

The EU and Russia Shifting Away from the Economic Logic of Interdependence – an Explanation through the Complex Interdependence Theory

Submitted 04/2017 Accepted for publication 08/2017

The EU and Russia Shifting Away from the Economic Logic of Interdependence – an **Explanation through the Complex** Interdependence Theory

Loredana Maria Simionov

Alexandru Ioan Cuza University of Iasi, Centre for European Studies, Research Department, Bd. Carol I, no. 19, Corpus I, Iasi, Romania, e-mail: loredana.simionov@uaic.ro

Gabriela Carmen Pascariu

Alexandru Ioan Cuza University of Iasi, Faculty of Economics and Business Administration, Bd. Carol I, no. 22, Corpus B, Iasi, Romania, e-mail: gcpas@uaic.ro



http://dx.doi.org/10.5755/j01.eis.0.11.18501

Abstract

In the aftermath of the Ukraine crisis, the ongoing debate concerning the best course of action that the West should take in order to better handle Russia still sparks the academia and the decision-makers. Thus, the European continent is once again divided, bringing back chills from the Cold War era. Although the current adopted measures, namely the economic sanctions on Russia's energy and financial sectors, have undoubtedly exerted considerable pressure on the Russian economy, isolating it from the Western world, they have not changed, at least for now, President Putin's overall strategic vision. Within this context, the current paper offers a comprehensive analysis of the nature of the EU and Russia relations, in order to shed some light over the current deadlock. Overall, the research aims, through an interdisciplinary approach to analyse the complex relations between the two actors, based on an evaluation of their economic interdependence and culminating with the exploration of its significance for their international political ties, considering the current economic and political context.

KEYWORDS: Russia; European Union; interdependence; energy, power; actorness.

Introduction



European Integration Studies No. 11 / 2017 DOI 10.5755/i01.eis.0.11.18501 © Kaunas University of Technology When analysing the relations between the European Union and Russia, the concept most commonly used to define their interaction is interdependence (Finon and Locatelli, 2007; Proedrou, 2007; Noel, 2008; Casier, 2011; Vecchi, 2012; Sakwa, 2012; Harsem, 2013; Güney and Korkmaz, 2014; Krickovic, 2015). The initial studies of interdependence focused on analysing the means to maximise the benefits of mutual dependence generated by trade, thus being perceived as a purely economic phenomenon (Smith, 1776; Hirschman, 1945; Linder, 1961; Vernon, 1966; Leontief, Carter and Petri, 1977). Subsequently, the interdependence concept has caught the attention of scholars from political sciences who have tried to determine the effects that economic interdependence exerts on political relations between states (Baldwin, 1980; Polachek, 1980; Doyle,



1997; Barbieri, 1996; O'Neal and Russet, 2001). Regularly, from an economic standpoint, the interdependence is considered to generate relatively symmetric relationships, with net benefits for each of those involved (Heckscher-Ohlin, 1991; Bagwati, 1993; Mikić, 1998; Nurske, 2009), whereas the IR studies focus on the asymmetric nature of the interdependence phenomenon, as the disadvantaged partner registers net losses (costs) (Barbieri, 1996; Willet and Chiu, 2001). In political sciences, the literature associates relationships of a different nature from those of international economics, as the studies are essentially concentrated on analysing how economic interdependence affects political relations and vice-versa. Overall, two paradigms seem to dominate the scientific debate: the liberal paradigm and the realist one. On the first hand, the liberal paradigm argues that deepening economic relations between countries causes a higher level of mutual dependence which might come out as a 'recipe for peace'. In other words, economic in-

interdependence affects political relations and vice-versa. Overall, two paradigms seem to dominate the scientific debate: the liberal paradigm and the realist one. On the first hand, the liberal paradigm argues that deepening economic relations between countries causes a higher level of mutual dependence which might come out as a 'recipe for peace'. In other words, economic interdependence leads to the development and consolidation of bilateral political relations, greatly reducing the possibility of conflicts / tensions (O'Neal and Russet, 2001; Doyle, 2005; Maoz, Z., 2009). On the other hand, the realist paradigm of interdependence is inextricably linked to the notion of power. States have a well-established hierarchy of their political agenda (Morgenthau, 1948; Waltz, 1979, Mearsheimer, 2001; Kirockovic, 2015), the main goal in foreign affairs being the augmentation of power (to influence others); it is considered that political power is an instrument which is more efficient and easier to use than economic power when it comes to achieving specific international policy objectives so that, regardless of the intensity of economic relations, states are always willing to use their military capabilities, as well as to generate conflict, if it results in increasing their political power.

However, the two paradigms explain only sequentially the relations of interdependence between states, often disregarding the complexity and variety of mutual effects that the current global context can exert. For instance, a high level of economic interdependence, including the specific case of symmetrical relations, does not necessarily guarantee peaceful political relations, as the interstate economic interactions may have positive (liberal paradigm), negative (realist paradigm) or no effect on political conflicts (Blainey, G., 1973, Levy, J., 1989). The reality of the EU-Russia relations in the recent years provides us with a differentiated picture, specific more to the realist paradigm, as the political power often prevailed; the actors proved prone to use their political leverage, to the extent of threatening with military capabilities, in order to dominate in international relations even if they have powerful mutual economic interests (e.g. the cases where Russia has stopped delivering gas to Ukraine, thus interrupting the transit to European customers or the recent sanctions imposed on Russia).

The first step in expanding the interpretation and implications of the much-nuanced relation between economic cooperation and political pressures in international relations was the concept of *complex interdependence* (Keohane and Nye, 1977). Namely, the concept argues that economic interdependence relativizes the use of military force in relations between states, however only under certain specific conditions: a) when within the system of interests, apart from national governments, there are involved other relevant actors, complementary to nation states (such as multinationals or international organizations, as there are required multiple channels of interaction); b) when the intensity of economic relations is strong (with an inverse correlation between economic interdependence and political conflict); and c) when the states do not have a well-established hierarchy in promoting their political agenda, regardless of their external environment's dynamics (Table 1).

As the table above suggests, if between two or more actors there is a relation of complex interdependence, the military power gradually becomes irrelevant, except for the case in which the actors were part of rival blocs; even if we were to consider two actors belonging to rival blocs,



Table 1
The theoretical framework of interdependence

	Main components (instruments)	Realist Paradigm	Liberal Paradigm	Complex interdependence
1.	Dominant actors	States represent coherent units and are the dominant actors in interna- tional relations	The nation states represent coherent units, although they are not the only dominant actors within the international relations systems; globalisation and economic integration lead to emergence of new important actors, such as multinationals and other international organisations and institutions;	Complementary to states, within the international relations there are other actors that interfere with relevant power of influence; international organisations (intergovernmental and/or professional); multinational companies; processes specific to business internationalisation, regionalisation and globalisation thus diluting the role of nation states, as they reduce the relevance of military force in conflict resolution;
2.	Intensity of eco- nomic relations versus political / military conflict (relevance of military power in interstate re- lations)	Despite the intensity of economic rela- tions, in internation- al politics, the mili- tary power remains a fundamental in- strument, efficient and easy to use	Economic interdependence considerably reduces the risk of military conflicts (economic integration = 'recipe for peace')	The indirect relation between economic interdependence and political/military conflict occurs only beyond a certain threshold of economic integration intensity (note: the opportunity cost is high and so the role of military force in settling disputes is strongly diminished, except when states belong the different regional blocs);
3.	Hierarchy of political agenda	There is a well-es- tablished hierar- chy in promoting foreign affairs, the main aim being gaining power	There is no well-ground- ed hierarchy in promoting foreign affairs objectives, although, over the last decades the economic co- operation has outrun geo- political rivalries	There is no universal tool of shaping a state's agenda, as there is no concrete hierarchy of the problems that a state must solve, the line between domestic and foreign policy (high and low politics) being ambiguous.

Source: Authors' synthesis of Keohane, Robert şi Nye, Joseph (2009) în Power and Interdependence: World Politics in Transition, p. 23–24.

highly intense economic relations between the regional blocks could nevertheless relativise the role of military force. The interference of other relevant actors that have considerable impact on international relations, coupled with lack of hierarchy within their political agendas (which a priori was built around the concept of power / influence / domination) enhances the reverse relation between economic integration and the use of military force, thus limiting the risk of conflict. Otherwise, regardless of the intensity of economic interdependence, the struggle for political power/leverage cannot be relativised, conflicts and threats of military use of force remain relevant.

In the present paper, we propose to test EU's ability of influencing Russia, through the tools offered by the complex interdependence theory; thus, the study focuses on analysing the interplay of economic and political relations between Russia and the European Union. This approach is meant to foster a better understanding of the EU's geopolitical perspectives in the region and to provide a nuanced answer to current questions regarding EU's reduced capacity to act coherently and effectively in managing the issues of its eastern neighbours, despite of the intense economic interdependence it has with Russia.

The high relevance of the present paper is given by the current context of EU's eastern border, where military power seems to play an essential role. As Russia is a key trading partners for the EU (often being brought up EU's energy dependence on Russia) and the EU is an important market for Russia's exports, as well as the main investor in the Federation, we are wondering



how is it possible that Russia assumes the enormous economic losses generated by the political instability in the Ukraine and how is it possible that the EU's external policy instruments or the economic sanctions have not proved very efficient in influencing Russia's foreign actions, so far. Nevertheless, considering that the Ukraine crisis has greatly affected the EU-Russia relations bringing them to an "abnormal" state of cooperation and dialogue, the current research focuses on the period before the crisis has started, namely 2007-2014. The year 2007 is considered as the moment when the Union became EU27.

The use of the complex interdependence specific tools in analysing interstate relations is not exclusively new, as it has been used in literature, for example, in the analysis of US-Canada or US-Australia relations (Keohane and Nye, 1977), and more recently in the Czech-Russian energy relations (Binhacka and Tichý, 2012). Nevertheless, the existing studies have focused particularly on political issues, considering asymmetry as the main instrument of analysis (perceived as the most important source of either sensitivity or vulnerability), thus not exploring in depth the economic aspects of interdependence. Regarding the existing case study on EU-Russia relations, the conducted analyses are one-dimensional, engaging predominantly a political perspective (Prozorov, 2006; Finon and Locatelli, 2007; Proedrou, 2007; Torbakov, 2013; Harsem and Claes, 2013).

Moreover, an overview of the literature regarding the relations between economic interdependence and conflict brings to light the conflicting opinions and research results of scholars. Therefore, the current aims to investigate whether the relation between the EU and Russia is one of complex interdependence and in this context, whether the high intensity of economic interdependence between Russia and the EU relativize the use of military force. The overall assumption of the paper is that the relation between the two actors is not a complex interdependence and as such, regardless of the interdependence's intensity, the military component remains relevant. By doing so, there are two main limits that the current paper will overcome: first, the proposed research will elaborate a thorough analysis of the economic ties, paying specific attention to their dynamics, nature and structure; second, a more nuanced approach to the complex interdependence theory thus arguing that actors who are aware of the actual and potential cost of their external actions do not necessarily refrain from using threats of military force, in order to acquire their intended outcome.

Therefore, the current paper is bringing up a new approach that can further clarify the political behaviour of the two actors, as well as to anticipate the possible outcomes of the current sanctions. Thus, as far as the methods are concerned, considering the interdisciplinary nature of the proposed topic, the current paper is based on mixed methods research, combining qualitative and quantitative methods in order to identify the typology and nature of the interdependent relations between Russia and the EU. More specifically, the research design was built on the three components of complex interdependence, although through concurrent nesting (Creswell et. al, 2003). Overall, the research design is based on three pillars: identifying the dominant players in Russia-EU relations (1), measuring the intensity of economic relations (2) and analysing the hierarchy of each actor's political agenda, focusing on the relation between low and high politics (3).

1) Dominant actors

The first pillar consists of an overview of the existing literature which focused on the analysis of the European Union and Russia as global actors. Thus, through a qualitative approach, there will be outlined the paradigms and policies promoted by the EU and Russia in order to identify the type of actor that the two powers promoted on the global stage, by analysing each individually, in terms of power (reductionist approach), as well as in relation to each other, focusing on the EU-Russia system of relations (a systemic approach). Taking into account the consistent litera-

State of the art and methods



ture on this topic, the main focus will be centred on the preferred or fostered means of interactions of both actors. Thus, the hypothesis to be tested is (H1): while the EU is solely using multiple channels of interaction, the Russian Federation mainly uses one channel.

2) The intensity of economic interdependence

The second pillar consists of measuring the intensity of the economic interdependence between the two actors by developing specific composite indices (Annex 1). Thus, this section will integrate an alternative quantitative method in order to increase the credibility and validate the assessment of interdependence intensity. So far, in literature the quantification of economic interdependence is reduced to trade volumes, often being neglected other important spheres of economic ties. The proposed composite indices expand the analysis to two additional spheres: energy (in terms of energy dependence on each other) and capital flows (FDIs). First, energy has often been regarded as the main area in which Russia and the EU are interdependent (Pailllard, 2010; Hogselius, 2013; Kirckovic, 2015), not only for its preponderance in EU-Russia trade structure, but also because of its strategic importance granted by the difficulty to substitute the provider, as well as the politicisation of the Russian gas sector. Second, majority of EU-Russia interdependence quantitative studies overlook the importance of capital flows. Considering that the EU is the main investor in Russia, integrating the capital flows within the dependency indices is highly relevant. Thus, the hypothesis to be tested is (H2): The economic interdependence of EU and Russia is one characterized by high intensity and asymmetry (in favour of the European Union).

3) Hierarchy of political agenda

The third component of the complex interdependence theory refers to the hierarchy of political agendas. Thus, by paying specific attention to EU's and Russia's external actions since 2000 to present, there will be determined through a qualitative approach whether there can be identified certain priorities within their agendas. This approach will regard their agendas both ways: in general, thus comparing any tendency to prioritise between high and low politics (reductionist approach), as well as towards each other (systemic approach) in order to establish if there is a common ground to foster dialogue. Thus, the hypothesis to be tested is (H3): *The EU doesn't have a specific hierarchy of political agenda, whereas Russia displays such hierarchy, with a clear focus on high politics goals*.

1. European Union and the Russian Federation – actorness and interactions on the global stage

The Reductionist Approach

The role that the EU assumed in its foreign policy meant that the EU as a global actor promotes a normative agenda with the central purpose of shaping, inspiring, diffusing - and thus normalising - its norms and values in international relations through non-coercive means, based on the principle of conditionality (Tocci, 2007, 2). Nevertheless, in exerting influence, the essence lies in how different resources and capabilities can be materialised within the negotiating process with other actors; the sole possession of resources (capabilities) does not automatically translate into influencing others in international negotiations; for this purpose it is necessary to be endowed with a certain bargaining power or applied power (Forsberg and Seppo, 2009, 1808). In other words, possession of significant resources or capabilities does not automatically guarantee influence in international relations.

The EU's main capability that can strengthen its power to influence other global players, refers to its available economic resources, which ensures EU's ability of applying various means and multiple specific instruments, such as: to impose or lift sanctions, tariffs and other trade barriers;



to use certain institutional resources (for example, in Russia's WTO accession process) or to invoke their own example of economic success and authority in relation to international standards. However, the EU's ability to transform economic capabilities into power, through appropriate negotiation strategies is relatively low. When it comes to the reasons behind this failure, the existing body of literature outlines scholars' lack of consensus, the main dispute stemming revolving around the main source of weakness: EU's institutional structure and decision-making process (Carr, 2001; Manners, 2002; Sjursen, 2006; Hyde-Price, 2006; Dur and Zimmerman, 2007; Stivachtis, 2013), divergent interests of member states (Lavanex, 2004; Wagnsson, 2010; Tocci, 2007) or EU's normative vision of the world (Tocci, 2007, Forsberg and Seppo, 2009; Pace, 2007; Lenz, 2013; Larsen, 2014).

Moreover, the literature on EU actorness emphasises the paradox of unrealised power (Baldwin, 1989; Forsberg and Seppo, 2009), despite EU's obvious presence and deep economic and institutional integration within global economic and political structures, through various channels of interactions. Overall, both internally (a hybrid and unique intergovernmental and supranational organization) and externally (deeply integrated within international organisations and regional economic groups) the European Union can be categorised by the preponderance of its multiple channels of interaction which simultaneously relativize the realistic assertion of States as the only major actors in world politics.

Unlike the EU, which is perceived as a post-modern, institutional and normative power, Russia is oriented towards the great powers politics of the nineteenth century. In its foreign policy, the geopolitical realism prevails, the state's major priorities being sovereignty, territorial integrity and independence, whereas the most important principle of international law is considered on non-intervention. Usually, the geopolitical realism lead to an increased tendency of perceiving international relations in terms of zero sum (Light, 2008, 7). In a regional context that means that any increase of other actors' influence is perceived by Russia as an attempt to decrease its own. Thus, Russia perceives the imposition of foreign values and norms as a highly intrusive policy, unless they reflect Russian values and traditions, insisting through its political discourse and narratives on defining Russia as an 'equal among equals' (Light, 2008, 19).

The concept of sovereign democracy proposed and promoted by the Russian politician Vladislav Surkov (2006) a decade ago, seemed to embody this conviction that Russia should define its own interpretation of democracy and forbid adoption of values exported by the West. Thus, in his view, Surkov's sovereign democracy represents a very different model of democracy compared to the one proposed and practiced in the West, as 'it embodies nostalgia for the old European nation-state, as well as for a European order which gravitates around the balance of power and non-interference in the internal affairs of other countries' (Krastev, 2008, p. 75). In this context, both internally and externally, Russia subscribes to geopolitical realism. In this sense, Russia prefers bilateral/interstate relations instead of multiple channels of interaction, as such type of relations do not fall within its realistic logic.

The synthesis of EU and Russia actorness through a reductionist approach (Table 2) highlights that whereas the EU is heterogeneous defined by coexistence of multiple actors and channels of interactions, the Russian Federation is homogenous, its core being the state (*Validating H1*).

Overall, the synthesis of the existing literature regarding Russia's and the European Union's actorness emphasises major differences between the two actors, both in terms of promoted values and on the means of interaction with other international actors. A reductionist approach to overviewing the external behaviour of both EU and Russia provides the premises for further analysis of the complex system of relations between the two actors.



Table 2

European Union's and Russia's actorness

	EUROPEAN UNION	RUSSIAN FEDERATION		
PROMOTED VALUES	Democracy, rule of law and human rights	Sovereign democracy		
INTERACTION	Multiple channels	Interstate relations		
POWER TYPOLOGY	SOFT	HARD		
main means	Normative, conditionality	Constraint, Sanctions		
exerting influence	Economic power	Military power		
DOMINANT Actors	Normative (regional groups, international organisations, supranational institutions)	Realist (nation states)		

Source: Authors' representation.

The Systemic Approach

Despite the obvious interdependence between the EU and Russia, the dialogue between them is often deficient, if we consider the various events and tensions over the last decades. The main issue that highlights their differences refers to their common neighbourhood. Taking into account the sensitivity that Russia shows regarding the EU and NATO enlargements, it is more accurate to speak of strategic rivalries or competition than strategic partnership when in it comes to their common neighbourhood.

On a conceptual note, the dialogue between the two actors is often under strain. The EU's missionary position often induces some hostile reactions from Russia and it becomes an important obstacle in deepening the dialogue between the two actors. Russian politicians often argue that the Western (common) European values should also reflect the Russian traditions. A supranational organization such as the EU, who reduces the role of the nation state in international relations cannot be appealing to Russia and its realist logic of power. Moreover, the institutionalisation of their dialogue through the Partnership and Cooperation Agreement has not brought the expected results. Not only that the EU policies have failed to influence Russia, but the more EU insisted on diffusing its model, the more Russia reaffirmed its cultural specificity and the right to have another interpretation of democracy (sovereign democracy) (Okara, 2007, 8).

Within a specific vision of political realism, Kremlin does not understand why it would need the European Union to develop relations with European states (Kazantsez, Sakwa, 2012, 292). As Russia mainly perceives international actors as nation-states, it prefers dealing with EU member states individually, as this falls within its realist logic. Consequently, Russia has sought to deal bilaterally with EU member states in both cases of cooperation and disputes, thus exerting some pressure on EU's solidarity. Often being accused of implementing a divide et impera strategy in order to split the EU, Russia's actions are not necessarily premeditated and carefully coordinated. As Popescu and Leonard noted, 'it is more natural for Moscow to deal with EU Member States individually, since this is how it sees international politics – as a series of tete-a-têtes meetings between great powers' (Leonard and Popescu, 2007, 13-14). Overall, for Russia, the EU is a less credible partner than its member states.

The lack of a European common voice should not be the only explanation for the EU's inability to influence the Russian Federation. There is a possibility that even if the EU would be consistent and with one voice, they might not be able to choose the best strategy or to implement it properly in order to achieve its objectives vis a-vis Russia, primarily because of the major differences in perceptions and values between the two actors.



	Characteristics	Convergences	Divergences	
EU-RUSSIA SYSTEM	Heterogeneous (East-West Division)	Energy interde- pendence	Perceptions of time and space (WW2, Transition, Cold War, last decade)	The EU
	Values Matrix	European civilisation culture, religion	(Universality of European Model versus Sovereign Democracy)	(WEST - EAST division) Germany Russia

Table 3
EU-Russia system of relations

Source: Authors' representation.

EU external actions do not regularly rely on its military or economic resources, even if it has these capabilities. The Union prefers the soft power measures and tools which are often associated with the identity of the EU as a normative power, in contrast with the perceptions and power politics of Russia. Moreover, the use of hard power tools did not enhance EU power of influence over Russia. If we were to consider the latest sanctions that EU has imposed following the annexation of Crimea, the results are rather disappointing. Apart from isolating Russia and pursuing it to reduce its dependence on the Union, the sanctions did not determine the Federation to change its course of actions in the common neighbourhood and beyond.

On the one hand, both the European Union and the Russian Federation naturally seek to further their cooperation, as it is in their strategic interests. However, the tensions that often arise between them prove that despite their intentions, they find it particularly difficult to reach a common denominator. Furthermore, this proves that their divergences arise due to their different values, perceptions and paradigms, and not because economic or geopolitical competitiveness. On the other hand, even if Russia perceives itself as an integral part of the European civilization, its affiliation to the realist paradigm and the concept of power makes it naturally competitive, especially when comes into question its former satellites.

2. The intensity of economic interdependence in EU - Russia relations

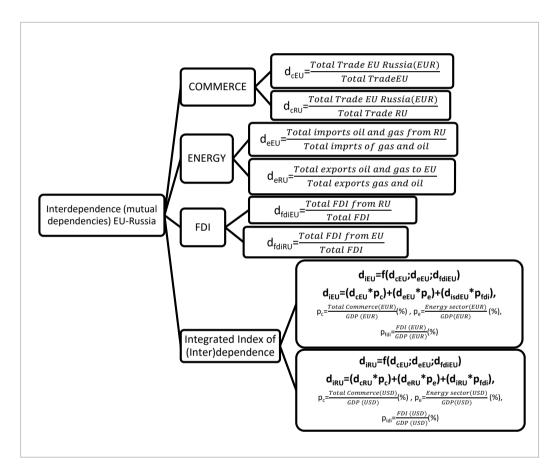
Despite the use of sophisticated methods of collecting and processing data, as well as a complex set of research tools, the perception and analysis of interdependent relations vary not only theoretically, but also in empirical studies. Therefore, if Katherine Barbieri demonstrates through her proposed coefficients that intense interstate relations can induce tension and rivalry (Barbieri, 1996), Russett and O'Neal argue based on their empirical methods that intense trade relations may lead to the development and consolidation of bilateral political relations (Russet, O'Neal, 1997). The latest criticism to both approaches comes from Willet and Chiu (2012), who believe the two measurement methods are too rigid, geared mainly on quantitative analysis. The experts point out the necessity to correlate quantitative and qualitative analysis, which perfectly complement each other. Thus, the contradictions in literature highlight the need of a more complex quantification method which must be carefully analysed through a comprehensive set of theories that goes beyond symmetrical interdependence.

Overall, the methods of quantification in literature indicate a major limit: the economic interdependence is measured almost exclusively by coefficients that depend solely on the trade vol-



umes (Barbieri) or on the Gross Domestic Product (Russet and O'Neal). Therefore, it was omitted one of the most important strategic characteristics of trade: its structure. To overcome this limit, the current research proposes a method which, apart from quantifying the national economy's dependency on trade, takes into account the energy sector, as well as the capital flows. Thus, using the method proposed by Russett and O'Neal to measure trade dependency in relation to the GDP, the current method offers a more comprehensive coefficient by constructing an integrated index of dependency which incorporates two additional dimensions: energy and capital flows. Within this framework, the intensity of economic interdependence between the EU and Russia is analysed by comparing the integrated dependency coefficients in all three spheres: trade, energy and capital flows (Figure 1).

Figure 1
EU-Russia economic interdependence model



In the sphere of *commerce*, the data was retrieved from Eurostat (for the EU and its member states, in millions of EUR), as well as from OECD and Russian Federation Federal State Statistics Service (RFFSSS) (for the Russian Federation, in millions of USD). The *energy dependency* is captured focusing on each actor's specific needs and vulnerabilities: for the EU it was considered as the share of oil and gas imported from Russia on total energy imports (data retrieved from Eurostat, having as measure units millions of EUR); whereas for Russia, the dependency is reflected as the share of gas and oil exports to EU in Russia's total energy exports (data was retrieved from RFFSSS and the Russian Ministry of Energy, having as unit millions of USD). Regarding the capital flows, the data was retrieved from Eurostat (for the EU and its member states, in millions



of EUR), whereas for the Russian Federation the data was retrieved from Central Bank of Russia (Russian FDIs in the EU and Russian total capital flows).

In order to better capture the intensity dynamics of interdependence, there has been considered a period of seven years, between 2007 and 2014, before the Ukraine crisis. Thus, by applying the proposed method of quantifying the intensity of interdependence, as described above, there were retrieved the following results (Figure 2):

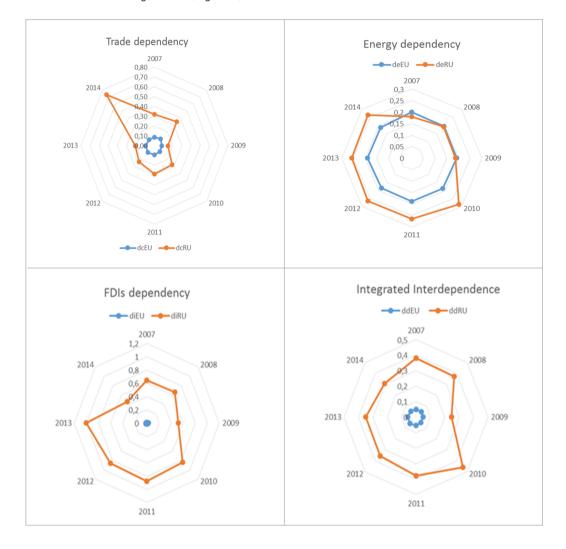


Figure 2
Intensity of economic interdependence
EU-Russia (2007-2014) (Authors' representations)
*For more details regarding data and sources, please see Annex 1

It may be noted that the EU dependencies (energy, trade, investment and integrated) are relatively constant regardless of the analysed period, highlighting the strategic importance of energy supplies for the EU's economy. Unlike the linear tendency of the Union's dependence, Russia's dependency recorded values that vary, thus showing a considerable decrease in trade and investment dependencies for 2008 and 2009, during the economic downturn. Furthermore, it can be noted that during the 2008-2009 crisis, the trends of trade and investment dependencies are inversely proportional to that of energy dependence. Thus, during the crisis, Russia's dependence on energy exports experienced a considerable increase, which can be interpreted as a measure to outweigh the considerable declines of trade and investments by increasing its energy exports.



The results of the applied methods for measuring the levels of interdependence in the spheres of trade, energy and FDI's, indicate the existence of an asymmetric interdependence in favour of the EU. However, there can be noted a relative symmetry in the energy sphere, where the EU recorded the highest values of dependence on Russia. Indeed, energy is the key point of the relations between Russia and the European Union, thus being the most intense sphere of their interdependence, which has diverse implications on EU-Russia relations. On the one hand, an excessively tough stand attitude towards Russia could provoke hostile reactions and would endanger the European investments, the access to the Russian markets, as well as the EU energy security. On the other hand, the current European policies and practices put the EU in a position that sometimes shows political weakness and reduce the amount of European investments, particularly in the energy sector. Moreover, given the two central issues: the high levels of intra-EU trade, and the difficulty in quantifying the importance of the energy sector for the economy, the implications of energy dependence has far more complex and diverse implications than the mere reporting of income from energy industry to GDP. Within this context, we can characterise the interdependent relations between the EU and the Russian Federation as intense, despite the asymmetry that characterises all the analysed indicators of dependence (validating H2).

However, the intense economic interdependence between the two actors, especially in the energy sphere does not guarantee an automatic cooperation, despite the large cost involved in disrupting these transactions. Furthermore, Russia's repeated actions (economic sanctions over its trading partners in the EU or the CIS, interruption of gas supply to the EU, etc.) have negatively affected the economy of the federation in exchange for increased political leverage. In other words, despite the intense economic interdependence and the high costs involved, Russia is not willing to cede and give away political influence in exchange for economic benefits. This logic might be an indicator that the economic sanctions that EU imposed on Russia will not have the expected effects. Overall, Russia's natural resources are primarily regarded as political leverage and secondly as an economic capability; moreover, the energy sector represents one of Russia's main tools available to increase its political influence on the global stage.

3. The hierarchy of political agendas

Over the last decades, there has been a considerable rise in the importance of economic power opposed to the role of the military one in international relations, especially in the context generated by the accelerated processes of regional integration and globalisation. Numerous groups of countries have joined hands in building regional groups around their specific economic interests, which has gradually gained importance within the hierarchy of external priorities; there have emerged new actors that reduce the role of national states on the international political relations scene; transnational companies build mutual economic interests on a global scale, thus influencing the political agendas of states (Koksal, 2006; Kicsi and Buta, 2012; Hunya, G., 2012). European Union is such actor, a post-modern hybrid, a regional group of European states that is still evolving, As such, European Union's policy agenda is very complex and multifaceted. Considering that the EU adapts it to different events, partners and objectives we can outline that there is no well-established hierarchy between its domestic and foreign policies. The diversity of topics and the multiplicity of interests of Member States are only two of the arguments that support the absence of a solid hierarchy of themes within EU's political agenda.

It is generally accepted in literature that, in all its external actions, the EU is trying to promote its normative agenda (Manners, 2002; Sjursen, 2006; Hardwick, 2011; Smith, 2012; Kavalski, 2013). Thus, its objectives transcend the narrow national interests (possession) and are shared on a



global scale, defined by Alfred Wolfers as 'milieu goals' (Smith, 2005, p. 3). However, when it comes to the Russian Federation, EU's specific objective interfere and often contradict its normative agenda, especially those related to securing energy supplies and entering the Russian markets (Emerson, 2006, pp. 62-94). This contradiction between the EU's declared normative agenda and its contradictory actions vis-a-vis Russia is emphasised especially after 2004, the year of EU and NATO enlargements towards Eastern Europe. In this regard, the normative objectives have sometimes become marginal, the focus being centred on the EU's own interests and specific objectives (Tocci, 2007, p. 38). Some of the most visible examples of neglecting the normative agenda in relations with Russia are the EU's position on the conflict in Chechnya, its reactions to the Munich Speech, or to the war in Georgia.

In general, the absence of a well-established hierarchy of themes on the EU's political agenda makes it a global actor with patterns of complex interdependence (Keohane and Nye, 1977) (validating H3). However, in relations with Russia, the EU's agenda becomes more hierarchic with specific interests and goals, prioritising its energy and security. Therefore, by promoting a more realistic approach (Light, 2008) towards Russia, once in a while, the EU exits the patterns of complex interdependence. To sum it up, a glance over the European Union's political agenda as a global actor reveals that despite its normative nature, in its relations with Russia, the European Union sometimes promotes a realpolitik type of policy, with a clear agenda where priorities revolve around energy and security.

When it comes to Russia's external actions, the agenda is more focused. The main landmarks of Russia's foreign policy towards the EU confirms its willingness to reaffirm its global power. First, Russia's economic recovery has been associated with the affirmation of a political discourse based on the 'rebirth of the Russian civilization' - a secular civilization, which is both connected and also so distinct from that of Europe, the federation openly exposed its desire to eliminate any existing inferiority complex (Gomart, 2008, p.13). In the view of the political elite of Russia, the European Union has its own contradictions, and it cannot be regarded as a dynamic model of economic development. Secondly, Russia is always careful to distinguish Europe from the European Union, as it still harbours hopes of a European continent based on two pillars: a Western pillar (led by the Union) and an Eastern one (led by Russia). This approach can be easily observed in the current political and military context in the Ukraine, and in the general attitude and expectations of Moscow regarding the EU - a dialogue between equal partners.

Asserting itself on the international stage, Russia was not exclusively concentrated on developing its foreign policy towards the West, but also towards its former satellites: thus, Kremlin has attempted to form regional groups under the aegis of Russia, such as the Commonwealth of Independent States. However, in the process of regional economic integration of its former satellites, Russia faced a number of difficulties and challenges due to its inability to move beyond the

		The EU		The Russian Federation			
	Objectives	Priority	Hierarchy	Objectives	Priority	Hierarchy	
Global Arena	Normative EU model		None	Possession	National interest	High politics	
EU-Russia relations	Possession	Energy security	High politics	Possession	National interest	High politics	

Table 4
Hierarchy of EU and
Russia's political
agendas

Source: Authors' representation.



traditional role of power. As a result, the federation failed to establish a viable integration process that goes beyond resembling a new form of domination over its neighbours. Thus, despite the efforts undertaken to reaffirm on the global stage, Russia seems to be caught in a paradox: 'geopolitical omnipresence and profound political solitude' (Trenin, 2007, p. 37). Nevertheless, over the last two decades, Russia's policy seems to revolve around asserting its power on the world stage, indicating at the top of its political agenda high politics goals, the low politics priorities becoming secondary (*validating H3*).

EU-Russia relations, where to?

The analysis of the three components (dominant actors, the relationship between the intensity of economic interdependence and the use of military power, and hierarchy of the political agenda) in the specific case of the European Union and Russia, indicates that between the two actors, there is no complex interdependence relation (Table 5).

Subsequently, applying the complex interdependence theory to EU-Russia relations, emphasizes a defining aspect of their political dimension, namely that: the lack of a complex interdependence validates the idea that, regardless of the intensity level of Russia-EU's economic interdependence, the political power and military capabilities will remain relevant.

Table 5

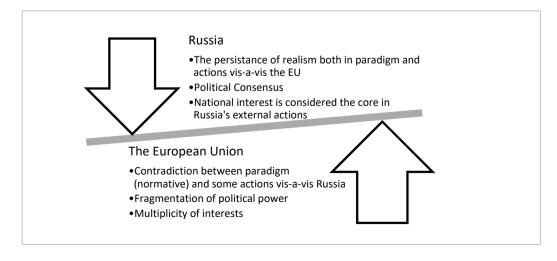
Realism vs. Complex Interdependence between Russia and the EU

	Domin	ant Actors	Economic interdepouse of military		Hierarchy of political agenda		
	In general EU-RU		In general	EU-RU	In general	EU-RU	
The EU	Complex Interdep. (multiple channels of interaction) Complex Interdep. (multiple channels, although bilateral relations are common)		Complex Interdep. (The EU itself has been formed and developed through a process of growing economic interdependence)	Realism (under US and NATO foreign policy)	Complex Interdep.	Mix of Realism and Complex Interdep.	
Russia	Realism Realism		Realism	Realism	Realism	Realism	

Source: Authors' representation.

Figure 3

The interdependence between the EU and Russia from a political perspective (Authors' representation)





A step-by-step analysis, considering the above, together with the main paradigms and directions in literature, indicates where the interdependent relations between the two actors would fit into the general picture of complex interdependence. The analysis results show the predominance of realism in the system of EU-Russia relations (Table 3), thus maintaining the political power and military capabilities as highly relevant. Moreover, as shown by the current economic and political situation between the two actors, whatever advantage the Union has on economic terms, it has not been able to exert political influence over Russia. However, the lack of political homogeneity within the European Union, coupled with Russia's consistency in promoting the realist political paradigm in foreign affairs, grant the latest a clear advantage in negotiations (Figure 3).

As a consequence, when it comes to the political sphere, the interdependence between Russia and EU is asymmetrical, with the Russian Federation holding the upper hand. On the premises of the strong interdependent economic ties between the two actors, especially in terms of energy, the current economic sanctions have strongly contributed to Russia's economic decline. Nevertheless, in the realm of Russia's foreign affairs, they have proved counterproductive. Moreover, the volatility of the global oil prices adds up to the lack of certainty of the current targeted sanctions, considering that if the oil prices should rise again, their impact will diminish further.

Since exerting pressure on the key sectors if Russia's economy might not be enough, it becomes clear the necessity to address the Western strategy by political means. First, by excluding Russia from dialogue and international discussion tables might add up to the deadlock, not break it. For instance, though enhanced dialogue and cooperation, Russia could be engaged in other various global issues which, in turn, would avoid isolating it diplomatically and consequently discourage it from creating or searching alternative international institutions. Moreover, if Russia should feel important and acknowledged, it might refrain from constantly trying to prove its hard power. Second, the realist nature of the Russian Federation, which gravitates around its national interests clearly suggests that Kremlin will not back down. As a genuine realist actor, Russia is highly competitive, not likely of being coerced or influenced in its policy and actions, thus exposing a strong unwillingness to compromise. Within this context, the best course of action for the West must be built around Russia's competitive nature. A good starting point might be to move the competition from geopolitics to economics, by supporting the consolidation of the Eurasian Union project.

The current evaluation of EU-Russia relations represents a proof that, the mere economic interdependence, regardless of how intense that is, is not enough to bring peace through the means of cooperation and regional integration. Overall, the analysis of the EU-Russia relations through the theory of complex interdependence, explains why the logic of mutual benefits - the win-win type of relations, is missing from the intense energy interdependent relations between the two actors. Whereas the classical perception of increased interdependence implies that intense trade makes any interruption in transactions to become expensive, thus irrational, the EU-Russia relations prove quite the opposite. Moreover, the use of complex interdependence theory in these particular case, brings out a number of major differences in terms of paradigm and perceptions between the EU and Russia, resulting into a very challenging cooperation.

The results of the analysis suggest that politically Russia holds the upper hand, whereas economically the EU has leverage, except for the energy sector where the interdependence tends to get symmetrical. Despite the political advantage that the EU holds on Russia, at the moment, the strong interdependent economic relations between Russia and the EU do not directly af-

Conclusions



fect -in the sense of reducing- the political tensions, and thus conflicts. On these premises, this study might shed some light on the efficiency of the current EU actions and measures (economic sanctions) towards its biggest neighbour. Thus, as the analysis suggests, it is highly unlikely for Russia to be persuaded to change its foreign policy and behaviour, even at the expense of serious economic downturn.

Nevertheless, despite the theoretical assessment of the nature of relations between Russia and the EU, it might be too early to properly dwell upon the long-term effects of the Western measures and actions to contain Russia. Within this context, further research is necessary in order to assess the impact of the imposed sanctions on both Russian and European economies, as well as to update the international context to the new realities of the Syrian war.

References

Baldwin, D. A. (1980). ,Interdependence and power: a conceptual analysis'. International Organization 34 (4): 471-506. https://doi.org/10.1017/S0020818300018828

Baldwin, D. A. (1989). Paradoxes of power. New York: Basil Blackwell.

Barbieri, K. (1996). "Economic Interdependence: A Path to Peace or Source of Interstate Conflict?". Journal of Peace Research 33 (1): 29-49. https://doi.org/10.1177/0022343396033001003

Binhacka, P. and Tichy, L. (2012). ,Asymmetric interdependence in the Czech-Russian energy relations'. Energy policy 45: 54 – 63. https://doi.org/10.1016/j.enpol.2012.01.027

Blainey, G. (1973). The Causes of War, New York: Free Press. https://doi.org/10.1007/978-1-349-01690-7

Carr, E. H. (1939) 2001. The Twenty Years' Crisis: An Introduction to the Study of International Relations, Basingstoke: Palgrave MacMillan.

Casier, T. (2011). 'The Rise of Energy to the Top of the EU-Russia Agenda: From Interdependence to Dependence?'. Geopolitics 16 (3). Special Issue: The Geopolitics of Energy Supply in the 'Wider Europe': 536-552.

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., and Hanson, W. E. (2003). 'Advanced mixed methods research designs' in Tashakkori, A. and Teddlie, C. (Eds.), Handbook of mixed methods in social and behavioural research. Thousand Oaks, CA: Sage: 209–240.

Doyle M.W. (1997). Ways of War and Peace: Realism, Liberalism, and Socialism. New York: W W Norton & Co Inc.

Doyle, M. W. (2005). ,Three pillars of the liberal peace'. The American Political Science Re-

view 99 (3): 463-466. https://doi.org/10.1017/ S0003055405051798

Dur, A., Zimmerman, H. (2007). ,Introduction: The EU in International Trade Negotiations'. Journal of Common Market Studies 45(4): 771-788. https://doi.org/10.1111/j.1468-5965.2007.00747.x

Emerson, M. (2006). 'A New Agreement between the EU and Russia: Why, what and when?'. in M. Emerson (ed.), The Elephant and the Bear Try Again. Options for a New Agreement between the EU and Russia, CEPS Paperback, Brussels: Centre for European Policy Studies: 62-94.

Finon, D. and Locatelli C. (2007). Russian and European gas interdependence: Could contractual trade channel geopolitics? Energy Policy 36 (1): 423-442. https://doi.org/10.1016/j.enpol.2007.08.038

Forsberg, T. and Seppo, A. (2009). Power without Influence? The EU and Trade Disputes with Russia'. Europe-Asia Studies Journal, Special Issue: The European Union, Russia and the Shared Neighbourhood. 61 (10): 1805–1823. https://doi.org/10.1080/09668130903278967

Gomart, T. (2008). 'EU – Russia relations. Towards a way out of depression', IFRI, CSIS, available at: http://www.ifri.org/files/Russie/Gomart_EU_Russia.pdf. (accessed on January 27th 2012).

Güney, N. A. and Korkmaz, V. (2014). 'The Energy Interdependence Model between Russia and Europe: An Evaluation of Expectations for Change'. Perceptions 19 (3): 35-59.

Hardwick, D. (2011). 'Is the EU a Normative Power?', available at: http://www.e-ir.info/2011/09/03/is-the-eu-a-normative-power/. (accessed on 23rd of April, 2014).

Harsem, Ø. and Claes, D. H. (2013). The interdependence of European–Russian energy relations'. En-

135

ergy Policy 59: 784-791. https://doi.org/10.1016/j. enpol.2013.04.035

Harsem, Ø. (2013). ,The interdependence of European–Russian energy relations'. Energy policy 59: 784 – 791. https://doi.org/10.1016/j.enpol.2013.04.035 Heckscher, E.F. and Ohlin, B. (1991). Heckscher-Oh-

lin Trade Theory. Cambridge, MA: The MIT Press. Hirschman, A. O. (1945) 1980. National Power and

Hirschman, A. O. (1945) 1980. National Power and the Structure of Foreign Trade. Berkeley: University of California Press.

Hogselius, P. (2013). Red Gas: Russia and the origins of European energy dependence. New York: Palgrave Macmillan. https://doi.org/10.1057/9781137286154

Hunya, G. (2012). 'The Role of Multi-national Companies in International Business Integration'. Vienna Institute for International Economic Studies. available at: http://wiiw.ac.at/the-role-of-multi-national-companies-in-international-business-integration-dlp-2704.pdf. (accessed on October 7th 2015).

Hyde-Price, A. (2006). ,Normative power Europe: a realist critique'. Journal of European Public Policy 13 (2): 217–234. https://doi.org/10.1080/13501760500451634

Kavalski, E. (2013). The struggle for recognition of normative powers: Normative power Europe and normative power China in context', Cooperation and conflict, 48 (2): 247–267. https://doi.org/10.1177/0010836713485386

Keohane, R. O. and Nye, J. S. (1977) 2011. Power and Interdependence, London: Pearson.

Kicsi, R., Buta, S. (2012). 'Multinational corporations in the architecture of global economy'. The USV annals of economics and public administration. Vol. 12, No. 2(16): 140-147.

Krickovic, A. (2015). "When Interdependence Produces Conflict: EU-Russia Energy Relations as a Security Dilemma". Contemporary Security Policy, 36 (1): 3-26. https://doi.org/10.1080/13523260.20 15.1012350

Koksal, E. (2006). 'The impact of multinational corporations on international relations -a study of American multinationals-'. available at: https://etd.lib.metu.edu.tr/upload/126 08016/index.pdf. (accessed on October 10th, 2015).

Krastev, I. (2008). 'What Russia Wants', Foreign Policy, available at: http://www.foreign policy.com/articles/2008/04/10/what_russia_wants. (accessed on July 21st, 2013).

Larsen, H. (2014). The EU as a Normative Power and the Research on External Perceptions: The Missing Link'. Journal of Common Market Studies 52 (4): 896–910. https://doi.org/10.1111/jcms.12109

Lavanex, S. (2004), EU external governance in ,wider Europe', Journal of European Public Policy, 11 (4), pp. 680-700. https://doi.org/10.1080/1350176042000248098

Leonard, M., and Popescu, N. (2007). 'A Power Audit of EU–Russia Relations'. ECFR. Available at://ecfr.3cdn.net/456050fa3e8ce10341_9zm6i2293.pdf. (accessed on March 20th 2014).pp. 13–14.

Leontief, W., Carter, A.P. and Petri, P. (1977). The Future of the World Economy. New York: Oxford University Press.

Lenz, T. (2013). ,EU Normative Power and Regionalism: Ideational Diffusion and Its Limits'. Cooperation and Conflict 48 (2): 211-228. https://doi.org/10.1177/0010836713485539

Levy, J. (1989). 'The Causes of War: A Review of Theories and Evidence', in Tetlock, P., Husbands, J.L., Jervis, R., Stern, P.C. and Tilly, C. (eds.), Behaviour, Society, and Nuclear War Vol. 1: 212-333. New York: New York University Press.

Light, M. (2008). 'Russia and the EU: Strategic Partners or Strategic Rivals? '. JCMS 46, Supplement: 7–27, London: Blackwell Publishing Ltd.

Linder, S. (1961). An Essay on Trade and Transformation. Hoboken, NJ: John Wiley and Sons.

Lorkowski, A. (2012). 'Far from completion? Prospect for Development of the EU energy market'. Demos Europa, Centre for European Strategy. Warsaw, available at:: www.demoseuropa.eu. (accessed on June 13th, 2014).

Maoz, Z. (2009). ,The effects of strategic and economic interdependence on international conflict across levels of analysis', American Journal of Political Science, 53 (1): 223-240. https://doi.org/10.1111/j.1540-5907.2008.00367.x

Manners, I. (2002). "Normative Power Europe: A Contradiction in Tems?". Journal of Common Market Studies 40 (2): 235-258. https://doi.org/10.1111/1468-5965.00353

Mearsheimer, J.J. (2001). The Tragedy of Great Power Politics. New York: Norton.

Mikić, M. (1998). 'Heckscher—Ohlin—Samuelson Model', International Trade: 52-130.

Morgenthau, H. (1948) 1993. Politics among Nations: The Struggle for Power and Peace. New York, Ed. McGraw-Hill.



Noël, P. (2008). 'Beyond dependence: How to deal with Russian gas'. Policy Brief ECFR. available at: www.ecfr.eu. (accessed on March 6th. 2015).

Okara, A. (2008). 'Sovereign Democracy: A New Russian Idea or a PR Project?'. Russia in Global Affairs 5 (3): 8-20.

Pace, M. (2007). ,The Construction of EU Normative Power', Journal of Common Market Studies 45 (5): 1041-1064. https://doi.org/10.1111/j.1468-5965.2007.00759.x

Polachek, S.W. (1980). ,Conflict and Trade'. The Journal of Conflict Resolution. 24 (1): 55-78. https://doi.org/10.1177/002200278002400103

Proedrou, F. (2007). ,The EU-Russia Energy Approach under the Prism of Interdependence'. European Security 16 (3-4): 329-355. https://doi.org/10.1080/09662830701751190

Prozorov, P. (2006). "Understanding Conflict between Russia and the EU: The Limits of Integration". Palgrave Macmillan. available at: http://www.palgrave.com/page/detail/ understanding-conflict-between-russia-and-the-eu-sergei-prozorov/?sf1=barcode&st1= 9781403996893 (accessed on 11th of August 2014). https://doi.org/10.1057/9780230625334

Russett, B. and O'Neal, J. (1997). The Classical Liberals were Right'. International Studies Quarterly. 41: 267-294. https://doi.org/10.1111/1468-2478.00042

Russett, B. and O'Neal, J. (2001). ,Clear and Clean: The Fixed Effect of the Liberal Peace'. International Organization 55 (2): 469-485. https://doi.org/10.1162/00208180151140649

Sakwa, R. (2012). ,Looking for a greater Europe: From mutual dependence to an international regime'. Communist and post-communist studies 45 (3-4): 315-325. https://doi.org/10.1016/j.postcomstud.2012.07.004

Sakwa, R. and Kazantsev, A. (2012). 'New 'dividing lines' in Europe: A crisis of trust in European–Russian relations'. Communist and Post-communist Studies 45 (3–4): 289-293.

Sjursen, H. (2006). 'The EU as a 'normative' power: how can this be?'. Journal of European Public Policy 13 (2), Special Issue: What Kind of Power? European Foreign Policy in Perspective: 235-251.

Smith, A. (1776) 2003. The Wealth of Nations. New York: Bantam Classics.

Smith, K. E. (2005). 'Beyond the Civilian Power EU Debate'. Politique européenne 17: 63-82.

Smith, K. E. (2012). 'The EU's recent foreign policy record has been poor, with Europe as a whole losing ground in the global system. Why are European politicians and civil servants unwilling to do more to improve performance?'. LSE European Politics and Policy (EUROPP) Blog (29 Feb 2012). available at: http://eprints.lse.ac.uk/42992/ (accessed on January 17th, 2015).

Stivachtis, Y. (2013). 'The EU as an international actor: 'Civilian', 'normative' or 'military' power? '. in Stivachtis, Y. The State of European Integration. Burlington, VT: Ashgate, 41–58.

Tocci, N. (2007). The EU and Conflict Resolution: Promoting Peace in the Backyard. London: Routledge.

Torbakov, I. (2013). 'The European Union, Russia, and the 'in-between Europe': Managing interdependence' in The European Union neighbourhood: challenges and opportunities: 174-190. London: Ashgate.

Trenin, D. (2007). 'Russia's threat perception and strategic posture', in R. Craig Nation and Dimitri Trenin. Russian Security Strategy under Putin: U.S. and Russian perspectives. Carlisle, PA: Strategic Studies Institute.

Vecchi, S. (2012). 'European Union – Russian Federation Sustainable proximity', EU-Russia Center, available at: http://www.eu-russiacentre.org/wp-content/uploads/2012/03/ European-Union-Russian-Federation-sustainable-proximity.pdf, (accessed on November 10th 2015).

Vernon, R. (1966). International Investment and International Trade in the Product Cycle'. Quarterly Journal of Economics 2: 190-207. https://doi.org/10.2307/1880689

Wagnsson, C. (2010). Divided power Europe: normative divergences among the EU big three. Journal of European Public Policy 17 (8): 1089-1105. https://doi.org/10.1080/13501763.2010.513

Waltz, K. N. (1979). Theory of International Politics. New York: Ed. McGraw-Hill.

Willett T. and Chiu, E. (2012). Quantitative Measures of Economic and Financial Power and the Rise of East Asia, UC Santa Barbara. 18 April, 2015. available at: http://www.cgu.edu/PDFFiles /SPE/Willett/Papers/draft%201%20-%20Chiu-Willett.pdf.



EU-Russia interdependence indexes

Dep. Index	2007/2008		2009/2010		2011		2012		2013/2014	
	EU	RU	EU	RU	EU	RU	EU	RU	EU	RU
dc	0,0930	0,3191	0,0795	0,1480	0,0944	0,2903	0,0972	0,2327	0,0954	0,2090
de	0,1973	0,6003	0,1944	0,7945	0,1919	0,5475	0,1878	0,5762	0,1835	0,5917
di	0,0048	0,6533	0,0244	0,5217	0,0035	0,8768	0,0202	0,8528	0,0157	1,0000
рс	0,2154	0,2660	0,1902	0,2410	0,2492	0,4330	0,2593	0,4890	0,2529	0,4020
ре	0,1480	0,1800	0,1567	0,1920	0,1545	0,2640	0,1835	0,2850	0,1884	0,2570
pi	0,1940	0,0569	0,2000	0,0220	0,2560	0,0361	0,2970	0,0265	0,3060	0,0335
dd	0,0502	0,2301	0,0505	0,1997	0,0541	0,3019	0,0657	0,3006	0,0635	0,2696

Annex 1

EU and Russia dependence indexes in Commerce, Energy and FDI's (2007-2014)

Source: Authors' calculations based on data retrieved from Eurostat (EU: dc, de, di, pc, pi), RFFSSS (RF: dc, pc), CBR (RF: di, pi) and the Ministry of Energy of the Russian Federation (de, pe).



Indexes for EU-Russia interdependence in Trade, Energy, FDI and Total (2007-2013/2014)*

Source: Authors' representations

SIMIONOV LOREDANA MARIA

Researcher, PhD

Alexandru Ioan Cuza University of Iasi, Centre for European Studies, Research Department

Fields of research interests

International Relations, European integration

Address

Bd. Carol I, no.19, Corpus I, Iasi, Romania Tel. +40753 817 084

PASCARIU GABRIELA CARMEN

Professor, PhD

Alexandru Ioan Cuza University of Iasi, Faculty of Economics and Business Administration

Fields of research interests

Regional Development, European integration

Address

Bd. Carol I, no.22, Corpus B, Iasi, Romania

About the authors