



LUND UNIVERSITY  
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**Master in Economic History**

**‘Russia’s Economic Influence and its Effect on  
the Quality of Governance in CEE since 1996 –  
An Analysis’**

by

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*Abstract:* The recent geopolitical tensions between Russia and the West and the deconsolidation processes in Central and Eastern European (CEE) countries have recently sparked a debate on Russia’s foreign policy strategy. This thesis analyzes whether an increase in Russian economic activity in CEE is associated with a decline in the quality of governance in the region. As a proxy for the quality of governance, this article relies on the Worldwide Governance Indicators (WGI) provided by the World Bank. The hypotheses are tested using an unbalanced panel dataset that consists of 11 EU-accession states covering the period 1996-2015. The results obtained from the panel regression analysis support the hypothesis that the energy sector provides a channel through which Moscow is able to exercise political influence.

*Key words:* Quality of Governance, Power and Economic Interdependence, Energy, Russia, Central and Eastern Europe

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## I. Introduction

The interruption of gas supplies by Russia in 2009, the annexation of Crimea in 2014, and Moscow's role in the Syrian war have given rise to new debates – politically as well as in academia – about Russia's position and interests in the international community (e.g. Barnett and Duvall, 2005; Hancock, 2007; Fedorov, 2013). Looking at the global security system today, the past years not only have experienced the return of traditional military security issues, but were also characterized by the emergence of new security threats in non-traditional spheres such as cyber-warfare, finance and energy. The reoccurrence of the geopolitical tensions between Western states and Russia have especially contributed to this phenomenon (Ágh, 2016). In this context, Russia's political system and its foreign policy combined with the rise of populism and illiberalism around the world have focused the attention on the role of Moscow in promoting these tendencies (Fedorov, 2013; Oliker, 2017).

Various countries in Central and Eastern Europe (CEE) have experienced a slow-down or counter-development of their on-going democratization processes (Ágh, 2016). Initially, the consecutive eastern enlargement of the European Union in 2004, 2007 and 2013 and the associated democratic consolidation have pushed the CEE states towards a democratic transition (Blitz, 2011). However, the process of democratic consolidation might have been only a short-term phenomenon (e.g. Schimmelfennig and Sedelmeier, 2004; Blitz, 2011; Tomini, 2014). Two recent examples of deconsolidated governments are Hungary or Poland. The reasons for this evolution are twofold. First, internally, as a consequence of rising inequality and weak institutions within the states. Second, externally as a result of the global crisis and of a changing global security system (Ágh, 2016).

Based on the findings of the *Kremlin Playbook report* in 2016, the motivation of this thesis is to further analyze the relationship between Russia's economic activity and the declining quality of governance in CEE. Even though Russia's foreign policy has been debated extensively in previous studies, quantitative analysis has been limited. The *Kremlin Playbook report* (Conley et al. 2016) has been published by the Center for Strategic and International Studies (CSIS) and the Center for the Study of Democracy (CSD). The authors focus on analyzing the role of the Russian government in destabilizing the democracies in CEE. Conley et al. (2016) claim that the declining trend of democratic standards is due to an increase of Russian economic activity in the region which the authors compare to the spread of a virus. This "virus" infects democracies from within by working through economic relations (Conley et al. 2016). Ultimately, it leads to a degradation of democratic standards

and the weakening of Western credibility. Based on the five case study countries Hungary, Slovakia, Bulgaria, Latvia and Serbia, Conley et al. (2016) use democracy indicators of the Freedom House and a Russian economic footprint to empirically assess Russia's economic influence and its effect on the democratic system. The authors consider the domination of different strategic industries, as for example the energy sector, as the driving force through which Russia exerts its economic and political influence in Central and Eastern Europe. In addition, Foreign Direct Investment (FDI) and trade relationships are seen as important channels through which Russian actors can affect the CEE governments.

Another strand of the literature centers around the fact that Russia's economy is relatively weak since its main pillar of economic growth rests on natural resources and its associated market price (e.g. Hancock, 2007; Laenen, 2012). With China on the one hand as the economically dominating emerging economy and the sanctions implemented from the international community in response to the Kremlin's military aggression on the other hand, Russia's real economic influence might be limited.

For the following empirical analysis, the eleven EU-accession states Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and the Slovak Republic are used instead of only the five case study countries in the *Kremlin Playbook* approach. The analysis is based on data from the World Bank, the United Nations and the Organization for Economic Co-operation and Development (OECD). The data comprises information on bilateral trade flows between the CEE countries and Russia, Foreign Direct Investment (FDI) inflows by Russia, information on mineral fuels and oil imports and Gross Domestic Product (GDP) per capita. Contrary to the analysis in the *Kremlin Playbook report*, the quality of governance is reflected by the Worldwide Governance Indicators (WGI) instead of the Freedom House data. The reasons for using the WGI indices rather than the Freedom House data include a check for robustness of the *Kremlin Playbook results*, the comprehensibility of the aggregation method and the more intuitive interpretation of the percentile ranks. Next to a qualitative assessment of the research question, the thesis uses a fixed-effect within-group regression approach as well as the examination of the correlation between the WGI mean and the economic indicators to address Russia's potential economic influence. Previewing the results, this thesis finds support for the hypothesis that the Russian government has the ability to weaken the quality of governance in CEE via the energy sector. The results therefore reinforce previous literature on the possibility of exercising political influence through economic ties.

The remainder of the paper is organized as follows. Section II is separated into three parts. First, the term ‘good governance’ is discussed by looking at various concepts and interpretations. Second, different political theories on economic interdependence and the role of power in foreign politics are presented. Third, Russia’s imperial past and its relation to the CEE countries are evaluated based on international relations theory. Section III describes the key variables followed by the methodology and the specification of the model in Section IV. Section V includes the presentation of the results along with their critical discussion. The final section concludes.

## II. Theory

The *Kremlin Playbook report* (2016)<sup>1</sup> argues that Russia follows a strategy of influence in the Central and Eastern European countries to strengthen its power and to destabilize the established Western norms and democratic standards in the region with the overall goal of regaining its historical influential position. According to the authors, Russia exercises its influence through economic, political and societal relations which, in turn, weaken the quality of governance within the states. However, the report omits to discuss possible theories related to its underlying hypothesis and to place it therefore into a wider theoretical context. Furthermore, the study fails to provide an adequate definition of what is meant by democratic standards and governance. For this reason, the following section focuses first on the concept of “quality of governance” and how it can be determined. Afterwards, the role of power and economic interdependence as well as social exchange in international relations theory will be discussed in more detail to illustrate how states can exercise political influence. The last section finally considers the role of Russia’s historical past and its identity as a great power to establish a better understanding of its foreign policy behavior.

### II.1 Defining the Quality of Governance

The terms “quality of governance” and “good governance” became especially prominent within development economics and development assistance after the Cold War. Being one of the largest global donors, the World Bank was among the leading institutions to establish the notion of good governance as a criterion for receiving financial aid (Doornbos, 2001). Domestic policies and processes were perceived as a central problem for promoting economic growth in developing countries which is why political and institutional change was increasingly demanded from Western donors and investors (ibid.). Weiss (2000) identifies four reasons responsible for the intensified debate about the quality of governance in the 1990s. First, authoritarian regimes, as for example in Cambodia, were no longer supported by Western governments. Second, a democratization wave in Third World as well as in the post-Soviet countries occurred by introducing political reforms, elections, and civil rights with the goal to become attractive for investors. Third, the 1990s were characterized by a growing

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<sup>1</sup> It should be noted that the *Kremlin Playbook report* (2016) has been written from a Western perspective and the results might therefore be subject to bias due to a lack of neutrality.



influence of non-governmental actors who changed the political and international environment in which politics was no longer an exclusive subject of the domestic governments. Fourth, human rights and humanitarian intervention became more and more accepted with the result that the international community increasingly focused on the quality of governance to avoid future catastrophes. As emphasized by Weiss (2000), the initial introduction of good governance has mainly had the goal to change the economic situation in developing and former Soviet states. However, he recognizes that the United Nations have been changing the concept of good governance by aiming at improving governmental institutions, political structures, and democracy itself in the countries rather than just promoting economic development.

Since the introduction of the term “quality of governance”, its concept and interpretation have been highly-debated in scholarly research. If there is consensus among the different positions at all then that no universal definition of the meaning exists. The World Bank defines governance as “the traditions and institutions by which authority in a country is exercised” and determines three different areas (Kaufmann et al. 2010, p. 4). The first aspect relates to the type of political system, the second one to the effectiveness of the government and the third category incorporates the relationship within a state towards its laws and institutions. Based on this definition, the World Bank has created six indices called the “Worldwide Governance Indicators” (WGI), which will be used and discussed in more detail later in the paper, in order to establish a valid measurement of the governance quality in countries. However, the World Bank’s explanation of governance has been criticized by various scholars as being too broad or as lacking justification (e.g. Agnafors, 2013; Rothstein and Teorell, 2008). Other institutions, such as the United Nations or the OECD, also provide definitions of governance with the focus on emphasizing the role of resource management by political authorities whereas other prioritize human rights and the deepening of democracy (Weiss, 2000),

The academical discourse during the past years has given rise to different concepts of governance and its quality. Agnafors (2013) for example associates morality and public ethos as main components for defining the quality of governance. Minimal morality, the minimum moral level which is acknowledged and fulfilled by most communities, is the necessary threshold for governance to be categorized as “good”. Public ethos, on the contrary, signifies the morality standards which exist within the state and its local communities and which reach higher levels of morality than just the minimum requirement. If the public agents adjust their

public authority to the public ethos, the level of governance quality can increase accordingly. Besides these two elements, Agnafors identifies five additional components including decision making, benefits for the citizens, government effectiveness, the rule of law and the capacity of the government to remain stable. For him, the optimal concept of quality of governance includes that public authority is exercised by exceeding the minimum requirement of each component, that the best result possible is attained in any circumstance and that the components are in accordance with certain principles to the definition.

Rothstein and Teorell (2008), on the other hand, consider impartiality as a crucial determinant of good governance. Impartiality hereby refers to an attribute by which the government and state officials have to adhere their actions to. This implies that they need to treat all people alike and that they follow the laws and policies in their country. For Rothstein and Teorell (2008), democracy represents the “input side” of governance which corresponds to the structure of the political system whereas impartiality concerns the “output side”, thus the manner of exercising public authority. Consequently, democracy itself does not reflect a sufficient condition for quality of governance but has to be complemented by impartiality. In their paper, the two scholars also discuss other normative components of the quality of governance, as for example the rule of law and government effectiveness. However, they conclude that impartiality actually incorporates the rule of law and that impartiality is superior to effectiveness. It could even be a way to encourage this latter dimension of governance by reducing the use of corruptive practices. As emphasized by Rothstein and Teorell (2008), impartiality should be considered as a normative concept or idea that has taken a long time to develop and to be established in the principles of society.

The “input” and “output” sides of a political system have also been discussed by Berg-Schlosser (2004). According to him, liberal democracy is based on three dimensions: political competition, political participation and civil rights. These three elements are responsible for reassuring the general democratic orientation of the governmental system. The output side of a political system includes the history, culture and economy as well as the effectiveness of the democracy. Improving the quality of governance or democracy can then be further achieved through different functional and normative features such as a full inclusion of minorities and effective control mechanisms within the system. By discussing different indicators of democratization or governance, Berg-Schlosser (2004) concludes that these measurements have to be considered in a larger context and can, in return, give at least an idea about the quality of governance in different countries.

As mentioned by Doornbos (2001), the term “good governance” lacks a distinct interpretation and is difficult to conceptualize. However, most scholars in general recognize that the quality of governance concept needs to include different political and democratic elements in order to comply with the overall idea behind it. Similar to the described theories above, Weiss (2000) also attributes efficiency, accountability, transparency, rule of law and representativeness as necessary criteria for a “good” government. For Munck (2016), a political system should incorporate civil rights and socio-economic conditions next to basic components such as political freedom, equality and the exercise of public authority. In addition, various democratic standards should complement governance to assess the quality.

Considering the different possible aspects which are used to characterize the levels of governance, the Worldwide Governance Indicators (WGI) created by the World Bank seem to capture a wide range of the term. Besides various measurement issues, which will be further examined below, the six WGI dimensions (voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption) cover theoretically the most commonly discussed components of the quality of governance.

## II.2 Power and Economic Interdependence

The concept of power and its implications for a country’s foreign policy behavior is a highly-discussed topic among international relations theorists. Over the past years, different perspectives of how to conceptualize “power” and “interdependence” have evolved in political theory along with the establishment of the two dominating schools in the same field: realism and liberalism. Whereas the realist conception of power mainly emphasizes the state’s urge for power to secure its sovereignty and the importance of material resources in exercising this power, the liberal perspective rather depreciates power and focuses more on the influence of countries via (economic) interdependence (Barnett and Duvall, 2005; Keohane and Nye, 1987).

As acknowledged by various scholars, “power” not only operates in different manners, but the term has also been used interchangeably with expressions such as control, influence or authority (Dahl, 1991; Barnett and Duvall, 2005). In general, power can be considered as a type of influence, namely “coercive influence”, and concerns primarily conflictual relationships within international theory (Knorr, 1975). For the following discussion however, no distinction will be made between the terms power and influence or any other related expression of the same word family.

This confusion about the terminology is also reflected in the search for a consensus in the meaning of power. Even though the concept of power has been part of political analysis since a long time, scholars have not been able to come to an agreement on how to define it precisely. A general definition of power is provided by Barnett and Duvall (2005: p. 42) who characterize power as “the production, in and through social relations, of effects that shape the capacities of actors to determine their circumstances and fate.” Dahl (1991: p. 32) on the other hand rather highlights the change in behavior of an actor and specifies influence as a “relation among actors such that the wants, desires, preferences, or intentions of one or more actors affect the actions, or predispositions to act, of one or more other actors”.

Even though these definitions provide a broad understanding of influence, power, especially political power, faces overall a problem of measurement. Unlike economic resources, political power resources cannot be converted into a quantitative value which would help to classify it and make it comparable to different degrees of influence. A purely objective analysis of an actor’s power resources and its potential to influence other actors is therefore difficult to achieve (Baldwin, 1979). Nevertheless, most scholars agree that the influence of actors in international relations should be evaluated related to its weight, scope, and domain which Baldwin (1979) refers to as a “policy-contingency framework” (Knorr, 1975; Dahl, 1991; Barnett and Duvall, 2005). Dahl (1991) suggests that any discussion about power needs to address the domain, thus who is being influenced, and the scope, which refers to the area of influence. Knorr (1975) further considers the level by which the influenced actor is affected as relevant for power analysis or in other words the “weight” attributed to the state’s influential ability. Since power is such a complex concept and cannot be measured quantitatively, any analysis of power resources and power relations should be specified among these three characteristics (Baldwin, 1979).

In his book about *the Power of Nations*, Knorr (1975) underlines the importance to distinguish between two types of coercive power: putative and actualized. Here, the former relates to power as a means which implies to something actors can possess and acquire whereas the latter describes power as an effect, thus considering the achieved result of exercising influence. He regards the division of power into two concepts as a way of capturing reality more precisely. However, Baldwin (1979) criticizes this approach as rather adding to the confusion about quantifying power and as failing to consider potential influence in relation to scope, domain, and weight.

Focusing only on the control of one actor over another's actor behavior has been challenged by Barnett and Duvall (2005) who differentiate between two analytical dimensions: the type of social relations responsible for exercising influence and their specificity. Resulting from this consideration, the two scholars have defined four different forms in which power works in international relations: compulsory power, institutional power, structural power, and productive power. The first one emphasizes the role of material, symbolic and normative resources in shaping the relations between two or more actors intentionally or unintentionally. Compulsory Power therefore rests on the realist theory that actors use material resources to control or gain influence over another actor's action. The institutional power approach works through indirect and diffuse relations which are determined by formal and informal institutions between the actors. Literature related to this concept especially focuses on interdependence and dependence and how this enables actors to exercise power. Structural power, on the other hand, evaluates power as the structural position of an actor and how this defines his characterization as a social being. As mentioned by Barnett and Duvall (2005), a theory related to this approach is the world-system theory which divides the globe along the structure of production creating in turn different interests and identities as core, semi-periphery and periphery. The last concept of power, productive power, focuses on subjectivity in systems and on the production of identities through history, social norms and discourse. Consequently, power in international relation has to be analyzed by evaluating how established meanings, categories and identities have evolved. All four forms of power will be discussed in relation to Russia's influential capabilities in the following section.

By concentrating on the concept of power among nations, Knorr (1975) identifies three different forms of power which can be used to influence other states: military power, economic power, and political penetration. The annexation of Crimea and the tensions between the NATO and Russia since 2014 have illustrated how relevant military threats and actions still are in foreign policy and especially in the relations between Russia and the West. However, as Lanoszka (2016) discusses in his paper, the strategy Russia follows in former Soviet states rather reflects the use of hybrid warfare than simple direct military confrontation. According to him, irregular military means are applied to undermine the sovereignty of these countries and to manipulate their economy as well as their stability along with the possibility of using conventional warfare. Against this background and based on the results of the *Kremlin Playbook report* (2016), this thesis focuses on the economic and

political relations between Russia and CEE whereas military power as a form of control will be neglected in the further discussion.

As described by Knorr (1975), interstate relations can exist between governments as well as nongovernmental actors and can occur in form of direct or informal access. Similar to the described hybrid warfare tactic above, informal access involves the use of influential mechanisms from within the target country and can have the aim of weakening another government or state. In this regard, Knorr characterizes foreign policy as a resource-based approach to gain advantage of international relations and to pursue a state's interest. One major possibility to influence another country through informal access is by using economic penetration. This access to another economy can include business relations, foreign direct investment, financial aid and technical support. Knorr (1975) emphasizes the fact that exercising economic power towards weaker states has been a common foreign policy method to achieve political and economic control over other states throughout history. Economic influence can affect the political circumstances in a society by operating indirectly through class structures and by strengthening the political power of certain groups in another country. From an economic sociology perspective, any economic exchange is interconnected with political relations and leads to power struggles as a consequence (Bandelj, 2007).

The concept of economic power has already been discussed by Perroux (1950) in the 1950s which he refers to as the "domination effect". He states that a dominating country can influence another economy through the underlying channels of the market economy. However, he also emphasizes that the economic relations between states can only be correctly analyzed if the domination effect is separated into its economic causes and its historical background. This kind of economic interdependence and especially asymmetric interdependence has been central in analyzing international relations. Keohane and Nye (1987: p. 730) define interdependence as "situations characterized by reciprocal effects among countries or among actors in different countries" and note that asymmetrical interdependence can be considered as a source of power. Within the discussion about asymmetrical interdependence, scholarly debate has mainly focused on trade relations among countries and how they can affect the behavior of other states (Richardson and Kegley, 1980). As emphasized by Cooper (1972), even though economic or trade relations have often been associated with "low" foreign policy, it should rather be classified as belonging to "high" foreign policy issues since it plays an essential part in power and security politics. Trade relations are considered to be of special importance because they determine a state's capacity

to influence another country and they can be more easily measured in quantitative values (Richardson and Kegley, 1980). Nevertheless, Wagner (1988) criticizes the asymmetrical trade dependence theory by emphasizing that an unequal trade relationship does not necessarily lead to the possibility of gaining political influence over another state or, in other words, economic interdependence does not immediately indicate an ability to influence areas unconnected to trade.

As described by Papayoanou (1997), economic relations between states, and therefore interdependence, are not only based on trade flows but they also include financial interactions and foreign direct investments. Especially foreign direct investments (FDI) are seen as essential in exercising economic and political influence in other countries. From an economic sociology point of view, FDI transactions can be understood as “social relations, embedded in social structures, power, and culture” (Bandelj, 2007: p. 32). Based on this definition, FDI can be perceived as a means to gain informal access to another state and to politically penetrate its government from within. However, this only applies for the cases when business men act as representatives of their government and not as agents for their enterprise and is not reflecting modern business practices, according to Knorr (1975).

Another important power source which has been extensively discussed in international relations theory and which can be associated with a realist perspective is a state’s natural resource endowments. Whereas economic influence based on foreign direct investment might function mainly through informal political penetration, the possession of scarce natural resources presents the opportunity to exercise more direct political influence. Emphasis has specifically been placed on the role of oil and gas, or more general the energy sector, as a “putative” economic power tool (Knorr, 1975). As noted by Wübbecke (2012), asymmetric interdependence between oil-importing and oil-exporting countries can provide a government with the possibility to use its competitive advantage to pursue political interests by threatening with supply disruptions or price increases.

### II.3 Russia’s Foreign Policy and the Great-Power Image

After having discussed the general theories on power and economic interdependence in international relations theory, the influence of Russia on Central and Eastern Europe can now be evaluated more comprehensively. In the *Kremlin Playbook report* (2016: p.1), the authors describe Russia’s method of exercising influence in the CEE countries as a “network-flow model” which works through two channels: economic and political penetration. Similar to

Knorr's (1975) descriptions of power types, the study claims that Moscow's strategy is to undermine the foreign state via these two approaches to weaken the government and its democratic institutions. Economic influence is achieved through the domination of specific sectors, direct investment and trade relationships whereas political power is established through social relations to important actors in the foreign states. This type of power tactics has also been observed by Fedorov (2013) who perceives Russia's foreign policy as a manner to restore its original sphere of influence in the former Soviet area.

In addition to Knorr's description of power, the four classifications of power by Barnett and Duvall (2005) can further help to characterize the claimed influential tendencies of Russia towards the CEE countries. Both compulsory power and institutional power can be related to the trade relationships between Russia and Eastern Europe and to the asymmetric interdependence on energy resources such as oil and gas. The *Kremlin Playbook report* (2016) emphasizes that economic influence has mainly been exercised via the energy sector until 2008 before other sectors, as for example the finance industry, have been targeted as well. Newton (2010: p. 105) compares the employment of energy resources as a power tool to a "bilateral diplomatic weaponry" which is used to create asymmetric interdependence and to divide Europe. The energy relations between the EU and Russia has also been evaluated in a paper by Schmidt-Felzmann (2011).

*Table 1: Dependency on gas from Russia in CEE*

	<b>Gas from Russia, share of imports (2006)</b>	<b>Supply drop, January 2009</b>
Estonia	100 %	n / a
Lithuania	100 %	n / a
Latvia	100 %	n / a
Bulgaria	100 %	- 100 %
Slovakia	100 %	- 97 %
Romania	94 %	n / a
Czech Republic	73.9 %	- 71 %
Hungary	80 %	- 45 %
Poland	68.84 %	- 33 %
Slovenia	52 %	- 50 %

*Note: Information retrieved from Schmidt-Felzmann, 2011. In January 2009, Russia cut the gas deliveries running through Ukraine for about two weeks. The supply drop shows the reduction of imported gas from Russia during this period in percentage points. n / a indicates that no data for this country was available.*



Table 1 shows the gas imports from Russia to ten of the eleven CEE countries investigated by Schmidt-Felzmann (2011). The third column illustrates the effect of the two-weeks supply disruption by Russia in January 2009 due to disputes with the Ukraine. It can be observed that the CEE countries are highly dependent on Russia as an energy supplier. However, at the same time, Schmidt-Felzmann (2011) indicates that the affected states could compensate for the loss of gas by changing to other suppliers or by using other energy resources. As noted by Wübbecke (2012), the globally integrated resource market makes it more difficult to use energy resources for political influence, since Russia simultaneously relies on the income from oil or gas. Consequently, the compulsory and institutional power of Russia based on the natural resources might be limited. Fedorov (2013) considers the Russian ability of using gas as a power tool as being the most obvious economic instrument, but other methods such as direct investment and social relations as more effective for economic penetration.

Evaluating Russia from a structural and productive power approach, on the other hand, directs the focus towards the social structures and processes underlying its relationship with Central and Eastern Europe and its perception by the West. As defined by Barnett and Duvall (2005), structures indicate an actor's position in a system and can determine his capabilities as well as its self-perception. The urge of the Russian elite to change the international order from a U.S.-dominated one to multipolarity could be interpreted as the strive to gain structural power (Newton, 2010). Changing the global world order would eventually provide Russia with a more influential role in the international community. However, more important for understanding Russia's attitude towards CEE is the analysis of its productive power and thereby Russia's underlying norms, history and social identities, which are responsible for shaping its behavior.

The aim to increase its sphere of influence can be traced back to Russia's historical past and its self-perception as a great power. The pre-Soviet and Soviet era were characterized by expansive behavior embedded in the belief to protect the state's security and to establish an empire (Fedorov, 2013). From a constructivist perspective, the historical, political, cultural and social context of a nation determine its identity and, in return, create national interests (Hopf, 1998). Consequently, Russia's imperial past as well as its experience during the Soviet Union era probably shape its national identity today and therefore its interests in the post-Soviet area (Laenen, 2012). As noted by Laenen (2012: p. 27), "from Russia's identity

concept as regional hegemonial power automatically follows the need of spatial control over a sphere of interest”.

However, it is not only Russia’s great-power mentality influencing its foreign policy behavior, but also its security interests based on its geopolitical location and its historical experience with the West. Various Western powers including Sweden, France, and Germany, have invaded or have tried to invade the Russian territory for about 500 years without long-lasting success which has stimulated Russia’s urge for greatness and its perception of being surrounded by external threats (Newton, 2010). After the fall of the Soviet Union, Yeltsin tried to establish pro-Western policies with the aim to integrate Russia in the international community. Yet, after five years of economic crisis in the first half of the 1990s without any help from the West as well as a disintegrating Eurasian region increased anti-Western tendencies in Russia again (Hancock, 2007). The attempt to improve relations with the West and the Kremlin’s cautious foreign policy behavior was finally set back by the eastward expansion of NATO in 2004. This enlargement of Western territory was considered as being a direct military threat to Russia’s security and to its national interests (Fedorov, 2013). Trying to rebuild its sphere of influence in Central and Eastern Europe through economic and political penetration could therefore be related to Moscow’s security concerns based on its past experiences as well as its great power image. As cited by Newton (2010: p. 93), the following statement of Putin underlines the self-perception of Russia: “Russia was and will remain a great power. It is preconditioned by the inseparable characteristics of its geopolitical, economic and cultural existence. They determined the mentality of Russians and the policy of government throughout or history and they cannot help but do so now.”

Based on the discussion above and the results presented in the *Kremlin Playbook report* (2016), it appears as if Russia has been following a strategy of influence in CEE to weaken the region’s government systems and its democratic institutions. At the same time, the question arises in how far Moscow is able to exercise its power abroad since Russia might have the will but not necessarily the instruments to influence the CEE countries. To further analysis the Kremlin’s potential influential position in the region, this paper will empirically test the following hypotheses in the subsequent sections:

*H1: An increase of Russian Foreign Direct Investment is associated with a reduction in the WGI index in Central and Eastern Europe.*

*H2: A rise in Russian imports is associated with a decline in the Worldwide Governance Indicators (WGI) in CEE.*

*H3: The dependency of Russian oil imports is related to a decrease in the WGI index.*

### III. Data

To test the hypotheses described above, the following analysis is based on an unbalanced panel dataset that consists of eleven country cross-sections covering the period 1996-2015. The countries represent the eleven CEE-accession states from the EU-enlargement rounds in 2004, 2007 and 2013 which are: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and the Slovak Republic. Reflecting the quality of governance in each state, the Worldwide Governance Indicators (WGI) is used as the dependent variable. Data on Gross Domestic Product (GDP) per capita, Foreign Direct Investment (FDI) inflows, commodity imports and mineral fuels/oil imports from Russia are chosen as the independent variables. The time period is selected in relation to the starting year of the WGI index and the data availability of FDI inflows.

#### III.1 The Dependent Variable: The Worldwide Governance Indicators

Researchers have developed various indices during the past years with the aim to measure and compare the “quality of governance” or the “level of liberal democracy” among countries. Examples of indices which are used more frequently within the field of political science include an ‘index of democracy’ created by Vanhanen, the data series of the ‘Polity IV project’, the rankings of the Freedom’s House reports and, as already mentioned above, the Worldwide Governance Indicators (WGI) developed by the World Bank (Berg-Schlosser, 2004). In general, most democracy indicators have faced severe criticism from scholars based on reasons such as a lack of reliability, their applied aggregation methods, or a lack of content validity (Thomas, 2010; Coppedge et al. 2011). The problems of creating reliable governance measurements can be traced back to the discussed absence of a consensus in defining the quality of governance which makes it difficult to develop a meaningful proxy. Nevertheless, as noted by Berg-Schlosser (2004) and Langbein and Knack (2010), the use of good governance indicators in empirical analysis might be limited but they still provide some relevant information about a country’s political system and can indicate differences among nations.

The *Kremlin Playbook report* (2016) uses data provided by Freedom House in order to analyze the effect of Russian economic influence on the level of democracy within Central

and Eastern European countries. Divided into three indicators, one regarding the corruption level, another one concerning juridical independence and the third one as proxy for media independence, the study evaluates the democratic development of the five case countries Hungary, Slovakia, Bulgaria, Latvia, and Serbia. As explained by the authors, the reasons for applying these proxies are the comprehensibility of the collected data and the availability as well as the comparability of the indices.

This paper, however, bases its analysis on the Worldwide Governance Indicators (WGI) constructed by the World Bank<sup>2</sup> for a number of reasons. First, the results in the *Kremlin Playbook report* could be related to the usage of the Freedom House data since democracy indicators depend on expert perceptions and are therefore subject to bias (Langbein and Knack, 2010). The application of another democracy or governance index, on the other hand, might result in a different outcome. Second, the aggregation method of the WGI is the most comprehensible and informative since over 30 individual data sources are used for creating the indicators. Information on the quality of governance is drawn from non-governmental organizations, public sector organizations, household and firm surveys and commercial business information providers leading to a diversity of sources (Kaufmann et al. 2010). Among these sources, the Freedom House indices are also included and are thus part of the WGI measurements. Third, the margins of errors of the estimated indicators can be calculated which allows for corrections in interpreting the quality of governance level in each country (ibid). And finally, the aggregate WGI proxies are reported in percentile rank terms, with 0 being the lowest and 100 the highest rank, next to its unit scale ranging from -2.5 to 2.5. The publication of the percentile ranks facilitates the interpretation and the classification of the liberal democracy level within countries compared to the Freedom House approach of a 1 to 7 score (Berg-Schlosser, 2004; Kaufmann et al. 2010).

The Worldwide Governance Indicators are divided among six different dimensions of governance: Voice and Accountability (VA), Political Stability and Absence of Violence/Terrorism (PV), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC). These dimensions can be associated with three overall areas of governance related to the type of political system, the perceived level of effectiveness and the compliance to the law in society and politics within a country

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<sup>2</sup> source: <http://data.worldbank.org/data-catalog/worldwide-governance-indicators>

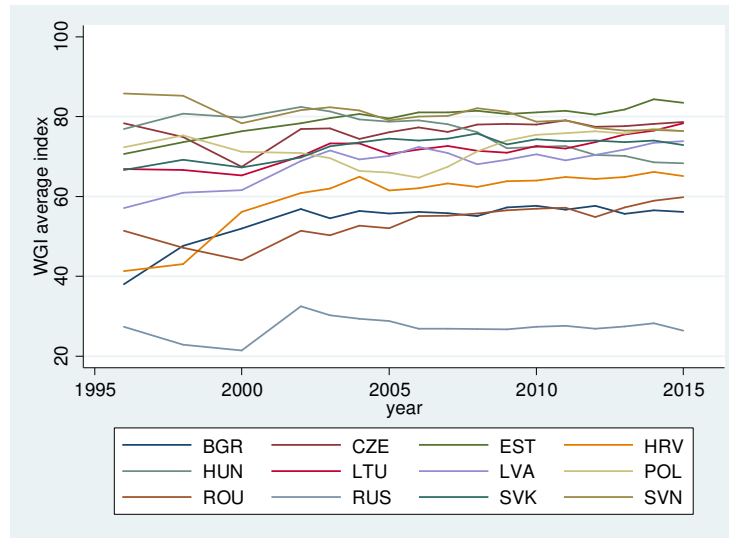
(Kaufmann et al. 2010). Voice and Accountability hereby refers to the selection process and the level of freedom in a country whereas PV comprises the probability of a selected government to be overthrown. The dimension Government Effectiveness can be defined as the perception of the prevailing quality of the services offered by the government and their level of independence from political pressures. Related to this, Regulatory Quality captures the impression of the government's ability to encourage economic development. The last two dimensions are based on the quality of jurisdiction and the rate of crime and violence in the state as well as the level of corruption when power is exercised (Kaufmann et al. 2010).

To better understand the meaning of the Worldwide Governance indicators, it is important to take a look at the construction of the indices. As described by Kaufmann et al. (2010), all the variables identified in the secondary data sources are clustered among the six dimensions and are rescaled for reasons of comparison. Based on an unobserved component model (UCM), which assumes that each individual data source variable is a linear function of the clustered unobserved governance dimension, governance estimators are constructed. Taking the weighted averages of the rescaled estimates results in the final governance score for each country ranging from -2.5 to 2.5 (Kaufmann et al. 2010). This construction method relies on the assumptions of a normally distributed error term which has zero mean and a variance differing across indicators but not among countries, of an error term independent across source variables and of a global governance average remaining the same in each period which implies that no change occurs (ibid.).

Langbein and Knack (2010) emphasize that the WGI indices cannot necessarily be considered as measuring six separate concepts due to high inter-correlation, the lack of construct validity and the lack of support in categorizing the six indicators into three different areas. Drawing conclusions about a state's capabilities or shortcomings regarding "good governance" based on the indicators can therefore be problematic. However, the two scholars acknowledge that even though a strict distinction between the dimensions is difficult, the WGI still provide relevant information on the level of governance within a country and on differences among nations.

Since the aim of this thesis is to only broadly assess possible effects on the quality of governance within CEE, the six indices will be averaged together into one general index for the further analysis. This approach has been suggested by Langbein and Knack (2010) and has been used by other researchers before (e.g. Al-Marhubi, 2004).

Figure 1: Mean of World Governance Indicators for the period 1996-2015



Country abbreviations:

*BGR = Bulgaria; HUN = Hungary; ROU = Romania; CZE = Czech Republic; LTU = Lithuania; RUS = Russia; EST = Estonia; LVA = Latvia; SVK = Slovak Republic; HRV = Croatia; POL = Poland; SVN = Slovenia.*

Figure 1 illustrates the development of the computed WGI average for the eleven EU-accession states and Russia since 1996. As demonstrated by the graph, the level of governance in Central and Eastern Europe remains relatively stable and does not increase or decrease substantially. Some improvement seems to take place following the year 1996, the first year for which the WGI proxies are available. This could be due to the democratic consolidation processes in CEE or simply to changes in the underlying data sources (Kaufmann et al. 2010, Blitz 2011).

In table 2, the WGI averages for each country are presented and sorted by their descending values. Slovenia appears to have the highest “good governance” score compared to the other countries whereas Russia only reaches a low score. The result of Russia is not surprising since its political system is often compared to an autocracy and power has increasingly been centralized by Putin and his government (Oliker, 2017). Slovenia, on the contrary, has often been perceived as the leading example in transforming a former communist state to one with a high quality of governance by using democratic consolidation (Blitz, 2011). This perception of Slovenia is reflected in the calculated WGI score. Nevertheless, as claimed by Blitz (2011), Slovenia’s judiciary system is not effective and fails to appropriately protect its citizen’s rights in many cases.

The reason for Croatia, Bulgaria, and Romania to only achieve a score between 50 and 60 could be related to the fact that these three countries are the newest members within the EU and have not yet fully established stable democratic institutions. At the same time, this result is somewhat conflicting to the Copenhagen criteria which candidate countries need to fulfill in order to join the European Union. These criteria include among others stable democratic institutions, the rule of law and the adherence of democratic values (European Commission, 2016). Consequently, it would be expected that EU members are able to reach a higher quality of governance score.

*Table 2: WGI country-average during the period 1996-2015 in CEE*

<b>Country</b>	<b>WGI Average</b>
Slovenia	80.152
Estonia	79.754
Czech Republic	76.710
Hungary	75.717
Slovak Republic	72.587
Poland	72.110
Lithuania	71.863
Latvia	68.780
Croatia	60.634
Bulgaria	54.458
Romania	53.924
Russia	27.286

*Note: The WGI (average) index reaches from 0 to 100. 90th-100th percentile equals extremely high; 75th-90th percentile equals high; 50th-75th percentile equals around average; 25th-20th equals low; 10th-25th percentile equals very low and 0th-10th percentile extremely low quality of governance (World Bank, 2007).*

Table 3 reflects the descriptive statistics of all the variables, which will be used later for the analysis, in their original form. However, Russia is only included for complementary purposes in the statistics and will be excluded in the actual regression model. As can be seen, the inclusion or exclusion of Russia in the Worldwide Governance Indicator (WGI) index changes the mean of the region significantly. This result is not surprising considering the great difference between the quality of governance in Central and Eastern European countries and Russia illustrated in figure 1 and table 2.

Table 3: Descriptive statistics of dependent and independent variable(s)

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>	<b>Russia included</b>
WGI mean	66.17	15.10	21.42	85.77	yes
WGI mean	69.70	9.88	38.04	85.77	no
Imports	3.36	4.27	0.15	27.96	no
FDI inflow	0.006	0.31	-2.40	1.30	no
Oil imports	2.65	3.35	0.03	20.58	no
GDP p.c.	9,888.16	5,941.07	1,208.85	27,501.81	yes
GDP p.c.	10,141.38	5,962.07	1,208.85	27,501.81	no

Note: WGI mean reflects an index ranging from 0 to 100; Imports and oil imports are given in billion US\$; FDI inflows in million US\$; GDP per capita in current US\$.

### III.2 The Independent Variables

Conley et al. (2016) describe Russia's strategy of influence in Central and Eastern Europe as mainly working via two channels: economic and political penetration. Since it is difficult to quantitatively evaluate the creation and deepening of relationships among certain actors, the political influence can only be estimated through qualitative and case-based analysis. This thesis, therefore, rather focuses on the second channel of influence, the economic one, by using empirical evidence on bilateral economic relations.

#### *Commodity Imports*

To reflect the trade relations between the CEE countries and Russia, data on imports in goods from Russia provided by the United Nations Commodity Trade Statistics Database<sup>3</sup> (UN Comtrade) are used. The UN Comtrade database comprises statistics on imported and exported goods concerning nearly 200 countries or regions. In addition to the total amount of imports and exports between two countries, the UN Comtrade database also publishes more specific details on traded commodities. Consequently, information on traded mineral fuels, oils, and their distillation products can be obtained an estimation for the dependency on Russian natural resources. All data are available in current US dollars, which have been calculated by an average annual exchange rate.

<sup>3</sup> source: <https://comtrade.un.org/labs/BIS-trade-in-goods/?reporter=100&partner=643&year=2014&flow=2>



For illustrative purposes, figure 1A in the Appendix shows the development of imports and of natural resource imports from Russia since 1996. Both graphs follow a similar pattern over the period which reflects the fact that mineral fuels and oil imports are the major trading commodities between CEE and Russia. Furthermore, it can be observed that the imports from Russia rose substantially until the financial crisis in 2008. However, the imports recover quickly and continue to increase again until 2014 when Russia annexed the Crimea. The largest purchaser of imports from Russia among the CEE countries is Poland which can be related to the fact that Poland has experienced strong economic growth in the past years and could avoid going into recession after the recent financial crisis (Bogdan et al. 2015). On average, the value of imported goods amounts to 3.36 billion US Dollars per year (table 3), with 27.956 billion US Dollars being the highest value from Poland in 2012. Since the use of the natural logarithm facilitates the interpretation of the regression results and reduces problems with heteroskedasticity (Gujarati and Porter, 2009), the natural logarithm of the total value of imports and the mineral fuels and oil imports will be employed in the following analysis.

### *Foreign Direct Investment (FDI) inflow*

Statistics on Foreign Direct Investment (FDI) inflows are based on data from the United Nations Conference on Trade and Development<sup>4</sup> (UNCTAD) as well as from the OECD<sup>5</sup>. The OECD defines Foreign Direct Investment as being a type of cross-border transaction conducted by an agent in one country with the aim to exercise influence and institute his strategic long-term interests in a foreign company located in a different economy. The bilateral FDI statistics used for this analysis reflect FDI inflows, which are equivalent to net liabilities, from Russia to each of the eleven EU-accession states in Central and Eastern Europe. In general, FDI inflows of the reporting country incorporate data on loan repayments, intra-company loans, reinvested earnings, and equity capital (OECD, 2008). Having a negative value of FDI inflow can be the result of the investor selling some of his acquired equity to another investor or the enterprise invested in lowers his net liabilities by repaying the investor. Other possibilities are changes in intra-company loans or that the direct investment corporation produces losses (ibid.). Since the natural logarithm cannot be applied for negative values, the FDI inflows will be included in its level form for the analysis below.

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<sup>4</sup> source: <http://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics-Bilateral.aspx>

<sup>5</sup> source: [https://stats.oecd.org/Index.aspx?DataSetCode=FDI\\_FLOW\\_PARTNER](https://stats.oecd.org/Index.aspx?DataSetCode=FDI_FLOW_PARTNER)

As can be seen in table 3, the average FDI inflow per year amounts to 0.06 million U.S. Dollar with the highest level of 1,301 million U.S. Dollars corresponding to Hungary in 2009. According to Conley et al. and their *Kremlin Playbook report* (2016), Russian investors have increasingly provided foreign direct investment for the domestic economies in Central and Eastern Europe which in turn can be used as a foreign policy tool to exercise influence. Figure 2A in the Appendix presents the FDI inflows from Russia for each EU-accession state during the years 1998 to 2012. As can be seen in the different graphs, the levels of FDI inflows appear to have remained the same in all of the countries except for Hungary, Lithuania, and Poland who show some variation in the time line. Based on figure 2A, a strong visible increase in Russian foreign direct investment in CEE cannot be confirmed.

### *GDP per capita*

The last variable necessary for the analysis is the Gross Domestic Product (GDP) per capita. Even though GDP per capita does not give any indications about bilateral economic relations, it should be included in the model as a control variable since it has often been argued that a country with higher per capita income is also more likely to accomplish better governance (Al-Mahrubi, 2004). For this purpose, data on GDP per capita is retrieved from the World Bank database<sup>6</sup>. As presented in table 3, the highest GDP per capita amounts to 27,501.81 current US Dollars and was achieved by Slovenia in 2008 whereas the lowest value of 1,208.85 US Dollars can be associated with Bulgaria in 1996. To reduce heteroscedasticity in the model, the variable will also be included in the model below by taking its natural logarithm.

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<sup>6</sup> source: <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

## IV. Methodology

### IV.1 Method and Model Specification

Within empirical research, different possibilities of estimating a regression model based on panel data exists. The first option is to use a pooled ordinary least-square (OLS) regression model. This method assumes that the cross-sectional units are homogenous and therefore estimates a common constant for all countries (Asteriou and Hall, 2011). However, this would imply that there are no differences among the states which does not correspond with reality. Not only are the CEE countries very diverse in their economic performance, but also in respect to their history, culture, political systems and other individualities. Moreover, the application of a pooled OLS regression may result in the error term being correlated with some of the independent variables in the model which would not only bias the estimations but render them inconsistent. The correlation can be due to the so-called unobserved or heterogeneity effect resulting from time-invariant variables which are not measurable but which can affect the outcome of the regression (Gujarati and Porter, 2009). Even though table 4 in the empirical analysis section presents the pooled OLS regression results, it is not the most suitable method for the analysis.

To take the heterogeneity effect in the regression into account and to avoid inconsistent estimators, another possibility for panel data analysis is to either use fixed effect within-group (WG) or random effect estimates. By using a fixed effect WG model, mean-corrected values of the dependent and independent variables are calculated with which a pooled OLS regression is run. This method produces consistent coefficients due to the elimination of the country individualities through the differencing procedure and their inclusion in the intercept term. In addition to the country-fixed effects, this approach also allows to include time dummies to account for unobserved time shocks in the quality of governance. Nevertheless, the fixed effect WG regression model has the disadvantage that no statement about the effect of time-invariant variables can be made (Gujarati and Porter, 2009).

The random effect method, on the contrary, treats the constant as a random variable using a common mean value of the cross-section units and incorporates the heterogenous characteristics of the intercepts in the error term. On the one hand, this method has the advantage that time-invariant dummy variables can be included in the model but on the other hand, it is likely that correlation between the error term and the independent variables occurs. In order to find out which of the two methods is most suited for the analysis, the Hausman test

can be applied. Using this test for the two models presented below leads to the result that the null hypothesis of no substantial difference between the estimated coefficients can be rejected (both p-values = 0.006). This indicates that the random effects are probably correlated with the explanatory variables which in turn suggests the application of fixed effects. Based on the three hypotheses raised above and the discussed possibilities of using panel data regression, the two following models are hence estimated:

$$(I) Y_{it} = \alpha_1 + \beta_1 FDIinflow_{it} + \beta_2 (\log) Imports_{it} + \beta_3 X_{it} + \vartheta_i + \mu_t + u_{it}$$

$$(II) Y_{it} = \alpha_1 + \beta_1 FDIinflow_{it} + \beta_2 (\log) Oil\_imports_{it} + \beta_3 X_{it} + \vartheta_i + \mu_t + u_{it}$$

where  $Y_{it}$  is the dependent variable and reflects the WGI index of country  $i$  at time  $t$ . In both models, the variable  $FDIinflow_{it}$  represents the Foreign Direct Investment inflows from Russia and  $X_{it}$  a vector of covariates. The difference between the two models is presented by the two import variables  $(\log) Imports_{it}$  and  $(\log) Oil\_imports_{it}$ . The first model (I) includes the natural logarithm of total goods imported whereas the second one (II) uses the logarithm of mineral fuels and oil imports instead. Since mineral fuels and oil imports are incorporated in the total value of commodity imports, the simultaneous estimation in the same model would lead to correlation problems which is why two separate models are specified. Finally, in each model,  $\alpha$  is a constant,  $u_{it}$  reflects the random error term,  $\vartheta_i$  represents country-fixed and  $\mu_t$ , respectively, time fixed effects.

Intuitively, the introduction of lags might help to improve the model considering that an increase in Russian economic activity in one year probably leads to a delayed effect on the quality of governance. Due to several limitations and the structure of the data, this method cannot be applied here. For this reason, the two-way fixed effect models presented above are kept relatively simple by only including two main variables of interest, a set of covariates<sup>7</sup> as well as country- and time fixed effects.

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<sup>7</sup> In this case, the set of covariates only includes the logarithmic value of GDP per capita.

## IV.2 Model Limitations and Assumptions

The two models specified above face various limitations and problems which will be discussed in the following.

### *Stationarity*

Before the actual regression analysis can be conducted, the variables should be tested for their stationarity properties. As emphasized by Asteriou and Hall (2011), examining panel data in respect to their stationarity has become increasingly relevant for empirical research and should not be ignored. Stationary data implies that the series' mean, variance and covariance do not change over time which means that they remain constant over the observed period. Using panel data in which the individual series are characterized by the same stationarity properties allows to draw more meaningful conclusions compared to working with differing individual series (Gujarati and Porter, 2009).

Table 1A in the Appendix section demonstrates the result of the unit-root tests. All independent variables have been tested by using the Pesaran CPIS test which also allows for cross-sectional dependence. The advantage of the CPIS for panel data analysis is that it is suitable for unbalanced panels and that it performs well even in small samples (Baltagi, 2005). The dependent variable, the mean of the Worldwide Governance Indicators (WGI), has not been examined for stationary due to the fact that it reflects an index reaching from 0 to 100. Moreover, the transformation of the WGI index into logarithmic values would render the interpretation too complex and difficult. As shown in table 1A, for both series, GDP per capita and the oil imports, the null hypothesis of the CPIS test that all cross-sections are non-stationary can be rejected if one lag is included. The data series on goods imports, however, needs the inclusion of three lags in order for it to have at least one stationary cross-section. For the Foreign Direct Investment (FDI) series, on the contrary, the null hypothesis of the CPIS test cannot be rejected implying that all cross-sections in the FDI series are non-stationary. Since many values in the FDI series are negative, a logarithmic transformation is not possible. Consequently, the only alternative would be to take the first difference of the FDI series to make it stationary reflecting the absolute change from one year to the next.

However, given the fact that the underlying sample is a relatively small panel with only eleven cross-section units and few time dimensions, stationary data properties are not as crucial for panel regression analysis (Asteriou and Hall, 2011). Moreover, the employment of fixed effect within-group estimates already accounts for series integrated of order one by de-

meaning the observations. Therefore, the stationary properties can be neglected for the specification of the model.

### *Heteroskedasticity and autocorrelation*

Other problems that can occur by estimating the specified regression models above include autocorrelation and heteroskedasticity. Two essential assumptions of a classical linear regression model relate to the variance of the error term being constant and to the disturbance terms being uncorrelated with each other. In case these two assumptions are violated, the estimated coefficients are no longer efficient (Gujarati and Porter, 2009). Reasons for the presence of heteroskedasticity can for example be outliers in the observations or the misspecification of the model. Autocorrelation on the other hand can result, among other things, from specification bias or the non-stationarity of the data (ibid.). As can be seen in the scatter plots of the residuals in the appendix (figure 3A), the estimated regression models seem to follow a pattern and are therefore subject to problems with both autocorrelation and heteroskedasticity. For this reason, robust standard errors will be applied for the final model. Using fixed effect within-group estimation additionally helps to reduce issues with autocorrelation as a result of its differencing method.

### *Endogeneity, Omitted Variable Bias and Reversed Causality*

In single-equation models, such as the ones above, the nature of the variables play an essential role for receiving reliable estimations. An endogenous variable is determined within the model and normally corresponds to the dependent variable (Y) whereas independent variables should be determined externally and should only affect the model. Two characteristics need to be fulfilled for the exogeneity assumption to hold. The first one implies that the mean of the error term has to equal zero and the second one entails the regressors being independent from the disturbance term. If the exogeneity assumption is violated, the estimated coefficients might be biased and inconsistent (Gujarati and Porter, 2009).

For the explanatory variables to be endogenous, two main causes can be held responsible: omitted variable bias and reversed causality. Since the model is kept relatively simple, it can be expected that variables are omitted. Various factors, such as the percentage of anti-Western politicians in a CEE country's parliament, would affect both the score of the Worldwide Governance Indicators as well as the amount traded with Russia. Since it is not possible to capture reality in a simple model, the two specified models in this thesis try to at least include

the essential variables which could shape Russian economic influence in Central and Eastern Europe.

Regarding the role of reversed causality, it might be possible that a causal effect runs from the Worldwide Governance Indicators (WGI) index to the independent variables. It is feasible to assume that investments are rather directed towards stable and reliable countries than to states with a low quality of governance. Furthermore, as already mentioned earlier, previous studies have shown that countries which are economically successful tend to reach a higher level of governance (e.g. Al-Mahrubi, 2004). Hence, the estimated models might endure problems with endogeneity due to reversed causality. Evaluating the direction of causality for the two models above would, however, exceed the scope of this thesis. This is why, in spite of potential reversed causality, weak exogeneity of the independent variables will be assumed for the following analysis.

## V. Empirical Analysis

### V.1 Correlation

Before conducting the regression analyses, it is important to also evaluate the correlation between the variables to estimate whether a linear association between the WGI and the independent variables exists *à priori*. Table 4 presents the Pearson correlation coefficients between each variable holding the others constant. As can be seen, the total value of commodity imports and the mineral fuels/oil imports reach a very high correlation coefficient ( $\rho = 0.91$ ) which corresponds to a nearly perfect linear relationship. This is why, as already mentioned above, it is necessary to run two separate regression models. Another relatively high relationship exists between GDP per capita and the Worldwide Governance Indicators (WGI) index. Considering previous research on the link between the quality of governance and economic growth (e.g. La Porta et al. 1999; Al-Mahrubi, 2004), this result seems to support the theory of a mutual connection between these two factors. GDP per capita also shows some linear association with the two import variables which can probably be related to their economic nature and the influence of imports on a country's economy.

Nevertheless, the most interesting part for the analysis of Russian economic influence on the quality of governance in Central and Eastern Europe is the correlation between the WGI index and the three variables total value of goods imported, mineral fuels/oil imported, and Foreign Direct Investment (FDI) inflows. As illustrated in the table below, no linear relationship between the variables can be detected since all the correlation coefficients are close to zero.

Based on this correlation analysis, there appears to be no *à priori* conditional correlation of Russian external economic activity and the WGI. Yet, correlation analysis treats both variables as symmetric and random whereas in a regression analysis, the dependent variable is considered to be stochastic and the explanatory variables are treated as fixed (Gujarati and Porter, 2009). The conditional correlation coefficients below therefore only illustrate a first general tendency of the relationship between the variables but does not take into account other factors such as country- and time-fixed effects. Hence, the estimation of the two specified regression models above can help to further enhance the relationship between the WGI index and the independent variables and leads to more consistent results.

*Table 4: Results of Pearson's correlation coefficients*

	<b>WGI mean</b>	<b>Imports</b>	<b>Oil imports</b>	<b>FDI inflow</b>	<b>GDP per capita</b>
<b>WGI mean</b>	1.0000				
<b>Imports</b>	0.0448	1.0000			
<b>Oil imports</b>	0.0848	0.9057	1.0000		
<b>FDI inflow</b>	-0.0969	-0.1028	-0.1006	1.0000	
<b>GDP per capita</b>	0.5038	0.2921	0.3584	-0.0484	1.0000

*Note: "Imports" represent the total value of goods imported from Russia and "Oil imports" represent the mineral fuels, oils, and distillation products imported.*



## V.2 Regression results, Discussion, and Limitations

Table 5 presents the results of conducting pooled OLS-regression estimations and table 6 the outcome of using country- and time-fixed effects panel regression analyses with the Worldwide Governance Indicator index as the dependent variable. For both methods, robust standard errors and 124 observations covering all eleven EU-accession states have been used. Due to the low data availability of Foreign Direct Investment (FDI) inflows from Russia, the years included in the analysis are limited to the period 1998-2012.

As can be derived from tables 5 and 6, the two regression methods estimate slightly different results. Looking at columns (1) and (2) of the pooled OLS-regression analysis (table 5), the results suggest that all three independent variables are significant on at least a 10 % level without the inclusion of time dummies. However, by controlling for time effects, the p-value of the coefficients for FDI inflows in columns (3) and (4) and for the mineral fuels/oil imports in column (4) turn insignificant. At the same time, the coefficients for the total value of imports as well as mineral fuels and oil imports change from being negative in columns (1) and (2) to being positive in column (3) and (4). Furthermore, the inclusion of year dummies has the effect that the magnitude of the constants and of the GDP per capita coefficients change notably.

In table 6, on the contrary, FDI inflows do not reach a statistically significant level in any of the four estimated models. Moreover, including time-fixed effects in addition to country-fixed effects leads to the result that the coefficient for total value of imports in column (1) turns to an insignificant level in column (3). Yet, column (4) shows that mineral fuels/oil imports are statistically significant on a 5 % level if time-fixed effects are added to model (II). Similar to the pooled OLS-regression results, the magnitude of the constants and of the GDP per capita coefficients differ substantially if the fixed effect within-group estimates take common time shocks into account.

Since fixed-effect WG regression estimations try to balance the unobserved individuality effect of the countries, problems with correlation between the error term and the explanatory variables are reduced. For this reason, the calculated coefficient of determination ( $R^2$ ) is lower for all fixed-effect panel analyses in table 6 compared to the pooled OLS-regression results in table 5. Having the tendency to provide more consistent and robust results, the following discussion will mainly focus on the evaluation of the fixed effect within-group estimation results.

Table 5: Results of pooled OLS-regression analyses

	(1)	(2)	(3)	(4)
POOLED OLS-REGRESSION				
DEPENDENT VARIABLE	WGI index	WGI index	WGI index	WGI index
FDI inflows from Russia	-0.002* (0.001)	-0.002* (0.001)	-0.000 (0.001)	-0.001 (0.001)
(log) GDP per capita	9.355*** (1.033)	9.851*** (1.147)	19.109*** (0.878)	18.386*** (0.872)
(log) total imports from Russia	-1.435*** (0.454)		1.091*** (0.409)	
(log) mineral fuels/oil imports		-1.025** (0.399)		0.116 (0.277)
Year Dummies	No	No	Yes	Yes
Constant	15.511 (13.360)	1.596 (11.735)	-110.456*** (13.119)	-83.304*** (8.685)
Observations	124	124	124	124
R-squared	0.360	0.355	0.700	0.688

Note: Robust standard errors are reported in parantheses, p-values denote significance at \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.; Regressions (1) and (3) include the total value of imports; Regressions (2) and (4) include mineral fuels/oil imports. For the interpretation, coefficients of logarithmic variables have to be divided by 100 ( $\beta/100$ ) due to level-log model.

Table 6: Results of country-fixed and time-fixed effects within-group estimations

	(1)	(2)	(3)	(4)
FIXED EFFECT REGRESSIONS				
DEPENDENT VARIABLE	WGI index	WGI index	WGI index	WGI index
FDI inflows from Russia	0.000 (0.001)	0.001 (0.001)	0.000 (0.000)	0.000 (0.000)
(log) GDP per capita	4.366*** (1.170)	2.983** (1.142)	12.213** (5.300)	13.993** (5.883)
(log) total imports from Russia	-2.265** (0.952)		-0.443 (1.755)	
(log) mineral fuels/oil imports		-0.809 (0.467)		-0.827** (0.339)
country-fixed effects	Yes	Yes	Yes	Yes
time-fixed effects	No	No	Yes	Yes
Constant	79.632*** (14.395)	60.418*** (7.663)	-22.219 (55.493)	-29.764 (44.136)
Observations	124	124	124	124
Number of countries	11	11	11	11
R-squared	0.132	0.113	0.360	0.389

Note: Robust standard errors are reported in parantheses, p-values denote significance at \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Regressions (1) and (3) include the total value of imports; Regressions (2) and (4) include mineral fuels/oil imports. For the interpretation, coefficients of logarithmic variables need to be divided by 100 ( $\beta/100$ ) due to level-log model.

*H1: An increase of Russian Foreign Direct Investment is associated with a reduction in the WGI index in Central and Eastern Europe.*

The results in table 5 and 6 suggest that no effect of FDI inflows from Russia on the quality of governance in Central and Eastern Europe exist. All estimated regression coefficients are close to zero which implies that investments do not serve as a channel for exercising influence. This result would contradict the claim of Conley et al. (2016) in the *Kremlin Playbook report* who state that an increase of Russian direct investment in CEE assets is responsible, among other things, for a decline in democratic standards in the region.

The outcome regarding the role of Foreign Direct Investment in the regression analysis above could be related to various problems with the data. First of all, data on FDI inflows for Central and Eastern Europe only exists for a limited time period which restricts the analysis of FDI inflows to a few years. Second, the Foreign Direct Investment (FDI) inflows from Russia should be seen in relation to investments conducted by other countries in the European Union. Compared to Germany in 2012, Russia's FDI inflow to Poland for example only reached 0.56 % of the German FDI value based on the data provided by the OECD. Third, FDI data is often subject to systematic errors in the data collection process such as the report of lower FDI flows due to initial portfolio investment in the previous year (Stephan and Pfaffmann, 2001). Additionally, Conley et al. (2016) emphasize in their study that Russian economic influence based on its investment activities is difficult to measure because the available data cannot capture the entire scope of Russian FDI. The authors claim that Russian actors use shell corporations and offshore accounts to cover their real presence in Central and Eastern Europe. Therefore, the data on FDI inflows might actually be higher in reality which would make the reliability of the FDI data questionable. Related to this, another problem concerns the existing differences in the reporting standards of FDI data and the applied methodology between countries which can render the data incomparable (Stephan and Pfaffmann, 2001). Finally, the possibility of FDI to take on negative values complicates the use and the interpretation of the variable. Data on FDI not only captures the original investments when the relationship is first established but also the following transactions. There is no clear information on the origin of the negative value and whether it is due to repayments of loans, reduction of liabilities or the sale of shares to a third party (OECD, 2008).

Looking at all the possible problems related to the use of FDI data, it could be argued that the variable should be excluded as a consequence. However, the alternatives are limited for

measuring a country's economic influence which is why the variable on FDI inflows remains included. Moreover, based on previous literature which has emphasized the role of Foreign Direct Investment as a political tool for exercising influence (e.g. Papayoanou, 1997; Conley et al. 2016), the variable should be kept within the model.

By assuming that the data on Foreign Direct Investment is coherent and reliable, the results of table 5 and 6 overall suggest that an increase in FDI inflows cannot be associated with a decrease in the WGI index. Therefore, it can be concluded that investments do not function as a political tool for Russian actors to exercise influence. This would support the argument of Knorr (1975) who points out that the penetration of a government from within through the use of investment relationships depends on the interest of the investors and does not necessarily represent modern business practices. The Russian investors might not act as representatives of their government but rather as an agent of their enterprise operating in its interest.

*H2: A rise in Russian imports is associated with a decline in the Worldwide Governance Indicators (WGI) in CEE.*

Column (1) and (3) in table 5 show a statistically significant relationship between the imports and the WGI index. Yet, compared to the results in column (1), the inclusion of year dummies in column (3) has the effect that a positive relationship between the total amount of goods imported from Russia and the WGI index is indicated.

The fixed-effect regression model in table 6 column (1), on the contrary, shows a negative effect of imports on the WGI index. The result suggests that a 10 percent increase in the total amount of goods imported from Russia is associated with a decrease in the WGI index by 0.23 percent. This outcome would support the theory of Conley et al. (2016) that a rise in economic ties between the region and Russia leads to a decline in democratic standards. However, column (3) in table 6 demonstrates that the results are not robust since the inclusion of time-fixed effects in the regression analysis leads to an insignificant coefficient even though the sign remains negative.

As previously mentioned, it can be assumed that the quality of governance is influenced by common time shocks which is why time-fixed effects should be included in the regression model. Based on the more robust results and the à priori expectations, the model in column (3), table 6, seems to represent the most consistent estimations. According to this result, an increase in the total amount of goods imported from Russia can therefore not be associated with a weakening of the governance quality in Central and Eastern Europe. Representing

trade relationships with Russia, the insignificance of the import variable implies that Russia is not using or cannot exploit this economic channel to exercise political influence.

Previous literature has especially focused on asymmetrical interdependence between states as an explanation of how countries can influence each other. The result in table 6 therefore rather supports the criticism of Wagner (1988) in which he questions the feasibility of changing the behavior of other states based on economic interdependence. At the same time, the import variable is not necessarily able to represent an asymmetric relationship between Russia and the CEE countries but rather the one-sided economic activity of Russia. To better reflect asymmetrical interdependence, a new variable would have to be calculated which represents the ratio between imported and exported commodities in relation to other trading partners. This however would exceed the scope of this thesis. Overall, the results hence suggest that, contradictory to the argumentation in the *Kremlin Playbook report*, an increase in the total value of imported commodities from Russia cannot be associated with a decline in democratic standards in CEE countries and thus, that no political influence is exercised via this channel.

*H3: The dependency of Russian oil imports is related to a decrease in the WGI index.*

The estimated regressions in columns (2) and (4) in both tables present the results for model (II) in which the total value of goods imported is exchanged for the natural resource imports from Russia. Following the more robust results and the higher coefficient of determination ( $R^2 = 0.389$ ) in table 6, column (4), the regression analysis suggests that an increase in mineral fuels and oil imports by 10 percent is associated with a decline in the WGI index in Central and Eastern European countries by 0.08 percent if everything else is hold constant. Since Conley et al. (2016) claim that the main channel through which the Kremlin has exercised economic influence in the past has been the energy sector, this regression outcome reinforces parts of their study.

As discussed by Knorr (1975) and Wübbke (2012), natural resources provide the opportunity to exercise more direct political influence. According to column (4) in table 6, the Russian government might hence have been able to use mineral fuels and oil imports as a power tool to exercise influence and undermine the quality of government in CEE. In their report, Conley et al. (2016) use the example of the state-owned gas supplier Gazprom to describe how Moscow can benefit from the dominance in the energy sector. The authors explain that the energy company can operate through its local distributors in the different countries by being able to change their financial and market position. Functioning as intermediaries between

Russia and the domestic economy, these local companies can in return exploit their dominant position in the sector to advance Russia's interests. Moreover, Conley et al. (2016) describe how the dependency on the natural resources and the dominance of the market can enable Russia to influence local governments and actors through the ability to determine prices and to close infrastructure investment deals in the energy sector. As reported by the authors, Russia possesses one of the most influential economic position in Bulgaria. Not only does Gazprom represent the single gas supplier in the country but other Russian state-owned enterprises dominate the nuclear energy sector and control the oil as well as wholesale fuels market. Subsequently, Russia can take advantage of this channel by indirectly exercising influence via the establishment of networks which include pro-Russian businessman and politicians and which are able to advance Russian interests in the government.

However, looking at the results in table 6, a decrease of 0.08 percent in the WGI index represents overall a rather small effect. Although the index only reaches from 0 to 100, an increase in Russian natural resource imports affects the quality of governance in Central and Eastern Europe only slightly. Moreover, the significant result of the coefficient might be related to problems with the model such as omitted variable bias, stationarity issues or other influential factors.

In spite of this, the estimated regression models provide interesting results, especially regarding the negative effect of mineral fuels and oil imports on the WGI index. Further research needs to be conducted to determine in how far Russia is responsible for the deconsolidation tendencies in the CEE region and to better understand the role of Russian natural resource endowments and its use as a political instrument.

Besides the already mentioned problems, the analysis faces two other major limitations. First, the WGI index illustrated in figure 1 does not show many fluctuations over the observed time periods which makes it difficult to determine any externally-induced effects through regression analysis. Democratic consolidation is a complex multi-level process which needs time to be implemented (Tomini, 2014). Considering the short time frame covered above, the low volatility of the index is therefore not surprising but it is disadvantageous for the analysis itself. Second, other important components, which might provide Russia with the power to exercise political penetration in Central and Eastern Europe such as cultural and religious ties, are not measurable. If Russia follows a strategy of influence in the CEE region, many diverse factors need to be considered which can function as power tools as for example the use of social media.

## VI. Conclusion

Relating the results above back to the debate about power and economic interdependence, Russia's actualized power can be categorized and summed up along the three criteria scope, domain, and weight suggested by Dahl (1991) and Knorr (1975). Since the domain refers to the entities being influenced and the scope to the area which is being influenced, these two categories are pre-determined by the outline of this paper. The domain under investigation signifies the eleven EU-accession states in Central and Eastern Europe whereas the scope concerns the influence on the quality of governance in these countries through economic matters. The central question, which the regression analysis tries to answer, therefore corresponds to the weight and thus to the degree to which Russia is able to influence the region. In this context, column (4) in table 6 suggests that an increase in mineral fuels and oil imports can be associated with a decrease in the WGI index by 0.08 percent. This would imply that Moscow has a certain ability to exercise power in CEE countries by using natural resources or as Barnett and Duvall (2005) would characterize it: by using compulsory power. In general, this result corresponds to previous literature on asymmetric interdependence in international relations theory as well as to the more specific case regarding the use of energy resources as a power tool by Russia (Baldwin, 1979; Papayoanou, 1997; Newton, 2010; Fedorov, 2013). Furthermore, table 6 reinforces the claim of Conley et al. (2016) in the *Kremlin Playbook report* that Russian economic influence in Central and Eastern Europe has mainly been exercised via the domination of the energy sector.

Nevertheless, the analysis of Russian economic influence on the quality of governance in Central and Eastern European states encounters various problems. One major issue relates to the application of the Worldwide Governance Indicators as the dependent variable for reflecting the standards of governance in a country. The WGI indices and other democracy indicators have been highly criticized in the past for a lack of reliability, a lack of objectivity and for missing a precise definition and distinction between the different dimensions. The term quality of governance, its concept, and interpretation is a highly-debated topic among scholars for which no consensus has been found making it difficult to interpret changes in the score of the WGI. Moreover, even though the panel regression outcome indicates a negative association between natural resource imports from Russia and a decline in democratic government standards, this might be the effect of other ongoing processes in the region (Ágh, 2016). Another problem which should be mentioned is the availability of the data. Bilateral Foreign Direct Investment (FDI) only exists for a limited period which reduces the time frame

for which the analysis can be conducted. Additionally, the data on FDI might not cover all transactions due to Russian offshores or shell corporations, as discussed by Conley et al. (2016), which makes the reliability of the data problematic.

The overall aim of this thesis has been to evaluate whether an increase in Russian economic activity can be associated with a decline in the quality of governance in CEE countries. The results suggest that neither Russian FDI nor general bilateral import relationships have an influence on democratic standards in the region. Natural resource imports from Russia, on the contrary, show an existing relationship with the governance quality in CEE. This would imply that political penetration is exercised via this economic channel. The question remains however in how far the results are related to problems with the data, to specification bias, or to general internal and external deconsolidation processes in the countries. Further research needs to be conducted to better understand the role of using economic relationships as a channel for exercising political influence, especially concerning the case of Russia.



## References

### Books

- Asteriou, D., Hall S.G. (2011), *Applied Econometrics*, 2nd Edition, Basingstoke: Palgrave Macmillan.
- Baltagi, B.H (2005), *Econometric Analysis of Panel Data*, 3rd Edition, Chichester: John Wiley & Sons Ltd.
- Dahl, R. A. (1991), *Modern Political Analysis*, 5th ed., Englewood Cliffs: Prentice-Hall, Inc.
- Gujarati, D.N., Porter D. C. (2009), *Basic Econometrics*, 5th Edition, New York: McGraw-Hill/Irwin.
- Knorr, K. (1975), *The Power of Nations. The Political Economy of International Relations*, New York: Basic Books, Inc.
- Organization of Economic Co-operation and Development (OECD) (2008), *OECD Benchmark Definition of Foreign Direct Investment*, 4<sup>th</sup> edn, [e-book] Paris: OECD Publishing. Available through: LUSEM University Library website: <http://www.lusem.lu.se/library> [Accessed 28 April 2017]

### Parts of Books

- Laenen, R. (2012), “Russia’s ‘Vital and Exclusive’ National Interests in the Near Abroad”, in Freire, M., Kanet, R. (eds), *Russia and its Near Neighbors. Identity, Interests and Foreign Policy* [e-book] Hampshire: Palgrave Macmillan, 17-38. Available through: LUSEM University Library website: <http://www.lusem.lu.se/library> [Accessed 20 March 2017]
- Newton, J. (2010), “Shortcut to Great Power: Russia in Pursuit of Multipolarity” in Newton, J., Tompson, W. (eds), *Institutions, Ideas and Leadership in Russian Politics*, [e-book] Basingstoke: Palgrave Macmillan, 88-115. Available through: LUSEM University Library website: <http://www.lusem.lu.se/library> [Accessed 27 March 2017]
- Wübbecke, J. (2012), “Three Worlds of Natural Resources and Power”, in Fels, E., Kremer, J.-F., Kronenberg, K. (eds), *Power in the 21st Century. International Security and International Political Economy in a Changing World*, [e-book] Berlin, Heidelberg: Springer-Verlag, 97-116. Available through: LUSEM University Library website: <http://www.lusem.lu.se/library> [Accessed 25 March 2017]

## Articles

- Ágh, A. (2016), "The Deconsolidation of Democracy in East-Central Europe: The New World Order and the EU's Geopolitical Crisis", *Politics in Central Europe*, vol. 12, no. 3: 7-36.
- Agnafors, M. (2013), "Quality of Government: Toward a More Complex Definition", *American Political Science Review*, vol. 107, no. 3: 433-445.
- Al-Marhubi (2004), "The Determinants of Governance: A Cross-Country Analysis", *Contemporary Economic Policy*, vol. 2, no. 3: 394-406.
- Bandelj, N. (2007), "Supraterritoriality, Embeddedness, or Both? Foreign Direct Investment in Central and Eastern Europe", *Contemporary Studies in Economic & Financial Analysis*, vol. 89, no.1: 25-63.
- Baldwin, D. (1979), "Power Analysis and World Politics: New Trends versus Old Tendencies", *World Politics*, vol. 31, no. 2: 161-194.
- Barnett, M. and Duvall, R. (2005), "Power in International Politics", *International Organization*, vol. 59: 39-75.
- Berg-Schlosser, D. (2004), "The Quality of Democracies in Europe as Measured by Current Indicators of Democratization and Good Governance", *Journal of Communist Studies and Transition Politics*, vol. 20, no. 1: 28-55.
- Blitz, B.K. (2011), "Evaluating Transitions: Human Rights and Qualitative Democracy in Central and Eastern Europe", *Europe-Asia Studies*, vol. 63, no. 9: 1745-1770.
- Cooper, R.N. (1972-1973), "Trade Policy is Foreign Policy", *Foreign Policy*, vol. 9: 18-36.
- Coppedge, M. et al. (2011), "Conceptualizing and Measuring Democracy: A New Approach", *Perspectives on Politics*, vol. 9, no. 2: 247-267.
- Doornbos, M. (2001), "'Good Governance': The Rise and Decline of a Policy Metaphor?", *Journal of Development Studies*, vol. 37, no. 6: 93-108.
- Fedorov, Y.E. (2013), "Continuity and Change in Russia's Policy Toward Central and Eastern Europe", *Communist and Post-Communist Studies*, vol. 46: 315-326.
- Hancock, K.J. (2007), "Russia: Great Power Image versus Economic Reality", *Asian Perspective*, vol. 31, no. 4: 71-98.
- Hopf, T. (1998), "The Promise of Constructivism in International Relations Theory", *International Security*, vol. 23, no.1: 171-200.
- Kaufmann, D., Kraay, A., Mastruzzi, M. (2010), "The Worldwide Governance Indicators. Methodology and Analytical Issues", *Policy Research Working Paper*, no. 5430, World Bank.

- Keohane, R., Nye Jr, J. (1987), "Power and Interdependence Revisited", *International Organization*, vol. 41, no. 4: 725-753.
- Langbein, L., Knack, S. (2010), "The Worldwide Governance Indicators: Six, One, or None?", *Journal of Development Studies*, vol. 46, no. 2: 350-370.
- Lanoszka, A. (2016), "Russian Hybrid Warfare and Extended Deterrence in Eastern Europe", *International Affairs*, vol. 92, no. 2: 175-195.
- La Porta et al. (1999), "The Quality of Governance", *Journal of Law, Economics & Organization*, vol. 15, no. 1: 222-279.
- Munck, G. (2016), "What is Democracy? A Reconceptualization of the Quality of Democracy", *Democratization*, vol. 23, no. 1: 1-26.
- Oliker, O. (2017), "Putinism, Populism and the Defense of Liberal Democracy", *Survival*, vol. 59, no. 1: 7-24.
- Papayoanou, P.A. (1997), "Economic Interdependence and the Balance of Power", *International Studies Quarterly*, vol. 41: 113-140.
- Perroux, F. (1950), "The Domination Effect and Modern Economic Theory", *Social Research*, vol. 17, no. 2: 188-206.
- Richardson, N.R., Kegley Jr. C.W. (1980), "Trade Dependence and Foreign Policy Compliance", *International Studies Quarterly*, vol. 24, no. 2: 191-222.
- Rothstein, B., Teorell, J. (2008), "What is Quality of Government? A Theory of Impartial Government Institutions", *Governance: An International Journal of Policy, Administration, and Institutions*, vol. 21, no.2: 165-190.
- Schimmelfennig, F., Sedelmeier, U. (2004), "Governance by Conditionality: EU rule Transfer to the Candidate Countries of Central and Eastern Europe", *Journal of European Public Policy*, vol. 11, no. 4: 661-679.
- Schmidt-Felzmann, A. (2011), "EU Member States' Energy Relations with Russia: Conflicting Approaches to Securing Natural Gas Supplies", *Geopolitics*, vol.16: 574-599.
- Stephan and Pfaffmann (2001), "Detecting the Pitfalls of Data on Foreign Direct Investment: Scope and Limits of FDI Data", *MIR: Management International Review*, vol. 41, no. 2: 189-218.
- Thomas, M.A. (2010), "What do the Worldwide Governance Indicators Measure?", *European Journal of Development Research*, vol. 22: 31-54.
- Tomini, L. (2014), "Reassessing Democratic Consolidation in Central and Eastern Europe and the Role of the EU", *Europe-Asia Studies*, vol. 66, no. 6: 859-891.

Wagner, R.H. (1988), “Economic Interdependence, bargaining power, and political influence”, *International Organization*, vol. 42, no. 3: 461-483.

Weiss, T.G. (2000), “Governance, Good Governance and Global Governance: Conceptual and Actual Challenges”, *Third World Quarterly*, vol. 21, no. 5: 795-814.

## Reports

Bogdan et al. (2015), “Poland 2025: Europe’s New Growth Engine”, *A Report by McKinsey & Company* [pdf] Available at: <http://www.mckinsey.com/global-themes/europe/how-poland-can-become-a-european-growth-engine> [Accessed 22 April 2017]

Conley, H.A., Mina, J., Stefanov, R., Vladimirov, M. (2016), “The Kremlin Playbook – Understanding Russian Influence in Central and Eastern Europe”. *A Report of the CSIS Europe Program and the CDS Economics Program* [pdf] Available at: <https://www.csis.org/analysis/kremlin-playbook> [Accessed 5 January 2017].

The World Bank (2007), “A Decade of Measuring the Quality of Governance. Governance Matters 2007. Worldwide Governance Indicators, 1996-2006. Annual Indicators and Underlying Data.” *A Publication by the Development Research Group* [pdf] Available at [http://info.worldbank.org/governance/wgi/pdf/booklet\\_decade\\_of\\_measuring\\_governance.pdf](http://info.worldbank.org/governance/wgi/pdf/booklet_decade_of_measuring_governance.pdf) [Accessed 27 May 2017]

## Websites

European Commission (2016), “Conditions for membership”, *European Neighbourhood Policy And Enlargement Negotiations*, Available online: [https://ec.europa.eu/neighbourhood-enlargement/policy/conditions-membership\\_en](https://ec.europa.eu/neighbourhood-enlargement/policy/conditions-membership_en) [Accessed 22 May 2017]

## Data Sources

Organisation for Economic Co-operation and Development, OECD, (2017) *International direct investment database*, downloaded from: [https://stats.oecd.org/Index.aspx?DataSetCode=FDI\\_FLOW\\_PARTNER](https://stats.oecd.org/Index.aspx?DataSetCode=FDI_FLOW_PARTNER) [Accessed 9 March 2017].

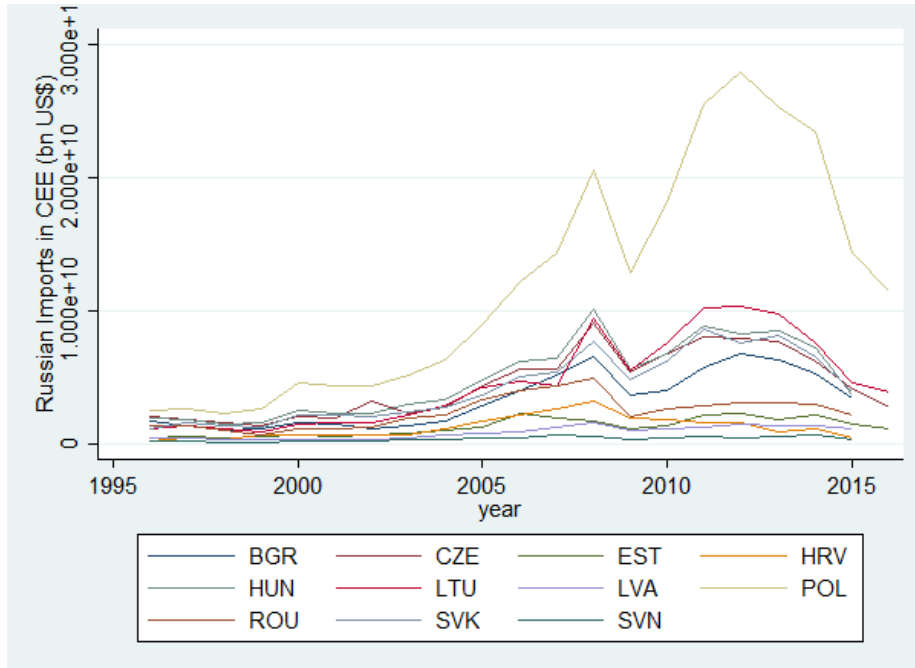
United Nations (2017) *UN comtrade database*, downloaded from: <https://comtrade.un.org/labs/BIS-trade-in-goods/?reporter=100&partner=643&year=2014&flow=2> [Accessed 6 March 2017].

World Bank (2016), *World Bank Database*, GDP per capita (current US\$), downloaded from: <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD> [Accessed 14 March 2017].

World Bank (2016), *World Bank Database*, Worldwide Governance Indicators 1996 - 2015, downloaded from: <http://data.worldbank.org/data-catalog/worldwide-governance-indicators> [Accessed 22 January 2017].

## Appendix

Figure 1A:  
Total value of imports and mineral fuels/oil imports from Russia to Central and Eastern European countries



Country abbreviations:

BGR = Bulgaria; HUN = Hungary; ROU = Romania; CZE = Czech Republic;  
LTU = Lithuania; EST = Estonia; LVA = Latvia; SVK = Slovak Republic;  
HRV = Croatia; POL = Poland; SVN = Slovenia.

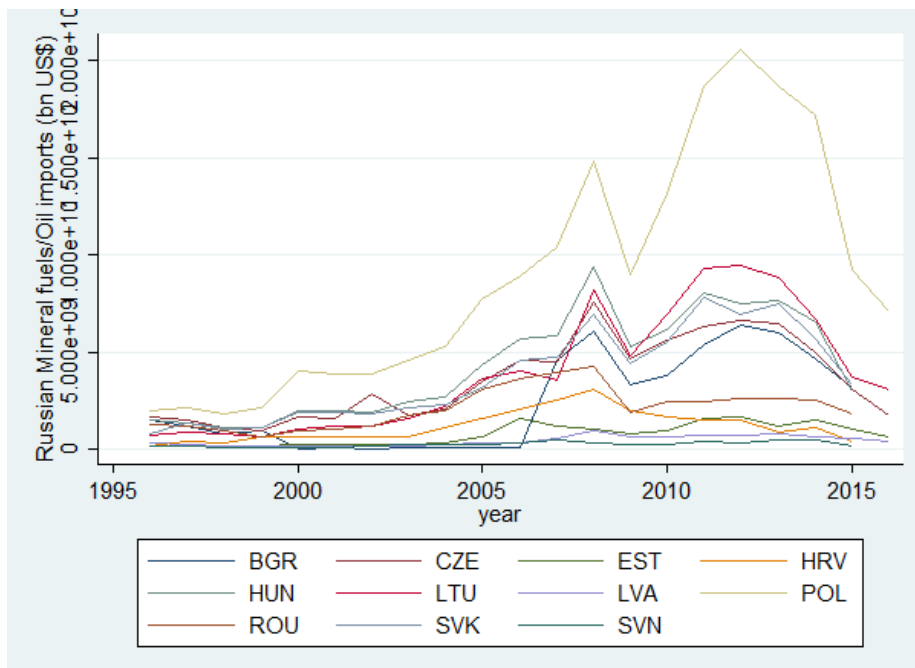


Figure 2A:  
Foreign Direct Investment (FDI) inflows from Russia to CEE countries

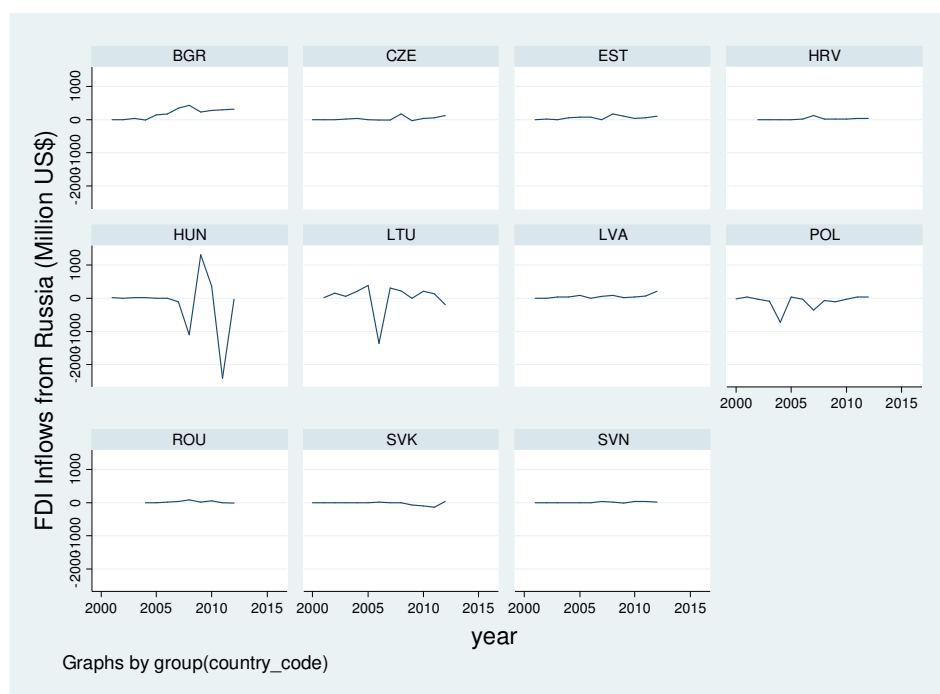
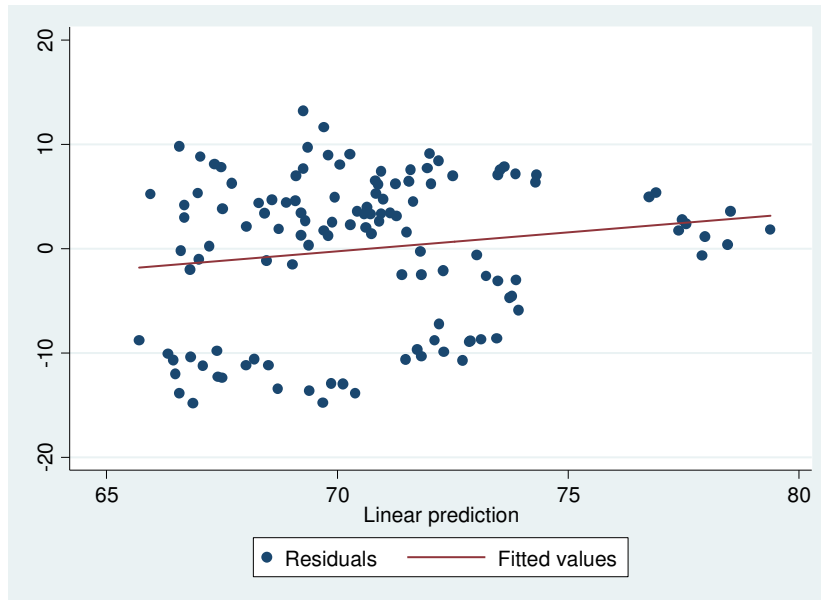


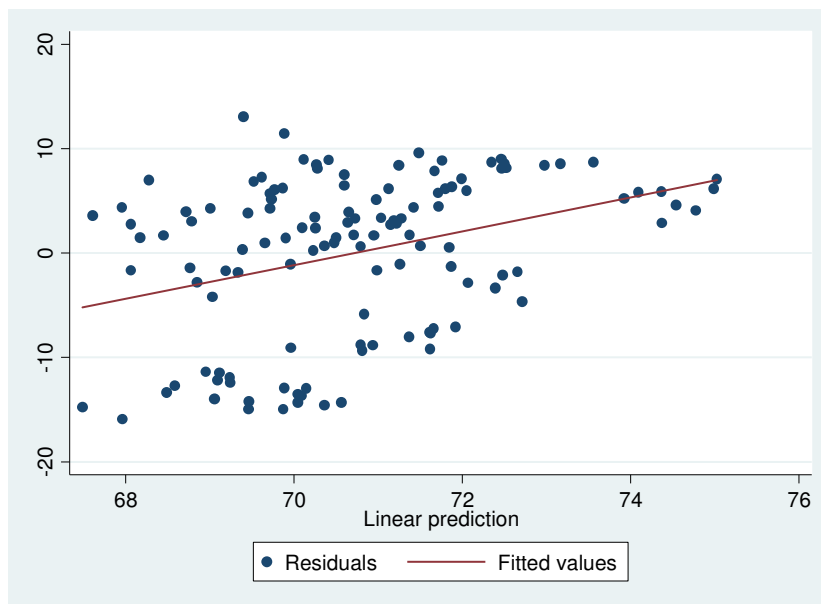
Table 1A: Pearson CPIS test for unit root / stationarity

Variable	Lags	Specification	p-value	Conclusion	No. observations
Imports	3	intercept & no trend	0.039	reject $H_0$	180
Mineral fuels/oil imports	1	intercept & no trend	0.048	reject $H_0$	203
$\Delta$ FDI inflows	1	intercept & no trend	0.000	reject $H_0$	100
GDP per capita	1	intercept & no trend	0.010	reject $H_0$	216

Figure 3A:  
Scatter plot of residuals after conducting a fixed-effect regression



Model (I): fixed-effect regression with total value of imports



Model (II): fixed-effect regression with mineral fuels/oil imports