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CORPORATE POLITICAL CONNECTIONS IN RUSSIA AND THEIR IMPLICATIONS FOR FIRM-LEVEL OPERATIONAL, FINANCIAL, AND INVESTMENT ACTIVITIES

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GENERAL ABSTRACT

This dissertation consists of three chapters representing three self-contained essays on the effects of corporate political connections on firm operational, financial, and investment activities. The research is based on a sample of Russian non-state-owned companies operating within the period of 2000-2013. Chapter 1 investigates the effect of corporate political connections on firm performance and profitability. I find that political connections to the executive branch of the central (federal) government positively affect connected firm's return on sales, return on assets, return on equity and market-to-book ratio. These improvements are conditioned by better operating performance of the connected firm. At the same time financial and taxation costs are not seriously affected by political connections. Contrary to the effect of federal ties, connections to regional authorities bring more costs than benefits to the connected firms with both operating performance and overall performance indicators showing decline in presence of regional political ties. The latter effect can be explained by greater costs which regionally connected firms have to bear in order to contribute to the economic development of regions and provinces to which they are connected. Overall, Chapter 1 provides direct evidence on the effects of corporate political connections on firm profitability, performance, and their basic determinants, also showing that different types of connections differently affect performance. Chapter 2 examines the effect of corporate political and bank connections on firm-level cost of debt. I find that corporate connections to banks decrease cost of debt of a firm. However this effect works only if a firm has connections to a state-owned bank, not a private bank, and connections to a state-owned bank are to be maintained

through a significant shareholder of the firm, not CEO, or board member. I also find that corporate connections to the executive branch of the central (federal) government decrease cost of debt. The latter effect works only if political connections are strong and cohesive enough, i.e. they were formed under circumstances that required high level of mutual trust and reliability between parties. Overall, the second chapter provides evidence that political and bank connections do really affect cost of debt and reveals important conditions under which connections can have an impact on this variable. Chapter 3 investigates the effect of corporate political connections on firm-level acquisitions activity. I find that political connections to central (federal) government positively affect firm's propensity to purchase stakes in other firms. This effect works well in the domestic market, but not in the foreign markets. It does also work well with regard to acquisitions of stakes in the open market, but, ironically, not in the process of privatization. At the same time I find that political connections to regional governments are negatively associated with the probability of purchasing a stake by the acquirer. The latter effect may have an explanation that in a "small world" of regional political and business elites it is risky for participants to violate the regional equilibrium of wealth and power, thus firms demonstrate acquisitions activity levels lower than that of the reference group of unconnected firms. Overall, the third chapter provides evidence on the effects of corporate political connections on bidder's acquisitions activity, showing, however, that different types of connections may differently impact bidder's propensity to acquire stakes in other firms.

SUMMARY OF THE DISSERTATION IN FRENCH

Structure de la thèse

Cette thèse, intitulée « Relations politiques des entreprises en Russie et leurs implications pour l'entreprise au niveau opérationnel, financier, et des activités d'investissement », commence par une introduction générale, se poursuit avec trois chapitres représentant trois essais autonomes, se termine par une conclusion générale.

L'introduction générale présente la structure de la thèse, examine le contexte théorique de la recherche, met en évidence les principales conclusions des trois chapitres, enfin souligne la contribution de la thèse.

Figure FS-1. Les interconnexions entre les trois chapitres
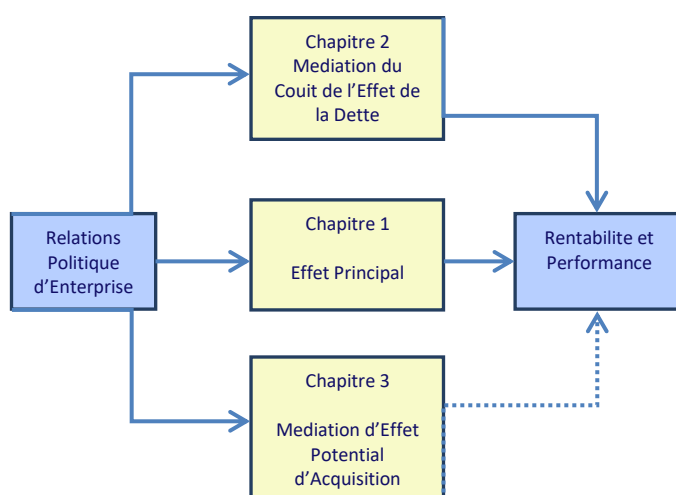
Les trois essais, qui constituent les principales contributions théoriques et empiriques de cette thèse, sont présentés dans les chapitres1 à 3. Le chapitre 1 présente le premier essai intitulé « Relations politiques d'entreprise en Russie et leurs implications pour la performance et la rentabilité des entreprises ». Le chapitre 2 représente le deuxième essai intitulé « Banque et relations politiques en Russie et

leurs implications pour les coûts au niveau de la dette ». Le chapitre 3 présente le troisième essai intitulé « Relations politiques d'entreprise en Russie et leurs implications pour l'activité d'acquisition au niveau de l'entreprise »

Bien que développés séparément, ces chapitres sont interconnectés de façon cohérente, comme le montre la figure GI-1. Conceptuellement, la construction théorique principale dans ces trois chapitres est l'effet ultime que les liens politiques des entreprises ont sur la performance et la rentabilité des entreprises. Cet effet peut être étudié directement (pour obtenir une grande image de l'impact que ces différents types de liens politiques ont sur la rentabilité et la performance), et aussi indirectement (en examinant précisément les effets des différents types de liens politiques sur les *déterminants* de rentabilité et de performance). Plus précisément, le chapitre 1 aborde la grande image en régressant les ratios de rentabilité et de performance et de leurs déterminants fondamentaux sur différents types de relations politiques. Le chapitre 2 enquête précisément sur l'impact des différents types de relations politiques et bancaires sur le coût au niveau de la dette de l'entreprise, qui à son tour affecte la rentabilité et la performance, et le chapitre 3 examine les effets des différents types de liens politiques sur l'activité des acquisitions au niveau des entreprises qui potentiellement peuvent également affecter les ratios de rentabilité et de performance.

Suite à ces trois chapitres, le mémoire se termine par une conclusion générale présentant les principales conclusions de cette thèse, les limites et les perspectives pour la recherche future.

Aperçu des trois chapitres

Chapitre 1 : Relations politiques des entreprises en Russie et leurs implications dans la performance et la rentabilité de l'entreprise

Le premier chapitre met en relief les effets des relations politiques d'entreprise sur la base des indicateurs de performance tels que les retours sur ventes (RSV), le rendement des actifs (RSA), le retour des capitaux propres (RSC), et la valeur du *Book to market* (B / M). Je décompose aussi la base de l'indicateur de performance du rendement des capitaux propres (RSC) en plusieurs facteurs comme cela a été fait

pas Hawawini et Viallet (2010) afin d'examiner précisément comment les relations politiques affectent les facteurs individuels de rendement de l'entreprise. Selon Hawawini et Viallet (2010) l'équation de RSC peut être écrite de la manière suivante :

RSC = Marge bénéficiaire d'exploitation x Taux de rotation du capital x Ratio des coûts financiers x Ratio de structure financière x Ratio d'effet fiscal

Les deux premiers composants de l'équation – *la marge bénéficiaire d'exploitation* et *le taux de ratio du capital* lorsqu'il est multiplié par *le rendement du capital investi avant impôt* (ROIC$_{BT}$). ROIC$_{BT}$ est la principale mesure de la rentabilité opérationnelle. Les troisième et quatrième composantes de l'équation – *le ratio des frais financiers* et *le ratio de structure financière,* quand ils sont multipliés par *le levier financier multiplicateur* qui reflète l'effet de levier sur la rentabilité de l'entreprise (d'une part, plus l'effet de levier diminue la rentabilité, plus le résultat sur le paiement de la dette est plus élevé ; d'autre part, l'effet de levier affecte positivement la rentabilité car elle augmente le capital investi par rapport au capital). Enfin, le cinquième composant de l'équation – *le ratio d'effet fiscal* – de la taxe sur l'équation, ressemble à l'effet de l'impôt sur le revenu des sociétés sur la rentabilité. Plus le taux d'imposition effectif qu'une société paie est élevé, moindre est le ratio d'effet de l'impôt et donc la rentabilité mesurée par RSC.

Je soutiens l'hypothèse que les relations avec le gouvernement central (fédéral) devraient influer positivement sur la rentabilité opérationnelle, le levier financier multiplicateur, le ratio d'effet fiscal et les indicateurs de rentabilité donc globaux tels que RSV, RSC, RSA et B / M.

Dans le même temps, j'estime que les rapports avec les autorités régionales sont susceptibles d'avoir un effet économique positif mais moins significatif sur la rentabilité opérationnelle et la rentabilité globale de l'entreprise reliée. Ceci est conditionné par le fait que les marchés régionaux sont par définition plus petits que le marché à l'échelle nationale. Entre autres, cette attente est également conditionnée par la considération que les autorités régionales sont plus susceptibles que les autorités fédérales d'imposer une pression sur une entreprise régionale reliée à

accroître l'emploi et les salaires dans la région, ainsi que des ressources d'achat auprès de fournisseurs locaux et de faire des investissements dans l'infrastructure locale dans le but d'améliorer la situation économique régionale (Bertrand et al., 2006). Ces pressions peuvent également apparaître au niveau fédéral mais leur ampleur est susceptible d'être moins importante. L'explication de ce phénomène est que sur le plan régional, les dons des entreprises à l'économie locale sont plus visibles par le public (seulement à l'échelle nationale), ainsi ces dons peuvent contribuer de manière significative au groupe politique des autorités locales, les politiciens et les entreprises elles-mêmes. Dans un même temps, les « dons » de l'énorme entreprise de marché à l'échelle nationale sont susceptibles d'être inaperçus par le public, ils n'ont donc aucun effet significatif sur la capitale politique des politiciens et des autorités fédérales comme cela arrive au niveau régional.

Je suis d'accord que les relations à l'exécutif (non législatif) branche du gouvernement fédéral améliorent la performance et la rentabilité des entreprises (RSV, RSC, RSA, B / M) en raison des effets positifs de ces relations *sur la rentabilité opérationnelle*. Aussi les relations de la branche exécutive du gouvernement fédéral ne semblent pas affecter de manière significative d'autres facteurs importants de l'entreprise tels que *la rentabilité multiplicateur de levier financier* et *le ratio d'effet fiscal*.

Je crois aussi que les relations avec les gouvernements régionaux imposent plus de frais pour les entreprises que d'avantages, qui affectent négativement à la fois la rentabilité opérationnelle et la rentabilité globale. Ce résultat est en accord avec des études précédentes (Fan et al 2007; Boubakri et al 2008; Bertrand et al., 2006) qui trouvent que les conseils des relations politiques et de la direction, souvent, ne respectent pas les objectifs de profit ou de maximisation de la valeur, sont souvent caractérisée par un moindre professionnalisme, alors que dans le même temps les politiciens locaux imposent une pression sur les entreprises reliées à eux, les poussant à créer plus d'emplois dans leurs régions respectives et à contribuer aux économies régionales par d'autres moyens.

Les résultats mentionnés ci-dessus me permettent d'aller plus loin pour une enquête approfondie sur les effets des relations politiques d'entreprise sur les facteurs et les déterminants de la rentabilité et de la performance au niveau de l'entreprise.

Chapitre 2 : banque et relations politiques en Russie et leurs implications sur les coûts de la dette au niveau de l'entreprise

Le deuxième chapitre examine les relations politiques des entreprises en rapport avec le coût de la dette et si oui dans quelle direction. J'inclus aussi dans la dimension d'analyse de la banque de relations politiques, à savoir, j'explore les effets des relations avec les banques publiques sur le coût de la dette.

Afin de résoudre les résultats contradictoires et non concluants publiés dans les documents précédents (pour en savoir plus sur cette question, voir la section Contexte théorique et Motivation) je regarde le marché de la dette du point de vue d'un prêteur, et je fais l'hypothèse que : quand il vient à prêter aux entreprises liées politiquement, tous les prêteurs ne peuvent pas suivre les objectifs de maximisation de profit. Certains prêteurs, comme les banques publiques et les banques privées liées politiquement, peuvent se considérer comme *noyées* dans le système politique et économique du pays, de sorte qu'ils fourniraient des prêts avec une diminution des taux d'intérêts aux entreprises et aux entreprises liées politiquement aux banques respectives.

Sur la base de cette prémisse, je fais l'hypothèse que les connexions à l'exécutif et/ou à la branche législative du gouvernement (fédéral) diminue le coût de la dette. J'estime aussi que les relations avec banques publiques affectent négativement les taux d'intérêt. Dans le même temps, je prédis que les entreprises liées à des banques privées payent des taux d'intérêt plus bas que les entreprises non liées, qui continuent de payer des taux d'intérêt plus élevés que ne le font les entreprises qui sont reliées aux banques publiques. Cette dernière attente est basée sur mon argument selon lequel les relations avec des banques publiques ont un effet plus profond de diminution des taux d'intérêt que les relations aux banques privées, parce que la relation avec une banque publique contient en elle-même à la fois la relation avec une banque et une relation avec un Etat en incluant ses ressources financières quasi illimitées.

Je reconnais que lorsqu'une entreprise dispose d'une relation avec une banque, le coût de la dette diminue. Cependant, tout à fait conformément à mes attentes, cette baisse est entraînée uniquement par des liens avec des banques appartenant à l'Etat, et non avec des banques privées. Ce qui est également important est que la relation avec une banque d'Etat doit être maintenue par le propriétaire (actionnaire important). Tandis que les relations par le biais de chefs d'entreprise ou des membres du conseil d'administration ne se traduisent pas par une diminution du coût de la dette. Cette dernière constatation suggère que, dans un pays en développement d'économie de marché (comme la Russie dans mon cas) les grands propriétaires (les actionnaires importants) comptent le plus dans la détermination des politiques de l'entreprise tandis que les membres du conseil d'administration et la hiérarchie ont moins d'impact sur les relations et le développement commercial de l'entreprise.

Je décèle aussi que le coût de la dette diminue lorsque les actionnaires importants de l'entreprise, ou chefs d'entreprise, ou des membres du conseil d'administration sont fortement liées à la branche exécutive du gouvernement fédéral. La condition la plus importante pour l'effet mentionné ci-dessus est que les liens de résistance doivent être suffisamment solides pour avoir un effet sur les taux d'intérêt. Dans le cadre institutionnel russe dans les années 1990–2013, il est probable que les liens les plus forts ont été établis dans les années de privatisation massive (1992–1999) quand les hommes d'affaires et les politiciens devaient former de très étroites alliances pour survivre et gagner les batailles de privatisation féroces. Ces liens étaient assez puissants pour bien fonctionner plusieurs années après qu'ils ont été établis.

Globalement, dans le second chapitre, je montre que l'effet des relations politiques sur le coût de la dette diminue à mesure que certains types de prêteurs, lorsqu'ils prêtent de l'argent à des entreprises politiquement liées, peuvent ne pas suivre les objectifs de maximisation des profits, mais, au lieu de cela, des règles non écrites de l'enchâssement politique et accordent des prêts à des taux d'intérêt plus bas. Dans ce même chapitre j'ajoute également la dimension de la banque à des relations politiques et montrent que les relations avec banques publiques diminuent les taux d'intérêt, tandis que les relations avec les banques privées ne disposent pas d'un tel effet sur le coût de la dette, il est bon de souligner également que les relations aux banques publiques, dans une économie en développement comme la Russie, ne

fonctionnent que si elles sont mises en œuvre par le propriétaire (actionnaire important) de l'entreprise, tandis que les relations des membres et des chefs d'entreprise conseil ne jouent pas un rôle significatif.

Chapitre 3 : relations politiques d'entreprise en Russie et leurs implications pour l'activité des acquisitions au niveau des entreprises

Le troisième chapitre examine l'impact des relations politiques d'une entreprise acquéreuse sur l'activité des acquisitions du soumissionnaire. Comme il a été mentionné dans la section « Contexte théorique et Motivation », la littérature antérieure enquête sur un nombre important de facteurs qui déterminent les activités d'acquisitions d'une entreprise acquéreuse, y compris la performance des indicateurs, marché valorisation, et taille des soumissionnaires. Cependant, il n'y a pas eu d'étude approfondie qui prendrait en compte l'impact des relations politiques d'entreprise sur l'activité des acquisitions.

Afin de combler cette lacune, j'entreprends l'étude qui constitue le chapitre 3 de ma thèse. Je pense que les entreprises politiquement liées devraient être plus actives dans l'acquisition de participations dans d'autres entreprises, en particulier dans l'achat de filiales, de participations dans des entreprises associées, et de former des coentreprises. Cette prédiction est basée sur plusieurs attentes qui sont expliquées en détail dans le chapitre 3. Sur la base de ces attentes j'avance l'hypothèse que les relations avec le gouvernement central (fédéral) affectent positivement la propension de l'entreprise à acheter des participations dans d'autres entreprises. Je trouve également que ce dernier effet fonctionne bien sur le marché intérieur, mais pas sur les marchés étrangers. Il est également probable que l'effet fonctionne surtout à l'égard des actifs privatisés.

Concernant les liens avec les gouvernements régionaux, je m''attends à ce qu'ils aient un effet positif sur l'activité des acquisitions, mais cet effet est susceptible d'être inférieur à celui des liens avec le gouvernement central (fédéral). Les attentes de basse amplitude des effets des relations régionales du gouvernement fédéral conditionnées par le fait que les gouvernements régionaux ont habituellement moins d'entreprises sur leur territoire avec qui ils collectent l'information, actifs appartenant

à l'Etat moins auxquelles ils ont droit de privatiser, ainsi que moins de fonds dans le système bancaire local qui peuvent potentiellement être utilisés par les entreprises reliées politiquement pour signaler leur capacité à acquérir des cibles.

Je trouve que les entreprises liées au gouvernement central (fédéral) ont une probabilité plus élevée dans l'achat de participations d'une autre firme que les entreprises non liées (les chances dans l'achat de participations d'une autre firme pour les ERP sont 89 % plus élevées que celles des non-ERP. Je trouve aussi que l'indicateur d'activité des acquisitions mesuré par le nombre d'offre d'achats par an est de 35 % plus élevé pour les ERP que pour les non-ERP. La valeur acquise à l'échelle par l'actif total (dépenses en investissement) est de 55 % (61 %) plus élevé pour les ERP que pour les non-ERP. En suivant mes prédictions, les entreprises liées au gouvernement central (fédéral) ont une propension plus élevée à participer à l'achat d'autres entreprises situées sur le marché *local*, mais pas sur les marchés étrangers. Dans le même temps, paradoxalement, les relations avec le gouvernement fédéral ne sont pas associées à une propension plus élevée pour des acquisitions d'actifs *privatisés* (étonnamment, les entreprises liées au gouvernement fédéral acquièrent activement des participations dans d'autres entreprises sur le marché libre).

Des tests d'hypothèses associés aux relations régionales conduisent à des résultats inattendus. Je pense que les entreprises liées aux gouvernements régionaux ont moins de chances de trouver des enjeux d'achat dans d'autres entreprises que les entreprises non liées (les chances d'achat de participation d'une autre entreprise pour une firme régionalement liée sont de 42 % inférieures à celles des entreprises non liées). Le nombre d'offres d'achat par an pour les entreprises au niveau régional liées est également de 54 % inférieur à celui des entreprises non liées. La corrélation négative entre la propension à acquérir des participations dans d'autres entreprises et la connectivité régionale du soumissionnaire est un résultat inattendu et peut être conditionnée par les limites de mon ensemble de données. Cependant, l'une des explications est que, dans le « petit monde » des élites politiques et économiques régionales, où tout le monde connaît tout le monde, il est un peu risqué de poursuivre des acquisitions politiques visibles, la propriété locale dans la plupart des régions a été privatisée parmi les nouveaux propriétaires pendant le programme de

privatisation massive des années 1990 et le maintien de l'équilibre du pouvoir intra-régional est important pour les grandes parties intéressées au niveau régional.

Dans l'ensemble, le chapitre 3 confirme que les relations politiques d'entreprise influencent l'effet d'activité des acquisitions au niveau des entreprises, mais le sens de cette influence peut être différents selon les liens fédéraux et avoir un impact positif sur les acquisitions d'activité, mais les relations régionales peuvent avoir un effet négatif sur la propension des firmes à l'achat de participations dans d'autres entreprises.

Contribution

Cette thèse contribue de manière significative à la littérature sur les effets des rapports politiques d'entreprise sur les activités de l'entreprise au niveau opérationnel, financier et des investis-sements. *Tout d'abord*, j'intègre dans mon analyse plusieurs types différents de relations politiques, en particulier les relations avec les gouvernements centraux (fédéraux) contre les relations avec les gouvernements régionaux, un démêlage de chacun de ces types dans les relations avec une branche exécutive du gouvernement par rapport à la branche législative. Ensuite, j'ajoute *une dimension de la banque* à des relations politiques, que j'emploie quand je teste les effets des rapports politiques sur le coût de la dette. La répartition des relations politiques en plusieurs types et dimensions me permet de voir comment les différents types de relations affectent les activités de l'entreprise au niveau opérationnel, financier et des investissements, ce qui est une contribution importante à la littérature.

En second lieu, lors de l'étude des effets des relations politiques sur la rentabilité et la performance au niveau de l'entreprise, j'examine en détail comment les rapports affectent plusieurs *déterminants* fondamentaux de la rentabilité / performance. C'est par la décomposition du principal indicateur de rentabilité RSC en cinq facteurs que je vois dans quels domaines d'activités les entreprises souffrent, et qu'elles prospèrent à cause des relations politiques. Je vois aussi comment les effets des relations politiques, sur chacun des cinq facteurs, soit se renforcent ou s'annulent les uns les autres, ayant finalement un effet sur la rentabilité de

l'entreprise globalement consolidée. Cette approche est une contribution à la littérature qui étudie les effets des relations politiques sur l'entreprise.

En troisième lieu, je confirme les idées ci-dessus (ce qui n'était pas une vue dominante dans la littérature) que, les rapports politiques peuvent avoir un effet *inverse* sur la rentabilité et la performance. Mes résultats confirment, quoique indirectement, que, dans certaines circonstances (par exemple des relations régionales) les politiciens sont susceptibles d'exercer des pressions sur les entreprises liées politiquement à exploiter l'ordre du jour de la responsabilité sociale des entreprises à faire des dons à des économies régionales sous la forme d'une plus grande création d'emplois et peut-être d'augmentation du prix d'achats de ressources dans une région particulière (Boubakri et al., 2008 ; Bertrand et al., 2006).

En quatrième lieu, lors de l'analyse des effets des relations politiques et bancaires sur le coût de la dette. Je fais une approche du côté de l'offre du marché de la dette et j'ai trouvé des preuves que les relations avec les banques appartenant à l'État sont importantes pour réduire les taux d'intérêts, tandis que les rapports avec des banques privées n'ont pas nécessairement un tel effet sur le coût de la dette. De plus, je trouve que dans une économie de marché en développement (comme la Russie), les relations avec une banque d'état n'ont d'importance que si elles sont mises en place par le propriétaire (principal actionnaire) mais non par un membre du Conseil d'administration ou par le CEO. C'est une indication sur l'importance des principaux actionnaires dans la gouvernance d'entreprise pour le développement d'économies de marché comme celle de la Russie.

En cinquième lieu, je trouve que les relations politiques des entreprises représentent l'un des déterminants de l'activité des acquisitions au niveau de l'entreprise. De même les relations politiques avec le gouvernement central fédéral sont positivement associées aux acquisitions de l'activité du soumissionnaire, et cet effet est principalement tiré par l'activité des acquisitions sur le marché intérieur, et non les marchés étrangers. Cependant, les relations avec le gouvernement central (fédéral) ne sont pas nécessairement associées à l'activité supérieure d'un soumissionnaire de privatisation. De même que les relations avec les gouvernements régionaux dans mon analyse ont un effet *négatif* sur le niveau d'activité des acquisitions. Cette dernière constatation est inattendue, cependant l'une des

explications spéculatives est que les membres des élites politiques et économiques régionales peuvent considérer l'activité d'acquisition visible au niveau régional comme une menace pour le fragile équilibre des pouvoirs et des intérêts locaux.

GENERAL INTRODUCTION

Structure of the dissertation

This dissertation, entitled "Corporate Political Connections in Russia and their Implications for Firm-Level Operational, Financial, and Investment Activities", begins with a general introduction, continues with three chapters representing three standalone essays, and closes with a general conclusion.

The general introduction outlines the structure of the dissertation, discusses the theoretical background of the research, highlights the key findings of the three chapters, and underscores the contribution of the dissertation.

Figure GI-1. The interconnections between the three chapters
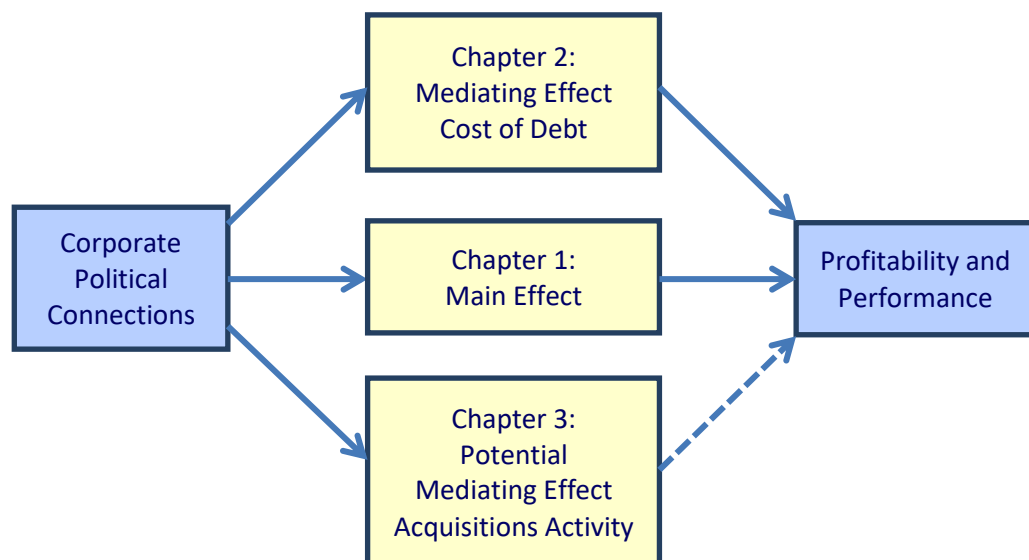
The three essays, which constitute the main theoretical and empirical contributions of this dissertation, are presented in Chapter 1 through Chapter 3. In particular, Chapter 1 represents the first essay entitled "Corporate Political Connections in Russia and their Implications for Firm Performance and Profitability". Chapter 2 represents the second essay entitled "Bank and Political Connections in Russia and their Implications for Firm-Level Cost of Debt". Chapter 3 represents the third essay entitled "Corporate Political Connections in Russia and their Implications for Firm-Level Acquisitions Activity".

Despite being developed separately, these chapters are cohesively interconnected, as depicted in Figure GI-1. Conceptually, the key theoretical construct across these three chapters is the ultimate effect that corporate political connections have on firm performance and profitability. This effect may be studied directly (to get a big picture of the impact that different types of political connections have on profitability and performance), and also indirectly (by examining precisely the effects of different types of political connections on the *determinants* of profitability and performance). More specifically, Chapter 1 studies the big picture by regressing profitability and performance ratios and their basic determinants on different types of political connections. Chapter 2 investigates precisely the impact of different types of political and bank connections on firm-level cost of debt, which in turn affects profitability and performance. Chapter 3 examines the effects of different types of political connections on firm-level acquisitions activity which potentially can also affect profitability and performance ratios.

Following these three chapters, the dissertation closes with a general conclusion presenting the main findings of this dissertation, the limitations, and the prospects for future research.

Theoretical background and motivation

Connections between firms and politicians are found to be rather widespread across the world. According to the seminal paper by Faccio (2006) corporate political connections exist in 35 of the 47 countries studied by Faccio, and politically connected firms (PCFs) represent 7.72% of the world's stock market capitalization. In some countries political connections are more prevalent than in other: for instance in Russia connected firms represent 87% of the market capitalization, twice more than in Thailand which holds the second position in this list with PCFs representing 42% of the local stock market capitalization (Faccio, 2006).

Business researchers actively enter the topic of politically connected firms since the beginning of 2000-s with the Fisman (2001) paper (concentrating on the effects of political connections on firm-value in Indonesia) paving the way. Before that there were a few papers devoted to this subject looking at it mostly through the prism of political science.[1]

An interesting feature of the papers which were then published in the area of research devoted to politically connected firms is that they do not propose a clear *theoretical definition* of a politically connected firm, but rather directly go into *proxies* which they use to determine the presence of political connections. In an

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[1] For instance Fisman (2001) points to the paper of Brian E. Roberts (1990) who looks at the valuation of political connections by examining "the effect of Senator Henry Jackson's (unexpected) death on various constituent interests and on the constituent interests of his successor on the Senate Armed Services Committee". Robert's event study shows that share prices of companies with ties to Senator Jackson declined in reaction to news of his death whereas the prices of companies affiliated with his successor increased. However, although Roberts' paper shows that connections matter, it does not address the larger question: How much do connections matter? (Fisman, 2001)

attempt to fill-in this gap in the Introduction to my Dissertation I suggest building a theoretical definition of a politically connected firm.

Definition of a politically connected firm

Sociological literature studies different types of connections between *individuals* including *family* ties, *business* ties and *social* ties. These *three types of ties* may be applied to build a definition of political connectedness with regard to a firm or a corporation.

The way in which a typical firm or a company functions is normally determined by its: (1) major shareholders, (2) members of the board of directors and (3) top managers. If any of the representatives of these bodies have *family* ties, *business* ties or *social* ties to the members of the government (or take it widely – ruling elite) or *themselves* are members of the government - then we may consider this firm to be politically connected.

The definition of the government (or the ruling elite) presumes that we should take into account only *real decision-making* bodies of the government (e.g. parliament, executive and judicial bodies) but ignore those bodies which are not involved in real decision-making on the territory of a country.

Figure GI-2. Components of political connectedness

Decision making bodies - major shareholders - board of directors - top management	*simultaneous holdings of positions* *ties (family, business and/or social)*	Decision making bodies - legislative branch - executive branch - judicial branch
Firm		Government
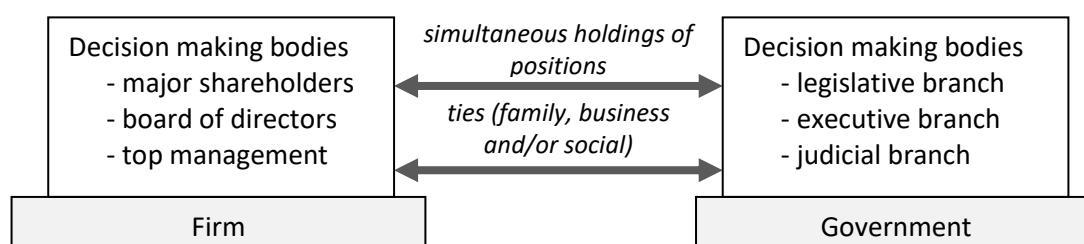
Note: state-owned firms are excluded from the analysis as their behavior is reflected in a distinct strand of literature

For business researchers which actively enter the topic of politically connected firms since the beginning of 2000-s it is rather difficult to estimate precisely the presence of political connections with regard to a particular firm. This is conditioned by the fact that though family ties and business ties are relatively easy to track through the investigation of some formal records, *social ties* are neither legally defined nor straightforward to identify.

According to Hwang and Kim (2009) people who form *social ties* should possess *mutual qualities* and *experiences*. These mutual qualities and experiences through an affinity for similar others *facilitate interactions* and thereby *foster personal connections*. All things being equal, actors enjoy an easier mutual understanding and are more comfortable with others who share similar characteristics and experiences (Marsden, 1987; McPherson, Smith-Lovin, and Cook, 2001). Moreover, contact between *similar* people occurs at a higher rate than among dissimilar people (McPherson, Smith-Lovin, and Cook, 2001). According to Subrahmanyam (2008) social connections indeed have been demonstrated to be more prevalent across agents who share similarities in income, age, and other attributes.

When social ties are formed there appears a *social bond* between the actors. This social bond has some important consequences. In particular, when two actors share a social bond, there is a *shift in normative expectations*: the actions of bonded people are governed by communal norms, which promote *mutual caring and trust*, as opposed to *exchange-based* norms, which promote *dispassionate reciprocation* (Mills and Clark, 1982; Silver, 1990). Furthermore, a social relationship disposes one to interpret favorably another's intentions and actions (Uzzi, 1996). Alumni, for

example, tend to help each other in finding jobs or investment opportunities. They do so not because they hope to receive something in return from the person they help (Barnea and Guedj, 2007).

There is also considerable evidence that social ties influence *economic outcomes*. Uzzi (1996) studied the apparel industry and observed that social ties promoted cooperation and "voluntary, non-obligating exchanges of assets and services between actors". For example, a buyer would find alternate uses for fabric mistakes rather than refuse the material at the manufacturer's cost. Uzzi (1999) also studied middle-market banking and found that social ties between firms and their lenders affect firms' access to capital and cost of capital. At the same time Ingram and Roberts (2000) found a substantial increase in hotel yields (i.e., revenue per room) when competing hotel managers shared a social tie. The increased yield was not achieved through explicit collusion or price-fixing, but through collaboration, information exchange, and the mitigation of aggressive competitive behavior.

So, as it is seen from the three paragraphs above social ties have a tendency to emerge between (among) people who share some *similarities*, like mutual qualities and experiences. When social tie is formed, with regard to their mutual relationship, people replace exchange-based norms (which promote dispassionate reciprocation) with new norms which promote *mutual caring and trust*, as well as favorable interpretations of another's intentions and actions. Logically, social ties have an impact on economic behavior and economic consequences.

Effects of political connections on firm activities and characteristics

As being demonstrated by various papers political connections have diverse effects on firm activities and characteristics. To see a "big picture", researchers actively analyze effects of political connections on firm performance and profitability. Existing empirical literature on this subject shows contradictory results which, in fact, are consistent with conflicting theoretical approaches to this issue. *On one hand*, political connections are expected to improve firm profitability and performance as connected firms are likely to have "preferential treatment by government-owned enterprises (such as banks or raw material producers), lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals" (Faccio, 2006). *On the other hand*, "the goals pursued by the politically-oriented selected managers are not necessarily in line with profit or value maximization" (Boubakri et al. 2008). It is expected that politically connected firms may be persuaded by politicians "to maximize employment and wages; promote regional development by locating production in politically desirable rather than economically attractive districts; ensure national security; provide low-prices goods and services; and produce unnecessary goods" (Boubakri et al. 2008; Bertrand et al., 2006). The latter effects would result in lower profitability and worse performance indicators for a politically connected firm. The contradictory *empirical* results with regard to the effects of political connections on firm-level performance and profitability are likely to be conditioned by the interplay of the two groups of factors mentioned above. Which of the factors takes the upper hand determines the outcome of the effect of political connection on profitability and performance. These

contradictory results form the basis of my motivation to explore this subject in detail, to which Chapter 1 of my dissertation project is devoted.

Getting closer to determinants of firm performance and profitability, I turn to cost of debt and explore the influence of political connections on the cost of debt in Chapter 2. According to a series of research papers (Faccio, 2010; Boubakri et al., 2008; Boubakri et al., 2009; Li et al., 2008; Khwaja and Mian, 2005) politically connected firms normally have *higher leverage* and better access to *debt financing* in the form of bank loans than their non-connected peers. This is probably conditioned by the fact that PCFs are more likely to be bailed out by the government in case of financial distress (Faccio et al., 2006). However an interesting feature of this situation is that "while connected firms are more levered than non-connected ones, they do not necessarily enjoy a benefit in the form of reduced costs of debt financing" (Faccio, 2010). Khwaja and Mian (2005), who study lending to politically connected firms in Pakistan, also find that there is "little difference" between politically connected and unconnected firms in the interest rates charged.

What is more puzzling is that Bliss and Gul (2012), who study the effect of political connections on the cost of debt in Malaysia, find that the interest rates charged by lenders to PCFs are significantly *higher* than those charged to non-PCFs. They explain this phenomenon by referring to Johnson and Mitton (2003) and Gul (2006) stating that both the market and auditors respectively assess Malaysian PCFs as being riskier than non-PCFs. The reason for increased riskiness, according to Johnson and Mitton (2003) and Gul (2006), is that PCFs are perceived as being inefficient.

The abovementioned idea of Bliss and Gul (2012) that PCFs are more risky for debt-holders than non-PCFs, however, contradicts findings by Boubakri et al. (2012) who study PCFs in 26 countries within the period from 1997 to 2001 with regard to the cost of equity capital. As Boubakri et al. (2012) state: "we find that politically connected firms enjoy a lower cost of equity capital than their non-connected peers"; "our findings provide strong evidence that investors require a lower cost of capital for politically connected firms, which suggests that politically connected firms are generally considered less risky than non-connected firms". So if equity holders consider PCFs as less risky than non-PCFs then debt-holders, which have a priority for payouts in case the firm goes bankrupt, a fortiori should consider PCFs less risky than non-PCFs.

Houston et al. (2014) in their study of political connections of listed firms in the United States reaffirm the latter view. Using a hand-collected dataset of the political connections of S&P 500 companies over the 2003–2008 time period, they find that the cost of bank loans is significantly lower for companies that have board members with political ties. They consider two possible explanations for these findings: a Borrower Channel in which lenders charge lower rates because they recognize that connections enhance the borrower's credit worthiness and a Bank Channel in which banks assign greater value to connected loans to enhance their own relationships with key politicians. After employing a series of tests to distinguish between these two channels, they find strong support for the Borrower Channel but no direct evidence supporting the Bank Channel. They also find that connections reduce the likelihood of a capital expenditure restriction or liquidity requirement demanded by banks at the origination of the loan. All these findings suggest that lenders consider US PCFs as less risky than non-connected firms.

So, there are conflicting results with regard to how political connections affect cost of debt and further investigation into this problem is necessary. This investigation is being conducted in Chapter 2 of my dissertation.

Referring to the effects of political connections on corporate investment policies, I turn to the exploration of firm's propensity to purchase stakes in other firms (subsidiaries, associates, and joint ventures) and the effects that political connections may have on this propensity. Prior literature investigates a significant number of factors that determine acquisitions activity of an acquiring firm (bidder), including bidder's performance indicators, market valuation, and size. However there has been no comprehensive study that would take into account the impact of corporate political connections on acquisitions activity. Thus, I logically take advantage of the deficit of information on this subject and study the effects of political connections on firm-level acquisitions activity in Chapter 3.

Overall, the research on the effects of corporate political connections on firm-level operational, financial, and investment activities is still in the initial stage of its development. Existing research papers often provide conflicting results with regard to both the "big picture" (the effects of connections on performance), and the details of this "big picture" (effects of connections on the determinants of performance and profitability). Additional research into these fields is needed to get a better understanding of how political connections, particularly *different types* of political connections, affect corporate operational, financial, and investment activities. These considerations motivate the following three chapters.

Overview of the three chapters

Chapter 1: Corporate political connections in Russia and their implications for firm performance and profitability

The first chapter investigates the effects of corporate political connections on basic performance indicators such as return on sales (ROS), return on assets (ROA), return on equity (ROE), and market-to-book value (M/B). I also disentangle the basic performance indicator return on equity (ROE) into several factors as has been done by Hawawini and Viallet (2010) in order to look precisely at how political connections affect individual factors of firm profitability. According to Hawawini and Viallet (2010) the equation for ROE can be written in the following way:

$$\textbf{ROE = Operating profit margin} \times \textbf{Capital turnover ratio} \times$$

$$\times \textbf{Financial cost ratio} \times \textbf{Financial structure ratio} \times \textbf{Tax effect ratio}$$

The first two components of the equation – *Operating profit margin* and *Capital turnover ratio* when multiplied result into *Return on invested capital before tax* (ROIC_{BT}). ROIC_{BT} is the main measure of operating profitability. The third and the fourth components of the equation – *Financial cost ratio* and *Financial structure ratio* when multiplied result into *Financial leverage multiplier* which reflects the effect of leverage on firm's profitability (on one hand, leverage decreases profitability as more debt results into higher interest payments; on the other hand, leverage positively affects profitability as it increases invested capital relative to equity). Finally, the fifth component of the equation – *Tax effect ratio* – resembles the effect of corporate income tax on profitability. The higher the effective tax rate

that a company pays, the lower the tax effect ratio and hence profitability measured by ROE.

I hypothesize that connections to central (federal) government should positively affect operating profitability, financial leverage multiplier, tax effect ratio, and hence overall profitability indicators such as ROS, ROA, ROE, and M/B.

At the same time I expect that connections to regional authorities are likely to have a positive but less significant economic effect on operating profitability and overall profitability of the connected firm. This is conditioned by the fact that regional markets are by definition smaller than the nation-wide market. Among other things, this expectation is also conditioned by the consideration that regional authorities are more likely than federal authorities to impose pressure on a regionally connected firm to increase employment and salaries in the region, as well as purchase resources from local suppliers and make investments in local infrastructure with a purpose to improve regional economic situation (Bertrand et al., 2006). Such pressures may also appear on the federal level however their magnitude is likely to be less significant. The explanation to this phenomenon is that on the regional level corporate "donations" to the local economy are more visible by the public (than on the nation-wide level), thus these "donations" may significantly contribute to the political capital of local authorities, politicians and the firms themselves. At the same time in the huge nation-wide market firm's "donations" are likely to be unnoticed by the public, so they have no significant effect on the political capital of federal politicians and authorities as it happens on the regional level.

I find that connections to the executive (but not legislative) branch of the federal government improve firm performance and profitability (ROS, ROA, ROE,

M/B) due to positive effects of these connections on *operating profitability*. At the same time connections to the executive branch of the federal government do not seem to affect significantly other important drivers of firm profitability such as *financial leverage multiplier* and *tax effect ratio*.

I also find that connections to regional governments bring more costs to the firms than benefits negatively affecting both operating profitability and overall profitability. This result is in accord with some previous studies (Fan et al. 2007; Boubakri et al. 2008; Bertrand et al. 2006) which find that politically connected boards and top management often do not follow the goals of profit or value maximization, are often characterized by relatively low professionalism, while at the same time local politicians impose pressure on connected firms making them create more jobs in their respective regions and contribute to regional economies in a few other ways.

The abovementioned results allow me to proceed further for detailed investigation into the effects of corporate political connections on specific factors and determinants of firm-level profitability and performance.

Chapter 2: Bank and political connections in Russia and their implications for firm-level cost of debt

The second chapter investigates whether corporate political connections affect cost of debt and if "yes" in what direction. I also include in the analysis *bank dimension* of political connections, i.e. I explore the effects of connections to state-owned banks on the cost of debt.

In order to resolve the contradictory and inconclusive results published in previous papers (for more on this issue see section *"Theoretical Background and*

Motivation") I look at the debt market from the point of view of a lender and hypothesize that when it comes to lending to politically connected firms not all lenders may follow profit maximization goals. Some lenders, like state-owned banks and politically connected private banks, may consider themselves *embedded* in the political and economic system of the country, so that they would provide loans at decreased interest rates to politically connected firms and firms connected to these respective banks.

Based on this premise I hypothesize that connections to the executive and/or legislative branch of the central (federal) government decrease cost of debt. I also expect that connections to state-owned banks negatively affect interest rates. At the same time I predict that firms connected to private banks though pay lower interest rates than non-connected firms, still pay higher interest rates than do firms with connections to state-owned banks. The latter expectation is based on my argument that connections to state-owned banks have a more profound decreasing effect on interest rates than connections to private banks, because connection to a state-owned bank contains in itself both connection to a bank and connection to the state with its nearly limitless financial resources.

I find that when a firm has a connection to a bank the cost of debt decreases. However, very much in line with my expectations, this decrease is driven *only* by connections to state-owned banks, not private banks. What is also important is that connection to a state-owned bank should be maintained through the owner (significant shareholder), while connections through CEOs or board members do not result in the decrease of the cost of debt. The latter finding suggests that in a developing market economy (like Russia in my case) major owners (significant shareholders) matter most for the determination of firm's policies while board

members and top management have less impact on firm's commercial relations and development.

I also find that cost of debt decreases when firm's significant shareholders, or CEOs, or board members are *strongly* connected to the executive branch of the federal government. The most important precondition for the abovementioned effect to work is *strength* – connections should be strong enough to have an effect on interest rates. In the Russian institutional setting within 1990-2013 it is likely that the strongest connections were established in the years of mass privatization (1992-1999) when businesspeople and politicians had to form very close alliances in order to survive and win the fierce privatization battles. These ties were powerful enough to work well many years after they were established.

Overall, in Chapter 2 I show that the effect of political connections on the cost of debt is decreasing as some types of lenders, when lending money to politically connected firms, may not follow profit-maximization goals, but instead follow unwritten rules of political embeddedness and provide loans at lower interest rates. In Chapter 2 I also add bank dimension to political connections and show that connections to state-owned banks decrease interest rates, while connections to private banks do not have such an effect on the cost of debt. I also stress that connections to state-owned banks in a developing economy like Russia work only if they are implemented by the owner (significant shareholder) of the firm, while connections maintained by board members and CEOs don't play any significant role.

Chapter 3: Corporate political connections in Russia and their implications for firm-level acquisitions activity

The third chapter examines whether political connections of an acquiring firm have an impact on the acquisitions activity of the bidder. As was mentioned in the section *"Theoretical Background and Motivation"*, prior literature investigates a significant number of factors that determine acquisitions activity of an acquiring firm, including bidder's performance indicators, market valuation, and size. However there has been no comprehensive study that would take into account the impact of corporate political connections on acquisitions activity.

In order to fill-in this gap I undertake the study which forms Chapter 3 of my dissertation. I predict that politically connected firms, all other things being equal, should be more active in acquiring stakes in other firms, particularly in purchasing subsidiaries, buying stakes in associates, and forming joint ventures. This prediction is based on several expectations which are explained in detail in Chapter 3. Based on these expectations I hypothesize that connections to central (federal) government positively affect firm's propensity for purchasing stakes in other firms. I also predict that the latter effect works well in the domestic market, but not foreign markets. It is also likely that the effect works mostly with regard to privatized assets.

Concerning ties to regional governments, I expect them to have a positive effect on acquisitions activity, but this effect is likely to be lower than that of ties to central (federal) government. The expectations of the lower magnitude of the effect of connections to regional governments than that of federal government is conditioned by the fact that regional governments usually have less enterprises on

their territory on which they collect information, less state-owned assets which they are entitled to privatize, as well as less funds in the local banking system that potentially can be used by politically connected firms to signal their abilities to acquire targets.

I find that firms connected to central (federal) government have a higher probability of purchasing a stake in another firm than non-connected firms (the odds of purchasing a stake in another firm for PCFs are 89% higher than that of non-PCFs). I also find that the acquisitions activity indicator measured by number of purchasing deals per year is 35% higher for PCFs, than for non-PCFs. The value of acquired stakes scaled by total assets (capital expenditures) is 55% (61%) higher for PCFs than for non-PCFs. In line with my predictions firms connected to central (federal) government have a higher propensity for purchasing stakes in other companies located in the *domestic* market, but not foreign markets. At the same time, ironically, connections to federal government are not associated with higher propensity of acquisitions of *privatized* assets (surprisingly, firms connected to federal government actively acquire stakes in other firms in the open market).

Tests of hypothesis associated with regional connections lead to unexpected results. I find that firms connected to regional governments have lower probability of purchasing stakes in other firms than the non-connected firms (the odds of purchasing a stake in another firm for regionally connected firm are 42% lower than that of non-connected firms). The number of purchasing deals per year for regionally connected firms is also 54% lower than that of non-connected companies. The negative association between the propensity to acquire stakes in other companies and bidder's regional connectedness is an unexpected result and may be conditioned by the limitations of my dataset. However, one of the explanations is that in a "small

world" of regional political and business elites, where everybody knows everybody, it is a bit risky to pursue visible acquisitions policies. Local property in most of the regions was privatized among the new owners during mass privatization program of the 1990-s and the maintenance of equilibrium of intra-regional power is important for the major interested parties on the regional level.

Overall, Chapter 3 confirms that corporate political connections indeed influence firm-level acquisitions activity, but the direction of this influence may be different: federal ties positively impact acquisitions activity, however regional ties may have an adverse effect on firm's propensity to purchase stakes in other firms.

Contribution

This dissertation significantly contributes to the literature on the effects of corporate political connections on firm-level operational, financial, and investment activities. *First*, I incorporate in my analysis several different types of political connections, particularly connections to the central (federal) government vs. connections to regional governments, disentangling further each of these types into connections to executive branch of the government vs. legislative branch. Further, I add a *bank dimension* to political connections, which I employ when I test effects of political connections on the cost of debt. The breakdown of political connections into several types and dimensions allows me to see how different types of connections affect firm-level operational, financial, and investment activities, which is a significant contribution to the literature.

Second, when investigating the effects of political connections on firm-level profitability and performance I examine in detail how connections affect several basic *determinants* of profitability/performance. By disentangling the major profitability indicator ROE in five factors I see which fields of corporate activity suffer, and which thrive because of political connections. I also see how effects of political connections on each of the five factors either reinforce, or cancel out each other finally having a consolidated effect on overall firm profitability. This approach is a contribution to the literature which studies effects of political connections on firm performance.

Third, I confirm the view (which before was not a dominant view in the literature) that political connections may have an *adverse* effect on profitability and performance. My results confirm, though indirectly, that under some circumstances (e.g. regional connections) politicians are likely to impose pressure on politically connected firms to exploit firm's social responsibility agenda and make firms donate to regional economies in the form of greater job creation and, possibly, greater purchases of resources in a particular region (Boubakri et al., 2008; Bertrand et al., 2006).

Fourth, when analyzing the effects of political and bank connections on the cost of debt, I look to the supply-side of the debt market and find evidence that connections to state-owned banks are important to decrease interest rates, while connections to private banks do not necessarily have such an effect on the cost of debt. Moreover, I find that in a developing market economy (like Russia) connections to a state owned bank matter only if they are implemented through the owner (significant shareholder) but not through board member or CEO, that is an

indication of the principal importance of major owners in corporate governance in developing market economies like Russia.

Fifth, I find that corporate political connections represent one of the determinants of firm-level acquisitions activity. I find that political connections to central (federal) government are positively associated with bidder's acquisitions activity, and this effect is mostly driven by the acquisitions activity in the domestic market, not the foreign markets. However, connections to central (federal) government are not necessarily associated with the higher activity of a bidder in privatization deals. At the same time connections to regional governments in my sample have an *adverse* effect on the level of acquisitions activity. The latter finding is unexpected however one of the speculative explanations is that members of regional political and business elites may consider visible acquisitions activity on the regional level as a threat to the fragile balance of local powers and interests.

CHAPTER 1

CORPORATE POLITICAL CONNECTIONS IN RUSSIA AND THEIR IMPLICATIONS FOR FIRM PERFORMANCE AND PROFITABILITY

Abstract: I investigate the effect of corporate political connections on firm performance and profitability. By analyzing the sample of Russian non-state-owned companies within the period of 2000-2013 I find that political connections to the executive branch of the federal government positively affect connected firm's return on sales, return on assets, return on equity and market-to-book ratio. These improvements are conditioned by better operating performance of the connected firm. At the same time financial and taxation costs are not seriously affected by political connections. Contrary to the effect of federal ties connections to regional authorities bring more costs than benefits to the connected firms with both operating performance and overall performance indicators showing decline in presence of regional political ties. The latter effect is likely to be conditioned by greater costs which regionally connected firms have to bear in order to contribute to the economic development of regions and provinces to which they are connected.

Résumé: J'étudie l'effet des connexions politiques d'entreprise sur la performance de l'entreprise et la rentabilité. En analysant l'exemple d'entreprises non-étatiques russes dans la période de 2000–2013, je trouve que les connexions politiques avec la branche exécutive du gouvernement fédéral affectent positivement le retour de l'entreprise connectée sur les ventes, le rendement des actifs, le rendement des capitaux propres et de marketing ratio-book. Ces améliorations sont conditionnées par une meilleure performance opérationnelle de l'entreprise connectée. Dans le même temps les coûts financiers et fiscaux ne sont pas sérieusement affectés par des connexions politiques. Contrairement à l'effet des liens fédéraux, les connexions aux autorités régionales apportent plus de dépenses que d'avantages pour les entreprises liées, les indicateurs de performance opérationnelle et de performance globale montrant une baisse en présence de liens politiques régionaux. Cette dernière, en effet, est susceptible d'être conditionnée par des frais plus élevés que les entreprises régionalement connectées doivent supporter afin de contribuer au développement économique des régions et des provinces auxquelles elles sont connectées.

Keywords: politically connected firm, profitability, performance.

1. Introduction

I study the effects of corporate political connections on firm profitability and performance. Existing empirical literature on this subject shows contradictory results which are consistent with conflicting theoretical approaches to this issue. On one hand, political connections are expected to *improve* firm profitability and performance as connected firms are likely to have "preferential treatment by government-owned enterprises (such as banks or raw material producers), lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals" (Faccio, 2006). On the other hand, "the goals pursued by the politically-oriented selected managers are not necessarily in line with profit or value maximization" (Boubakri et al. 2008). It is expected that politically connected firms may be persuaded by politicians "to maximize employment and wages; promote regional development by locating production in politically desirable rather than economically attractive districts; ensure national security; provide low-prices goods and services; and produce unnecessary goods" (Boubakri et al. 2008; Bertrand et al., 2006). The latter effects would result in *lower* profitability and *worse* performance indicators for a politically connected firm.

The contradictory *empirical* results with regard to the effects of political connections on firm-level performance and profitability (for more on this see Section "Theoretical background") are likely to be conditioned by the *interplay* of the two factors mentioned above. Which of the factors takes the upper hand determines the outcome of the effect of political connection on profitability and performance.

In order to look precisely at how political connections affect firm profitability and performance I disentangle the basic performance indicator Return on equity (ROE) into several factors as has been done by Hawawini and Viallet (2010). According to their approach the equation for ROE can be written in the following way:

ROE = Operating profit margin $\times$ Capital turnover ratio $\times$

$\times$ Financial cost ratio $\times$ Financial structure ratio $\times$ Tax effect ratio

(for more on the interpretation of this equation see Section "Theoretical background")

Analyzing the way in which political connections affect *each* of the five components of ROE allows us to figure out for which type of *corporate activity* political connections have positive effect and for which type they have a negative influence. We can see then how the effects of political connections on different components of ROE cancel out (or reinforce) each other resulting in the overall final effect of political connections on profitability and performance. By disentangling ROE into several components it is also possible to test the effects of different *types* of political connections on each of the components investigating some additional insights into the mechanisms of the effects of political connections.

The **first** two components of the equation – *Operating profit margin* and *Capital turnover ratio* when multiplied result into *Return on invested capital before tax (ROIC$_{BT}$)*. ROIC$_{BT}$ is the main measure of *operating profitability*. I expect that a firm that has an established connection to central (federal) government has more benefits than costs from political connections and therefore has higher operating profitability than do firms without such connections. This expectation forms the basis

of my **Hypothesis 1** (for a more detailed rationalization of this hypothesis please see Section "Theoretical background").

Getting to the regional level of state governance I expect that regional authorities are more likely than federal authorities to impose pressure on a regionally connected firm to create more jobs in the region, purchase resources from local suppliers and make investments in local infrastructure with a purpose to improve regional economic situation. Such pressures may also appear on the federal level however their magnitude is likely to be less significant. The explanation to this phenomenon is that on the regional level corporate "donations" to the local economy are more *visible* by the public (than on the nation-wide level), thus these "donations" may significantly contribute to the political capital of local authorities, politicians and the firms themselves. At the same time in the huge nation-wide market firm's "donations" are likely to be relatively unnoticed by the public, so they have no significant effect on the political capital of federal politicians and authorities as it happens on the regional level. Taking into account these expectations I formulate the second hypothesis **H2:** A firm that has an established connection to regional government normally has lower operating profitability than the firm with connections to central (federal) government. The negative effect of additional costs bore by the regionally connected firm with regard to job creation and other donations to the regional economy may cancel out the positive effects of political connections, thus bringing the overall effect of regional political connection on operating profitability nearly to null, or even making it negative.

The **third** and the **fourth** components of the equation – *Financial cost ratio* and *Financial structure ratio* - reflect the effect of leverage on firm's profitability. Leverage affects ROE in two opposite ways: on one hand leverage means greater

interest payments which reduce ROE, on the other hand leverage increases invested capital relative to equity which positively affects ROE. The resulting effect of leverage on ROE is measured by *Financial leverage multiplier* which is a product of *Financial cost ratio* and *Financial structure ratio.* I expect that political connections to central (federal) government overall have a positive effect on *Financial leverage multiplier* and thus on ROE as the increase in *Financial structure ratio* for politically connected firms should outweigh the negative effects of interest payments. These expectations are in line with prior studies which document that politically connected firms are more leveraged (Boubakri et al. 2008; Boubakri et al. 2009; Li et al. 2008; Khwaja and Mian 2005) and probably pay lower interest rates for the loans obtained (Faccio 2010; Houston et al. 2014). Therefore, my third hypothesis **H3** is: A firm that has an established connection to central (federal) government has greater financial leverage multiplier than the firms without such connections.

Getting to the regional level of state governance I do not see any specific implications of regional connections for either leverage or cost of debt as financial resources of regional banking systems are usually limited and cannot play significant role in determining financial policies of big firms operating in the nation-wide and international markets.

Finally, the **fifth** component of the equation – *Tax effect ratio* – resembles the effect of corporate income tax on profitability. The higher the *effective tax rate* that a company pays, the lower the *tax effect ratio* and hence profitability measured by ROE. I expect political connections to central (federal) government to negatively affect effective tax rate and hence positively affect *tax effect ratio* and ROE. This expectation is based on results of a few previous studies on the implications of political connections for taxation (Adhikari et al. 2006; Wu et al. 2012). I suppose

that it is highly likely, that connections to central (federal) government, but not regional level connections, improve firm's ability to negotiate the legal and semi-legal aspects of its corporate tax optimization schemes with national tax authorities. So, my fourth hypothesis **H4** is the following: A firm that has an established connection to central (federal) government pays lower effective tax rate and has higher tax effect ratio than do firms without political connections.

Taking into account the expected effects mentioned above I propose two additional hypotheses which reflect and assemble the four outlined before.

H5: A firm that has an established connection to central (federal) government has better performance indicators, in particular return on equity (ROE), return on sales (ROS), return on assets (ROA) and market-to-book ratio than the corresponding indicators of the firms without such connections.

H6: A firm that has an established connection to regional government has lower performance indicators in particular return on equity (ROE), return on sales (ROS), return on assets (ROA) and market-to-book ratio than the corresponding indicators of the firms with connections to central (federal) government. The negative effect of additional costs bore by the regionally connected firm with regard to job creation and other donations to regional economy may nearly cancel out the positive effects of political connections, thus bringing the overall effect of regional political connections on total profitability nearly to zero, or even making it negative.

I test the hypotheses stated above on a sample of Russian non-state-owned firms within a period of 2000-2013. The choice of the country and the period is conditioned by the following factors: (1) Russia's massive privatization program conducted after the collapse of communism was mostly finished in the end of 1990-s

leaving the formerly state-owned property in the hands of a rather diverse group of owners. As institutional arrangements for the protection of private property were weak at that stage, many companies had to establish political connections both on federal and regional levels in order to protect themselves and compensate for the lack of relevant institutions. So, corporate political connections flourish in Russia. (2) Contemporary Russian business elites are rather diversified in terms of their relationship with the government: some firms may be considered politically independent, other firms may be considered politically connected, but connected firms differ with regard to the branch of the government they are connected to (executive vs. legislative) and level of government (federal vs. regional) thus allowing to test the hypotheses with regard to effects of connections to different branches and levels of government; (3) As during the times of the Soviet Union for decades companies were to subsidize social welfare sector, the society generally retained these expectations in the era of capitalism after 1991. Companies after privatization were expected to be socially responsible in their business activities, create jobs and contribute to the development of the regions in which they were located. Corporate political connections reinforced these expectations on the part of the society. (4) According to Faccio (2010) differences between politically connected firms and non-connected firms are stronger when the firm operates in "countries with higher degrees of corruption". Russia is holding 127-d position out of 177 in the 2013 Corruption Perceptions Index by Transparency International. So, Russia may be a good place to analyze differences between politically connected and non-connected firms.

I find that connections to the executive (but not legislative) branch of the federal government improve firm performance and profitability (ROS, ROA, ROE, M/B)

due to positive effects of these connections on *operating profitability*. At the same time connections to the executive branch of the federal government do not seem to affect significantly other important drivers of firm profitability such as *financial leverage multiplier* and *tax effect ratio*.

I also find that connections to regional governments bring more costs to the firms than benefits negatively affecting both operating profitability and overall profitability. This result is in accord with some previous studies (Fan et al. 2007; Boubakri et al. 2008; Bertrand et al. 2006) which find that politically connected boards and top management often do not follow the goals of profit or value maximization, are often characterized by relatively low professionalism, while at the same time local politicians impose pressure on connected firms making them create more jobs in their respective regions and contribute to regional economies in a few other ways.

I contribute to the existing literature on the effects of political connections on firm profitability and performance in the following ways. *First*, I disentangle the basic profitability indicator ROE in five factors in order to test how political connections affect each of these five factors and, more importantly, the corresponding fields of corporate activity. This allows me to see which fields of corporate activity suffer, and which thrive because of political connections. I also see how effects of political connections on each of the five factors either reinforce, or cancel out each other finally having a consolidated effect on overall firm profitability. *Second*, I disentangle political connections into two types: connections to the central (federal) government vs. connections to regional governments, disentangling further each of these types into connections to executive branch of the government vs. legislative branch. This allows me to see how different types and

levels of political connections affect firm profitability and its drivers. *Third*, I confirm the view (which before was not a dominant view in the literature) that political connections may have an *adverse* effect on profitability and performance. My results confirm, though indirectly, that under some circumstances (e.g. regional connections) politicians are likely to impose pressure on politically connected firms to exploit firm's social responsibility agenda and make firms donate to regional economies in the form of greater job creation and, possibly, greater purchases of resources in a particular region (Boubakri et al., 2008; Bertrand et al., 2006).

The rest of the paper is organized as follows. In Section 2 I present the theoretical background, the literature review, develop the hypotheses and justify the institutional framework under which I test my hypotheses. In Section 3 I explain the methodology of the study. In Section 4 I present the results. In Section 5 I make conclusions and discuss future research prospects.

2. Theoretical background

Effects of political connections on firm profitability and performance

The empirical literature which covers the effects of corporate political connections on profitability and performance of non-state-owned firms is to some extent controversial as are the theoretical approaches to this problem. *On one hand* political connections may have an *adverse* effect on firm's profitability as "the goals pursued by the politically-oriented selected managers are not necessarily in line with profit or value maximization" (Boubakri et al. 2008, p.655-656). Indeed, managerial objectives in politically connected firms may to significant extent resemble those of state-owned enterprises (SOEs), particularly "to maximize employment and wages; promote regional development by locating production in politically desirable rather than economically attractive districts; ensure national security; provide low-prices goods and services; and produce unnecessary goods" (Boubakri et al. 2008, p.656; also see Bertrand et al., 2006). *On the other hand* political connections may have a *positive* effect on the profitability of a non-state-owned firm by facilitating "preferential treatment by government-owned enterprises (such as banks or raw material producers), lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals" (Faccio, 2006).

The empirical investigations into this problem, as was mentioned before, produce contradictory results. The strand of literature confirming *positive* effects of political connections on firm's profitability and performance is more extensive than

the one confirming negative effects. Particularly, Li et al. (2008) in their seminal paper find that the Communist Party membership of private entrepreneurs in China has a *positive* effect on the performance of their firms. Wu et al. (2012) also find that in China private firms with politically connected managers outperform those without such managers. A strand of literature devoted to the effects of political connections on *firm value* also supports the view that connections are beneficial for profitability and performance. In particular, Fisman (2001), Johnson and Mitton (2003), Ramalho (2004), Ferguson and Voth (2008), Niessen and Ruenzi (2010), Goldman et al. (2009) - all find that political connections have, ceteris paribus, a *positive* effect on firm value.

However, some papers present the results quite *opposite* to the optimistic picture revealed before. For example, Fan et al. (2007) track the performance of newly partially privatized firms (NPPF) in China and find that "firms with politically connected CEOs underperform those without politically connected CEOs by almost 18% based on three-year post-IPO stock returns and have poorer three-year post-IPO earnings growth, sales growth, and change in returns on sales". Boubakri et al. (2008) confirm these results studying "impact of political ties in newly privatized firms around the world by using a multinational sample of 245 firms privatized in 27 developing countries and 14 industrialized countries". Faccio (2010) also finds that politically connected firms have *lower* return on assets (ROA) and market-to-book value (M/B).

The empirical papers devoted to the effects of political connections on firm-level profitability and performance may be summarized as follows:

The *contradictory* empirical results with regard to the effects of political connections on firm-level performance and profitability are likely to be conditioned by the interplay of the two factors mentioned above. The *first* factor reflects the possibility that a firm may bear additional social and political *costs* as well as face lower quality of professionalism of its management team because of political connections. The *second* factor reflects the possibility of *benefits* which a politically connected firm may receive thanks to its political connections (namely preferential treatment by banks or raw material producers, lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals; see Faccio, 2006). Which of the factors takes the upper hand determines the outcome of the effect of political connections on profitability and performance.

In order to look precisely at how political connections affect profitability and performance of a firm I suggest disentangling the basic performance indicator Return on equity (ROE) into several factors as has been done by Hawawini and Viallet (2010). According to their approach the equation for ROE can be written in the following way:

ROE = Operating profit margin × Capital turnover ratio ×

× Financial cost ratio × Financial structure ratio × Tax effect ratio

where:

Operating profit margin = Earnings before interest and tax (EBIT) / Sales

Capital turnover ratio = Sales / Invested capital

Financial cost ratio = Earnings before tax (EBT) / Earnings bef.int.&tax (EBIT)

Financial structure ratio = Invested capital / Equity

Tax effect ratio = Earnings after tax (EAT) / Earnings before tax (EBT)

Analyzing the way in which political connections affect *each* of the five components of ROE allows us to figure out for which type of *corporate activity* political connections have positive effect and for which type they have a negative influence. We can see then how the effects of political connections on different components of ROE cancel out (or reinforce) each other resulting in the overall final effect of political connections on profitability and performance. By disentangling ROE into several components it is also possible to test the effects of different types of political connections on each of the components investigating some additional insights into the mechanisms of effects of political connections.

The **first** two components of the equation – *Operating profit margin* and *Capital turnover ratio* when multiplied result into *Return on invested capital before tax (ROIC$_{BT}$)*:

ROIC$_{BT}$ = Earnings before interest and tax (EBIT) / Invested capital

ROIC$_{BT}$ is the main measure of *operating profitability* and is mainly determined by three factors (Jagiello and Mandry, 2004): (1) the firm's competitive position as measured by its *market share* relative to that of its competitors; (2) the relative *quality of firm's products and services* as perceived by its customers; (3) the firm's *cost and assets structures*, namely, the composition and concentration of its assets, the structure of its costs, and its degrees of vertical integration and capacity utilization (see also Hawawini and Viallet 2010, p.150). Jagiello and Mandry (2004) and Hawawini and Viallet (2010) indicate that *high market share* and *superior*

product quality, on average, *boost* operating profitability, while *high investments* and *high fixed costs*, on average, *depress* it.

I expect that, all other thing being equal, political connections to central (federal) government *boost* firm's *market share* relative to that of its competitors (this may be caused by preferential treatment of the connected firm in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals, better financing opportunities which may facilitate acquisitions of greater market share; see Faccio, 2006). I also expect that political connections to central (federal) government have *no specific effect* on the relative *quality of firm's products and services*. I neither expect any specific association between connections to central (federal) government and *higher investments* and *higher fixed costs*, which, according to Jagiello and Mandry (2004), depress operating profitability. In line with these expectations I formulate the first hypothesis:

H1: A firm that has an established connection to central (federal) government has higher operating profitability than do firms without such connections.

Getting to the regional level of state governance I expect that the effect of regional political connections on *market share* of a connected firm should be *lower* than the corresponding effect of connections to the federal government. This is conditioned by the fact that regional markets are by definition less heavy than the nation-wide market. I also expect that political connections to regional governments should *not* have any *specific effects* on the relative *quality of firm's products and services*. At the same time, regional authorities are more likely than federal authorities to impose pressure on a regionally connected firm to more eagerly

increase employment and salaries in the region, as well as purchase resources from local suppliers and make investments in local infrastructure with a purpose to improve regional economic situation. Such pressures may also appear on the federal level however their magnitude is likely to be less significant. The explanation to this phenomenon is that on the regional level corporate "donations" to the local economy are more *visible* by the public (than on the nation-wide level), thus these "donations" may significantly contribute to the political capital of local authorities, politicians and the firms themselves. At the same time in the huge nation-wide market firm's "donations" are likely to be unnoticed by the public, so they have no significant effect on the political capital of federal politicians and authorities as it happens on the regional level.

Taking into account these expectations I formulate the second hypothesis:

H2: A firm that has an established connection to regional government normally has lower operating profitability than the firm with connections to central (federal) government. The negative effect of additional costs bore by the regionally connected firm with regard to job creation and other donations to the regional economy may cancel out the positive effect of greater market share, thus bringing the overall effect of regional political connection on operating profitability nearly to null, or even making it negative.

The **third** and the **fourth** components of the equation – *Financial cost ratio* and *Financial structure ratio* - reflect the effect of leverage on firm's profitability. Leverage affects ROE in two opposite ways: on one hand leverage means greater interest payments which reduce ROE, on the other hand leverage increases invested capital relative to equity which positively affects ROE. The resulting effect of

leverage on ROE is measured by *Financial leverage multiplier* which is a product of *Financial cost ratio* and *Financial structure ratio.*

I expect that political connections to central (federal) government overall have a positive effect on *Financial leverage multiplier* and thus on ROE as the increase in *Financial structure ratio* for politically connected firms should outweigh the negative effects of interest payments. These expectations are in line with prior studies which document that politically connected firms are more leveraged (Boubakri et al. 2008; Boubakri et al. 2009; Li et al. 2008; Khwaja and Mian 2005) and allegedly pay lower interest rates for the loans obtained (Faccio 2010; Houston et al. 2014). Therefore, my third hypothesis is:

H3: A firm that has an established connection to central (federal) government has greater financial leverage multiplier than the firms without such connections.

Getting to the regional level of state governance I do not see any specific implications of regional connections for either leverage or cost of debt as financial resources of regional banking systems are usually limited and cannot play significant role in determining financial policies of a big firm operating in the nation-wide and international markets.

Finally, the **fifth** component of the equation – *Tax effect ratio* – resembles the effect of corporate income tax on profitability. The higher the *effective tax rate* that a company pays, the lower the *tax effect ratio* and hence profitability measured by ROE.

I expect political connections to central (federal) government to negatively affect effective tax rate and hence positively affect *tax effect ratio* and ROE. This expectation is based on results of a few previous studies (Adhikari et al. 2006; Wu et

al. 2012). I suppose that it is highly likely, that connections to central (federal) government, but not regional level connections, improve firm's ability to negotiate the legal and semi-legal aspects of its corporate tax optimization schemes with national tax authorities. So, my fourth hypothesis is the following:

H4: A firm that has an established connection to central (federal) government pays lower effective tax rate and has higher tax effect ratio than do firms without political connections.

Taking into account the expected effects mentioned above I propose two additional hypotheses which reflect and assemble the four outlined before.

H5: A firm that has an established connection to central (federal) government has better performance indicators, in particular return on equity (ROE), return on sales (ROS), return on assets (ROA) and market-to-book ratio than the corresponding indicators of the firms without such connections.

H6: A firm that has an established connection to regional government has lower performance indicators in particular return on equity (ROE), return on sales (ROS), return on assets (ROA) and market-to-book ratio than the corresponding indicators of the firms with connections to central (federal) government. The negative effect of additional costs bore by the regionally connected firm with regard to job creation and other donations to regional economy may nearly cancel out the positive effect of greater market share, thus bringing the overall effect of regional political connection on total profitability nearly to zero, or even making it negative.

In order to test the hypotheses stated above I need to find an *institutional setting* in which there are flourishing political connections both on the level of central government and regional governments. There should be also some traditions

of corporate social responsibility within the connected firms that would stimulate connected firms to "donate" to local economies as a payback for potential benefits of political connections.

Choice of an institutional setting

I suggest testing the hypotheses stated above on a sample of Russian non-state-owned firms within a period of 2000-2013. The choice of the country and the period is conditioned by the following factors: (1) Russia's massive privatization program conducted after the collapse of communism was mostly finished in the end of 1990-s leaving the formerly state-owned property in the hands of a rather diverse group of owners. As institutional arrangements for the protection of private property were weak at that stage, many companies had to establish political connections both on federal and regional levels in order to protect themselves and compensate for the lack of relevant institutions. So, corporate political connections flourish in Russia. (2) Contemporary Russian business elites are rather diversified in terms of their relationship with the government: some firms may be considered politically independent, other firms may be considered politically connected, but connected firms differ with regard to the branch of the government they are connected to (executive vs. legislative) and level of government (federal vs. regional) thus allowing to test the hypotheses with regard to effects of connections to different branches and levels of government; (3) As during the times of the Soviet Union for decades companies subsidized social welfare sector, the society generally retained these expectation in the era of capitalism after 1991. Companies after privatization were expected to be socially responsible in their business activities and corporate political connections often reinforced these expectations on the part of the society.

(4) According to Faccio (2010) differences between politically connected firms and non-connected firms are stronger when the firm operates in "countries with higher degrees of corruption". Russia is holding 127-d position out of 177 in the 2013 Corruption Perceptions Index by Transparency International. So, Russia may be a good place to analyze differences between politically connected and non-connected firms; (5) The period of 2000-2013 is rather long so there were numerous rotations of board members, CEOs, and significant shareholders in many companies that increase variability of my dataset even if there is a relatively limited number of companies on which information is available through publicly open sources.

One more reason for choosing Russia is that this country is rather important for the world economy and politics. It is the sixths largest economy in the world (by GDP PPP; World Bank, 2013), second largest net exporter of oil in the world (IEA, 2012), and first largest nuclear power (Fed. of American Scientists, 2012).

3. Methodology

Sample and time period

As an initial source for building a representative *sample of firms* for my study I refer to the Rating of Russia's 200 largest non-state-owned firms (in terms of sales) published by Forbes Magazine in 2013. Forbes *excludes* from its rating the following types of companies:

- Companies in which the Russian state or the foreign investors possess more than 50% of the voting stock;
- Banks, insurance, leasing, investment and other financial companies.

From the list of 200 Russia's largest non-state owned companies I pick companies which provide either IFRS or US GAAP financial statements. This is important because IFRS/US GAAP statements presume *consolidated statements* for the group of companies as a whole, while Russian Accounting Standards (RAS) presume financial statements only for the *individual* companies inside the group, showing no picture for the group as a whole. I find 84 companies with IFRS, and 9 companies with US GAAP (in total 93 companies) in the Forbes 200 rating.

However, it is necessary to mention that the list of Russian IFRS/US GAAP companies may be *increased* by several companies as some of the companies were not included into Forbes 200 rating because they did not exceed the rating's *lower criteria* (23 billion rubles of sales in 2012 = around 600 million Euros). These additional companies may be taken from the Rating of Russia's 400 largest companies (both private and government-owned) published by the prominent

Russia's news agency Expert RA in 2013 (http://raexpert.com). After examining this rating I add *eight* companies to the existing list of 93 Russian IFRS/US GAAP companies. I also add *one* large company, which ceased to exist by the time of Forbes-200 2013 Rating construction: TNK-BP (acquired by the state-owned Rosneft in 2012-2013). As a result the size of my sample grows to 102 companies. However, this figure should be *decreased* by the number of companies on which there is *no* possibility of acquiring information through publicly open sources. So, finally as a result of this adjustment I end up with *73 companies*.

I investigate the *time period* of 2000-2013. The period of 2000-2013 is rather long so there were numerous rotations of board members, CEOs, and significant shareholders in many companies that increase variability of my dataset even with a relatively limited number of companies (on which information is available through publicly open sources).

Determining firm's political connections

For *each firm* in my sample a list of:
- board members
- CEOs
- significant shareholders (major owners)

for the period of 2000-2013 is developed indicating the *precise time periods* when these people were in the company. The board members and CEOs are found by means of searching SKRIN Database[1], while significant shareholders (major owners)

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[1] SKRIN (www.skrin.com) was founded in 1999 by Russia's National Association of Stock-Market Participants (NAUFOR), and by November 2013 SKRIN database contained information on 9,244,854 Russian companies, including historical information on their owners (if disclosed), board members and management teams. The main sources of information for SKRIN are the following organizations:

are found by the search of Russia's three major business newspapers (Kommersant, Vedomosti, RBC-Daily), and four major business magazines (RBC, Kommersant-Dengi, Kommersant-Vlast, Forbes Russia). The necessity to determine owners through the business press is conditioned by the fact that at least until 2010-2011 real owners of Russian companies used to hide their identities behind the chains of firms registered in various offshore tax heavens and related jurisdictions (Chernykh, 2008).

For each of the individual's found *biographic information* was discovered through the search of Labyrinth database[2], Kommersant database (operated by one of Russia's leading business newspapers Kommersant), SKRIN, official web-sites of the corresponding companies and/or Viperson.ru[3].

Biographic information normally contains date and place of birth, parents, university education, career after the graduation from the university, ties and links to political and business figures, major announcements that a person made publicly in his/her life, etc.

Before coding each *firm-year* observation with regard to political connections that the firm had in a particular year it is important first to code each significant

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Federal Service for the Financial Markets (www.fcsm.ru), Federal State Statistics Service (www.gks.ru), individual Russian companies, Depositary Clearing Company (www.dcc.ru), Russian and foreign exchanges, leading Russian media-sources.

[2] Database Labyrinth (www.labyrinth.ru) was created in 1992. By November 2013 it contained 42 thousand references compiled by Labyrinth specialists on the basis of reliable publicly available information obtained from Russia's federal and regional authorities, publications in mainstream media, documents of political parties, etc. as well as from 4,000 questionnaires personally filled-in by the businessmen and the politicians. The database contains 33 thousand biographies of Russian politicians, government officials, businessmen, journalists and other publicly important figures. All the references in Labyrinth are connected by hyperlinks which allow finding both explicit and implicit connections between people, organizations, and events.

[3] Viperson.ru is operated by Nonprofit Partnership "Scientific Information Agency "Heritage of the Fatherland" (Russian Certificate of registration of mass media FS © 77-32003 dated May 16, 2008).

shareholder, CEO, and board member with regard to the political connections that these people had in that particular year. In accordance with the hypotheses stipulated above I categorize significant shareholders, CEOs, and board members into the following categories and make the following independent variables of interest (see Table below):

Please see Table Ch1-2

In all the cases stipulated above the person should have worked in the government *before or during* the time when he/she was a significant shareholder of the firm, a CEO, or a board member.

Coding each *person-year* observation in the firm according to the criteria mentioned in the Table Ch1-2 allows me to proceed to coding of each *firm-year* observation. I apply the following rule: if in a particular firm in a particular year there was *at least one person* (board member, CEO or a significant shareholder) who was rated, for instance, PFE, then the whole firm is rated PFE for this year. The same rule is applied to all other independent variables of interest.

Dependent variables

I use the following indicators to measure firm's profitability and performance.

Please see Table Ch1-3

Return on sales, return on assets, return on equity and market-to-book ratio are crude measures of firm's overall profitability and performance, while the following seven indicators are the components of return on equity, reflecting several specific areas of corporate activity.

Control variables

I include the following control variables as done by Li et al. (2008) in their seminal paper (see Table below):

Please see Table Ch1-4

Regression equation

As a result I get the following basic regression equation:

Measure of performance = β_0 + β_1AGE + β_2SIZE + β_3LEV +

+ β_s Measures of political connections + β_sYR + β_sINDUST + ε

To control for *industry* and *year* β_sYR and β_sINDUST variables are included in the regression. All of the t-tests are supposed to be reported as White's (1980) corrected t-tests.

4. Results

I analyze 73 companies for the period of 2000-2013 inclusive and end up with 528 firm-year observations. The number of observations is smaller than the result of multiplication of 73 companies by 14 years because for some companies the information on political connections or financial data is not available for the full period of 2000-2013.

The average level of return on sales (ROS) in my sample is 9.6%, while average return on assets (ROA) amounts to 8.2%.

Please see Table Ch1-5

When calculating the summary statistics (as well as building correlation matrices and regressions) for return on equity (ROE) and market-to-book ratio (M/B) I use only those observations which have *positive* equity as otherwise calculating the above-mentioned ratios has no clear economic sense. So, I have 516 firm-year observations for return on equity and 419 firm-year observations for market-to-book ratio (the decrease of the sample to 419 firm-year observation for the latter variable is conditioned by the fact that not all companies in my sample are liquid or listed on a stock exchange while calculating M/B ratio is possible only for companies which have a market price).

Please see Table Ch1-6

When analyzing dependent variables which are the drivers of ROE (as explained in Section 2) I limit my sample to those observations which have *positive* equity, *positive* earnings before interest and tax (EBIT), and *positive* earnings before tax

(EBT). This is conditioned by the fact that in the opposite case calculating ratios in which EBT or EBIT are denominators has no clear sense. For these dependent variables I have 458 firm-year observations.

Please see Table Ch1-7

Summary statistics for control variables is given in Table Ch1-8.

Please see Table Ch1-8

Summary statistics on political connections shows that 35% of firm-year observations presume the presence of a connection to the *executive* branch of the *federal* government in Russia. For the *legislative* branch of the *federal* government this indicator is 23%. 25% and 28% of firm-year observations constitute connections to *executive* and *legislative* branches of *regional* authorities correspondingly.

Please see Table Ch1-9

Univariate analysis

Analysis of the correlation matrix shows that at 10% level of significance there is slightly positive correlation between return on sales (ROS) and presence of ties to executive branch of the federal government. There are also slight negative correlation coefficients between ROS and ROA on one hand, and presence of ties to the legislative branch of regional governments on the other hand. Slight negative correlations are also found between return on equity and market-to-book ratio on one hand and presence of ties to executive branches of regional governments on the other hand.

Please see Table Ch1-10, Table Ch1-11, and Table Ch1-12

Multivariate analysis

Regressions of return on sales (ROS), return on assets (ROA), return on equity (ROE), and market-to-book ratio (M/B) on a number of political connections and control variables show statistically significant positive effects of connections to the executive branch of the federal government (PFE) on ROS, ROA, ROE, M/B. All other things being equal, PFE increases ROS by 46%, ROA and ROE by 31%, and M/B by 26%. **These results confirm Hypothesis 5.** It is important to note that connections should be maintained to the *executive* branch of the federal government: connections to the parliament do not yield any statistically significant effects on profitability and performance.

It is interesting that connections to regional legislative assemblies (PRL) trigger a negative effect on ROS, ROA, and M/B. All other things being equal, PRL decreases ROS by 39%, ROA by 26%, and M/B by 39%. **These results are consistent with Hypothesis 6,** and they reinforce the idea that negative effects of political connections may outweigh the positive effects. It is possible to presume that firms connected to deputies of regional legislative assemblies have to bear special costs with regard to creating jobs in regional economies, paying higher wages and purchasing resources from regional suppliers (for more on this effect see Boubakri et al. 2008, Bertrand et al., 2006).

Please see Table Ch1-13

Regressions of components of ROE (for detailed description of components see Section "Theoretical background") on a number of political connections and control

variables yield results mostly consistent with those stated before. However there are some important peculiarities.

PFE positively affects operating profit margin (EBIT/Sales rises by 23%) but negatively affects capital turnover ratio (Sales/Invested capital decreases by 12%). The overall effect of PFE on return on invested capital before tax ($ROIC_{BT}$) is, however, positive (+9%) that **supports Hypothesis 1**. The negative influence that connections to the executive branch of the federal government have on capital turnover ratio potentially can be explained by the relatively higher fixed assets and higher fixed costs per dollar of sales for politically connected firms. In line with the expectations of a presence of a *negative* component in political connections, we may expect politically connected firms to build greater property, plant and equipment (PPE) in order to stimulate production and employment as a matter of socially responsible payback for potential benefits of political connections. However, no matter how intuitively appealing the latter explanation can be, it is also likely that the observed effect is conditioned by the limitations of my sample and further investigation into this subject is required.

Connections to regional governments (executive branch) yield a negative effect on operating profitability ($ROIC_{BT}$ decreases by 10%) while connections to regional legislative assemblies decrease operating profit margin (EBIT/Sales) by 18%. These results are generally **in line with predictions of Hypothesis 2**. Again we see that negative effects of political connections may outweigh the positive effects.

Getting to the effects of political connections on firm's financing decisions we surprisingly see that neither connections to federal, nor connections to regional authorities yield any effect on financial leverage multiplier (the coefficients are far

from statistical significance). However, the effect of PFE on financial cost ratio (EBT/EBIT) is positive and significant at 10.2% which is very close to the conventional 10-percent threshold for statistical significance. This implies that PFE-firms probably pay lower interest rates. At the same time, the effect of ties to executive branches of regional governments on financial cost ratio is negative and significant at 5%, implying that PRE-firms are likely to pay higher interest rates (though the economic scale of this effect is small: -6%). Summarizing the results mentioned above we may nevertheless say that **Hypothesis 3 finds no support**.

The regression of tax effect ratio (EAT/EBT) on a number of political connections and control variables yields a rather interesting result. PFE positively affects EAT/EBT (+5%) thus presuming slightly lower effective tax rates for firms connected to the federal government (executive branch). However, connections to the parliament have a negative effect on tax effect ratio (-5%). The magnitude of both effects is rather small therefore it is **hardly possible to say that Hypothesis 4 is well supported**.

Please see Table Ch1-14

Summarizing the results we may say that connections to the *central (federal)* government indeed bring more *benefits* than costs to firms. However, these connections should be maintained to the *executive* branch of the government, not to the parliament whose members seem to be not very useful in providing better opportunities for the firms. The sources of benefits for the firms connected to the executive branch of the federal government mostly lie in the field of *better operating performance*, while financing and taxation activities seem to have a marginal effect on overall performance.

At the same time connections to regional governments bring more *costs* to the firms than benefits. Most negative effect on firm performance in my sample comes from connections to regional legislative assemblies: it looks like the deputies of regional legislative assemblies are most interested in improving the state of regional economies at the expense of local enterprises. As a result, operating profit margin, as well as ROS, ROA and M/B are *lower* for firms possessing regional connections than for non-connected firms. However, more in-depth research into this problem is required in order to see precisely how regional connections affect profitability.

5. Conclusion

Responding to contradictory results of the previous studies, I investigate the effect of corporate political connections on firm performance and profitability by studying a sample of Russian non-state-owned firms within a period of 2000-2013. I find that connections to the executive (but not legislative) branch of the federal government improve firm performance and profitability due to positive effects of these connections on *operating profitability*. At the same time connections to the executive branch of the federal government do not seem to affect significantly other important drivers of firm profitability such as *financial leverage multiplier* and *tax effect ratio*.

I also find that connections to regional governments bring more costs to the firms than benefits negatively affecting *operating* and overall profitability. This result is in accord with some previous studies (Fan et al. 2007; Boubakri et al. 2008; Bertrand et al. 2006) which find that politically connected boards and top management are often characterized by relatively low professionalism, while local politicians often impose pressure on connected firms making them create more jobs in their respective regions and contribute to local economies in other ways.

I contribute to the existing literature on the effects of political connections on firm profitability and performance in the following ways. *First*, I disentangle the basic profitability indicator ROE in *five* factors in order to see how political connections affect each of these five factors and the corresponding fields of corporate activity. This allows me to see how effects of political connections on each of the five factors either reinforce, or cancel out each other finally having a

consolidated effect on overall firm profitability. *Second*, I disentangle political connections into two types: connections to the *central (federal)* government vs. connections to *regional* governments, disentangling further each of these types into connections to *executive* branch of the government vs. *legislative* branch. This allows me to see how different types and levels of political connections affect firm profitability and its drivers. *Third*, I confirm the view that was not a dominant view in the literature that political connections may have an *adverse* effect on profitability and performance. My results confirm, though indirectly, that under some circumstances (e.g. regional level connections) politicians are likely to impose pressure on politically connected firms to exploit firm's social responsibility agenda and make firms donate to regional economies in the form of greater job creation and, possibly, greater purchases of resources in a particular region (Boubakri et al., 2008; Bertrand et al., 2006).

Among the *limitations* of my study it is possible to highlight the following: (1) Political connections in this study are determined based on previous employment of significant shareholders, CEOs, or board members (or their closest relatives) in the government. However, potentially connections can emerge through other means (without any employment in the government), for example through friendship, etc. Though these other means of building political connections may be difficult to observe, it would be good to take them into account in future studies. (2) Endogeneity issue is not resolved in this study. There might be situations when politically connected people would join firms which are most successful and demonstrate high profitability and performance ratios, though intuitively it is more likely that political connections facilitate firm performance, not vice versa.

Future research should take into account the limitations stated above and may extend its scope to the following issues: (1) in-depth study into the mechanism of negative effect of political connections to regional authorities on firm performance (e.g. how regional political connections affect firm's operational costs); (2) in-depth study of the effects of political connections on firm's financing activities (particularly, cost of debt); (3) study of the effects of political connections on firm's taxation; (4) study of the effects of political connections on firm's investment decisions. These extensions will contribute further to the development of the field of literature devoted to the effects of political connections.

6. Tables

Table Ch1-1. Summary of studies devoted to the effects of political connections on firm-level profitability, performance and their potential drivers

Paper and dataset	Dependent variables related to profitability and performance	Effect of polit. conn. on dependent variables
Li et al. (2008) China 2324 firms 2002	1) ROA	positive
	2) ROE	positive
	3) Amount of loans from state-banks and other state institutions	positive
	4) Total tax payment/sales	no effect
	5) Total fee payment/sales	no effect
	6) Time of dealing with bureaucracy	no effect
	7) Likelihood to resort to legal channels in business disputes	positive
Fan et al. (2007) China 790 firms 1993-2000	1) Three-year post-IPO stock returns	negative
	2) Three-year post-IPO earnings growth	negative
	3) Three-year post-IPO sales growth	negative
	4) Three-year post-IPO change in return on sales (ROS).	negative
Boubakri et al. (2008) 41 countries 245 firms 1980-2002	1) Change in return on sales (ROS) during the privatization window (-3, -1 vs. +1, +3).	negative
	2) Growth rate of sales from the average annual sales of the three years before the privatization year to that of the three years after the privatization year.	negative
	3) Growth rate of earnings from the average annual earnings of the three years before the privatization year to that of the three years after the privatization year.	no effect

Table Ch1-1, continued.

Faccio (2010) 47 countries 16191 firms 1996-2003	1) Return on assets (ROA) measured as the ratio of a company's net income prior to financing costs to total assets (x100)	negative
	2) Market-to-book (M/B) measured as the ratio of market value of (ordinary and preferred) equity plus the book value of debt, divided by the sum of book value of equity plus book value of debt.	negative
	3) Productivity measured as the natural log of total-factor productivity estimated assuming a Cobb-Douglas production function.	no effect
	4) Market share measured as the firm's market capitalization as a proportion of the total market capitalization of all firms in the same country and two-digit SIC industry (%).	positive
	5) Tax rate measured as income taxes over pre-tax income x 100	no effect
	6) Leverage measured as long-term debt (excluding the current portion of long-term debt, pensions, deferred taxes, and minority interest) over total capital x 100.	positive
Wu et al. (2012) China 1408 firms 1999-2007	1) Tobin's Q defined as the market value of total assets deflated by the book value of total assets (calculated as the ratio of the market value of equity plus the book value of total debts to the book value of total assets).	positive
	2) Return on assets (ROA) calculated as net profit divided by total assets.	positive
	3) Effective income tax rate (ETR) calculated as the current portion of tax (measured by tax expenses minus deferred tax expenses) divided by adjusted taxable income (adjusted taxable income is calculated as profit before tax plus asset depreciation reserves excluding provisions for bad debts, minus investment returns plus cash dividends received plus cash bond interest received).	negative

Table Ch1-1, continued.

Boubakri et al. (2012) 23 countries 234 firms 1989-2003	1) Change in the return on assets (ROA) during the three years surrounding the establishment of political connection (i.e., during the first three years of the political connection as compared to that in the three years before the connection was made).	positive
	2) Change in the debt-to-assets ratio (DTA) during the three years surrounding the establishment of political connection.	positive
	3) Change in the ratio of long-term debt over total debt during the three years surrounding the establishment of political connection.	positive
	4) Change in the ratio of current assets over current liabilities during the three years surrounding the establishment of political connection.	positive
Du and Girma (2010) China 106'000 firms 1999-2004	1) The probability of firm exit at time t conditional on surviving up to time $t-1$.	negative
	2) Year-on-year growth rate of total employment.	positive
	3) Year-on-year growth rate of total factor productivity (TFP, estimated using the Levinsohn and Petrin, 2003 approach).	negative

Table Ch1-1, continued.

Su and Fung (2013) China 1253 firms 2004-2008	1) Return on assets (ROA) measured as the ratio of a company's net income prior to financing cost to total assets.	positive
	2) Tobin's Q measured as the market value of total assets deflated by the book value of total assets, calculated as the number of shares multiplied by the market price plus the book value of total debts divided by the book value of total assets.	positive
	3) Long-term loans ratio calculated as total long-term loans divided by total loans.	positive
	4) Financial expense ratio calculated as interest expenses and loan fees divided by total liabilities.	negative
	5) Natural log of sales measured at the end of the year.	positive
	6) Unit sales cost calculated as cost of goods sold divided by sales.	negative

Table Ch1-2. Coding individual's political connections

#	Question	Designation of the independent variable of interest	Yes	No
1	Did the person work in the *executive* branch of the Russian government on the *federal* level since 2000 inclusive?	PFE	1	0
2	Did the person work in the *legislative* branch of the Russian government on the *federal* level since 2000 inclusive?	PFL	1	0
3	Did the person work in the *executive* branch of the Russian government on the *regional* level since 2000 inclusive?	PRE	1	0
4	Did the person work in the *legislative* branch of the Russian government on the *regional* level since 2000 inclusive?	PRL	1	0

Note 1: By saying that a particular person worked in the *executive* branch of the federal government in Russia I mean that this person occupied a hierarchical position *not lower* than deputy head of the department in a ministry or in a major state-owned company. Several state-owned companies are considered equal to ministries as top-management positions in these companies generally produce the same level and quality of political connections as the corresponding positions in the ministries. In this paper I take into consideration the following state-owned companies: Gazprom, Rosneft, Russian Railways, Transneft, Rostekh, Oboronprom, Rosoboronexport, Rosenergoatom, Alrosa, Rosugol, Olimpstroy.

By saying that a particular person worked in the *legislative* branch of the federal government in Russia I mean that this person was either a senator in the Federation Council (the upper chamber of Russia's parliament) or a deputy in the State Duma (the lower chamber of Russia's parliament).

By saying that a particular person worked in the *executive* branch of one of the regional governments in Russia I mean that this person occupied a hierarchical position *not lower* than deputy head of the department in a regional administration or a regional ministry (if any).

By saying that a particular person worked in the *legislative* branch of one of the regional governments in Russia I mean that this person was a deputy of the corresponding regional legislative assembly.

<u>Note 2</u>: Taking into account traditionally strong family ties in the Russian environment, a particular person is also considered connected if one of his/her closest relatives (mother, father, brother, sister, son, daughter) worked in the government. This rule applies in case there is no indication in the public media and other publicly available sources that family relationship was fully broken.

<u>Note 3</u>: I study political connections established after year 2000 inclusive as personal composition of Russia's *political* elite changed significantly after 2000 with the election of the new President Vladimir Putin and the accompanying arrival of a new management team.

Table Ch1-3. Measures of firm's profitability and performance (dependent variables)

Designation of variable	Definition
ROS	Return on sales measured as earnings after tax divided by sales
ROA	Return on assets measured as earnings after tax divided by total assets average for the year
ROE_eoy	Return on equity measured as earnings after tax divided by equity at the end of year
M_B	Market-to-book value measured as total market capitalization (ordinary + preferred shares, e-o-y) divided by equity (e-o-y)
EBIT_Sales	Operating profit margin measured as earnings before interest and tax divided by sales
Sales_IC	Capital turnover ratio measured as sales divided by invested capital (e-o-y)
ROIC_bt	Return on invested capital before tax measured as earnings before interest and tax divided by invested capital (e-o-y)
EBT_EBIT	Financial cost ratio measured as earnings before tax divided by earnings before interest and tax
IC_Equity	Financial structure ratio measured as invested capital (e-o-y) divided by equity (e-o-y)
FinLev_mult	Financial leverage multiplier measured as product of financial cost ratio and financial structure ratio
EAT_EBT	Tax effect ratio measured as earnings after tax divided by earnings before tax

Table Ch1-4. Control variables

Designation and predicted sign	Definition
AGE (+)	Number of years since the company was incorporated
SIZE (+)	Natural logarithm of total assets (e-o-y)
LEV (+)	Sum of total short-term and long-term debt (e-o-y) divided by total assets (e-o-y)

Table Ch1-5. Summary statistics on return on sales and return on assets (full sample)

Variable	Obs	Mean	Std. Dev.	Min	Max
ROS_w	528	0.096	0.119	-0.232	0.355
ROA_w	528	0.082	0.087	-0.150	0.277

The table describes the financial variables used in the study. Variable definitions are the following:

ROS_w = Return on sales measured as earnings after tax divided by sales, winsorized at 2%.

ROA_w = Return on assets measured as earnings after tax divided by total assets average for the year, winsorized at 2%.

Table Ch1-6. Summary statistics on return on equity and market-to-book ratio

(firm-year observations with negative equity and no data on market capitalization are omitted)

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE_eoy_w	516	0.157	0.205	-0.489	0.908
M_B_w	419	1.980	1.873	0.000	8.799

The table describes the financial variables used in the study. Variable definitions are the following:

ROE_eoy_w = Return on equity measured as earnings after tax divided by equity at the end of year, winsorized at 2%.

M_B_w = Market-to-book value measured as total market capitalization (ordinary + preferred shares) divided by equity, winsorized at 2%.

Table Ch1-7. Summary statistics on factors of return on equity (ROE)

(firm-year observations with negative equity, negative EBIT, and negative EBT are omitted)

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE_eoy_w	458	0.204	0.156	-0.061	0.908
EBIT_Sales_w	458	0.196	0.121	0.005	0.503
Sales_IC_w	458	1.246	0.944	0.308	5.177
ROIC_bt_w	458	0.189	0.098	0.005	0.455
EBT_EBIT_w	458	0.790	0.209	0.020	1.000
IC_Equity_w	458	1.854	1.127	1.000	7.883
FinLev_mult_w	458	1.381	0.838	0.065	7.913
EAT_EBT_w	458	0.736	0.151	0.253	1.554

The table describes the financial variables used in the study. Variable definitions are the following:

ROE_eoy_w = Return on equity measured as earnings after tax divided by equity at the end of year, winsorized at 2%.

EBIT_Sales_w = Operating profit margin measured as earnings before interest and tax divided by sales, winsorized at 2%.

Sales_IC_w = Capital turnover ratio measured as sales divided by invested capital, winsorized at 2%.

ROIC_bt_w = Return on invested capital before tax measured as earnings before interest and tax divided by invested capital, winsorized at 2%.

EBT_EBIT_w = Financial cost ratio measured as earnings before tax divided by earnings before interest and tax, winsorized at 2%.

IC_Equity_w = Financial structure ratio measured as invested capital divided by equity, winsorized at 2%.

FinLev_mult_w = Financial leverage multiplier measured as product of financial cost ratio and financial structure ratio, winsorized at 2%.

EAT_EBT_w = Tax effect ratio measured as earnings after tax divided by earnings before tax, winsorized at 2%.

Table Ch1-8. Summary statistics on control variables

Variable	Obs	Mean	Std. Dev.	Min	Max
AGE	528	12.720	5.224	1	23
SIZE	528	8.026	1.307	4.143	11.603
LEV_w	528	0.304	0.180	0.002	0.771

The table describes the financial variables used in the study. Variable definitions are the following:

AGE = Number of years since the company was incorporated.

SIZE = Natural logarithm of total assets (e-o-y).

LEV_w = Sum of total short-term and long-term debt (e-o-y) divided by total assets (e-o-y), winsorized at 2%.

Table Ch1-9. Summary statistics on political connections variables

Variable	Obs	Mean	Std. Dev.	Min	Max
PFE	528	0.352	0.478	0	1
PFL	528	0.231	0.422	0	1
PRE	528	0.254	0.436	0	1
PRL	528	0.282	0.450	0	1

The table describes the political connections variables used in the study. Variable definitions are the following:

PFE = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the executive branch of the Russian government on the federal level since 2000 inclusive, "0" otherwise.

PFL = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the legislative branch of the Russian government on the federal level since 2000 inclusive, "0" otherwise.

PRE = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the executive branch of regional governments in Russia since 2000 inclusive, "0" otherwise.

PRL = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the legislative branch of regional governments in Russia since 2000 inclusive, "0" otherwise.

Table Ch1-10. Pairwise correlation coefficients

	ROS_w	ROA_w	PFE	PFL	PRE	PRL	AGE	SIZE	LEV_w
ROS_w	**1**								
ROA_w	**0.88**	**1**							
	0								
PFE	**0.09**	**0.05**	**1**						
	-0.04	-0.29							
PFL	**0.01**	**0.01**	**0.1**	**1**					
	-0.81	-0.86	-0.02						
PRE	**-0.06**	**-0.06**	**0.03**	**0.08**	**1**				
	-0.2	-0.15	-0.56	-0.06					
PRL	**-0.11**	**-0.09**	**0.01**	**0.2**	**0.33**	**1**			
	-0.01	-0.04	-0.76	0	0				
AGE	**-0.08**	**-0.13**	**0.1**	**0.05**	**0.12**	**0.07**	**1**		
	-0.08	0	-0.02	-0.27	0	-0.1			
SIZE	**0.22**	**0.18**	**0.13**	**0.09**	**-0.08**	**0.02**	**0.13**	**1**	
	0	0	0	-0.03	-0.07	-0.63	0		
LEV_w	**-0.3**	**-0.33**	**-0.03**	**0.07**	**0.06**	**0.05**	**0.02**	**-0.04**	**1**
	0	0	-0.5	-0.1	-0.19	-0.26	-0.62	-0.31	

Significance test p-values dispalayed below the coefficients (please ignore the sign "-" before the values)

Table Ch1-11. Pairwise correlation coefficients (firm-year observations with negative equity are omitted)

	ROE_eoy_w	M_B_w	PFE	PFL	PRE	PRL	AGE	SIZE	LEV_w
ROE_eoy_w	1								
M_B_w	**0.25**	1							
	0								
PFE	**0.04**	**0.07**	1						
	-0.33	-0.18							
PFL	**0.03**	**0.06**	**0.09**	1					
	-0.43	-0.2	-0.03						
PRE	**-0.09**	**-0.18**	**0.04**	**0.1**	1				
	-0.04	0	-0.39	-0.03					
PRL	**-0.06**	**-0.26**	**-0.01**	**0.19**	**0.35**	1			
	-0.15	0	-0.76	0	0				
AGE	**-0.11**	**-0.1**	**0.11**	**0.04**	**0.13**	**0.09**	1		
	-0.01	-0.05	-0.01	-0.31	0	-0.05			
SIZE	**0.1**	**-0.05**	**0.12**	**0.09**	**-0.08**	**0.02**	**0.13**	1	
	-0.02	-0.33	-0.01	-0.05	-0.07	-0.69	0		
LEV_w	**0**	**0.07**	**-0.05**	**0.07**	**0.06**	**0.03**	**0.08**	**-0.02**	1
	-0.97	-0.15	-0.3	-0.11	-0.16	-0.51	-0.08	-0.64	

Significance test p-values dispalayed below the coefficients (please ignore the sign "-" before the values)

Table Ch1-12. Pairwise correlation coefficients (firm-year observation with negative equity, negative EBIT, and negative EBT are omitted)

	ROE_eoy_w	EBIT_Sales_w	Sales_IC_w	ROIC_bt_w	EBT_EBIT_w	IC_Equity_w	FinLev_mult_w	EAT_EBT_w	PFE	PFL	PRE	PRL	AGE	SIZE	LEV_w
ROE_eoy_w	1														
EBIT_Sales_w	0.4	1													
	0														
Sales_IC_w	0.14	-0.51	1												
	0	0													
ROIC_bt_w	0.74	0.53	0.23	1											
	0	0	0												
EBT_EBIT_w	0.31	0.47	0.06	0.55	1										
	0	0	-0.23	0											
IC_Equity_w	0.42	-0.12	-0.04	-0.12	-0.52	1									
	0	-0.01	-0.4	-0.01	0										
FinLev_mult_w	0.72	0.1	0.01	0.16	0.01	0.76	1								
	0	-0.03	-0.81	0	-0.77	0									
EAT_EBT_w	0.29	0.18	-0.01	0.2	0.19	0.03	0.13	1							
	0	0	-0.79	0	0	-0.52	-0.01								
PFE	0.03	0.11	-0.05	0.05	0	0.02	0	0.03	1						
	-0.51	-0.02	-0.27	-0.25	-0.96	-0.73	-0.97	-0.57							
PFL	0.04	0.07	-0.12	-0.01	-0.06	0.07	0.05	-0.02	0.12	1					
	-0.34	-0.15	-0.01	-0.88	-0.24	-0.14	-0.24	-0.72	-0.01						
PRE	-0.14	-0.08	-0.04	-0.11	-0.15	0.05	-0.09	-0.02	0.05	0.08	1				
	0	-0.09	-0.43	-0.01	0	-0.3	-0.07	-0.71	-0.33	-0.09					
PRL	-0.08	-0.14	-0.05	-0.12	-0.06	0.02	-0.01	0.06	-0.02	0.17	0.34	1			
	-0.1	0	-0.26	-0.01	-0.23	-0.73	-0.82	-0.23	-0.68	0	0				
AGE	-0.11	-0.08	0.12	-0.13	-0.14	0.05	-0.06	0	0.12	0.03	0.1	0.07	1		
	-0.02	-0.09	-0.01	0	0	-0.33	-0.17	-0.97	-0.01	-0.53	-0.03	-0.16			
SIZE	0.07	0.22	-0.26	0.06	0.21	-0.03	0.07	0.05	0.12	0.07	-0.09	-0.01	0.15	1	
	-0.13	0	0	-0.23	0	-0.54	-0.12	-0.27	-0.01	-0.14	-0.05	-0.8	0		
LEV_w	0.18	-0.09	-0.21	-0.26	-0.61	0.76	0.45	0.05	-0.03	0.06	0.05	0.03	0.05	-0.03	1
	0	-0.05	0	0	0	0	0	-0.3	-0.51	-0.18	-0.28	-0.53	-0.24	-0.48	

Significance test p-values dispalayed below the coefficients (please ignore the sign "-" before the values)

Table Ch1-13. Effects of political connections on profitability and performance

VARIABLES	(1) ROS_w	(2) ROA_w	(3) ROE_eoy_w	(4) M_B_w
PFE	0.0446***	0.0255***	0.0488**	0.516***
	(1.64e-05)	(0.000693)	(0.0200)	(0.00791)
PFL	0.00406	0.00840	0.0211	0.264
	(0.727)	(0.289)	(0.360)	(0.187)
PRE	0.000203	-0.00151	-0.0320	-0.337
	(0.987)	(0.870)	(0.183)	(0.137)
PRL	-0.0374***	-0.0216**	-0.0340	-0.777***
	(0.00107)	(0.0139)	(0.143)	(0.000434)
AGE	-0.00202**	-0.00258***	-0.00641***	-0.0577***
	(0.0293)	(0.000849)	(0.00270)	(0.000468)
SIZE	0.0121**	0.00909***	0.0108	-0.218**
	(0.0135)	(0.00753)	(0.251)	(0.0172)
LEV_w	-0.227***	-0.178***	-0.0495	0.764
	(0)	(0)	(0.543)	(0.298)
YEAR DUMMIES	YES	YES	YES	YES
INDUSTRY DUMMIES	YES	YES	YES	YES
Observations	528	528	516	419
Adjusted R-squared	0.333	0.333	0.109	0.353
Robust pval in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

This table presents results of the regression analysis. Several measures of firm-level profitability and performance were regressed on a number of political connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Table Ch1-2, Table Ch1-3, Table Ch1-4)

Table Ch1-14. Effects of political connections on drivers of ROE

VARIABLES	(5) ROE_eoy_w	(6) EBIT_Sales_w	(7) Sales_IC_w	(8) ROIC_bt_w	(9) EBT_EBIT_w	(10) IC_Equity_w	(11) FinLev_mult_w	(12) EAT_EBT_w
PFE	0.0166	0.0460***	-0.155**	0.0176*	0.0268	0.0124	-0.00857	0.0395**
	(0.296)	(6.75e-05)	(0.0237)	(0.0836)	(0.102)	(0.919)	(0.927)	(0.0191)
PFL	0.0250	0.0181	-0.155*	0.0108	0.00684	-0.0183	0.0825	-0.0394**
	(0.215)	(0.189)	(0.0552)	(0.347)	(0.717)	(0.900)	(0.448)	(0.0306)
PRE	-0.0544***	-0.0157	0.0399	-0.0190*	-0.0451**	0.191	-0.127	-0.00998
	(0.00451)	(0.242)	(0.610)	(0.0825)	(0.0142)	(0.207)	(0.288)	(0.595)
PRL	-0.0194	-0.0361***	-0.0227	-0.0181	-0.0136	0.0517	0.0118	0.00830
	(0.318)	(0.00252)	(0.770)	(0.116)	(0.438)	(0.742)	(0.922)	(0.663)
AGE	-0.00536***	-0.00104	0.0223**	-0.00263**	-0.00545***	-0.0320**	-0.0356***	-0.00315**
	(0.00327)	(0.347)	(0.0115)	(0.0279)	(0.000621)	(0.0470)	(0.00133)	(0.0366)
SIZE	0.00816	0.00824	-0.135***	0.000639	0.0183**	-0.0213	0.0217	0.0142**
	(0.313)	(0.149)	(0.00188)	(0.907)	(0.0216)	(0.561)	(0.452)	(0.0389)
LEV_w	0.182***	-0.114***	-0.797***	-0.151***	-0.778***			-0.0743
	(0.00891)	(0.00185)	(0.00138)	(3.74e-06)	(0)			(0.164)
YEAR DUMMIES	YES	YES	YES	YES	YES	YES	YES	YES
INDUSTRY DUMMIES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	458	458	458	458	458	458	458	458
Adjusted R-squared	0.110	0.301	0.461	0.149	0.535	0.115	0.068	0.132
Robust pval in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								

This table presents results of the regression analysis. Several drivers of ROE (along with the ROE itself) were regressed on a number of political connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Table Ch1-2, Table Ch1-3, Table Ch1-4)

CHAPTER 2

BANK AND POLITICAL CONNECTIONS IN RUSSIA AND THEIR IMPLICATIONS FOR FIRM-LEVEL COST OF DEBT

Abstract: I investigate the effect of corporate political and bank connections on firm-level cost of debt. By analyzing the sample of Russian non-state-owned firms within a period of 2000-2013 I find that corporate connections to banks decrease cost of debt of a firm. However this effect works only if a firm has connections to a state-owned bank, not a private bank, and connections to a state-owned bank are to be maintained through a significant shareholder of the firm, not CEO, or board member. I also find that corporate connections to the executive branch of the federal government decrease cost of debt. The latter effect works only if political connections are strong and cohesive enough, i.e. they were formed under circumstances that required high level of mutual trust and reliability between both parties.

Résumé: J'analyse l'effet des relations politiques et bancaires des entreprises sur le coût de la dette au niveau l'entreprise. En analysant l'échantillon des entreprises non-étatiques russes dans la période 2000–2013, je trouve que les connexions des entreprises aux banques diminuent le coût de la dette d'une entreprise. Cependant, cet effet ne fonctionne que si une entreprise a des connexions à une banque appartenant à l'Etat, et non une banque privée, et les connexions à une banque appartenant à l'Etat doivent être gérées par un actionnaire important de la société, et non par un membre de la direction ou un membre du conseil d'administration. Je trouve aussi que les connexions des entreprises à la branche exécutive du gouvernement fédéral entraîne une diminution du coût de la dette. Ce dernier effet ne fonctionne que si les relations politiques sont fortes et assez cohésives, à savoir s'ils ont été formés dans des circonstances qui exigeaient un niveau élevé de confiance mutuelle et de fiabilité entre les deux parties.

Keywords: politically connected firm, cost of debt.

1. Introduction

This study examines the effect of corporate political and bank connections on firm-level cost of debt. Prior literature on these subjects is inconclusive and sometimes shows contradictory results.

Particularly, research on the effects of *corporate political connections* on the cost of debt shows quite inconsistent results. While some studies (Faccio, 2010; Khwaja and Mian, 2005) do *not* find any associations between political connections and the cost of debt, Bliss and Gul (2012) find *increasing* effect of political connections on interest rates paid by the companies in Malaysia. At the same time Houston et al. (2014) in their study based on a sample of US firms find that politically connected firms pay *lower* interest rates than do firms without political connections.

The well-developed strand of literature covering the effects of *corporate bank connections* on the cost of debt and other characteristics of loans is more coherent (e.g. Engelberg et al., 2012; Sisli-Ciamarra, 2012; Haselmann et al., 2013). These studies find that connections to banks decrease cost of debt and soften other characteristics attributed to corporate loans. However, these studies cover corporate connections to banks in general but do not address political dimension of bank connections specifically connections to *state-owned banks* which play a very important role in many countries outside the Anglo-Saxon institutional context. Corporate relations with state-owned banks may have a more specific impact on the cost of debt and require special study.

In order to resolve the contradictory and inconclusive results published in previous papers, I look at the debt market from the different angle and hypothesize

that when it comes to lending to politically connected firms not all lenders may follow profit maximization goals. Some lenders, like state-owned banks and politically connected private banks, may consider themselves *embedded* in the political and economic system of the country, so that they would provide loans at *decreased* interest rates to politically connected firms and firms connected to these respective banks. Based on this premise I develop three hypotheses: **H1:** A firm that has an established connection to the executive and/or legislative branch of the central (federal) government pays lower cost of debt than do firms without such connections. **H2:** A firm that has an established connection to a *state-owned bank* pays lower cost of debt than do firms without such connections; **H3:** A firm that has an established connection to a *private bank* pays lower cost of debt than do firms without such connections, but higher cost of debt than do firms with connections to state-owned banks. I construct Hypotheses 2 and 3 in this way as I argue that connections to state-owned banks have a more profound decreasing effect on interest rates than connections to private banks. This is because connection to a state-owned bank contains in itself both connection to a bank and connection to the state with its nearly limitless financial resources.

I test these three hypotheses on a sample of 528 firm-year observations looking at Russian non-state-owned firms within a period of 2000-2013. The choice of the country is conditioned by the following factors: (1) Russia has an array of state-owned banks, as well as a huge population of private banks so testing the distinct effects that these two types of bank connections have on the cost of debt may be quite effective on the Russian soil; (2) Russian business elites are rather diversified in terms of their relationship with the government: some firms may be considered politically independent, some firms may be considered politically connected, but

connected firms differ with regard to the branch of the government they are connected to (executive vs. legislative), level of government (federal vs. regional), and the ruling political teams (Yeltsin's vs. Putin's) - analyzing the cost of debt of firms with different types of political connections may be an additional contribution to the literature on politically connected firms; (3) According to Faccio (2010) differences between politically connected firms and non-connected firms are stronger when the firm operates in "countries with higher degrees of corruption". Russia is holding 127-d position out of 177 in the 2013 Corruption Perceptions Index by Transparency International. So, Russia may be a good place to analyze differences between politically connected and non-connected firms.

I find that when a firm has a connection to a bank the cost of debt decreases. However, this decrease is driven only by connections to state-owned banks, not private banks. What is also important is that connection to a state-owned bank should be maintained through the owner (significant shareholder), while connections through CEOs or board members do not result in the decrease of the cost of debt. The latter finding suggests that in a developing market economy like Russia major owners (significant shareholders) matter most for the determination of firm's policies while board members and top management have less impact on firm's commercial relations and development.

I also find that cost of debt decreases when firm's significant shareholders, or CEOs, or board members are *strongly* connected to the *executive* branch of the *federal* government. Surprisingly, *strong* corporate ties to the *parliament* have an *increasing* effect on interest rates (the latter result is difficult to explain and it may be conditioned by the limitations of my dataset; in any way it deserves further investigation). The most important precondition for the two abovementioned effects

to work is *strength* – connections should be strong enough to have an effect on interest rates. In the Russian institutional setting within 1990-2013 it is likely that the strongest connections were established in the years of mass privatization (1992-1999) when businesspeople and politicians had to form very close alliances in order to survive and win the fierce privatization battles. These ties were powerful enough to work well many years after they were established.

My main contributions to the literature on corporate political and bank connections and their influence on the cost of debt are the following. First, I look to the *supply-side* of the debt market and find evidence that connections to *state-owned banks* are important to decrease interest rates, while connections to private banks do not have such an effect on the cost of debt. Second, I find that in a developing market economy (like Russia) connections to a state-owned bank matter only if they are implemented through the *owner* (significant shareholder) but not through board member or CEO, that is an indication of the principal importance of major owners in corporate governance in developing market economies like Russia. Third, I find that *strong* corporate ties to the *executive* branch of the *central (federal)* government decrease interest rates, while ties to the parliament may have an increasing effect on the cost of debt. Fourth, I find that political connections affect cost of debt only if connections are *strong*, i.e. when connections were established in a situation that required close cooperation and mutual trust between the connected individuals.

The rest of the paper is organized as follows. In Section 2 I study the theoretical background and develop hypotheses. In Section 3 I explain the methodology of the study. In Section 4 I present the results. In Section 5 I make conclusions and discuss future research prospects.

2. Theoretical background

Connections between firms and politicians are found to be rather widespread across the world. According to the seminal paper by Faccio (2006) corporate political connections exist in 35 of the 47 countries studied by Faccio, and politically connected firms (PCFs) represent 7.72% of the world's stock market capitalization. In some countries political connections are more prevalent than in other: for instance in Russia connected firms represent 87% of the market capitalization, twice more than in Thailand which holds the second position in this list with PCFs representing 42% of the local stock market capitalization (Faccio, 2006).

Political connections have various effects on firm performance and firm characteristics. Since 2001 researchers extensively analyzed the effect of political connections on *firm value*. Fisman (2001), Johnson and Mitton (2003), Ramalho (2004), Ferguson and Voth (2008), Niessen and Ruenzi (2010), Goldman et al. (2009) - all find that political connections have, ceteris paribus, a *positive* effect on firm value. The source of such value, according to Faccio (2006), can take various forms, "including preferential treatment by government-owned enterprises (such as banks or raw material producers), lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals, and many other forms".

A large strand of literature concentrates on the effects of political connections on the above mentioned sources of value. For instance Faccio (2010) finds that across her sample of 47 countries PCFs (as opposed to non-PCFs) enjoy *higher leverage, marginally lower taxation, much greater market power* (the latter is measured as the

firm's market capitalization as a proportion of the total market capitalization of all firms in the same country and two-digit SIC industry; results are similar if *sales* are used instead of market capitalization). However Faccio (2010) finds that PCFs display *lower return-on-assets* and *lower market-to-book value* than their non-connected peers. She also finds that differences between PCFs and non-connected firms are "marginally more important when political links are stronger"; differences are also greater when the firm operates in "countries with higher degrees of corruption" (Faccio, 2010).

Boubakri et al. (2008), Boubakri et al. (2009), Li et al. (2008), Khwaja and Mian (2005) – all confirm Faccio (2010) view that PCFs normally have *higher leverage* and *better access to debt financing* in the form of *bank loans* than their non-connected peers. This is probably conditioned by the fact that PCFs are more likely to be *bailed out* by the *government* in case of financial distress (Faccio et al., 2006). However an interesting feature of this situation is that "while connected firms are more levered than non-connected ones, they *do not necessarily enjoy* a benefit in the form of *reduced costs of debt* financing" (Faccio, 2010). For the whole sample of 458 PCFs and 15,733 non-connected peers studied by Faccio (2010), the "average interest rate on debt (interest paid/total debt) is only marginally lower for connected firms (a difference of −0.07%) and far from significance". Khwaja and Mian (2005), who study lending to politically connected firms in Pakistan, also find that there is "little difference" between politically connected and unconnected firms in the interest rates charged.

What is even more puzzling is that Bliss and Gul (2012), who study the effect of political connections on the *cost of debt* in Malaysia, find that the interest rates charged by lenders to PCFs are significantly *higher* than those charged to non-PCFs.

They explain this phenomenon by referring to Johnson and Mitton (2003) and Gul (2006) stating that both the *market* and *auditors* respectively assess Malaysian PCFs as being *riskier* than non-PCFs. The reason for increased riskiness, according to Johnson and Mitton (2003) and Gul (2006), is that PCFs are perceived as being *inefficient*. Faccio et al. (2006) in their study on corporate bailouts also confirm that PCFs "exhibit significantly worse financial performance than their non-connected peers at the time of and following the bailout". Higher leverage of Malaysian PCFs also contributes to their riskiness (Fraser et al., 2006).

However while debt-holders and auditors may attribute *higher riskiness* to PCFs because of their inefficiency and higher leverage, they should normally also take into account the increased probability of *bailout* by the government in case of financial distress (Faccio et al., 2006) which, ceteris paribus, *lowers the riskiness* of crediting the PCFs.

The idea of Bliss and Gul (2012) that PCFs are more risky for debt-holders also contradicts findings by Boubakri et al. (2012) who study PCFs in 26 countries within the period from 1997 to 2001 with regard to the *cost of equity* capital. As Boubakri et al. (2012) state: "we find that politically connected firms enjoy a *lower cost of equity* capital than their non-connected peers"; "our findings provide strong evidence that investors require a *lower cost of capital* for politically connected firms, which suggests that politically connected firms are generally considered *less risky* than non-connected firms". So if equity holders consider PCFs as less risky than non-PCFs then debt-holders, which have a priority for payouts in case the firm goes bankrupt, *a fortiori* should consider PCFs less risky than non-PCFs.

Houston et al. (2014) in their study of political connections of listed firms in the United States reaffirm the latter view. Using a hand-collected data set of the political connections of S&P 500 companies over the 2003–2008 time period, they find that the *cost of bank loans* is significantly *lower* for companies that have board members with political ties. They consider two possible explanations for these findings: a *Borrower Channel* in which lenders charge lower rates because they recognize that connections enhance the *borrower's credit worthiness* and a *Bank Channel* in which banks assign greater value to connected loans to enhance their own relationships with key politicians. After employing a series of tests to distinguish between these two channels, they find strong support for the *Borrower Channel* but no direct evidence supporting the Bank Channel. They also find that connections reduce the likelihood of a capital expenditure restriction or liquidity requirement demanded by banks at the origination of the loan. All these findings suggest that lenders consider US PCFs as *less risky* than non-connected firms.

So there are conflicting results with regard to how political connections affect cost of debt and further investigation into this problem is necessary.

Effects of political connections on the cost of debt: detailed analysis

In an attempt to deeper understand the mixed results of the papers devoted to the effect of political connections on the cost of debt we may try to build up a simple theoretical model of the *outcomes* which a lender faces when providing a loan to a company.

As it is known from financial theory and practice, the interest rate paid by the company can be modeled as the *risk-free rate* plus a *risk premium*, which itself is *positively* related to the probability of a default on a loan.

IR = risk-free rate + risk premium *(positively related to the probability of a default)*

A typical lender faces two possible outcomes:

Please see Figure Ch2-1

The higher is d, the higher is the risk-premium, so the higher is the interest rate charged by the lender.

But at the *default stage* there is also a chance for the lender to get its money back.

The *first* thing that might help is a *collateral*. If there is a collateral (and it covers the whole amount of the loan plus interest accrued) then the scheme of outcomes can be redrawn in the following way:

Please see Figure Ch2-2

In this situation the higher probability of a default (higher d) will *not* necessarily lead to higher risk-premium and higher interest rate (in other words risk-premium may become non-sensitive to d).

The *second* thing that may save the lender's money at the default stage is the *bail-out package* from the government. Here the scheme of outcomes can be redrawn in the following way:

Please see Figure Ch2-3

The probability of government bailout in situation of financial distress is b, while the probability that the government will *not* help the company is *(1-b)*.

So, the probability of a *complete default* is $d*(1-b)$

The probability that the loan will be *repaid* is *(1-d) + d*b*

The risk-premium increases (along with the overall interest rate) with the increase in the probability of a complete default (PCD) which is *d*(1-b) = d-db*

We can graph this situation in a XY plot.

Please see Figure Ch2-4

So, using this model to interpret the *mixed results* with regard to the effect of political connections on the firm-level cost of debt we may say that "turning" a non-PCF into PCF affects both d and b in the equation *PCD = d-db*. The effects witnessed in different papers may be summarized as follows:

Please see Table Ch2-1

Considering Bliss and Gul (2012) paper which states that the interest rates charged by lenders to PCFs in Malaysia in 2001-2004 were significantly *higher* than those charged to non-PCFs because "both the market and auditors respectively assess Malaysian PCFs as being *riskier* than non-PCFs" as well as "inefficient", it is a bit puzzling why the effect of increased d (probability of default) was not overshadowed by the effect of increased b (likelihood of a government bailout). According to Faccio et al. (2006) whose study is based on 450 PCFs and 450 matching non-connected firms from 35 countries observed during years 1997-2002, PCFs are *more likely* to be bailed out by the government in case of financial distress. Moreover,

according to Faccio et al. (2006), in 1997-2002 Malaysia was a *leader* among 35 countries in terms of the number of bailed-out PCFs (17 out of 51 bailed out PCFs internationally). 21% of Malaysian PCFs were bailed out in these years, while the percent of bailed-out Malaysian non-PCFs was 3.7%. When conducting *robustness tests* Faccio et al. (2006) even had to *exclude* Malaysia from the sample as the authors pointed to "a disproportionate number of the bailouts" which "occur in Malaysia".

However, we should point to the fact that these bailouts were conducted in Malaysia in 1997-2002, while Bliss and Gul (2012) paper covers the period of 2001-2004, so probably in that later period the lenders perceived the government to be less inclined to bail-out troubled PCFs (so the b did not increase).

Summarizing the stated above, we may say that the effect of political connections on the cost of debt is realized through three mechanisms:

(1) possible *increase* in the default risk (d) due to higher leverage and greater inefficiency (this factor has an *increasing* effect on the cost of debt) – Bliss and Gul (2012);

(2) possible *decrease* in the default risk (d) due to improvement in prospects of firm's future cash flows and decrease in the probability of a decline in firm's creditworthiness – Houston et al. (2014);

(3) possible increase in the likelihood of government bailout (b) – (this factor has a *decreasing* effect on the cost of debt) – Faccio et al. (2006)

Which of the effects takes the upper hand, which of the effects will be stronger seems to depend on a particular country (local business and corporate culture,

government's propensity for bailing-out troubled PCFs), a particular period, and a particular sample of firms.

From this point of view there is *no single answer* on how political connections influence the cost of debt. However, that statement holds only if in our model we look at the debt market from the point of view of a *profit-maximizing lender* which is interested in maximizing profits adjusted for risk. The profit-maximizing lender would really care about the trade-off between d and b in order to assign the proper interest rate. But when it comes to politically connected firms the *goals* of some lenders may be different, i.e. *not all* lenders may be inclined to maximize profits.

Development of hypotheses

Generally, a typical firm in nearly any country might obtain debt financing from five different sources:

1) Local state-owned banks;

2) Local private banks (non-state-owned);

3) Foreign banks;

4) Issues of corporate debt securities in the domestic market;

5) Issues of corporate debt securities in the foreign (international) market.

When lending to a politically connected firm some of the lenders may have goals different from pure profit-taking. As follows is the list of lenders divided into providers of public debt and private debt with the most likely corresponding goals.

Please see Table Ch2-2

So, for PCFs the market of lenders is not that simple as for non-PCFs. Some lenders are ready to provide "friendly" loans to PCFs at *lower* than market rates. This situation, all other things being equal, allows us to hypothesize that a firm that has an established connection to federal government should decrease the cost of debt thanks to "friendly" loans from state-owned banks and politically connected private banks. Following Faccio (2010), we expect the negative effect on interest rates to be consistent both with the ties to the executive and legislative branches of the federal government. So my first hypothesis is:

H1: A firm that has an established connection to the executive and/or legislative branch of the central (federal) government pays lower cost of debt than do firms without such connections.

We can also expect that a firm that has a connection to a *state-owned bank* pays lower cost of debt than do firms without such connections. There is a large strand of literature describing the effects of connections between banks and firms on the cost of corporate debt and other characteristics of corporate loans and borrowings. Of the latest papers we may cite Engelberg et al. (2012) who study the interpersonal linkages between banks and firms (like those which appear when banks' and firms' respective management attended the same college or previously worked together) and find that when these linkages exist, interest rates on bank loans are "markedly reduced". Sisli-Ciamarra (2012) investigates the effects of the presence of a creditor on a company's board in large US nonfinancial companies. The results suggest that the presence of a creditor: (1) increases the amount of debt in a company's capital structure via an increase in private debt, (2) decreases the sensitivity of debt financing to the amount of tangible assets that a company holds, (3) decreases the cost of borrowing, and (4) reduces the pledge of collateral and financial covenants in

debt contracts. The paper by Haselmann et al. (2013) employs a "contract-level dataset on members of 211 social clubs in Germany over the period 1993-2011, and uses a quasi-experimental research design to investigate how social connections between banks and firms affect the allocation of credit". Haselmann et al. (2013) find that "banks provide significantly more credit to firms that are within their club than they do to firms that are members of other clubs". The "credit supplied inside the club generates a lower return for the bank - banks earn 3.23 percent lower returns on club loans, compared to what they earn on loans given to firms that are members of other clubs".

However, the papers describing the effects of connections between banks and firms on the cost of corporate debt and other characteristics of corporate loans and borrowings address firm's connections to private banks or banks as a whole, without a clear attention to *state-owned banks*. In this paper I argue that connections to *state-owned banks* have a more profound decreasing effect on interest rates than connections to private banks. This is because connection to a state-owned bank contains in itself both connection to a bank and connection to the state with its nearly limitless financial resources.

So I have two additional hypotheses:

H2: A firm that has an established connection to a *state-owned bank* pays lower cost of debt than do firms without such connections.

H3: A firm that has an established connection to a *private bank* pays lower cost of debt than do firms without such connections, but higher cost of debt than do firms with connections to state-owned banks.

In order to test the three hypotheses stated above I need to find an institutional setting in which there are state-owned banks, private banks, and an environment favorable for thriving connections between firms and politicians.

Choice of an institutional setting

I suggest testing the three hypotheses stated above on a sample of Russian non-state-owned firms within a period of 2000-2013. The choice of the country and the period is conditioned by the following factors: (1) Russia has an array of state-owned banks, as well as a huge population of private banks so testing the distinct effects that these two types of bank connections have on the cost of debt may be quite effective on the Russian soil; (2) Russian business elites are rather diversified in terms of their relationship with the government: some firms may be considered politically independent, some firms may be considered politically connected, but connected firms differ with regard to the branch of the government they are connected to (executive vs. legislative), level of government (federal vs. regional), and the ruling political teams (Yeltsin's vs. Putin's) - analyzing the cost of debt of firms with different types of political connections may be an additional contribution to the literature on politically connected firms; (3) According to Faccio (2010) differences between politically connected firms and non-connected firms are stronger when the firm operates in "countries with higher degrees of corruption". Russia is holding 127-d position out of 177 in the 2013 Corruption Perceptions Index by Transparency International. So, Russia may be a good place to analyze differences between politically connected and non-connected firms. (4) The period of 2000-2013 is rather long so there were numerous rotations of board members, CEOs, and significant shareholders in many companies that increase variability of my dataset even if there

is a relatively limited number of companies on which information is available through publicly open sources.

One more reason for choosing Russia is that this country is rather important for the world economy and politics. It is the sixths largest economy in the world (by GDP PPP; World Bank, 2013), second largest net exporter of oil in the world (IEA, 2012), and first largest nuclear power (Fed. of American Scientists, 2012).

3. Methodology

Sample and time period

As an initial source for building a representative *sample of firms* for my study I refer to the Rating of Russia's 200 largest non-state-owned firms (in terms of sales) published by Forbes Magazine in 2013. Forbes *excludes* from its rating the following types of companies:

- Companies in which the Russian state or the foreign investors possess more than 50% of the voting stock;
- Banks, insurance, leasing, investment and other financial companies.

From the list of 200 Russia's largest non-state owned companies I pick companies which provide either IFRS or US GAAP financial statements. This is important because IFRS/US GAAP statements presume *consolidated statements* for the group of companies as a whole, while Russian Accounting Standards (RAS) presume financial statements only for the *individual* companies inside the group, showing no picture for the group as a whole. I find 84 companies with IFRS, and 9 companies with US GAAP (in total 93 companies) in the Forbes 200 rating.

However, it is necessary to mention that the list of Russian IFRS/US GAAP companies may be *increased* by several companies as some of the companies were not included into Forbes 200 rating because they did not exceed the rating's *lower criteria* (23 billion rubles of sales in 2012 = around 600 million Euros). These additional companies may be taken from the Rating of Russia's 400 largest companies (both private and government-owned) published by the prominent

Russia's news agency Expert RA in 2013 (http://raexpert.com). After examining this rating I add *eight* companies to the existing list of 93 Russian IFRS/US GAAP companies. I also add *one* large company, which ceased to exist by the time of Forbes-200 2013 Rating construction: TNK-BP (acquired by the state-owned Rosneft in 2012-2013). As a result the size of my sample grows to 102 companies. However, this figure should be *decreased* by the number of companies on which there is *no* possibility of acquiring information through publicly open sources. So, finally as a result of this adjustment I end up with *73 companies*.

I investigate the *time period* of 2000-2013. The period of 2000-2013 is rather long so there were numerous rotations of board members, CEOs, and significant shareholders in many companies that increase variability of my dataset even with a relatively limited number of companies (on which information is available through publicly open sources).

Determining firm's bank and political connections

For *each firm* in my sample a list of:
- board members
- CEOs
- significant shareholders (major owners)

for the period of 2000-2013 is developed indicating the *precise time periods* when these people were in the company. The board members and CEOs are found by means of searching SKRIN Database[1], while significant shareholders (major owners)

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[1] SKRIN (www.skrin.com) was founded in 1999 by Russia's National Association of Stock-Market Participants (NAUFOR), and by November 2013 SKRIN database contained information on 9,244,854 Russian companies, including historical information on their owners (if disclosed), board members and management teams. The main sources of information for SKRIN are the following organizations:

are found by the search of Russia's three major business newspapers (Kommersant, Vedomosti, RBC-Daily), and four major business magazines (RBC, Kommersant-Dengi, Kommersant-Vlast, Forbes Russia). The necessity to determine owners through the business press is conditioned by the fact that at least until 2010-2011 real owners of Russian companies used to hide their identities behind the chains of firms registered in various offshore tax heavens and related jurisdictions (Chernykh, 2008).

For each of the individual's found *biographic information* was discovered through the search of Labyrinth database[2], Kommersant database (operated by one of Russia's leading business newspapers Kommersant), SKRIN, official web-sites of the corresponding companies and/or Viperson.ru[3].

Biographic information normally contains date and place of birth, parents, university education, career after the graduation from the university, ties and links to political and business figures, major announcements that a person has made publicly in his/her life, etc.

Before coding *each firm-year observation* with regard to political and bank connections that the firm had in a particular year it is important first to code each

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Federal Service for the Financial Markets (www.fcsm.ru), Federal State Statistics Service (www.gks.ru), individual Russian companies, Depositary Clearing Company (www.dcc.ru), Russian and foreign exchanges, leading Russian media-sources.

[2] Database Labyrinth (www.labyrinth.ru) was created in 1992. By November 2013 it contained 42 thousand references compiled by Labyrinth specialists on the basis of reliable publicly available information obtained from Russia's federal and regional authorities, publications in mainstream media, documents of political parties, etc. as well as from 4,000 questionnaires personally filled-in by the businessmen and the politicians. The database contains 33 thousand biographies of Russian politicians, government officials, businessmen, journalists and other publicly important figures. All the references in Labyrinth are connected by hyperlinks which allow finding both explicit and implicit connections between people, organizations, and events.

[3] Viperson.ru is operated by Nonprofit Partnership "Scientific Information Agency "Heritage of the Fatherland" (Russian Certificate of registration of mass media FS © 77-32003 dated May 16, 2008).

significant shareholder, CEO, and board member with regard to the political and banking connections that these people had in that particular year. I hypothesize that when we consider effects of political connections on the cost of debt, connections on the level of *federal government* are important, while connections to regional governments may be insufficient to affect cost of debt. I also hypothesize that it is important to distinguish between connections to *executive branch* of the government and *legislative branch (parliament)* - as it is implemented in Faccio (2010). I also consider that it is important to look precisely at the *period* when political connections were developed, namely I distinguish between Soviet period (before August 1991), period under President Yeltsin (August 1991 – December 1999), and period under President (Prime-Minister) Putin (2000-2013). Distinguishing between these three periods is important because in the last years of communism and in the aftermath of the Soviet period *political connections* in Russia were a pre-condition for exercising effective property rights by the newly emerged owners. Within a long period from 1917 to 1991 Russia was trying to build an economy based on the strict prevalence of state-owned property, as a result, *institutes* which would support private property rights were either non-existent or non-developed in Russia in the beginning of 1990-s. Property rights of the newly emerged owners were also deemed completely illegitimate by the overwhelming majority of the Russian population[4]. That is why political support was an important precondition for exercising effective property rights. However, such a situation had its drawbacks for the owners and their

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[4] As Guriev and Rachinsky (2004) mention, in a July 2003 poll by ROMIR (an independent Russian research and polling agency), 88 percent responded that all large fortunes were amassed in an illegal way, 77 percent said that privatization results should be partially or fully reconsidered, and 57 percent agreed that government should launch criminal investigations against the wealthy (Vedomosti, 2003).

companies as if there was a change in the ruling political elite an owner and his/her firm could be dropped out of the cohort of political favorites with consequences for firm's market position, access to debt financing, procurement contracts, etc.

Taking into account all these factors I categorize significant shareholders, CEOs, and board members into the following categories and make the following independent variables of interest:

Please see Table Ch2-3

For connections with banks I employ the following system of coding:

Please see Table Ch2-4

In all the cases above the person should have worked in the government or in a bank *before or during* the time when he/she was a significant shareholder of the firm, a CEO, or a board member.

Coding each *person-year* observation in the firm according to criteria mentioned in the tables above allows us to proceed to coding of each *firm-year* observation. I apply the following rule: if in a particular firm in a particular year there was *at least one person* (board member, CEO or a significant shareholder) who was rated, for instance, PFE, then the whole firm is rated PFE for this year. The same rule is applied to all other independent variables of interest.

Dependent variable

The dependent variable, cost of debt, or Interest Rate (*IR*), is measured as in Bliss and Gul (2012), and represents interest expense of the firm divided by its average short-term and long-term debt during the year. The interest expense for the year is disclosed in the income statement and the short-term and long-term debt is disclosed in the statement of financial position (balance sheet) of the financial statements incorporated in the annual reports.

Control variables

Based on prior research of cost of debt studies (Petersen and Rajan, 1994; Pittman and Fortin, 2004; Francis et al. 2005; Qiu and Yu, 2009 and Bliss and Gul, 2012), the following variables are included as control variables to the cost of debt regression:

Please see Table Ch2-5

Regression equation

As a result we get the following basic regression equation:

$$IR = \beta_0 + \beta_1 AGE + \beta_2 BIG\_N + \beta_3 LEV + \beta_4 CF + \beta_5 SIZE + \beta_6 PPE +$$

$$+ \beta_7 GROWTH + \beta_8 NEGEQ + \beta_9 CR + \beta_{10} LOSS +$$

$$+ \beta_s \text{ (political and banking connections variables)} +$$

$$+ \beta_s YR + \beta_s INDUST + \varepsilon$$

To control for *industry* and *year* $\beta_s YR$ and $\beta_s INDUST$ variables are included in the regression. All of the t-tests are supposed to be reported as White's (1980) corrected t-tests.

4. Results

I analyze 73 companies for the period of 2000-2013 inclusive and end up with 528 firm-year observations. The number of observations is smaller than the result of multiplication of 73 companies by 14 years because for some companies the information on political or banking connections or financial data is not available for the full period of 2000-2013.

The average interest rate that the companies pay during 2000-2013 is 8.5%. Leverage (sum of total short-term and long-term debt divided by total assets) is slightly above 30%. In more than 90% of cases firms had Big N auditor. In slightly more than 2% of cases firms had negative equity, while firms with losses amounted to slightly less than 13% of the sample.

Please see Table Ch2-6

As for political and bank connections statistics, it can be seen that people with some Soviet heritage (who were employed in the executive or legislative branches of the federal government in Soviet times; SFE and SFL) are seldom met in the Russian firms in 2000-2013. However, people who worked in the federal government (executive and legislative branches) under Yeltsin or Putin are met much more often. Nearly 40% of firm-year observations indicate the presence of a person (significant shareholder, CEO, or a board member) who worked in the executive branch of the Russian federal government under President Yeltsin (YFE). For Putin (PFE) this indicator is 35%.

Nearly 80% of firm-year observations presume the presence of a person in a firm (significant shareholder, CEO, or a board member) who worked in a commercial bank either before or during the time he/she began his/her career in the firm. However, this high figure is mostly conditioned by connections to private banks (around 77%), while connections to state-owned banks comprise 28% of the sample. A few connections to state-owned banks were established during Soviet times (less than 7% of the sample) while most of them were established under President Yeltsin or President Putin terms (each category comprises about 16-17% of the sample). Most of the connections to state-owned banks are implemented through the board member (26% of the sample); connections through owners comprise 6.6% of all cases, while connections to state-owned banks through CEOs are very rare (2% of the sample).

Please see Table Ch2-7

Univariate analysis

Analysis of the correlation matrix shows that at 10% level of significance interest rate is *negatively* correlated with cash flow, property plant and equipment, current ratio, and company size (that is logical). Interest rate is *positively* correlated with negative equity dummy and with loss dummy that is also logical. In most cases political connections and connections with banks are *negatively* correlated with interest rate as expected. At 10% level of significance there are negative pairwise correlations between interest rate and the political dummies loke Soviet federal executive (SFE) and Yeltsin federal executive (YFE). Presence of state and private bankers in a company is also negatively correlated with interest rates. Ties developed to state banks during Yeltsin's and Putin's terms as well as ties developed to state

banks by company owners (significant shareholders) are also negatively correlated with interest rates.

Multivariate analysis

Effects of bank and political connections on the cost of debt

In the course of the *multivariate analysis* we first regress interest rate on Bank dummy and six political connections dummies (SFE, SFL, YFE, YFL, PFE, PFL).

We see that there is a strong statistically significant *negative* association between the presence of people who worked in a commercial bank (both state-owned and private) and the cost of debt. According to Table Ch2-6, the average cost of debt in my sample is 8.5% and the regression analysis (Table Ch2-9) shows that the presence of bankers in a company decreases the cost of debt by 1.4% or *one sixth* of the initial value.

It is also peculiar that the presence of people who worked in the executive branch of the Russian federal government under Yeltsin (YFE) is also associated with a decrease in interest rate. At the same time people who worked in the executive branch of the Russian federal government under Putin *do not* evoke any decrease in interest rate. It is important to mention that we are studying the period of 2000-2013 that is entirely covered by Putin's term as President (or Prime-Minister) however cost of debt is decreased for those companies which have people connected to the previous administration. That may be conditioned by the fact that in the period under

Yeltsin (1992-1999) Russia went through a turmoil of extremely difficult economic reforms and mass privatization and in order to survive and win the fierce battles for the enterprises that were privatized businessmen and politicians had to form very close and cozy alliances. These ties were powerful enough to work well even after the old President stepped down and the new President came to power.

It is also peculiar that the presence of people who worked in the Parliament under the term of President Yeltsin evokes higher interest rates for the companies. It is a bit difficult to explain this unpredicted result. One of the speculative explanations may be that the Parliament during the times of Yeltsin was rather hostile to the liberal economic policies implemented by the Yeltsin's government (these policies in significant part were further taken by Putin's administration), so relationships between former parliamentarians and executive government officials were kept not very friendly.

In the *second* regression I regress interest rate on the same variables as in the first regression with the only difference that I *disentangle* Bank dummy into two dummy variables: state bank and private bank. It can be seen that the presence of people who worked in a state-owned bank (among significant shareholders, CEOs, and/or board members) negatively affects interest rates, decreasing the cost of debt by about one tenth. That finding confirms Hypothesis 2. However, ties to private banks do not lead to a statistically significant decrease in interest rates (Hypothesis 3 finds no support). What is also interesting (and it is seen through the third regression) is that ties to state-owned banks have a statistically significant negative effect on interest rates only when implemented through significant shareholders (owners), but not CEOs or board members. If a company has a significant shareholder that works or worked in a state-owned bank then the cost of debt is decreased by about one fifth. That finding

goes in line with the idea about privileged position of owners (significant shareholders) in the corporate hierarchy in the developing capitalist economies (as well as in many developed ones). Board members and CEOs very much depend on a majority shareholder who is de-facto in charge of the company and its relationships with the outer world.

Endogeneity issue

In order to address *endogeneity issues* we employ the natural "exogeneous shock" that is the election of Dmitry Medvedev a President of Russia in 2008 and his presence in the office until 2011 inclusive. We call this period the "Medvedev Window" (the designation of the corresponding dummy variable is MedWin) as Medvedev's term was surrounded by Vladimir Putin's term as President. We want to see how corporate political and bank ties would affect cost of debt during the term of Medvedev to whose team actors could not develop ties in advance as his nomination as the presidential candidate from the ruling "United Russia" party was somewhat a surprise in the end of 2007. Particularly, we are interested in YFE and YFL dummies (which proved to have an effect on the cost of debt in the first three regressions) and their interaction with MedWin dummy.

Moreover, we disentangle state-owned bank and private bank dummies *each into three dummies* depending on the period when the ties to banks were built (Soviet period, Yeltsin's period, and Putin's term).

Please see Table Ch2-10

We see that "Medvedev Window" dummy on its own has a strong negative and statistically significant effect on interest rates, cutting the cost of debt by about 75%. That is likely to be conditioned by the fact that Medvedev's term coincided with the

global financial crisis of 2008-09 when extra-soft monetary policies were employed by the governments all around the world including Russia. We also see that YFE_MedWin interaction term is not statistically significant. At the same time YFL_MedWin interaction term is negative and statistically significant at 5% level, while coefficient at YFL itself is positive and significant. To explain these results additional research is needed. However, the speculative explanation which we may employ is that former Yeltsin's parliamentarians who were not at ease with the government officials during both Yeltsin's and Putin's periods somehow hoped to gain better positions under the new Medvedev's administration (or at least the lenders perceived them to do so).

But the most interesting finding is that companies which established ties to state-owned banks during the term of President (Prime-Minister) Putin (P_StateBank) and which paid lower interest rates within 2000-2013 had to pay *higher* interest rates during the period of "Medvedev Window" (coefficient at P_StateBank_MedWin interaction term is positive and significant at 5% level while coefficient at P_StateBank is negative and significant at 5% level). This is an indication that lenders perceived Medvedev to make changes in the management of state-owned banks thus making ties with existing officials less valuable.

Summary of the results

Summarizing the results I may say that I find evidence supporting Hypothesis 2 which presumes that a firm that has an established connection to a *state-owned bank* pays lower cost of debt than do firms without such connections. I also find that in an institutional setting like Russia (developing market economy) connections to state-owned banks established through significant shareholders (major owners) matter, i.e.

these connections result in lower interest rates, while connections to state-owned banks established through CEOs or board members do not result in lower interest rates.

I find *no evidence* for Hypothesis 3 (which presumes that a firm that has an established connection to a *private bank* pays lower cost of debt than do firms without such connections, but higher cost of debt than do firms with connections to state-owned banks). The coefficient at PrivBank dummy in the second regression is not statistically significant though it is negative and it's magnitude is lower than for StateBank dummy that would imply (in case the coefficient was statistically significant) that Hypothesis 3 could be right.

With regard to Hypothesis 1 (which presumes that a firm that has an established connection to the executive and/or legislative branch of the central (federal) government would pay lower cost of debt than do firms without such connections) I find interesting results. Ties to federal government built under existing President and his administration *do not* lead to decrease in interest rates. However ties to federal government built under previous administration unexpectedly affect interest rates under the term of the current administration. I find that ties to executive branch of the federal government built under Yeltsin (YFE) *decrease* cost of debt for the firms during the period of Putin. At the same time ties to the Parliament built under Yeltsin (YFL) *increase* cost of debt for the firms during the period of Putin. These statistically significant effects for ties established under previous administration can be explained by their *strength*: in the period under Yeltsin (1992-1999) Russia went through a turmoil of mass privatization (normally accompanied by fierce rivalry, fraud, and contract killings), in order to survive and win the battles for the enterprises that were privatized, businessmen and politicians had to form very *close, trustworthy*

and cozy alliances. These ties were powerful enough to work well even after the old President stepped down and the new President came to power. The latter finding corresponds to Faccio (2010) findings presuming that differences between PCFs and non-connected firms are "marginally more important when political links are stronger."

The positive effect of ties to Parliament on interest rates is difficult to explain and basically requires additional in-depth research into this subject.

5. Conclusion

I investigate the effect of corporate political and bank connections on firm-level cost of debt by studying a sample of Russian non-state-owned firms within a period of 2000-2013. I find that the cost of debt decreases when firm's significant shareholders (major owners) are connected to a state-owned bank. This effect does not work when connections are to a private bank. It does not also work when connections are to a state-owned bank but are implemented by CEOs or board members.

I also find that cost of debt decreases when firm's significant shareholders, or CEOs, or board members are *strongly* connected to the executive branch of the federal government. Unexpectedly, *strong* corporate ties to the parliament have an *increasing* effect on interest rates – the phenomenon which needs additional research to be explained. In any way, the most important condition for these two effects to work is *strength* – connections should be strong enough to have an effect on interest rates. In the Russian institutional setting within the period 1990-2013 the strongest connections seem to be established in the years of mass privatization when businesspeople and politicians had to form very close alliances in order to survive and win the fierce privatization battles.

I contribute to the existing literature on political and bank connections and their influence on the cost of debt in the following way: 1) I look at the *supply-side* of the debt market and find evidence that connections to *state-owned banks* are important to decrease interest rates, while connections to private banks may not have such an effect on the cost of debt; 2) I find that in a developing market economy (like Russia)

connections to a state-owned bank matter only if they are implemented through the *owner* (significant shareholder) but not through board member or CEO, that is an indication of the principal importance of major owners in corporate governance in developing economies and emerging markets; 3) I find that corporate ties to the *executive* branch of the *central (federal)* government decrease interest rates, while ties to the parliament ironically may have an increasing effect on the cost of debt; 4) I find that political connections affect cost of debt only if connections are *strong*, i.e. when connections were established in a situation that required close cooperation and mutual trust between the connected individuals.

Among the *limitations* of my study it is possible to highlight the following:

1) Political and bank connections in this study are determined based on previous employment of significant shareholders, CEOs, or board members (or their closest relatives) in the government or in banks. However, potentially connections can emerge through other means (without any employment in the government or in banks), for example through friendship, etc. Though these other means of building political connections may be difficult to observe, it would be good to take them into account in future studies.

2) Total interest rate paid by the firm in a particular year is a rather crude measure to capture the effect of political connections on interest rates. It would be better if interest rates on particular loans from particular lenders could be found in a database that would make the study more precise.

In future research it would be reasonable to take into account the limitations stated above and extend the research into other fields where corporate political

connections may have effects, for example, procurement contracts, corporate investment policy, effectiveness of investment projects, taxation, etc.

6. Tables and figures

Figure Ch2-1. Unsecured loan

a) Loan *not* repaid (default); probability = d

b) Loan repaid; probability = (1 - d)
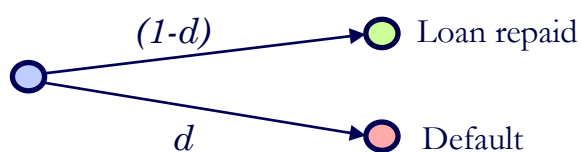
Figure Ch2-2. Loan with a collateral
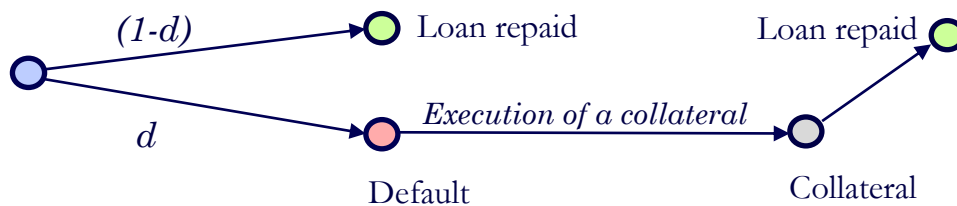
Figure Ch2-3. Loan with a probability of a bailout
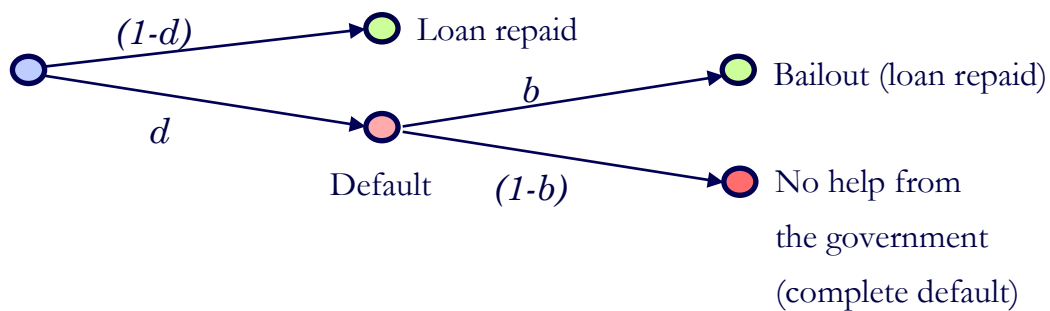
Figure Ch2-4. Probability of a complete default (PCD) as a function of d and b
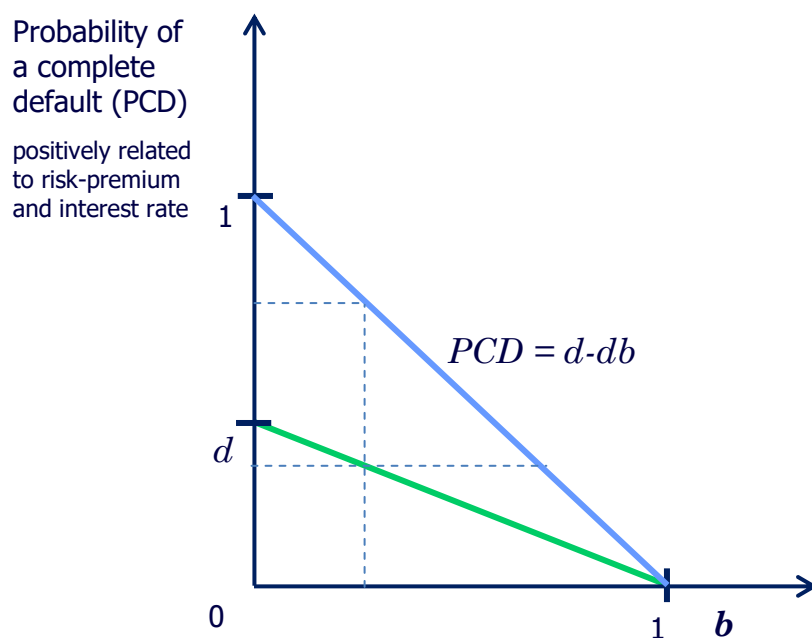
In this plot we lay the PCD on the vertical axis and b (the probability of the government bailout) on the horizontal axis. In this situation d (the probability of a default) is a *parameter* which determines the slope of the line and its intersect with the vertical axis.

In the extreme case (when d - the probability of default, is 1) the line intersects *vertical* axis at 1. The line always intersects *horizontal* axis at point 1 as when the probability of government bailout is 1, PCD always equals zero.

Table Ch2-1. Interpretation of mixed results of the effect of political connections on the cost of debt and related characteristics

Paper	Findings	Interpretation from the point of view of the model
Bliss and Gul (2012) Malaysia 1667 firms 2001-2004	Cost of debt is *higher* for PCFs than for non-connected firms	PCFs have a greater d than non-PCFs, that is why given all things equal they have higher PCD and hence higher risk premium and the interest rate. There is no information on whether b is higher for PCFs than for non-connected firms. However, it is likely that increase in b is *not enough* to overshadow the effect of the increase in d, that is why PCD for PCFs is *higher* (so as the risk premium and the interest rate) than for non-PCFs.
Houston et al. (2014) USA 417 firms 2003-2008	Cost of debt (bank loans) is *lower* for PCFs than for non-connected firms	Political connections, given all things equal, improve prospects of firm's future cash flows and decrease the probability of a decline in firm's creditworthiness thus jointly decreasing d (the probability of default). There is no information on whether b is higher for PCFs than for non-connected firms, however even if b stays constant the decrease in d is enough to decrease the overall interest rate.
Faccio (2010) 47 countries 16,191 firms 1996-2003	PCFs and non-connected firms enjoy relatively *the same* cost of debt	d and b either do not change significantly to affect PCD (and hence risk premium and interest rate), or change *in accord*, so that the overall effect on PCD (an hence on risk premium and interest rate) is neutral.

Table Ch2-1, continued.

Paper	Findings	Interpretation from the point of view of the model
Faccio et al. (2006) 35 countries 900 firms 1997-2002	Probability of government bailout is *higher* for PCFs than for non-connected firms	The probability of government bailout (b) is higher for PCFs, so, given all things equal, PCD (as well as risk premium and interest rate) should be lower than for non-connected firms. However, Faccio et al. (2006) also states that PCFs "exhibit significantly worse financial performance than their non-connected peers at the time of and following the bailout", so d for PCFs should be also higher than for non-PCFs. The balance between d and b is not addressed in this paper and the authors do not cover the topic of the cost of debt.

Note: When Bliss and Gul (2012) regress cost of debt on political connectedness they control for 9 factors affecting the probability of default (d), so naturally if all these factors would comprise what is called "inefficiency" and/or "high risk" of PCFs the coefficient at political connectedness dummy would not be statistically significant. However, as this coefficient is significant in the paper there seem to be other factors of inefficiency and high risk which are effectively absorbed by PCF variable, but not the controls.

Table Ch2-2. Lenders and their goals

Type of lender		Lending to *non-connected* firm		Lending to *PCF*	
		Goals	Interest rate assigned	Goals	Interest rate assigned
Private debt — **State-owned banks**		Profit maximi-zation	Market rate	Supporting "friendly" companies	Lower than the market rate
Local private banks	Politically connected				
	Non-connected	Profit maximi-zation	Market rate	Profit maximization or establishing political connections	Some decrease in the interest rate is possible if the bank wants to establish political connections
Foreign banks					
Public debt — **Banks - providers of syndicated loans**		Profit maximi-zation	Market rate	Profit maximization	Market rate (adjusted for *d* and *b*)
Buyers of corporate debt securities in the domestic and international markets					

Table Ch2-3. Coding individual's political connections

#	Question	Designation of the independent variable of interest	Yes	No
1	Did the person work in the *executive* branch of the Soviet government on the *federal* level before August 1991?	SFE	1	0
2	Did the person work in the *legislative* branch of the Soviet government on the *federal* level before August 1991?	SFL	1	0
3	Did the person work in the *executive* branch of the Russian government on the *federal* level under President Yeltsin?	YFE	1	0
4	Did the person work in the *legislative* branch of the Russian government on the *federal* level under President Yeltsin?	YFL	1	0
5	Did the person work in the *executive* branch of the Russian government on the *federal* level under President (Prime-Minister) Putin?	PFE	1	0
6	Did the person work in the *legislative* branch of the Russian government on the *federal* level under President (Prime-Minister) Putin?	PFL	1	0

Note 1: By saying that a particular person worked in the *executive* branch of the federal government in Russia I mean that this person occupied a hierarchical position *not lower* than deputy head of the department in a ministry or in a major state-owned company. Several state-owned companies are considered equal to ministries as top-management positions in these companies generally produce the same level and quality of political connections as the corresponding positions in the ministries. In this paper I take into consideration the following state-owned companies: Gazprom, Rosneft, Russian Railways, Transneft, Rostekh, Oboronprom, Rosoboronexport, Rosenergoatom, Alrosa, Rosugol, Olimpstroy.

By saying that a particular person worked in the *legislative* branch of the federal government in Russia I mean that this person was a deputy of the upper (Federation Council) or lower (State Duma) chambers of the Russian parliament.

Note 2: Taking into account traditionally strong family ties in the Russian environment, a particular person is also considered connected if one of his/her closest relatives (mother, father, brother, sister, son, daughter) worked in the government. This rule applies in case there is no indication in the public media and other publicly available sources that family relationship was fully broken.

Table Ch2-4. Coding individual's banking connections

#	Question	Designation of the independent variable of interest	Yes	No
7	Did the person work in a private or state-owned bank?	Bank	1	0
8	- Did the person work in a state-owned bank?	StateBank	1	0
9	- Did the person work in a private bank?	PrivBank	1	0

#	Question		Designation of the independent variable of interest	Yes	No
10	Did the person work in a **state-owned bank**?	In Soviet times	S_StateBank	1	0
11		Under President Yeltsin	Y_StateBank	1	0
12		Under President (PM) Putin	P_StateBank	1	0

#	Question		Designation of the independent variable of interest	Yes	No
13	Did the person work in a **private bank**?	In Soviet times	S_PrivBank	1	0
14		Under President Yeltsin	Y_PrivBank	1	0
15		Under President (PM) Putin	P_PrivBank	1	0

#	Question		Designation of the independent variable of interest	Yes	No
16	Did the person work in a **state-owned bank** subsequently getting or simultaneously having the following positions in the firm:	Significant shareholder	StateBank_Ow	1	0
17		CEO	StateBank_CEO	1	0
18		Board member	StateBank_Board	1	0

#	Question		Designation of the independent variable of interest	Yes	No
19	Did the person work in a **private bank** subsequently getting or simultaneously having the following positions in the firm:	Significant shareholder	PrivBank_Ow	1	0
20		CEO	PrivBank_CEO	1	0
21		Board member	PrivBank_Board	1	0

Note 1: By saying that a particular person worked in a bank I mean that this person occupied a hierarchical position *not lower* than deputy head of the department in a bank.

Note 2: The following state-owned banks are considered in this paper: Sberbank, VTB, Vneshekonombank, Gazprombank, Bank of Moscow, Russian Bank of Reconstruction and Development, Promstroybank (St.Petersburg), and Central Bank of Russia.

Note 3: Taking into account traditionally strong family ties in the Russian environment, a particular person is also considered connected if one of his/her closest relatives (mother, father, brother, sister, son, daughter) worked in a bank. This rule applies in case there is no indication in the public media and other publicly available sources that family relationship was fully broken.

Table Ch2-5. Control variables for the cost of debt regression

Designation and predicted sign	Definition
AGE (-)	Number of years since the firm was incorporated
BIG_N (-)	Dummy variable, equals "1" if audited by a Big N firm, "0" otherwise
LEV (+)	Sum of total short-term and long-term debt divided by total assets
CF (-)	Cash flow from operations divided by total assets
SIZE (-)	Natural logarithm of total assets
PPE (-)	Property, plant and equipment divided by total assets
GROWTH (-)	Sales revenues in year t minus sales revenues in year t-1 divided by sales revenue in year t-1
NEGEQ (+)	Dummy variable, equals "1" if firm reported negative equity, "0" otherwise
CR (-)	Current assets divided by current liabilities
LOSS (+)	Dummy variable, equals "1" if firm reported loss, "0" otherwise

Table Ch2-6. Summary statistics on financial variables

Variable	Obs	Mean	Std. Dev.	Min	Max
IR_w	528	0.085	0.038	0.011	0.202
LEV_w	528	0.304	0.180	0.002	0.771
CF_w	528	0.115	0.084	-0.068	0.317
PPE_w	528	0.481	0.182	0.084	0.796
GROWTH_w	528	0.217	0.310	-0.441	1.063
CR_w	528	1.606	1.023	0.422	5.615
SIZE	528	8.026	1.307	4.143	11.603
AGE	528	12.720	5.224	1	23
BIG_N	528	0.915	0.279	0	1
NEGEQ	528	0.023	0.149	0	1
LOSS	528	0.129	0.335	0	1

The table describes the financial variables used in the study. Variable definitions are the following:

IR_w = Interest expense of the firm divided by its average short-term and long-term debt during the year, winsorized at 2%.

LEV_w = Sum of total short-term and long-term debt (e-o-y) divided by total assets (e-o-y), winsorized at 2%.

CF_w = Cash flow from operations divided by total assets (e-o-y), winsorized at 2%.

PPE_w = Property, plant, and equipment (e-o-y) divided by total assets (e-o-y), winsorized at 2%.

GROWTH_w = Sales revenues in year *t* minus sales revenues in year *t-1* divided by sales revenues in year *t-1*, winsorized at 2%.

CR_w = Current assets (e-o-y) divided by current liabilities (e-o-y), winsorized at 2%.

SIZE = Natural logarithm of total assets (e-o-y).

AGE = Number of years since the firm was incorporated.

BIG_N = Dummy variable, equals "1" if audited by a Big N firm, "0" otherwise.

NEGEQ = Dummy variable, equals "1" if firm reported negative equity, "0" otherwise.

LOSS = Dummy variable, equals "1" if firm reported loss, "0" otherwise.

Table Ch2-7. Summary statistics on political connections and bank connections variables

Variable	Obs	Mean	Std. Dev.	Min	Max
SFE	528	0.116	0.320	0	1
SFL	528	0.038	0.191	0	1
YFE	528	0.396	0.489	0	1
YFL	528	0.134	0.341	0	1
PFE	528	0.352	0.478	0	1
PFL	528	0.231	0.422	0	1
Bank	528	0.799	0.401	0	1
StateBank	528	0.277	0.448	0	1
PrivBank	528	0.769	0.422	0	1
S_StateBank	528	0.068	0.252	0	1
Y_StateBank	528	0.161	0.368	0	1
P_StateBank	528	0.167	0.373	0	1
StateBank_Ow	528	0.066	0.249	0	1
StateBank_CEO	528	0.021	0.143	0	1
StateBank_Board	528	0.258	0.438	0	1
S_PrivBank	528	0.063	0.242	0	1
Y_PrivBank	528	0.665	0.473	0	1
P_PrivBank	528	0.600	0.490	0	1
PrivBank_Ow	528	0.566	0.496	0	1
PrivBank_CEO	528	0.273	0.446	0	1
PrivBank_Board	528	0.727	0.446	0	1

The table describes the political and bank connections variables used in the study. Variable definitions are the following:

SFE = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the executive branch of the Soviet government on the federal level before August 1991, "0" otherwise.

SFL = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the legislative branch of the Soviet government on the federal level before August 1991, "0" otherwise.

YFE = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the executive branch of the Russian government on the federal level under President Yeltsin, "0" otherwise.

YFL = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the legislative branch of the Russian government on the federal level under President Yeltsin, "0" otherwise.

PFE = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the executive branch of the Russian government on the federal level under President (Prime-Minister) Putin, "0" otherwise.

PFL = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in the legislative branch of the Russian government on the federal level under President (Prime-Minister) Putin, "0" otherwise.

--

Bank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a bank (state-owned or private), "0" otherwise.

StateBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a state-owned bank, "0" otherwise.

PrivBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a private bank, "0" otherwise.

--

S_StateBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a state-owned bank in Soviet times, "0" otherwise.

Y_StateBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a state-owned bank under President Yeltsin, "0" otherwise.

P_StateBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a state-owned bank under President (Prime-Minister) Putin, "0" otherwise.

StateBank_Ow = Dummy variable, equals "1" if a firm in a particular year has at least one significant shareholder who worked in a state-owned bank, "0" otherwise.

StateBank_CEO = Dummy variable, equals "1" if a firm in a particular year has a CEO who worked in a state-owned bank, "0" otherwise.

StateBank_Board = Dummy variable, equals "1" if a firm in a particular year has at least one board member who worked in a state-owned bank, "0" otherwise.

--

S_PrivBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a private bank in Soviet times, "0" otherwise.

Y_PrivBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a private bank under President Yeltsin, "0" otherwise.

P_PrivBank = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in a private bank under President (Prime-Minister) Putin, "0" otherwise.

PrivBank_Ow = Dummy variable, equals "1" if a firm in a particular year has at least one significant shareholder who worked in a private bank, "0" otherwise.

PrivBank_CEO = Dummy variable, equals "1" if a firm in a particular year has a CEO who worked in a private bank, "0" otherwise.

PrivBank_Board = Dummy variable, equals "1" if a firm in a particular year has at least one board member who worked in a private bank, "0" otherwise.

Table Ch2-8. Pairwise correlation coefficients

	IR_w	LEV_w	CF_w	PPE_w	GROWTH_w	CR_w	SIZE	AGE	BIG_N	NEGEQ	LOSS	SFE	SFL	YFE	YFL	PFE	PFL	Bank	StateBank	PrivBank	S_StateBank	Y_StateBank	P_StateBank	StateBank_Ow	StateBank_CEO	StateBank_Board	S_PrivBank	Y_PrivBank	P_PrivBank	PrivBank_Ow	PrivBank_CEO	PrivBank_Board
IR_w	1																															
LEV_w	0.04	1																														
	-0.41																															
CF_w	-0.23	-0.22	1																													
	0	0																														
PPE_w	-0.15	-0.01	0.24	1																												
	0	-0.86	0																													
GROWTH_w	0.02	-0.1	0.14	0.01	1																											
	-0.62	-0.03	0	-0.74																												
CR_w	-0.08	-0.44	0.14	-0.01	0.05	1																										
	-0.05	0	0	-0.76	-0.24																											
SIZE	-0.37	-0.04	0.31	0.18	-0.04	0.13	1																									
	0	-0.31	0	0	-0.31	0																										
AGE	-0.05	0.02	-0.01	-0.07	-0.18	-0.05	0.13	1																								
	-0.22	-0.62	-0.74	-0.13	0	-0.28	0																									
BIG_N	-0.06	0.04	0.19	0.16	0.01	-0.08	0.3	-0.12	1																							
	-0.15	-0.36	0	0	-0.74	-0.06	0	-0.01																								
NEGEQ	0.12	0.35	-0.13	-0.06	-0.11	-0.14	-0.06	-0.12	0.05	1																						
	-0.01	0	0	-0.14	-0.01	0	-0.15	-0.01	-0.29																							
LOSS	0.09	0.21	-0.31	-0.07	-0.28	-0.16	-0.09	0.09	0.06	0.17	1																					
	-0.04	0	0	-0.1	0	0	-0.05	-0.05	-0.19	0																						
SFE	-0.09	-0.15	0.12	0.04	0.03	0.1	0.28	-0.16	0.07	-0.06	-0.09	1																				
	-0.05	0	-0.01	-0.35	-0.49	-0.02	0	0	-0.12	-0.21	-0.05																					
SFL	0.02	-0.06	0.04	-0.05	0.06	0.03	0.13	-0.18	0.06	-0.03	-0.05	0.49	1																			
	-0.59	-0.14	-0.41	-0.28	-0.15	-0.51	0	0	-0.16	-0.49	-0.28	0																				
YFE	-0.11	-0.2	0.02	-0.09	0	0.14	0.17	-0.05	-0.02	-0.05	-0.01	0.41	0.16	1																		
	-0.01	0	-0.7	-0.05	-0.91	0	0	-0.26	-0.71	-0.3	-0.81	0	0																			
YFL	-0.02	-0.13	0.13	0.17	-0.03	0.2	0.25	0.06	0.02	-0.06	0.01	0.41	-0.05	0.14	1																	
	-0.7	0	0	0	-0.48	0	0	-0.19	-0.63	-0.17	-0.74	0	-0.26	0																		
PFE	-0.07	-0.03	0.03	-0.06	-0.05	0.01	0.13	0.1	0.04	0.02	0.01	0.07	-0.06	0.54	-0.01	1																
	-0.12	-0.5	-0.51	-0.15	-0.29	-0.89	0	-0.02	-0.35	-0.64	-0.78	-0.12	-0.15	0	-0.79																	
PFL	-0.02	0.07	0.01	-0.05	0	0.06	0.09	0.05	-0.14	0.04	0.04	0.24	-0.09	0.18	0.44	0.1	1															
	-0.57	-0.1	-0.86	-0.26	-0.93	-0.2	-0.03	-0.27	0	-0.4	-0.31	0	-0.05	0	0	-0.02																
Bank	-0.2	-0.17	0.2	0	0.04	0.16	0.31	-0.01	-0.02	0.04	-0.02	0.08	-0.1	0.17	0.18	0.12	0.2	1														
	0	0	0	-0.98	-0.31	0	0	-0.87	-0.69	-0.31	-0.66	-0.07	-0.02	0	0	0	0															
StateBank	-0.09	-0.09	0	-0.17	-0.08	0.04	0.13	0.09	0.05	0.02	-0.02	0.08	-0.06	0.44	0	0.43	0.16	0.31	1													
	-0.03	-0.04	-0.94	0	-0.06	-0.4	0	-0.03	-0.23	-0.66	-0.6	-0.06	-0.2	0	-0.92	0	0	0														
PrivBank	-0.17	-0.17	0.17	0.07	0.04	0.16	0.33	0.02	-0.01	-0.04	0.01	0.07	-0.08	0.13	0.18	0.1	0.19	0.91	0.18	1												
	0	0	0	-0.1	-0.31	0	0	-0.6	-0.88	-0.4	-0.83	-0.1	-0.07	0	0	-0.02	0	0	0													
S_StateBank	-0.03	-0.12	0.01	0.02	0.04	0.07	0.1	0.02	0.08	-0.04	-0.04	-0.1	-0.05	0.2	-0.04	0.18	-0.11	0.14	0.44	0.15	1											
	-0.52	0	-0.83	-0.58	-0.39	-0.13	-0.03	-0.71	-0.06	-0.34	-0.4	-0.02	-0.22	0	-0.35	0	-0.01	0	0	0												
Y_StateBank	-0.12	-0.19	0.08	-0.16	-0.06	0.08	0.05	0.05	0.04	-0.07	-0.09	0.05	-0.03	0.33	0.02	0.29	0.02	0.22	0.71	0.14	0.45	1										
	-0.01	0	-0.06	0	-0.21	-0.05	-0.22	-0.29	-0.34	-0.13	-0.04	-0.24	-0.45	0	-0.59	0	-0.7	0	0	0	0											
P_StateBank	-0.09	0.03	-0.01	-0.07	-0.09	-0.06	0.19	0.17	0.03	0.07	0.04	0.08	-0.06	0.32	-0.03	0.44	0.2	0.22	0.71	0.12	0.06	0.26	1									
	-0.04	-0.44	-0.73	-0.13	-0.04	-0.2	0	0	-0.53	-0.12	-0.35	-0.08	-0.15	0	-0.53	0	0	0	0	0	-0.17	0										
StateBank_Ow	-0.16	-0.04	0.01	0	-0.01	0	0	0.11	0.03	-0.04	0.03	0.21	-0.05	0.33	0.14	0.27	0.12	0.13	0.43	0.15	0.17	0.34	0.35	1								
	0	-0.3	-0.79	-0.95	-0.83	-0.96	-0.93	-0.01	-0.54	-0.35	-0.44	0	-0.23	0	0	0	0	0	0	0	0	0	0									
StateBank_CEO	-0.02	0	-0.08	-0.1	0.01	-0.03	-0.01	0.03	-0.05	-0.02	-0.02	0.07	-0.03	0.18	0.06	0.06	0.01	0.07	0.24	0.08	0.28	0.19	0.15	0.28	1							
	-0.67	-0.94	-0.06	-0.02	-0.76	-0.44	-0.75	-0.48	-0.25	-0.61	-0.71	-0.1	-0.51	0	-0.18	-0.18	-0.74	-0.09	0	-0.07	0	0	0									
StateBank_Board	-0.06	-0.07	-0.02	-0.2	-0.09	0.01	0.14	0.13	0.04	0.03	-0.01	0.02	-0.05	0.39	-0.05	0.43	0.13	0.3	0.94	0.16	0.37	0.67	0.76	0.26	0.25	1						
	-0.14	-0.1	-0.6	0	-0.04	-0.77	0	0	-0.36	-0.54	-0.88	-0.69	-0.26	0	-0.21	0	0	0	0	0	0	0	0	0	0							
S_PrivBank	0.07	0.05	0.13	0.05	0.04	0.04	0.14	0.04	-0.03	0.12	-0.01	-0.04	0.07	-0.11	0.13	-0.11	-0.07	0.13	-0.11	0.14	-0.07	-0.11	-0.03	-0.07	-0.04	-0.08	1					
	-0.1	-0.26	0	-0.27	-0.37	-0.38	0	-0.4	-0.45	-0.01	-0.89	-0.31	-0.1	-0.01	0	-0.01	-0.12	0	-0.01	0	-0.11	-0.01	-0.47	-0.11	-0.39	-0.06						
Y_PrivBank	-0.15	-0.13	0.21	0.03	0.03	0.1	0.38	-0.06	0.16	-0.03	0.01	0.14	-0.03	0.22	0.24	0.22	0.21	0.71	0.27	0.77	0.19	0.22	0.18	0.19	0.1	0.24	0.18	1				
	0	0	0	-0.51	-0.48	-0.02	0	-0.15	0	-0.55	-0.83	0	-0.53	0	0	0	0	0	0	0	0	0	0	0	-0.02	0	0					
P_PrivBank	-0.08	-0.09	0.01	0.05	-0.03	0.15	0.22	0.1	-0.1	0.02	0.07	0.1	0	0.17	0.02	0.14	0.07	0.61	0.12	0.67	0.19	0.04	0.21	0.09	0.09	0.14	0.1	0.42	1			
	-0.06	-0.03	-0.8	-0.22	-0.43	0	0	-0.03	-0.03	-0.64	-0.1	-0.02	-1	0	-0.72	0	-0.1	0	-0.34	0	0	-0.03	-0.03	0	-0.02	0						
PrivBank_Ow	-0.17	-0.11	0.26	0.05	0.12	0.17	0.4	-0.03	0.12	-0.07	-0.05	0.16	-0.05	0.18	0.17	0.13	0.16	0.57	0.12	0.63	0.24	0.09	0.07	0.11	0.13	0.09	0.15	0.61	0.53	1		
	0	-0.01	0	-0.26	-0.01	0	0	-0.48	-0.01	-0.1	-0.24	0	-0.05	0	0	0	0	0	0	0	0	-0.03	-0.09	-0.01	0	-0.05	0	0	0			
PrivBank_CEO	-0.21	-0.21	0	0.18	0.05	0.16	0.33	0	-0.01	-0.04	-0.02	0.2	0.03	0.17	0.13	0.07	0.01	0.31	0.15	0.34	0.24	0.17	0.14	0.23	0.09	0.14	-0.04	0.37	0.33	0.3	1	
	0	0	-0.97	0	-0.22	0	0	-0.98	-0.8	-0.4	-0.65	0	-0.43	0	0	-0.09	-0.87	0	0	0	0	0	0	0	-0.04	0	-0.42	0	0	0		
PrivBank_Board	-0.18	-0.19	0.14	0.08	0.03	0.18	0.32	0.02	-0.03	-0.05	-0.01	0.05	-0.06	0.12	0.09	0.13	0.16	0.82	0.17	0.9	0.15	0.12	0.15	0.08	0.09	0.19	0.04	0.66	0.68	0.51	0.37	1
	0	0	0	-0.05	-0.49	0	0	-0.57	-0.43	-0.26	-0.89	-0.27	-0.19	-0.01	-0.03	0	0	0	0	0	0	-0.01	0	-0.07	-0.04	0	-0.42	0	0	0	0	

Significance test p-values displayed below the coefficients (please ignore the sign "-" before the values)

Table Ch2-9. Political and banking connections and cost of debt

VARIABLES	(1) IR_w	(2) IR_w	(3) IR_w
Bank	-0.0144***		
	(0.00134)		
StateBank		-0.00807**	
		(0.0268)	
PrivBank		-0.00471	
		(0.248)	
StateBank_Ow			-0.0193***
			(0.000574)
StateBank_CEO			0.00215
			(0.700)
StateBank_Board			-0.00346
			(0.386)
PrivBank_Ow			0.000312
			(0.932)
PrivBank_CEO			-0.00558
			(0.195)
PrivBank_Board			-0.00358
			(0.377)
SFE	0.00436	0.00434	0.00875
	(0.601)	(0.600)	(0.293)
SFL	0.00290	0.00493	0.00291
	(0.792)	(0.643)	(0.783)
YFE	-0.00988**	-0.00850*	-0.00862*
	(0.0351)	(0.0783)	(0.0751)
YFL	0.0137**	0.0127**	0.0113*
	(0.0326)	(0.0490)	(0.0870)
PFE	0.00121	0.00282	0.00357
	(0.757)	(0.460)	(0.354)
PFL	-0.000435	-0.00103	-0.00163
	(0.920)	(0.813)	(0.714)

Table Ch2-9, continued.

VARIABLES	(1) IR_w	(2) IR_w	(3) IR_w
LEV_w	0.00841	0.00898	0.00647
	(0.538)	(0.518)	(0.645)
CF_w	0.000512	-0.00610	-0.00980
	(0.984)	(0.807)	(0.690)
PPE_w	0.00769	0.00821	0.00920
	(0.528)	(0.503)	(0.451)
GROWTH_w	0.00815	0.00643	0.00807
	(0.229)	(0.354)	(0.245)
CR_w	-6.90e-06	-0.000424	-0.000478
	(0.998)	(0.875)	(0.860)
AGE	0.000393	0.000491	0.000707*
	(0.264)	(0.168)	(0.0589)
SIZE	-0.00592***	-0.00701***	-0.00757***
	(0.00112)	(0.000103)	(0.000172)
BIG_N	-0.00654	-0.00439	-0.00352
	(0.395)	(0.566)	(0.644)
NEGEQ	0.0209**	0.0176**	0.0171**
	(0.0102)	(0.0180)	(0.0327)
LOSS	-0.000378	-0.00122	0.000134
	(0.923)	(0.758)	(0.972)
INDUSTRY DUMMIES	YES	YES	YES
YEAR DUMMIES	YES	YES	YES
Observations	528	528	528
Adjusted R-squared	0.331	0.321	0.331

Robust pval in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This table presents results of the regression analysis. Cost of debt was regressed on a number of political and bank connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Table Ch2-6 and Table Ch2-7).

Table Ch2-10. Exogeneous shock and connections impact on cost of debt

VARIABLES	(4) IR_w
MedWin	-0.0645***
	(0.000112)
S_StateBank_MedWin	-0.0278**
	(0.0346)
Y_StateBank_MedWin	-0.0122
	(0.146)
P_StateBank_MedWin	0.0170**
	(0.0250)
YFE_MedWin	0.000500
	(0.941)
YFL_MedWin	-0.0175**
	(0.0303)
S_StateBank	0.0158*
	(0.0951)
Y_StateBank	-0.00747
	(0.243)
P_StateBank	-0.0118**
	(0.0444)
S_PrivBank	0.0124*
	(0.0893)
Y_PrivBank	-0.00117
	(0.802)
P_PrivBank	-0.00152
	(0.684)
SFE	0.00919
	(0.275)
SFL	0.00185
	(0.856)
YFE	-0.00868
	(0.150)
YFL	0.0156**
	(0.0277)
PFE	0.00254
	(0.523)
PFL	-0.000261
	(0.951)

Table Ch2-10, continued.

VARIABLES	(4) IR_w
LEV_w	0.0102
	(0.459)
CF_w	0.00174
	(0.942)
PPE_w	0.00727
	(0.565)
GROWTH_w	0.00455
	(0.508)
CR_w	-0.00121
	(0.650)
AGE	0.000629*
	(0.0699)
SIZE	-0.00789***
	(4.63e-05)
BIG_N	-0.00373
	(0.645)
NEGEQ	0.0117
	(0.159)
LOSS	-0.00322
	(0.440)
INDUTRY DUMMIES	YES
YEAR DUMMIES	YES
Observations	528
Adjusted R-squared	0.342

Robust pval in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This table presents results of the regression analysis. Cost of debt was regressed on a number of political and bank connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Table Ch2-6 and Table Ch2-7).

To address the endogeneity issue the natural exogeneous shock was employed that is the election of Dmitry Medvedev a President of Russia in 2008 and his presence in the office until 2011 inclusive. The corresponding dummy variable is MedWin which equals "1" for the years 2008-2011 inclusive, "0" otherwise.

Five interaction terms were developed:
S_StateBank_MedWin = S_StateBank * MedWin
Y_StateBank_MedWin = Y_StateBank * MedWin
P_StateBank_MedWin = P_StateBank * MedWin
YFE_MedWin = YFE * MedWin
YFL_MedWin = YFL * MedWin

CHAPTER 3

CORPORATE POLITICAL CONNECTIONS IN RUSSIA AND THEIR IMPLICATIONS FOR FIRM-LEVEL ACQUISITIONS ACTIVITY

Abstract: I investigate the effect of corporate political connections on firm-level acquisitions activity. By analyzing the sample of Russian non-state-owned firms within a period of 2001-2013 I find that political connections to central government positively affect firm's propensity to purchase stakes in other firms. This effect works well in the domestic market, but not in the foreign markets. It does also work well with regard to acquisitions of stakes in the open market, but, ironically, not in the process of privatization. At the same time I find that political connections to regional governments are negatively associated with the probability of purchasing a stake by the acquirer. The latter unexpected effect potentially may be explained by the fact that in a "small world" of regional political and business elites it is risky for participants to violate the regional equilibrium of wealth and power, thus firms demonstrate acquisitions activity levels lower than that of the reference group of non-connected firms.

Résumé: Je parle de l'effet des relations politiques d'entreprise sur l'activité des acquisitions au niveau de l'entreprise. En analysant l'exemple des entreprises non-étatiques russes dans la période 2001–2013, je trouve que les relations politiques au gouvernement central ont une influence positive sur la propension des entreprises à acheter des participations dans d'autres entreprises. Cet effet fonctionne bien sur le marché intérieur, mais non dans les marchés étrangers. Il fonctionne bien aussi à l'égard de l'acquisition de participations dans le marché libre, mais, ironiquement, non pas dans le processus de privatisation. Dans le même temps, je trouve que les connexions politiques aux gouvernements régionaux sont négativement associées à la probabilité de l'achat d'une participation par l'acquéreur. L'effet inattendu de celui-ci peut éventuellement être expliqué par le fait que dans le « petit monde » des élites politiques et économiques régionales, il est risqué pour les participants de violer l'équilibre régional de la richesse et de la puissance, donc les entreprises affichent des niveaux inférieurs à celui de l'activité des acquisitions du groupe de référence de sociétés non-liées.

Keywords: politically connected firm, acquisitions, subsidiaries, associates.

1. Introduction

This study examines the effect of corporate political connections on acquisitions activity of an acquiring firm. Prior literature investigates a significant number of factors that determine acquisitions activity of an acquiring firm (bidder), including bidder's performance indicators, market valuation, and size. However there has been no comprehensive study that would take into account the impact of corporate political connections on acquisitions activity.

I predict that politically connected firms (PCFs), all other things being equal, should be more active in acquiring stakes in other firms, particularly in purchasing subsidiaries, buying stakes in associates, and forming joint ventures. This prediction is based on several expectations. *First*, connections to the government may give the connected firm additional informal access to information gathered by the governmental agencies on the situation in different industries, the financial position of potential targets, their development strategies, as well as the intentions of their top managers and controlling shareholders. Having this information at hand the politically connected firm may plan its acquisition strategy in a more efficient way than the firms without political connections. *Second*, informal connections to the government can be used by the firm to facilitate the negotiations process with the target by signaling to its owners that the potential acquirer has easier access to financial resources needed to acquire large stakes. Indeed, several studies show that politically connected firms have better access to debt financing in the form of bank loans than their non-connected peers (Boubakri et al., 2008; Boubakri et al., 2009; Li et al., 2008; Khwaja and Mian, 2005; Faccio, 2010). According to Boubakri et al. (2012) PCF's also enjoy lower cost of equity capital than non-connected companies.

So raising funds for PCF is not a problem. *Third*, in situation of high corruption the politically connected firm may use its informal relations with the government to impose governmental pressure on the owners of the potential target forcing them to be more appeasable in the negotiation process. And *fourth*, political connections to the government can give the connected firm priority access to privatized state-owned assets, if any.

Taking into account the factors mentioned above I develop the following hypotheses. **H1**: A firm that has an established connection to *central (federal)* government has a higher propensity for purchasing stakes in other companies, than do firms without such connections. **H2**: A firm that has an established connection to *regional* government(s) has a higher propensity for purchasing stakes in other companies, than do firms without such connections, but lower propensity than do firms with connections to federal government. The expectations of the lower magnitude of the effect of connections to regional governments than that of federal government is conditioned by the fact that regional governments usually have less enterprises on their territory on which they collect information, less state-owned assets which they are entitled to privatize, as well as less funds in the local banking system that potentially can be used by politically connected firms to signal their abilities to acquire targets. **H3**: A firm that has an established connection to *central (federal)* government has a higher propensity for purchasing stakes in other companies which are located in the *domestic* market, but not in those which are located in the foreign markets. **H4:** A firm that has an established connection to *central (federal)* government has better access to privatized assets and purchases more state-owned assets during privatization, than do firms without such connections.

I test these *four* hypotheses on a sample of 520 firm-year observations looking at Russian non-state-owned firms within a period of 2001-2013. The choice of the country and the period is conditioned by the following factors: (1) Russia's massive privatization program conducted after the collapse of communism was mostly finished in the end of 1990-s leaving the formerly state-owned property in the hands of a rather diverse group of owners. These owners then began reshuffling the assets, selling some of the assets and buying other ones, thus fueling the M&A activity in Russia in the period after the year 2000. (2) Contemporary Russian business elites are rather diversified in terms of their relationship with the government: some firms may be considered politically independent, other firms may be considered politically connected, but connected firms differ with regard to the level of the government they are connected to (federal vs. regional) thus allowing to test the hypotheses with regard to effects of regional vs. federal connections; (3) According to Faccio (2010) differences between politically connected firms and non-connected firms are stronger when the firm operates in "countries with higher degrees of corruption". Russia is holding 127-d position out of 177 in the 2013 Corruption Perceptions Index by Transparency International. So, Russia may be a good place to analyze differences between politically connected and non-connected firms.

Applying the logit model I find that firms connected to central (federal) government have a higher probability of purchasing a stake in another firm than non-connected firms (the odds of purchasing a stake in another firm for PCFs are 89% higher than that of non-PCFs). Using the OLS regression model I find that the acquisitions activity indicator measured by number of purchasing deals per year is 35% higher for PCFs, than for non-PCFs. OLS regression also shows that the value of acquired stakes scaled by total assets (capital expenditures) is 55% (61%) higher

for PCFs than for non-PCFs. Thus, Hypothesis 1 finds support with these empirical results.

Tests of Hypothesis 2 lead to unexpected results. Employing the logit model I find that firms connected to regional governments have a *lower* probability of purchasing a stake in another firm than the non-connected firms (the odds of purchasing a stake in another firm for regionally connected firms are 42% lower than that of non-connected firms). The OLS regression model shows that the number of purchasing deals per year for regionally connected firms is also 54% lower than that of non-connected companies. The negative association between the propensity to acquire stakes in other companies and bidder's regional connectedness is an unexpected result and is likely to be conditioned by the limitations of my dataset. However, one of the speculative explanations may be that in a "small world" of regional political and business elites, where everybody knows everybody, it is a bit risky to pursue visible acquisitions policies. Local property in most of the regions was privatized among the new owners during mass privatization program of the 1990-s and the maintenance of equilibrium of intra-regional power is very important for the major interested parties on the regional level.

Testing hypothesis 3 I find that firms connected to central (federal) government have a higher propensity for purchasing stakes in other companies located in the *domestic* market. However that effect does *not* work in the foreign markets. These results confirm my Hypothesis 3.

At the same time Hypothesis 4 finds no empirical support in my sample as connections to federal government are not associated with higher propensity of acquisitions of privatized assets. Surprisingly, firms connected to federal government

actively acquire stakes in other firms in the open market: the odds of acquiring a stake in another firm in the open market for the firm connected to the federal government are 81% higher than that of non-connected firms.

My main contributions to the literature on corporate political connections and the literature on firm-level acquisitions activity are the following. *First*, I find that corporate political connections are indeed associated with the level of acquisitions activity of a bidder. *Second*, I find that political connections to central (federal) government are *positively* associated with bidder's acquisitions activity, and this effect is mostly driven by the acquisitions activity in the *domestic* market, *not* the foreign markets. *Third*, I find that connections to central (federal) government are not necessarily associated with the higher activity of a bidder in privatization deals. *Fourth*, connections to regional governments may have an *adverse* effect on the level of acquisitions activity. The latter effect is unexpected. One of the speculative explanations may be that the regional acquisitions usually happen in a "small world" of regional business and political elites. Members of these elites may consider visible acquisitions activity as an attempt to unbalance the equilibrium of wealth and power formed in the particular region.

The rest of the paper is organized as follows. In Section 2 I present the theoretical background and a short literature review on corporate political connections and the determinants of firm-level acquisitions activity that allow me to develop hypotheses. In Section 3 I explain the methodology of the study. In Section 4 I present the results. In Section 5 I make conclusions and discuss future research prospects.

2. Theoretical background

Determinants of acquisitions activity

The determinants of acquisitions activity on the part of the acquiring firm (bidder) covered by previous studies can be roughly divided into several strands (Owen and Yawson, 2010). The *first* strand of literature is associated with the inefficient management hypothesis (Manne, 1965; Palepu, 1986; Morck et al., 1989; Martin and Mcconnell, 1991). This hypothesis suggests that firms with efficient management have a tendency to purchase firms with non-efficient management in order to enhance the value of the combined firm. In accordance with this theory bidding companies are expected to have strong performance and good financial condition relative to their potential targets. The variables that determine acquisitions activity on the side of the bidder which are tested in line with this theory include return on equity (ROE) and/or return on assets (ROA), growth rate of the firm (usually annual growth in sales), and leverage.

The *second* strand of determinants is associated with the market valuation theory (Shleifer and Vishny, 2003; Rhodes-Kropf and Viswanathan, 2004; Rhodes-Kropf et al., 2005). The market valuation theory predicts that "during periods of high takeover activity, firms are more likely to be misvalued, giving rise to opportunistic stock bids by overvalued firms" (Owen and Yawson, 2010). According to Martin (1996) firms that use stocks in acquisitions normally have high market-to-book ratios as bidders attempt to profit by purchasing undervalued targets, or targets that are less overvalued than the bidder. The main variable that affects acquisitions activity with regard to the second strand of determinants is market-to-book ratio (M/B).

The *third* strand of determinants is associated with the agency cost of free cash flows. The theory was developed by Jensen (1986), Lehn and Poulsen (1989), Espahbodi and Espahbodi (2003). According to Jensen (1986) managers have the incentive to increase the size of their firms beyond the optimal size because growth increases manager's power and private benefits. In this situation managers will not pay out excess cash to shareholders as dividends but are likely to spend it on investments that might be inappropriate. Harford (1999) shows that firms with more cash holdings are more likely to make acquisitions. In this connection the main variable in the third strand of determinants of firm-level acquisitions activity is cash flow earned by the company through its operations.

And finally, the *fourth* strand of determinants deals with the size of the bidding firm. According to Palepu (1986) the likelihood of being acquired decreases with the size of the firm because of significant transaction costs in mergers and acquisitions that are directly related to the size of the target firm. The number of potential bidders for a firm is likely to decrease with size, however the greater the size of the acquiring firm the more the bidder is likely to make an acquisition. Hence the size of the bidder is also an important determinant of firm-level acquisitions activity.

The determinants of acquisitions activity of a bidder mentioned above explain a significant part of bidder's acquisitions behavior. However there has been no comprehensive study that would take into account the impact of corporate political connections on acquisitions activity.

Effects of corporate political connections

Connections between firms and politicians are found to be rather widespread across the world. According to the seminal paper by Faccio (2006) corporate political

connections exist in 35 of the 47 countries studied by Faccio, and politically connected firms (PCFs) represent 7.72% of the world's stock market capitalization. In some countries political connections are more prevalent than in other: for instance in Russia, according to Faccio (2006), connected firms represent 87% of the market capitalization, twice more than in Thailand which holds the second position in this list with PCFs representing 42% of the local stock market capitalization (Faccio, 2006).

Political connections have various effects on firm performance and firm characteristics. Since 2001 researchers extensively analyzed the effect of political connections on *firm value*. Fisman (2001), Johnson and Mitton (2003), Ramalho (2004), Ferguson and Voth (2008), Niessen and Ruenzi (2010), Goldman et al. (2009) - all find that political connections have, ceteris paribus, a *positive* effect on firm value. The source of such value, according to Faccio (2006), can take various forms, "including preferential treatment by government-owned enterprises (such as banks or raw material producers), lighter taxation, preferential treatment in competition for government contracts, relaxed regulatory oversight of the company in question, or stiffer regulatory oversight of its rivals, and many other forms".

A large strand of literature concentrates on the effects of political connections on the above mentioned sources of value. For instance Faccio (2010) finds that across her sample of 47 countries PCFs (as opposed to non-PCFs) enjoy *higher leverage, marginally lower taxation, much greater market power* (the latter is measured as the firm's market capitalization as a proportion of the total market capitalization of all firms in the same country and two-digit SIC industry; results are similar if *sales* are used instead of market capitalization). However Faccio (2010) finds that PCFs display *lower return-on-assets* and *lower market-to-book value* than their non-

connected peers. She also finds that differences between PCFs and non-connected firms are "marginally more important when political links are stronger"; differences are also greater when the firm operates in "countries with higher degrees of corruption" (Faccio, 2010).

Boubakri et al. (2008), Boubakri et al. (2009), Li et al. (2008), Khwaja and Mian (2005) – all confirm Faccio (2010) view that PCFs normally have *higher leverage* and *better access to debt financing* in the form of *bank loans* than their non-connected peers. This is probably conditioned by the fact that PCFs are more likely to be *bailed out* by the *government* in case of financial distress (Faccio et al., 2006). Politically connected firms also have better access to *equity financing*: according to Boubakri et al. (2012) who study PCFs in 26 countries within the period from 1997 to 2001, "politically connected firms enjoy a *lower cost of equity* capital than their non-connected peers".

Having better access to debt and equity financing, politically connecting firms, all other things being equal, should be more active in their investment policies, directed both at the accumulation of property, plant, and equipment, and acquisitions of stakes in other firms, particularly in subsidiaries, associates, and joint ventures. However, political connections are likely to affect the level firm's investments not only through better access to debt and equity financing (indirect path), but also directly.

I predict that the *direct* effect of firm's political connections on firm's propensity to purchase stakes in other firms should be *positive*. This prediction is based on several expectations. *First*, political connections to the government may give the firm additional informal access to information gathered by governmental agencies on the

real state of affairs in different industries, the financial situation at potential target companies, their development strategies, as well as the intentions of their managers and controlling shareholders. Having this information at hand the connected firm may plan its acquisition strategy in a more effective way than the firms without political connections. *Second*, in situation of excessive corruption the politically connected firm may use its informal relations with the government to impose governmental pressure on the owners of the potential target forcing them to be more appeasable in the negotiation process. And *third*, political connections to the government may give the connected firm priority access to privatized state-owned assets, if any.

Taking into account the factors mentioned above I develop the following hypotheses.

H1: A firm that has an established connection to *central (federal)* government has a higher propensity for purchasing stakes in other companies, than do firms without such connections. **H2**: A firm that has an established connection to *regional* government(s) has a higher propensity for purchasing stakes in other companies, than do firms without such connections, but lower propensity than do firms with connections to federal government. The expectations of the lower magnitude of the effect of connections to regional governments than that of federal government is conditioned by the fact that regional governments usually have less enterprises on their territory on which they collect information, less state-owned assets which they are entitled to privatize, as well as less funds in the local banking system that potentially can be used by politically connected firms to signal their abilities to acquire targets. **H3**: A firm that has an established connection to *central (federal)* government has a higher propensity for purchasing stakes in other companies which

are located in the *domestic* market, but not in those which are located in the foreign markets. **H4:** A firm that has an established connection to *central (federal)* government has better access to privatized assets and purchases more state-owned assets during privatization, than do firms without such connections.

Choice of an institutional setting

I suggest testing the four hypotheses stated above on a sample of Russian non-state-owned firms within a period of 2001-2013. The choice of the country and the period is conditioned by the following factors: (1) Russia's massive privatization program conducted after the collapse of communism was mostly finished in the end of 1990-s leaving the formerly state-owned property in the hands of a rather diverse group of owners. These owners then began reshuffling the assets, selling some of the assets and buying other ones, thus fueling the M&A activity in Russia in the period after the year 2000; (2) Contemporary Russian business elites are rather diversified in terms of their relationship with the government: some firms may be considered politically independent, other firms may be considered politically connected, but connected firms differ with regard to the level of the government they are connected to (federal vs. regional) thus allowing to test the hypotheses with regard to effects of regional vs. federal connections; (3) According to Faccio (2010) differences between politically connected firms and non-connected firms are stronger when the firm operates in "countries with higher degrees of corruption". Russia is holding 127-d position out of 177 in the 2013 Corruption Perceptions Index by Transparency International. So, Russia may be a good place to analyze differences between politically connected and non-connected firms; (4) The period of 2001-2013 is rather long so there were numerous rotations of board members, CEOs, and significant

shareholders in many companies that increase variability of my dataset even if there is a relatively limited number of companies on which information is available through publicly open sources.

One more reason for choosing Russia is that this country is rather important for the world economy and politics. It is the sixths largest economy in the world (by GDP PPP; World Bank, 2013), second largest net exporter of oil in the world (IEA, 2012), and first largest nuclear power (Fed. of American Scientists, 2012).

3. Methodology

Sample and time period

As an initial source for building a representative *sample of firms* for my study I refer to the Rating of Russia's 200 largest non-state-owned firms (in terms of sales) published by Forbes Magazine in 2013. Forbes *excludes* from its rating the following types of companies:

- Companies in which the Russian state or the foreign investors possess more than 50% of the voting stock;
- Banks, insurance, leasing, investment and other financial companies.

From the list of 200 Russia's largest non-state owned companies I pick companies which provide either IFRS or US GAAP financial statements. This is important because IFRS/US GAAP statements presume *consolidated statements* for the group of companies as a whole, while Russian Accounting Standards (RAS) presume financial statements only for the *individual* companies inside the group, showing no picture for the group as a whole. I find 84 companies with IFRS, and 9 companies with US GAAP (in total 93 companies) in the Forbes 200 rating.

However, it is necessary to mention that the list of Russian IFRS/US GAAP companies may be *increased* by several companies as some of the companies were not included into Forbes 200 rating because they did not exceed the rating's *lower criteria* (23 billion rubles of sales in 2012 = around 600 million Euros). These additional companies may be taken from the Rating of Russia's 400 largest companies (both private and government-owned) published by the prominent

Russia's news agency Expert RA in 2013 (http://raexpert.com). After examining this rating I add *eight* companies to the existing list of 93 Russian IFRS/US GAAP companies. I also add *one* large company, which ceased to exist by the time of Forbes-200 2013 Rating construction: TNK-BP (acquired by the state-owned Rosneft in 2012-2013). As a result the size of my sample grows to 102 companies. However, this figure should be *decreased* by the number of companies on which there is *no* possibility of acquiring information through publicly open sources. So, finally as a result of this adjustment I end up with *73 companies*.

To get information on the purchases of stakes in other companies by the selected 73 firms I use database Mergers.ru.[1] The database contains information on the purchases of stakes (deals) in which a Russian company is either an acquirer, or the target. The time period covered by the database begins with January 2001. I study the acquisitions activity within the period 2001-2013 inclusive. The period of 2001-2013 is rather long so there were numerous rotations of board members, CEOs, and significant shareholders in many companies that increase variability of my dataset even with a relatively limited number of companies (on which information is available through publicly open sources).

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[1] Database Mergers.ru (Mergers and Acquisitions in Russia) was created in 2004 by the Russian Research group ReDeal with a purpose to structure the information on mergers and acquisitions in Russia beginning with January 2001. The database is updated on a daily basis and includes information on purchases of stakes (deals) when a Russian company is either an acquirer, or the target of the deal. By January 2016 the database contained information on 10'415 deals with a total value of $616,6 b.

Determining firm's political connections

For *each firm* in my sample a list of:

- board members
- CEOs
- significant shareholders (major owners)

for the period of 2001-2013 is developed indicating the *precise time periods* when these people were in the company. The board members and CEOs are found by means of searching SKRIN Database[2], while significant shareholders (major owners) are found by the search of Russia's three major business newspapers (Kommersant, Vedomosti, RBC-Daily), and four major business magazines (RBC, Kommersant-Dengi, Kommersant-Vlast, Forbes Russia). The necessity to determine owners through the business press is conditioned by the fact that at least until 2010-2011 real owners of Russian companies used to hide their identities behind the chains of firms registered in various offshore tax heavens and related jurisdictions (Chernykh, 2008).

For each of the individual's found *biographic information* was discovered through the search of Labyrinth database[3], Kommersant database (operated by one of

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[2] SKRIN (www.skrin.com) was founded in 1999 by Russia's National Association of Stock-Market Participants (NAUFOR), and by November 2013 SKRIN database contained information on 9,244,854 Russian companies, including historical information on their owners (if disclosed), board members and management teams. The main sources of information for SKRIN are the following organizations: Federal Service for the Financial Markets (www.fcsm.ru), Federal State Statistics Service (www.gks.ru), individual Russian companies, Depositary Clearing Company (www.dcc.ru), Russian and foreign exchanges, leading Russian media-sources.

[3] Database Labyrinth (www.labyrinth.ru) was created in 1992. By November 2013 it contained 42 thousand references compiled by Labyrinth specialists on the basis of reliable publicly available information obtained from Russia's federal and regional authorities, publications in mainstream media, documents of political parties, etc. as well as from 4,000 questionnaires personally filled-in by the businessmen and the politicians. The database contains 33 thousand biographies of Russian politicians, government officials, businessmen, journalists and other publicly important figures. All the references in Labyrinth are connected by hyperlinks which allow finding both explicit and implicit connections between people, organizations, and events.

Russia's leading business newspapers Kommersant), SKRIN, official web-sites of the corresponding companies and/or Viperson.ru[4].

Biographic information normally contains date and place of birth, parents, university education, career after the graduation from the university, ties and links to political and business figures, major announcements that a person made publicly in his/her life, etc.

Before coding each *firm-year* observation with regard to political connections that the firm had in a particular year it is important first to code each significant shareholder, CEO, and board member with regard to the political connections that these people had in that particular year. In accordance with the four hypotheses stipulated above I categorize significant shareholders, CEOs, and board members into the following categories and make the following independent variables of interest:

<div align="center">**Please see Table Ch3-1**</div>

In all the cases stipulated above the person should have worked in the government *before or during* the time when he/she was a significant shareholder of the firm, a CEO, or a board member.

Coding each *person-year* observation in the firm according to the criteria mentioned in the Table Ch3-1 allows me to proceed to coding of each *firm-year* observation. I apply the following rule: if in a particular firm in a particular year there was *at least one person* (board member, CEO or a significant shareholder) who

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[4] Viperson.ru is operated by Nonprofit Partnership "Scientific Information Agency "Heritage of the Fatherland" (Russian Certificate of registration of mass media FS © 77-32003 dated May 16, 2008).

was rated, for instance, PF, then the whole firm is rated PF for this year. The same rule is applied to all other independent variables of interest.

Dependent variables

I use the following indicators to measure acquisitions activity of a bidder.

Please see Table Ch3-2

The first *seven* indicators are the *dummy* dependent variables showing whether *at least one deal* presuming a purchase of a stake in another company was conducted by the bidder in a particular year. The second set of *seven* indicators represents the *number of deals* presuming purchase of a stake in another company conducted by the bidder in a particular year. Finally there are two sets of *seven* indicators each representing the value of stakes purchased by the acquirer in a particular year scaled by either total assets average for the year, or capital expenditures of the acquirer.

The indicators are derived from the database Mergers.ru

Control variables

I include the following control variables based on the determinants of acquisitions activity tested in the previous studies and outlined in Section "Determinants of acquisitions activity". Particularly, the following variables are included as control variables to the acquisitions activity regression:

Please see Table Ch3-3

Regression equation

As a result I get the following basic regression equations:

Logit model:

Dummy showing the presence of at least one deal (0/1) = $\beta_0 + \beta_1$ROE

+ β_2LEV + β_3GROWTH + β_4CF_lesCAPEX + β_5SIZE +

+ β_s Measures of political connections + β_sYR + β_sINDUST + ε

OLS model:

Continuous measure of acquisitions activity = $\beta_0 + \beta_1$ROE + β_2LEV +

+ β_3GROWTH + β_4CF_lesCAPEX + β_5SIZE +

+ β_s Measures of political connections + β_sYR + β_sINDUST + ε

To control for *industry* and *year* β_sYR and β_sINDUST variables are included in the regression. All of the t-tests are supposed to be reported as White's (1980) corrected t-tests.

4. Results

I analyze 73 companies for the period of 2001-2013 inclusive and end up with 520 firm-year observations. The number of observations is smaller than the result of multiplication of 73 companies by 13 years because for some companies the information on political connections or financial data is not available for the full period of 2001-2013.

The summary statistics shows that in 49,6% of cases firms from my sample purchase stakes (0-100%) in other firms. Firms purchase stakes in associates (10-50% of voting rights) in 26% of cases while acquisitions of controlling stakes account for 37% of cases. Domestic deals comprise 43% of the sample, while foreign deals account for 17%. Nearly 49% of firm-year observations presume purchases of stakes in other companies in the free market, while privatization deals account for 4.6% of the sample.

Please see Table Ch3-4 (a)

In terms of the *number of deals*, on average, each firm makes 1.4 acquisitions deals per year.

Please see Table Ch3-4 (b)

The summary statistics on the value of acquisitions deals scaled by total assets and capital expenditures are shown in the following tables.

Please see Table Ch3-4 (c) and Table Ch3-4 (d)

Summary statistics on control variables show that the average value of the return on equity (ROE) is 0.167, while the average leverage amounts to 30.7% of total assets. On average, firms in my sample grow at the rate of 21.2% per annum (in terms of sales).

Please see Table Ch3-5

Summary statistics on independent variables of interest shows that ties to the federal government represent 48.3% of the sample, while ties to regional governments are found in 39.8% of cases.

Please see Table Ch3-6

Univariate analysis

Analysis of correlation matrix shows that there are *positive* but rather low Phi correlation coefficients between such binary variables as PF and Deals, PF and Deals_10to50, PF and Deals_market. For PR dummy correlation coefficients are *negative* with the dependent variables throughout the whole set of measures of acquisitions activity (both binary dependent variables and those representing the number of deals).

Please see Table Ch3-7 (a)

Correlation matrix which contains the *value* of acquisitions deals (scaled by total assets and capital expenditures) is based on a smaller sample of 450 firm-year observations as the value of deals, unfortunately, is not available for the whole number of initial observations (520 firm-year observations).

Please see Table Ch3-7 (b)

Multivariate analysis

In the course of the *multivariate analysis* first I employ the *logit model* which measures the odds of making at least one deal per year by the bidder depending on a set of explanatory variables, including the political connections dummies.

The results of the logistic regressions show several statistically significant positive associations between the PF variable and the set of dependent dummies. For the firms which possess ties to the *federal* government the odds of making a deal presuming a purchase of a stake in another company (0-100%) during a year are 89% higher than for non-connected firms. If the stake varies from 10% to 50% of voting stock (not including the upper limit) then the odds for PCFs are 189% higher! For controlling stakes (50-100% inclusive) the odds of making an acquisitions deal are 59% higher. The odds are also significantly higher for stakes in domestic companies, but not the foreign companies. Contrary to expectations connections to the federal government are *not* associated with greater odds for privatization deals, though for the deals conducted in the free market the odds are higher (the lack of former effect is likely to be conditioned by the relatively low ratio of privatization deals in my sample). Summarizing these results it is possible to say that Hypothesis 1 and Hypothesis 3 find support in logistic regression analysis. However, Hypothesis 4 finds no support.

The logistic regressions show quite *unexpected* results with regard to the associations between ties to regional authorities (PR) and dependent dummies. The odds of purchasing stakes in other companies (0-100%) during a year are 42% lower for regionally connected firms than for non-connected firms. In fact the negative

coefficient is statistically significant for all the 7 dependent dummies. Thus, Hypothesis 2 finds no support. However, the unexpected results need special explanation.

Please see Table Ch3-8 (a)

After testing the four hypotheses using the logit model, I turn to OLS regression analysis. In the *first stage* I use the *number of deals* which presume purchase of a stake in another company during a year as a dependent variable. The results mostly correspond to what has been seen in the logit modelling, with Hypotheses 1 and 3 finding support, but Hypotheses 2 and 4 finding no support.

Please see Table Ch3-8 (b)

OLS regressions with dependent variables represented by the annual value of acquisitions deals (scaled by either total assets, or capital expenditures) also show mostly the same results as the regressions before. Scaling value of acquired stakes by bidder's total assets, it is possible to see that firms connected to the federal government, all things being equal, spend annually 55% more on purchasing stakes in other companies (0-100%), 17% more on purchasing stakes in other companies varying from 10% to 50% of voting stock (excluding the upper limit), 72% more on purchasing stakes in the domestic market, and 60% more on purchasing stakes in the free market (as opposed to privatization deals) than the non-connected firms.

At the same time regional ties in most cases are *not* associated with lower spending on acquisitions deals as one would expect based on the results of the logit regressions and OLS regressions with the number of deals as dependent variables. Coefficient at PR dummy is negative and statistically significant only in two cases in

the set of regressions where the value of deals is scaled by total assets, and one case in the set of regressions where the value of deals is scaled by capital expenditures. However, there is also *no* positive association between the presence of corporate regional political ties and the spending on purchases of stakes in other companies.

Summarizing this set of results, we may say that, as in the previous regressions, Hypotheses 1 and 3 find support, but Hypotheses 2 and 4 find no support.

Please see Table Ch3-8 (c) and Table Ch3-8 (d)

An interesting result of the regression analysis which needs explanation is the *lower* odds of making an acquisitions deal for *regionally* connected firms compared to non-connected firms. One of the appealing speculative explanations is that in a "small world" of regional political and business elites, where everybody knows everybody, it is a bit risky to pursue visible acquisitions policies. Local property in most of the regions was privatized among the new owners during mass privatization program of the 1990-s and the maintenance of equilibrium of intra-regional power is very important for the major interested parties at the regional level.

5. Conclusion

I investigate the effect of corporate political connections on firm-level acquisitions activity by studying the sample of Russian non-state-owned firms within a period of 2001-2013. I find that firm's propensity to purchase stakes in other companies is positively associated with firm's connections to the central (federal) government. Ties to federal government are positively associated with the propensity to purchase stakes in the domestic market, but not the foreign markets. At the same time ties to federal government do *not* result in higher acquisitions activity in the course of privatization process.

Regional ties surprisingly do *not* lead to higher acquisitions activity, to the contrary the odds of purchasing a stake in another company are lower for the regionally connected firms than for non-connected firms.

My main contributions to the literature on corporate political connections and the literature on firm-level acquisitions activity are the following. *First*, I find that corporate political connections are indeed associated with the level of acquisitions activity of a bidder. *Second*, I find that political connections to central (federal) government are positively associated with bidder's acquisitions activity, and this effect is mostly driven by the acquisitions activity in the domestic market, *not* the foreign market. *Third*, I find that political connections are not necessarily associated with higher activity of a bidder in privatization affairs. *Fourth*, connections to regional governments may have an *adverse* effect on the level of acquisitions activity. The latter effect is unexpected. The appealing explanation is that regional acquisitions usually happen in a "small world" of regional business and political

elites. Members of these elites may consider visible acquisitions activity as an attempt to unbalance the equilibrium of wealth and power formed in the particular region. However, further investigation into this problem is required.

Among the *limitations* of my study it is possible to highlight the following:

1) Political connections in this study are determined based on previous employment of significant shareholders, CEOs, or board members (or their closest relatives) in the government. However, potentially connections can emerge through other means (without any employment in the government), for example through friendship, etc. Though these other means of building political connections may be difficult to observe, it would be good to take them into account in future studies.

2) Endogeneity issue is not resolved in this study. There might be situations when politically connected people would join firms which are more active in acquisitions. Though intuitively it is appealing that the political connections drive higher acquisitions activity of a firm, not vice versa, in fact the effect potentially might be of opposite direction.

3) It would be interesting to see in future studies whether politically connected bidder systematically overpays or underpays for the acquired targets. This will show whether connections to the government can be used by the acquiring firm to coerce the owner of the target to decrease the price of the company.

Future research should take into account the limitations stated above and also look deeper at the two issues unexpectedly found in this paper: (1) lack of positive

association between political connections and privatization deals; (2) negative association between regional political ties and firm-level acquisitions activity.

Future research can also extend its scope into other fields where corporate political connections may have other interesting effects, for example, procurement contracts, corporate investment policy, effectiveness of investment projects, taxation, etc.

6. Tables

Table Ch3-1. Coding individual's political connections

#	Question	Designation of the independent variable of interest	Yes	No
1	Did the person work on the *federal* level of the Russian government (both executive and legislative branches) since 2000 inclusive?	PF	1	0
2	Did the person work in *regional* governments of Russia (both executive and legislative branches) since 2000 inclusive?	PR	1	0

Note 1: By saying that a particular person worked in the *executive* branch of the *federal* government in Russia I mean that this person occupied a hierarchical position *not lower* than deputy head of the department in a ministry or in a major state-owned company. Several state-owned companies are considered equal to ministries as top-management positions in these companies generally produce the same level and quality of political connections as the corresponding positions in the ministries. In this paper I take into consideration the following state-owned companies: Gazprom, Rosneft, Russian Railways, Transneft, Rostekh, Oboronprom, Rosoboronexport, Rosenergoatom, Alrosa, Rosugol, Olimpstroy.

By saying that a particular person worked in the *legislative* branch of the *federal* government in Russia I mean that this person was either a senator in the Federation Council (the upper chamber of Russia's parliament) or a deputy in the State Duma (the lower chamber of Russia's parliament).

By saying that a particular person worked in the *executive* branch of one of the regional governments in Russia I mean that this person occupied a hierarchical position *not lower* than deputy head of the department in a regional administration or a regional ministry (if any).

By saying that a particular person worked in the *legislative* branch of one of the regional governments in Russia I mean that this person was a deputy of the corresponding regional legislative assembly.

Note 2: Taking into account traditionally strong family ties in the Russian environment, a particular person is also considered connected if one of his/her closest relatives (mother, father, brother, sister, son, daughter) worked in the government. This rule applies in case there is no indication in the public media and other publicly available sources that family relationship was fully broken.

Note 3: I study political connections established after year 2000 inclusive as personal composition of Russia's political elite changed significantly after 2000 with the election of the new President Vladimir Putin and the accompanying arrival of a new management team.

Table Ch3-2. Measures of bidder's acquisitions activity (dependent variables)

Designation of variable	Definition
Dummy dependent variables	
Deals	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake in another company (0-100%) in a particular year, "0" otherwise.
Deals_10to50	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake varying from 10% to 50% of voting stock (not including the upper limit) in another company in a particular year, "0" otherwise.
Deals_50to100	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake varying from 50% to 100% of voting stock (inclusive) in another company in a particular year, "0" otherwise.
Deals_dom	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake in another company (0-100%) in the domestic market in a particular year, "0" otherwise.
Deals_forgn	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake in another company (0-100%) in the foreign market in a particular year, "0" otherwise.
Deals_market	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake in another company (0-100%) in the free market (i.e. outside the privatization process) in a particular year, "0" otherwise.
Deals_privatiz	Dummy variable, equals "1" if an acquirer executes at least one deal presuming a purchase of a stake in another company (0-100%) which is sold by the government in a particular year, "0" otherwise.

Table Ch3-2, continued.

Designation of variable	Definition
Number of deals per year as dependent variables	
NumDeals	Number of deals presuming purchase of stakes in other companies (0-100%) executed by an acquirer in a particular year.
NumDeals_10to50	Number of deals presuming purchase of stakes in other companies varying from 10% to 50% of voting stock (not including the upper limit) executed by an acquirer in a particular year.
NumDeals_50to100	Number of deals presuming purchase of stakes in other companies varying from 50% to 100% of voting stock (inclusive) executed by an acquirer in a particular year.
NumDeals_dom	Number of deals presuming purchase of stakes in other companies (0-100%) in the domestic market executed by an acquirer in a particular year.
NumDeals_forgn	Number of deals presuming purchase of stakes in other companies (0-100%) in the foreign market executed by an acquirer in a particular year.
NumDeals_market	Number of deals presuming purchase of stakes in other companies (0-100%) in the free market (i.e. outside privatization process) executed by an acquirer in a particular year.
NumDeals_privatiz	Number of deals presuming purchase of stakes in other companies (0-100%) within the privatization process executed by an acquirer in a particular year.

Table Ch3-2, continued.

Designation of variable	Definition
Continuous dependent variables (value of deals)	
ValD_TA	Value of stakes in other companies (0-100%) purchased by the acquirer in a particular year scaled by acquirer's total assets average for the year.
ValD_TA_10to50	Value of stakes in other companies varying from 10% to 50% of voting stock (not including the upper limit) purchased by the acquirer in a particular year scaled by acquirer's total assets average for the year.
ValD_TA_50to100	Value of stakes in other companies varying from 50% to 100% of voting stock (inclusive) purchased by the acquirer in a particular year scaled by acquirer's total assets average for the year.
ValD_TA_dom	Value of stakes in other companies (0-100%) purchased by the acquirer in the domestic market in a particular year scaled by acquirer's total assets average for the year.
ValD_TA_forgn	Value of stakes in other companies (0-100%) purchased by the acquirer in the foreign market in a particular year scaled by acquirer's total assets average for the year.
ValD_TA_market	Value of stakes in other companies (0-100%) purchased by the acquirer in the free market (i.e. outside the privatization process) in a particular year scaled by acquirer's total assets average for the year.
ValD_TA_privatiz	Value of stakes in other companies (0-100%) purchased by the acquirer in the privatization process in a particular year scaled by acquirer's total assets average for the year.

Table Ch3-2, continued.

Designation of variable	Definition
ValD_CAPX	Value of stakes in other companies (0-100%) purchased by the acquirer in a particular year scaled by acquirer's capital expenditures.
ValD_CAPX_10to50	Value of stakes in other companies varying from 10% to 50% of voting stock (not including the upper limit) purchased by the acquirer in a particular year scaled by acquirer's capital expenditures.
ValD_CAPX_50to100	Value of stakes in other companies varying from 50% to 100% of voting stock (inclusive) purchased by the acquirer in a particular year scaled by acquirer's capital expenditures.
ValD_CAPX_dom	Value of stakes in other companies (0-100%) purchased by the acquirer in the domestic market in a particular year scaled by acquirer's capital expenditures.
ValD_CAPX_forgn	Value of stakes in other companies (0-100%) purchased by the acquirer in the foreign market in a particular year scaled by acquirer's capital expenditures.
ValD_CAPX_market	Value of stakes in other companies (0-100%) purchased by the acquirer in the free market (i.e. outside the privatization process) in a particular year scaled by acquirer's capital expenditures.
ValD_CAPX_privatiz	Value of stakes in other companies (0-100%) purchased by the acquirer in the privatization process in a particular year scaled by acquirer's capital expenditures.

Table Ch3-3. Control variables

Designation and predicted sign	Definition
ROE (+)	Net income before extraordinary items divided by average equity for the year
LEV (+)	Sum of total short-term and long-term debt (e-o-y) divided by total assets (e-o-y)
GROWTH (+)	Sales revenues in year t minus sales revenues in year t-1 divided by sales revenue in year t-1
CF_lesCAPEX (+)	Net cash from operations minus capital expenditures divided by average total assets for the year
SIZE (+)	Natural logarithm of total assets (e-o-y)

Tables Ch3-4 (a – d) Summary statistics of measures of acquisitions activity

Table Ch3-4 (a) Dummy dependent variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Deals	520	0.496	0.500	0	1
Deals_10to50	520	0.262	0.440	0	1
Deals_50to100	520	0.369	0.483	0	1
Deals_dom	520	0.431	0.496	0	1
Deals_forgn	520	0.167	0.374	0	1
Deals_market	520	0.485	0.500	0	1
Deals_privatiz	520	0.046	0.210	0	1

The table describes dummy dependent variables used in the study. Variable definitions are the following:

Deals = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake (0-100%) in another company in a particular year, "0" otherwise.

Deals_10to50 = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake varying from 10% to 50% of voting stock (not including the upper limit) in another company in a particular year, "0" otherwise.

Deals_50to100 = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake varying from 50% to 100% of voting stock (inclusive) in another company in a particular year, "0" otherwise.

Deals_dom = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake (0-100%) in another company in the domestic market in a particular year, "0" otherwise.

Deals_forgn = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake (0-100%) in another company in the foreign market in a particular year, "0" otherwise.

Deals_market = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake (0-100%) in another company in the free market (i.e. outside privatization projects) in a particular year, "0" otherwise.

Deals_privatiz = Dummy variable, equals "1" if an acquirer executes at least one deal in purchasing a stake (0-100%) in another company which is sold by the state in a particular year, "0" otherwise.

Table Ch3-4 (b) Number of deals of purchases of stakes in other companies

Variable	Obs	Mean	Std. Dev.	Min	Max
NumDeals	520	1.413	2.475	0	22
NumDeals_10to50	520	0.427	0.924	0	7
NumDeals_50to100	520	0.896	1.948	0	22
NumDeals_dom	520	1.117	2.110	0	22
NumDeals_forgn	520	0.296	0.836	0	7
NumDeals_market	520	1.365	2.441	0	22
NumDeals_privatiz	520	0.048	0.223	0	2

The table describes continuous dependent variables used in the study. Variable definitions are the following:

NumDeals = Number of deals of purchase of stakes (0-100%) in other companies executed by an acquirer in a particular year.

NumDeals_10to50 = Number of deals of purchase of stakes in other companies varying from 10% to 50% of voting stock (not including the upper limit) executed by an acquirer in a particular year.

NumDeals_50to100 = Number of deals of purchase of stakes in other companies varying from 50% to 100% of voting stock (inclusive) executed by an acquirer in a particular year.

NumDeals_dom = Number of deals of purchase of stakes (0-100%) in other companies in the domestic market executed by an acquirer in a particular year.

NumDeals_forgn = Number of deals of purchase of stakes (0-100%) in other companies in the foreign market executed by an acquirer in a particular year.

NumDeals_market = Number of deals of purchase of stakes (0-100%) in other companies in the free market (i.e. outside privatization projects) executed by an acquirer in a particular year.

NumDeals_privatiz = Number of deals of purchase of stakes (0-100%) in other companies within the privatization process executed by an acquirer in a particular year.

Table Ch3-4 (c) Value of acquisitions deals scaled by total assets

Variable	Obs	Mean	Std. Dev.	Min	Max
ValD_TA_w	450	0.025	0.064	0	0.330173
ValD_TA_10to50_w	450	0.006	0.018	0	0.095676
ValD_TA_50to100_w	450	0.017	0.052	0	0.264297
ValD_TA_dom_w	450	0.015	0.040	0	0.214283
ValD_TA_forgn_w	450	0.006	0.020	0	0.107922
ValD_TA_market_w	450	0.024	0.062	0	0.330173
ValD_TA_privatiz_w	450	0.000	0.001	0	0.006578

The table describes continuous dependent variables used in the study. Variable definitions are the following:

ValD_TA_w = Value of stakes in other companies (0-100%) purchased by the acquirer in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

ValD_TA_10to50_w = Value of stakes in other companies varying from 10% to 50% of voting stock (not including the upper limit) purchased by the acquirer in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

ValD_TA_50to100_w = Value of stakes in other companies varying from 50% to 100% of voting stock (inclusive) purchased by the acquirer in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

ValD_TA_dom_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the domestic market in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

ValD_TA_forgn_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the foreign market in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

ValD_TA_market_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the free market (i.e. outside privatization projects) in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

ValD_TA_privatiz_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the privatization process in a particular year scaled by acquirer's total assets average for the year, winsorized at 2%.

Table Ch3-4 (d) Value of acquisitions deals scaled by capital expenditures

Variable	Obs	Mean	Std. Dev.	Min	Max
ValD_CAPX_w	450	0.307	0.832	0	4.603684
ValD_CAPX_10to50_w	450	0.068	0.213	0	1.137099
ValD_CAPX_50to100_w	450	0.203	0.611	0	3.259374
ValD_CAPX_dom_w	450	0.186	0.510	0	2.43005
ValD_CAPX_forgn_w	450	0.062	0.234	0	1.349491
ValD_CAPX_market_w	450	0.292	0.811	0	4.521006
ValD_CAPX_privatiz_w	450	0.002	0.013	0	0.082679

The table describes continuous dependent variables used in the study. Variable definitions are the following:

ValD_CAPX_w = Value of stakes in other companies purchased by the acquirer (0-100%) in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

ValD_CAPX_10to50_w = Value of stakes in other companies varying from 10% to 50% of voting stock (not including the upper limit) purchased by the acquirer in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

ValD_CAPX_50to100_w = Value of stakes in other companies varying from 50% to 100% of voting stock (inclusive) purchased by the acquirer in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

ValD_CAPX_dom_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the domestic market in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

ValD_CAPX_forgn_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the foreign market in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

ValD_CAPX_market_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the free market (i.e. outside privatization projects) in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

ValD_CAPX_privatiz_w = Value of stakes in other companies (0-100%) purchased by the acquirer in the privatization process in a particular year scaled by acquirer's capital expenditures, winsorized at 2%.

Table Ch3-5. Summary statistics of control variables

Variable	Obs	Mean	Std. Dev.	Min	Max
ROE_w	520	0.167	0.234	-0.63185	0.851693
LEV_w	520	0.307	0.180	0.002853	0.771412
GROWTH_w	520	0.212	0.307	-0.44069	1.057182
CF_lesCAPEX_w	520	0.020	0.099	-0.24087	0.224942
SIZE	520	8.025	1.310	4.143027	11.60312

The table describes control variables used in the study. Variable definitions are the following:

ROE_w = Net income before extraordinary items divided by average equity for the year, winsorized at 2%.

LEV_w = Sum of total short-term and long-term debt (e-o-y) divided by total assets (e-o-y), winsorized at 2%.

GROWTH_w = Sales revenues in year *t* minus sales revenues in year *t-1* divided by sales revenues in year *t-1*, winsorized at 2%.

CF_lesCAPEX_w = Net cash from operations minus capital expenditures divided by average total assets for the year, winsorized at 2%.

SIZE = Natural logarithm of total assets (e-o-y).

Table Ch3-6. Summary statistics of political connections variables

Variable	Obs	Mean	Std. Dev.	Min	Max
PF	520	0.483	0.500	0	1
PR	520	0.398	0.490	0	1

The table describes political connections variables used in the study. Variable definitions are the following:

PF = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked on the federal level of the Russian government (both executive and legislative branches) since 2000 inclusive, "0" otherwise.

PR = Dummy variable, equals "1" if a firm in a particular year has at least one person (significant shareholder, board member, or CEO) who worked in regional governments of Russia (both executive and legislative branches) since 2000 inclusive, "0" otherwise.

Table Ch3-7 (a) Pairwise correlation coefficients (dummy dependent variables, number of deals as dependent variables; 520 firm-year observations)

	Deals	Deals_10to50	Deals_50to100	Deals_dom	Deals_forgn	Deals_market	Deals_privatiz	NumDeals	NumDeals_10to50	NumDeals_50to100	NumDeals_dom	NumDeals_forgn	NumDeals_market	NumDeals_privatiz	PF	PR	ROE_w	LEV_w	GROWTH_w	CF_lesCAPEX_w	SIZE
Deals	1																				
Deals_10to50	0,6	1																			
	0																				
Deals_50to100	0,77	0,22	1																		
	0	0																			
Deals_dom	0,88	0,6	0,67	1																	
	0	0	0																		
Deals_forgn	0,45	0,31	0,45	0,16	1																
	0	0	0	0																	
Deals_market	0,98	0,56	0,79	0,85	0,46	1															
	0	0	0	0	0																
Deals_privatiz	0,22	0,31	0,15	0,25	0,05	0,12	1														
	0	0	0	0	-0,27	-0,01															
NumDeals	0,58	0,46	0,6	0,59	0,48	0,58	0,2	1													
	0	0	0	0	0	0	0														
NumDeals_10to50	0,47	0,78	0,25	0,49	0,38	0,45	0,27	0,59	1												
	0	0	0	0	0	0	0	0													
NumDeals_50to100	0,46	0,17	0,6	0,46	0,36	0,47	0,12	0,9	0,22	1											
	0	0	0	0	0	0	-0,01	0	0												
NumDeals_dom	0,53	0,41	0,55	0,61	0,24	0,54	0,22	0,95	0,54	0,88	1										
	0	0	0	0	0	0	0	0	0	0											
NumDeals_forgn	0,36	0,31	0,4	0,2	0,79	0,37	0,02	0,57	0,38	0,47	0,28	1									
	0	0	0	0	0	0	-0,64	0	0	0	0										
NumDeals_market	0,56	0,44	0,6	0,57	0,48	0,58	0,11	1	0,57	0,9	0,94	0,58	1								
	0	0	0	0	0	0	-0,01	0	0	0	0	0									
NumDeals_privatiz	0,22	0,28	0,16	0,25	0,04	0,12	0,98	0,19	0,25	0,12	0,22	0,02	0,11	1							
	0	0	0	0	-0,34	-0,01	0	0	0	-0,01	0	-0,71	-0,02								
PF	0,08	0,14	0,04	0,04	0,06	0,07	0,06	0,02	0,09	-0,03	0	0,06	0,02	0,05	1						
	-0,07	0	-0,33	-0,39	-0,16	-0,1	-0,15	-0,61	-0,04	-0,56	-0,98	-0,15	-0,69	-0,25							
PR	-0,12	-0,11	-0,12	-0,11	-0,11	-0,1	-0,09	-0,18	-0,12	-0,16	-0,16	-0,12	-0,17	-0,09	0,22	1					
	-0,01	-0,01	-0,01	-0,01	-0,01	-0,02	-0,05	0	0	0	0	-0,01	0	-0,05							
ROE_w	0,05	0,06	0,06	0,04	0,1	0,04	0,06	0,08	0,08	0,04	0,06	0,1	0,08	0,05	0,03	-0,08	1				
	-0,26	-0,16	-0,17	-0,39	-0,02	-0,39	-0,15	-0,07	-0,06	-0,33	-0,2	-0,03	-0,08	-0,21	-0,46	-0,06					
LEV_w	-0,05	-0,12	-0,03	-0,08	-0,04	-0,05	-0,02	-0,07	-0,14	-0,01	-0,05	-0,06	-0,06	-0,03	0	0,12	-0,09	1			
	-0,25	-0,01	-0,56	-0,05	-0,35	-0,22	-0,69	-0,14	0	-0,86	-0,21	-0,2	-0,15	-0,48	-0,97	-0,01	-0,05				
GROWTH_w	0,12	0,06	0,13	0,14	0,09	0,13	0,03	0,19	0,09	0,17	0,17	0,12	0,19	0,02	-0,03	-0,04	0,28	-0,08	1		
	-0,01	-0,15	0	0	-0,03	0	-0,54	0	-0,04	0	0	-0,01	0	-0,63	-0,51	-0,41	0	-0,07			
CF_lesCAPEX_w	0,13	0,17	0,08	0,11	0,14	0,13	0,04	0,08	0,17	0	0,03	0,16	0,08	0,04	0,14	-0,06	0,28	-0,23	0,01	1	
	0	0	-0,06	-0,01	0	0	-0,31	-0,06	0	-0,95	-0,49	0	-0,07	-0,37	0	-0,15	0	0	-0,85		
SIZE	0,35	0,28	0,32	0,29	0,35	0,34	0,12	0,34	0,32	0,24	0,24	0,4	0,33	0,11	0,15	-0,06	0,06	-0,04	-0,05	0,28	1
	0	0	0	0	0	0	-0,01	0	0	0	0	0	0	-0,01	0	-0,14	-0,17	-0,33	-0,22	0	

Significance test p-values displayed below the coefficients (please ignore the sign "-" before the values)

Table Ch3-7 (b) Pairwise correlation coefficients (value of deals as dependent variables; 450 firm-year observations)

	ValD_TA_w	ValD_TA_10to50_w	ValD_TA_50to100_w	ValD_TA_dom_w	ValD_TA_forgn_w	ValD_TA_market_w	ValD_TA_privatiz_w	ValD_CAPX_w	ValD_CAPX_10to50_w	ValD_CAPX_50to100_w	ValD_CAPX_dom_w	ValD_CAPX_forgn_w	ValD_CAPX_market_w	ValD_CAPX_privatiz_w	PF	PR	ROE_w	LEV_w	GROWTH_w	CF_lesCAPEX_w	SIZE
ValD_TA_w	1																				
ValD_TA_10to50_w	0,55	1																			
	0																				
ValD_TA_50to100_w	0,92	0,25	1																		
	0	0																			
ValD_TA_dom_w	0,83	0,56	0,74	1																	
	0	0	0																		
ValD_TA_forgn_w	0,58	0,25	0,58	0,12	1																
	0	0	0	-0,01																	
ValD_TA_market_w	0,98	0,53	0,9	0,78	0,6	1															
	0	0	0	0	0																
ValD_TA_privatiz_w	0,2	0,26	0,13	0,29	-0,05	0,08	1														
	0	0	0	0	-0,31	-0,09															
ValD_CAPX_w	0,9	0,5	0,81	0,75	0,46	0,89	0,18	1													
	0	0	0	0	0	0	0														
ValD_CAPX_10to50_w	0,52	0,91	0,25	0,48	0,27	0,51	0,26	0,55	1												
	0	0	0	0	0	0	0	0													
ValD_CAPX_50to100_w	0,84	0,22	0,91	0,68	0,48	0,83	0,12	0,9	0,25	1											
	0	0	0	0	0	0	-0,01	0	0												
ValD_CAPX_dom_w	0,74	0,5	0,67	0,89	0,11	0,71	0,27	0,85	0,52	0,77	1										
	0	0	0	0	-0,02	0	0	0	0	0											
ValD_CAPX_forgn_w	0,56	0,24	0,55	0,09	0,94	0,58	-0,04	0,49	0,3	0,5	0,1	1									
	0	0	0	-0,05	0	0	-0,35	0	0	0	-0,03										
ValD_CAPX_market_w	0,88	0,48	0,8	0,72	0,47	0,9	0,08	0,99	0,53	0,89	0,82	0,5	1								
	0	0	0	0	0	0	-0,09	0	0	0	0	0									
ValD_CAPX_privatiz_w	0,2	0,26	0,14	0,3	-0,05	0,08	0,99	0,18	0,27	0,13	0,28	-0,04	0,09	1							
	0	0	0	0	-0,33	-0,07	0	0	0	-0,01	0	-0,37	-0,07								
PF	0,07	0,15	0,03	0,08	0	0,08	0,04	0,12	0,17	0,06	0,1	0,03	0,11	0,04	1						
	-0,12	0	-0,52	-0,08	-0,95	-0,11	-0,37	-0,01	0	-0,23	-0,04	-0,48	-0,02	-0,4							
PR	-0,04	-0,06	-0,04	-0,03	-0,09	-0,04	-0,03	-0,04	-0,07	-0,04	-0,04	-0,08	-0,03	-0,02	0,22	1					
	-0,37	-0,18	-0,38	-0,48	-0,05	-0,39	-0,58	-0,44	-0,11	-0,46	-0,42	-0,08	-0,5	-0,62	0						
ROE_w	0,12	0,02	0,12	0,08	0,09	0,11	0,09	0,12	0,02	0,13	0,09	0,07	0,12	0,08	0,04	-0,09	1				
	-0,01	-0,61	-0,01	-0,09	-0,05	-0,02	-0,04	-0,01	-0,6	-0,01	-0,06	-0,15	-0,01	-0,09	-0,41	-0,07					
LEV_w	0,1	0,05	0,07	0,09	0	0,1	0,01	0,06	0	0,04	0,04	0	0,06	0	0	0,13	-0,06	1			
	-0,04	-0,28	-0,14	-0,07	-0,96	-0,04	-0,76	-0,17	-0,97	-0,41	-0,39	-0,92	-0,17	-0,92	-0,94	-0,01	-0,2				
GROWTH_w	0,21	0,05	0,25	0,21	0,09	0,21	0,02	0,16	0,04	0,19	0,16	0,03	0,16	0,02	-0,02	-0,06	0,28	-0,1	1		
	0	-0,28	0	0	-0,06	0	-0,63	0	-0,36	0	0	-0,52	0	-0,6	-0,69	-0,22	0	-0,03			
CF_lesCAPEX_w	0,14	0,15	0,12	0,07	0,14	0,14	0,01	0,18	0,21	0,15	0,13	0,16	0,18	0,01	0,15	-0,05	0,28	-0,2	0,02	1	
	0	0	-0,01	-0,13	0	0	-0,9	0	0	0	-0,01	0	0	-0,89	0	-0,31	0	0	-0,7		
SIZE	0,16	0,19	0,12	0,07	0,24	0,15	0,02	0,13	0,18	0,1	0,06	0,23	0,12	0,02	0,15	-0,04	0,07	-0,05	-0,03	0,27	1
	0	0	-0,01	-0,13	0	0	-0,6	-0,01	0	-0,03	-0,17	0	-0,01	-0,7	0	-0,39	-0,13	-0,3	-0,53	0	

Significance test p-values displayed below the coefficients (please ignore the sign "-" before the values)

Table Ch3-8 (a). Results of the logistic regression

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
VARIABLES	Deals	Deals_10to50	Deals_50to100	Deals_dom	Deals_forgn	Deals_market	Deals_privatiz
PF	0.637***	1.062***	0.464*	0.482**	0.286	0.596**	0.444
	(0.00938)	(0.000164)	(0.0599)	(0.0485)	(0.382)	(0.0150)	(0.363)
PR	-0.551**	-0.845***	-0.449*	-0.461**	-0.575*	-0.462**	-1.200**
	(0.0187)	(0.00166)	(0.0605)	(0.0466)	(0.0734)	(0.0486)	(0.0252)
ROE_w	-0.519	-0.281	-0.329	-0.754	0.727	-0.695	1.104
	(0.315)	(0.637)	(0.512)	(0.163)	(0.198)	(0.190)	(0.348)
LEV_w	0.293	0.0712	0.922	0.0190	1.154	0.234	1.550
	(0.665)	(0.928)	(0.203)	(0.978)	(0.265)	(0.732)	(0.299)
GROWTH_w	0.588	0.259	0.361	0.453	0.658	0.521	1.270
	(0.174)	(0.582)	(0.386)	(0.276)	(0.197)	(0.227)	(0.156)
CF_lesCAPEX_w	0.437	2.213	0.0229	0.627	-0.161	0.614	0.162
	(0.701)	(0.131)	(0.985)	(0.589)	(0.918)	(0.590)	(0.948)
SIZE	0.912***	0.787***	0.905***	0.839***	0.962***	0.875***	0.483***
	(1.12e-10)	(4.20e-08)	(4.75e-09)	(9.52e-09)	(5.69e-09)	(3.02e-10)	(0.00898)
Constant	-4.579***	-5.028***	-5.977***	-3.969***	-9.947***	-4.411***	-5.914***
	(0.00132)	(3.19e-05)	(2.39e-05)	(0.00723)	(2.23e-10)	(0.00196)	(0.000110)
INDUSTRY DUMMIES	YES	YES	YES	YES	YES	YES	YES
YEAR DUMMIES	YES	YES	YES	YES	YES	YES	YES
Observations	513	508	498	513	455	513	352
r2_p	0.185	0.184	0.189	0.182	0.191	0.193	0.131
p	3.13e-10	3.09e-07	1.34e-07	4.90e-09	1.32e-05	1.72e-10	0.00124
chi2	106.6	85.51	87.96	99.03	69.50	108.2	50.45
Robust pval in parentheses							
*** p<0.01, ** p<0.05, * p<0.1							

This table presents results of the logistic regression analysis. Several measures of firm-level acquisitions activity were regressed on a number of political connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Tables Ch3-4 - Ch3-6).

Table Ch3-8 (b). Results of the OLS regression (dependent variables: number of deals)

VARIABLES	(1) NumDeals	(2) NumDeals_10to50	(3) NumDeals_50to100	(4) NumDeals_dom	(5) NumDeals_forgn	(6) NumDeals_market	(7) NumDeals_privatiz
PF	0.493**	0.254***	0.193	0.384**	0.109	0.468**	0.0254
	(0.0113)	(0.00292)	(0.182)	(0.0158)	(0.190)	(0.0143)	(0.275)
PR	-0.769***	-0.290***	-0.479***	-0.604***	-0.165**	-0.717***	-0.0513**
	(4.11e-05)	(0.000171)	(0.000762)	(0.000139)	(0.0223)	(9.69e-05)	(0.0159)
ROE_w	-0.146	0.0110	-0.262	-0.279	0.133	-0.172	0.0261
	(0.802)	(0.924)	(0.651)	(0.630)	(0.240)	(0.769)	(0.561)
LEV_w	1.744***	0.297	1.302**	1.397**	0.347*	1.703***	0.0406
	(0.00479)	(0.148)	(0.0143)	(0.0160)	(0.0633)	(0.00537)	(0.557)
GROWTH_w	0.937*	0.117	0.747*	0.763*	0.174	0.910*	0.0273
	(0.0590)	(0.468)	(0.0968)	(0.0966)	(0.216)	(0.0673)	(0.482)
CF_lesCAPEX_w	0.0216	0.773*	-1.073	-0.396	0.417	0.0347	-0.0131
	(0.984)	(0.0507)	(0.272)	(0.702)	(0.276)	(0.975)	(0.874)
SIZE	1.025***	0.325***	0.610***	0.694***	0.331***	1.000***	0.0252**
	(0)	(4.96e-09)	(4.11e-10)	(0)	(2.71e-09)	(0)	(0.0197)
Constant	-4.262***	-1.199**	-2.649***	-1.696	-2.566***	-4.205***	-0.0567
	(0.00107)	(0.0259)	(0.00629)	(0.143)	(4.84e-09)	(0.000920)	(0.577)
INDUSTRY DUMMIES	YES	YES	YES	YES	YES	YES	YES
YEAR DUMMIES	YES	YES	YES	YES	YES	YES	YES
Observations	520	520	520	520	520	520	520
Adjusted R-squared	0.308	0.232	0.217	0.247	0.206	0.303	0.004
Robust pval in parentheses							
*** p<0.01, ** p<0.05, * p<0.1							

This table presents results of the OLS regression analysis. Several measures of firm-level acquisitions activity were regressed on a number of political connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Tables Ch3-4 - Ch3-6).

Table Ch3-8 (c). Results of the OLS regression (dependent variables: value of deals scaled by total assets)

VARIABLES	(1) ValD_TA_w	(2) ValD_TA_10to50_w	(3) ValD_TA_50to100_w	(4) ValD_TA_dom_w	(5) ValD_TA_forgn_w	(6) ValD_TA_market_w	(7) ValD_TA_privatiz_w
PF	0.0138**	0.00703***	0.00514	0.0108***	0.00111	0.0143**	8.64e-05
	(0.0313)	(0.000227)	(0.321)	(0.00921)	(0.595)	(0.0208)	(0.496)
PR	-0.00720	-0.00506***	-0.00221	-0.00673*	-0.00158	-0.00633	-0.000135
	(0.222)	(0.00747)	(0.641)	(0.0749)	(0.394)	(0.270)	(0.228)
ROE_w	0.000867	-0.00415	-5.47e-05	-0.00664	0.00289	-0.00116	0.000391*
	(0.933)	(0.238)	(0.995)	(0.444)	(0.272)	(0.910)	(0.0854)
LEV_w	0.0737***	0.0126**	0.0480***	0.0400***	0.00655	0.0700***	0.000299
	(0.000784)	(0.0271)	(0.00306)	(0.00506)	(0.247)	(0.00128)	(0.283)
GROWTH_w	0.0504***	0.00493	0.0450***	0.0297***	0.00494	0.0495***	0.000240
	(0.00183)	(0.255)	(0.000943)	(0.00756)	(0.172)	(0.00221)	(0.291)
CF_lesCAPEX_w	0.0862**	0.0174**	0.0657**	0.0388**	0.0137	0.0839**	-0.000308
	(0.0142)	(0.0207)	(0.0243)	(0.0385)	(0.229)	(0.0169)	(0.424)
SIZE	0.0155***	0.00322***	0.0106***	0.00559***	0.00516***	0.0151***	7.05e-05
	(1.44e-06)	(0.000166)	(4.75e-05)	(0.00285)	(5.21e-06)	(2.07e-06)	(0.177)
Constant	-0.0949***	-0.0156***	-0.0714***	-0.0220	-0.0411***	-0.0937***	-0.000331
	(9.76e-05)	(0.00867)	(0.000400)	(0.135)	(3.47e-06)	(0.000108)	(0.334)
INDUSTRY DUMMIES	YES	YES	YES	YES	YES	YES	YES
YEAR DUMMIES	YES	YES	YES	YES	YES	YES	YES
Observations	450	450	450	450	450	450	450
Adjusted R-squared	0.153	0.073	0.144	0.089	0.114	0.156	0.005
Robust pval in parentheses							
*** p<0.01, ** p<0.05, * p<0.1							

This table presents results of the OLS regression analysis. Several measures of firm-level acquisitions activity were regressed on a number of political connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Tables Ch3-4 - Ch3-6).

Table Ch3-8 (d). Results of the OLS regression (dependent variables: value of deals scaled by capital expenditures)

VARIABLES	(8) ValD_CAPX_w	(9) ValD_CAPX_10to50_w	(10) ValD_CAPX_50to100_w	(11) ValD_CAPX_dom_w	(12) ValD_CAPX_forgn_w	(13) ValD_CAPX_market_w	(14) ValD_CAPX_privatiz_w
PF	0.187**	0.0754***	0.0511	0.101*	0.0128	0.183**	0.000973
	(0.0308)	(0.00165)	(0.408)	(0.0593)	(0.617)	(0.0309)	(0.532)
PR	-0.0857	-0.0631**	-0.0147	-0.0692	-0.0250	-0.0713	-0.00139
	(0.295)	(0.0118)	(0.796)	(0.159)	(0.290)	(0.370)	(0.307)
ROE_w	0.0813	-0.0579	0.0844	-0.0428	0.0326	0.0623	0.00393
	(0.633)	(0.166)	(0.499)	(0.697)	(0.312)	(0.711)	(0.101)
LEV_w	0.783***	0.104	0.455**	0.352*	0.0969	0.750**	0.00297
	(0.00898)	(0.126)	(0.0285)	(0.0662)	(0.168)	(0.0110)	(0.398)
GROWTH_w	0.571***	0.0680	0.441***	0.302**	0.0432	0.559***	0.00307
	(0.00768)	(0.188)	(0.00829)	(0.0258)	(0.313)	(0.00824)	(0.296)
CF_lesCAPEX_w	1.469***	0.369***	0.951***	0.772***	0.257*	1.421***	-0.00282
	(0.00234)	(0.00238)	(0.00836)	(0.00283)	(0.0569)	(0.00283)	(0.546)
SIZE	0.178***	0.0345***	0.116***	0.0628***	0.0591***	0.174***	0.000782
	(2.15e-05)	(0.00190)	(0.000129)	(0.00535)	(1.33e-05)	(2.49e-05)	(0.224)
Constant	-1.100***	-0.139**	-0.799***	-0.299*	-0.413***	-1.082***	-0.00378
	(0.000347)	(0.0432)	(0.000386)	(0.0680)	(3.73e-05)	(0.000331)	(0.373)
INDUSTRY DUMMIES	YES	YES	YES	YES	YES	YES	YES
YEAR DUMMIES	YES	YES	YES	YES	YES	YES	YES
Observations	450	450	450	450	450	450	450
Adjusted R-squared	0.128	0.061	0.114	0.059	0.100	0.127	-0.005

Robust pval in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This table presents results of the OLS regression analysis. Several measures of firm-level acquisitions activity were regressed on a number of political connection variables, control variables, industry dummies and year dummies (for detailed description of variables see Tables Ch3-4 - Ch3-6).

GENERAL CONCLUSION

Main findings

This dissertation concludes with the following main findings. *First*, Chapter 1 explores the effects of corporate political connections on firm profitability/performance and their main drivers. This chapter documents that: (1) connections to the executive (but not legislative) branch of the federal government improve firm performance and profitability (ROS, ROA, ROE, M/B) due to positive effects of these connections on operating profitability. At the same time connections to the executive branch of the federal government do not seem to affect significantly other important drivers of firm profitability such as financial leverage multiplier and tax effect ratio; (2) connections to regional governments bring more costs to the firms than benefits negatively affecting both operating profitability and overall profitability as politically connected boards and top management often do not follow the goals of profit or value maximization, are often characterized by relatively low professionalism, while at the same time local politicians are likely to impose pressure on connected firms making them create more jobs in their respective regions and contribute to regional economies in a few other ways.

Second, Chapter 2 examines the effects of corporate political and bank connections on firm-level cost of debt. This chapter shows that: (1) when a firm has a connection to a bank the cost of debt decreases, however, this decrease is driven only by connections to state-owned banks, not private banks. It is also important that

connection to a state-owned bank is maintained through the owner (significant shareholder) - connections through CEOs or board members do not result in the decrease of the cost of debt. The latter finding suggests that in a developing market economy like Russia major owners (significant shareholders) matter most for the determination of firm's policies while board members and top management have less impact on firm's commercial relations and development; (2) cost of debt decreases when firm's significant shareholders, or CEOs, or board members are *strongly* connected to the executive branch of the federal government (in the Russian institutional setting within 1990-2013 it is likely that the strongest connections were established in the years of mass privatization [1992-1999] when businesspeople and politicians had to form very close alliances in order to survive and win the fierce privatization battles. These ties were powerful enough to work well many years after they were established).

Finally, Chapter 3 examines the effect of corporate political connections on acquisitions activity of an acquiring firm. This chapter finds that: (1) firms connected to central (federal) government have a higher probability of purchasing a stake in another firm than non-connected firms, execute more acquisitions deals per year, and acquire greater values of stakes in other companies (scaled by bidder's total assets, or capital expenditures) than non-connected firms; (2) firms connected to regional governments have a lower probability of purchasing a stake in another firm than non-connected firms and execute less acquisitions deals per year than non-connected firms (one of the explanations of the latter result is that members of regional political and business elites may consider visible acquisitions activity on the regional level as a threat to the fragile balance of local powers and interests); (3) firms connected to central (federal) government have a higher propensity for purchasing stakes in other

companies located in the domestic market, but not in the foreign markets; (4) connections to federal government are not associated with higher propensity of acquisitions of privatized assets, surprisingly, firms connected to federal government actively acquire stakes in other firms in the open market.

Limitations

This dissertation employs the archival empirical method utilizing financial/accounting data on companies and personal data on firm's significant shareholders, board members, and CEOs. Although much effort has been made to mitigate the limitations inherent to this research method by following the "best practice" advised in a large body of archival empirical accounting, finance, and management literature, there are still some limitations that deserve attention.

First, there is a relative scarcity of non-state-owned non-financial firms in Russia which provide consolidated financial statements in accordance with IFRS or US GAAP for the period under investigation (2000-2013). After studying Forbes Rating of Russia's 200 largest (in terms of sales) non-state-owned firms for the year 2013, adding several companies from Expert RA Rating of Russia's 400 largest companies (2013), I end up with 73 companies for the period of 14 years (2000-2013). As for some companies the information on political connections or financial data is not available for the full period of 2000-2013, the number of observations is smaller than the result of multiplication of 73 companies by 14 years, and in most cases of analysis I end up with 528 firm year observations. This number of observations is enough to come up with reliable statistical conclusions, however many firms which

do not provide consolidated financial statements are *beyond* the scope of the analysis, though they too most likely have political connections.

Second, I make the list of board members and CEOs for each firm-year observation based on the reliable SKRIN Database[1], however the significant shareholders (major owners) have to be found by the search of Russia's three major business newspapers (Kommersant, Vedomosti, RBC-Daily), and four major business magazines (RBC, Kommersant-Dengi, Kommersant-Vlast, Forbes Russia). The necessity to determine owners through the business press is conditioned by the fact that at least until 2010-2011 real owners of Russian companies used to hide their identities behind the chains of firms registered in various offshore tax heavens and related jurisdictions (Chernykh, 2008). As a result, there is a chance of a bias with regard to the list of major owners, though objectively the Russian press is usually well informed on the final beneficiaries of the Russian companies with investigation journalism being one of the core specializations among major business newspapers and magazines.

Third, personal biographic data on firm's significant shareholders, board members, and CEOs is taken from several sources: Labyrinth database[2],

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[1] SKRIN (www.skrin.com) was founded in 1999 by Russia's National Association of Stock-Market Participants (NAUFOR), and by November 2013 SKRIN database contained information on 9,244,854 Russian companies, including historical information on their owners (if disclosed), board members and management teams. The main sources of information for SKRIN are the following organizations: Federal Service for the Financial Markets (www.fcsm.ru), Federal State Statistics Service (www.gks.ru), individual Russian companies, Depositary Clearing Company (www.dcc.ru), Russian and foreign exchanges, leading Russian media-sources.

[2] Database Labyrinth (www.labyrinth.ru) was created in 1992. By November 2013 it contained 42 thousand references compiled by Labyrinth specialists on the basis of reliable publicly available information obtained from Russia's federal and regional authorities, publications in mainstream media, documents of political parties, etc. as well as from 4,000 questionnaires personally filled-in by the businessmen and the politicians. The database contains 33 thousand biographies of Russian

Kommersant database (operated by one of Russia's leading business newspapers Kommersant), SKRIN, official web-sites of the corresponding companies and/or Viperson.ru[3]. The reliability of these sources is high, though potentially there might be cases when parts of person's biography which reflect personal political and/or bank connections are omitted in the records. This situation underestimates the presence and prevalence of political connections.

Fourth, political and bank connections in my dissertation are determined based on previous employment of significant shareholders, CEOs, or board members (or their closest relatives) in the government or banks. However, potentially connections can emerge through other means (without any employment in the government), for example through friendship, etc. Though these other means of building political connections may be difficult to observe, it would be good to take them into account in future studies.

Fifth, in two of the three chapters of this dissertation *endogeneity* issue is not resolved. There might be situations when politically connected people would join firms which are most successful and demonstrate high profitability and performance ratios, as well as high acquisitions activity. Though intuitively it is appealing that the political connections drive better performance and higher acquisitions activity of a firm, not vice versa, in fact the effect theoretically might be of the opposite direction.

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politicians, government officials, businessmen, journalists and other publicly important figures. All the references in Labyrinth are connected by hyperlinks which allow finding both explicit and implicit connections between people, organizations, and events.

[3] Viperson.ru is operated by Nonprofit Partnership "Scientific Information Agency "Heritage of the Fatherland" (Russian Certificate of registration of mass media FS © 77-32003 dated May 16, 2008).

Future research

This dissertation points to several avenues for future research. *First*, it is reasonable to study in detail mechanisms of negative relationship between some types of political connections (e.g. regional connections) and performance. As was mentioned before, negative association between political connections and firm performance is not a dominant view in the literature, though sometimes this negative association is found in empirical papers. It is interesting to find out whether the goals pursued by the politically-oriented selected managers are indeed "not necessarily in line with profit or value maximization" (Boubakri et al. 2008); whether politically connected firms indeed may be persuaded by politicians "to maximize employment and wages; promote regional development by locating production in politically desirable rather than economically attractive districts; ensure national security; provide low-prices goods and services; and produce unnecessary goods" (Boubakri et al. 2008; Bertrand et al., 2006). It is likely that the probability and the magnitude of negative effect of political connections on firm performance to a significant extent depends on the institutional setting in which the research is conducted, so it would be interesting to see whether and to which extent this negative effect exists in different models of corporate governance, e.g. Anglo-Saxon model, Continental European model, Japanese network model, Asian family based model, etc.

Second, it would be interesting to extend research into the field of the effects of political connections on bidder's acquisitions activity, particularly to see whether politically connected bidder systematically overpays or underpays for the acquired

targets. This will show whether connections to the government can be used by the acquiring firm to coerce the owner of the target to decrease the price of the company. It is also important to get a better understanding of the findings in Chapter 3 that there exists a negative association between regional political ties and firm-level acquisitions activity.

Third, when making research into the effects of political connections on firm-level operational, financial, and investment activities on the Russian soil, it is interesting to use the crisis in Russia's relations with the West in 2014 and the subsequent war of sanctions as an exogenous shock. Some businessmen and companies, allegedly close to Kremlin, were sanctioned by the US and the EU, while others were not. It would be interesting to see whether political connections mitigated or, to the contrary, aggravated the effect of sanctions on the Russian companies and under which circumstances and conditions these effects work.

Lastly, it is reasonable to extend the research into other fields where corporate political connections may have effects which ultimately influence firm performance and profitability. For example it is interesting to study the effects of political connections on firm's taxation, corporate investment policies (e.g. investments in PPE), procurement contracts, etc.

Studies into these areas would help portrait a more complete picture of the effects of corporate political connections on firm-level operational, financial, and investment activities.

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