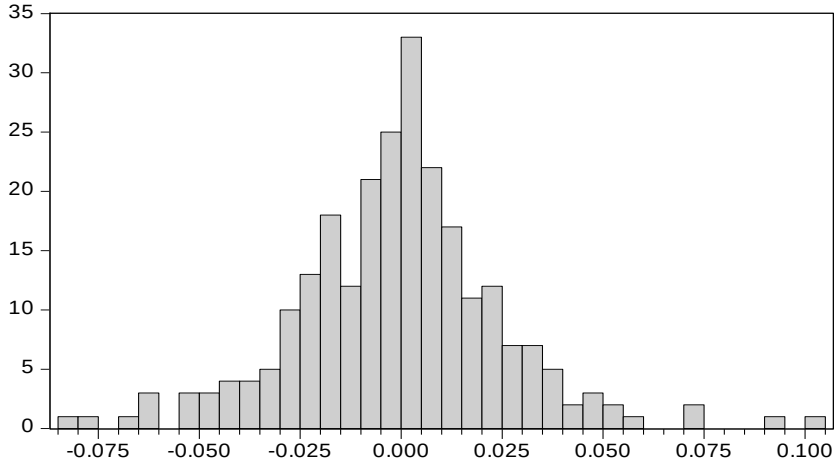
Series: RETURNS_POLZOL	
Sample 1 250	
Observations 250	
Mean	0.000741
Median	0.001463
Maximum	0.165230
Minimum	-0.327832
Std. Dev.	0.032707
Skewness	-3.202174
Kurtosis	45.60324
Jarque-Bera	19333.87
Probability	0.000000

11) Sollers



Series: RETURNS_SOLLERS	
Sample 1 250	
Observations 250	
Mean	0.002341
Median	-0.000707
Maximum	0.076670
Minimum	-0.054465
Std. Dev.	0.017847
Skewness	0.826888
Kurtosis	4.762092
Jarque-Bera	60.83279
Probability	0.000000

12) TMK



Series: RETURNS_TMK	
Sample 1 250	
Observations 250	
Mean	-0.000744
Median	0.000132
Maximum	0.102415
Minimum	-0.080911
Std. Dev.	0.025788
Skewness	0.189360
Kurtosis	4.820290
Jarque-Bera	36.00920
Probability	0.000000