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## **PH.D. THESIS**

**EU-Russia relations in the field of energy and trade. Existing interdependencies and their impact on the prospects for regional cooperation and integration in Europe**

**(SUMMARY)**

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## SUMMARY

### Relevance of the research topic

In the year of 2000 in Lisbon, the European leaders had great visions regarding the Union's future; they saw in the European Union (EU) of 2010 "the most dynamic and competitive knowledge-based economy." However, reality proves to be contrary to this expectation. The current economic and political context demonstrates that the future and prosperity of the European Union does not only depend on will and internal actions, but also on its external ones, such as the efficient management of EU relations with its neighbours. Since the Russian Federation is the most important neighbour of the Union, we can state that the future, prosperity and security depend largely on a proper management of its relations with Russia. In essence, within the current global context, the interdependence of the two economic areas implies that the EU needs Russia's energy and market, as the latter needs the foreign direct investments from the EU, as well as to remain the main energy supplier in Europe. Therefore, as a first assessment, we can state that economic interdependence is the essence of international relations between the two powers;

The interdependence centred on energy resources has become a strategic stake not only for the internal development options of the two spaces, but also for defining their external relations. However, the prospects for cooperation between Russia and the European Union currently remain limited as the potential for solid cooperation is directly proportional to the challenges and difficulties that the EU and Russia must face. On one hand, on short and medium term, both actors have other priorities: EU gives priority to deepening the integration process of its newly added members and to find a model of macroeconomic governance, especially in the current sovereign debt crisis; As for Russia, in addition to the global economic crisis which has seriously affected its economy, the Federation is currently facing a large-scale political crisis exacerbated by the recent events in Ukraine. On the other hand, the EU has no proper means for a common energy policy towards Russia for as long as the bilateral relations between Russia and the EU member states outweigh the regional relations between Russia and the European Union.

The proposed PhD thesis aims to analyse the EU-Russia relations in the spheres of energy and trade, the attention being focused on the current interdependencies and their implications on the prospects for regional cooperation and integration in Europe. The present research subscribes to a wide field of international economic relations. However, the complexity of the scientific endeavour requires an interdisciplinary approach, which uses concepts, methods and tools from various fields, such as economics, international relations, geopolitics, history and econometrics.

The particular relevance of the proposed research topic emerges from the need to understand the complex relations between the EU and Russia, as well as to find solutions for the security and welfare of the entire European continent, needs that can only be covered by enhancing and developing regional cooperation and integration between the European Union and Russia.

### **The overall aim and research objectives**

Given the wide range that this line of research offers, the study will primarily focus on analysing the current economic and political interdependent relations between the EU and Russia aiming to clarify their general typology, to assess the advantages and intensity of economic interdependence between Russia and the European Union, to analyse and interpret the role that energy plays in shaping the foreign policy relations of the two actors, as well as to outline the main prospects for cooperation and pan European regional integration.

The scientific approach involves both a theoretical perspective (using the main concepts and theories in the literature in order to identify specific analytical tools that allow us to define and analyse the relations of interdependence) as well as an empirical approach (using the methods of measurement and analysis of the interdependent economic relations between the EU and Russia, both regionally and at the Member States level).

Since the political and economic relations of the EU Member States with the Russian Federation are characterized by complexity and diversity, the analysis of interdependence between the two actors is not relevant enough if we should consider the EU as a whole. In essence, the originality of this research resides in: correlating a regional perspective with a bilateral one, combining the economic risk and implications of interdependence with the political ones, through an interdisciplinary approach, as well as extending the analysis to all EU Member States.

**The current research is based on these three main hypotheses:**

H1: At *regional level*, from an *economic perspective*, the interdependence between Russia and the European Union is asymmetric and *the European Union holds the advantage*;

H2: At *regional level*, from a *political perspective*, the interdependence between Russia and the European Union is asymmetric and *the Russian Federation holds the advantage*;

H3: At *bilateral level*, the interdependence between Russia and the EU member states is *asymmetric* and the *bargaining advantages are held by the Western Member States, while the disadvantages by the Eastern ones*.

**Research objectives:**

O1: Identify the meanings and typologies of interdependence in the fields of economics and political science;

O2: Identify the main directions and theories of interdependence, as well as the main analytical tools for characterising and measuring interdependence;

O3: Define and characterise Russia and the European Union as global actors;

O4: Characterise the typology of interdependence between the EU and Russia from a political perspective;

O5: Characterise the typologies of interdependence between Russia and the European Union at regional level and identify the induced leverages in the spheres of trade, energy and investment;

O6: Conduct a comparative analysis of interdependencies in the spheres of energy, trade and foreign investment between the EU Member States and Russia, in order to identify the asymmetries (dependencies) and hence vulnerability between the two actors;

O7: Conduct an analysis of the interdependencies and correlations between the EU27 Member States and Russia in the field of energy, trade and investment, having energy as a common denominator, in order to outline the role of energy in the relations between the EU and Russia at regional level.

O8: Assess the implications and effects of the interdependent between the EU and Russia on regional cooperation and integration in Europe.

### **Thesis structure**

Chapter I entitled *The conceptual framework regarding economic and political interdependence between countries and regions* consists of the theoretical background of the research that underpin the assessment of the main theories and directions in literature in order to identify the necessary analytical tools to be used in the scientific approach. Given the bivalent nature of the concept of interdependence, there are exposed theories of both political sciences, as well as economics. The main analytical tool used is *asymmetry*, both in terms of economic vulnerability and in terms of political leverage (advantage). This chapter will outline the analytical framework, as well as the necessary tools used for analysis in the following chapters.

Chapter II, entitled *The interdependence between the EU and Russia in political perspective* represents a political analysis of the relations between the two actors which aims to define Russia and the European Union as global players, to assess the typology of power in the two areas and to analyse the political agenda promoted by Russia and the EU in relation to their domestic and foreign policy (high and low politics). The scientific approach will focus on characterising the typology of interdependence between the EU and Russia, as well as identifying the induced political leverage, therefore testing the first research hypothesis (H1).

Chapter III, entitled *The interdependence between the EU and Russia at regional level, an economic perspective* focuses on EU (as a region) relations with the Russian Federation by addressing their interdependence as mutual dependences. The interdependence seen as mutual dependence perspective assumes the existence of mutual and parallel economic dependence, as follows: the EU27 economy depends on Russia while the Russian economy depends on EU-27. In this sense, this chapter analyses the mutual dependencies of the two regional actors in the spheres of trade, energy and investment, in order to characterize the interdependence typology and to identify the induced advantages and therefore testing the second research hypothesis (H2).

*Chapter IV The interdependence between the EU and Russia at the Member States level, an economic perspective* represents a natural continuation of the previous chapter, focusing on a more complex analysis, both in terms of subjects, as well as on the approaches to the concept



interdependence. Thus, regarding the subjects, the analysis will be extended to all 27 members of the Union. In this approach, the dependencies and vulnerabilities of EU Member States and Russia are the main analytical tools for assessing the unequal distribution of benefits. The central purpose of this chapter is to test the third research hypothesis (H3). In this sense, the scientific approach focuses on conducting a comparative analysis of mutual dependencies, as well as identifying correlations between the two spaces in the spheres of trade, energy and investment, in order to characterise the typology of interdependence between Russia and the EU member states, and the distribution of cost and benefits among them.

*Chapter V The implications and effects of the interdependent relations between the European Union and the Russian Federation* is intended to outline the main implications and effects of the relations of interdependence analysed and presented in the previous chapters. In doing so, there are outlined the main scenarios and recommendations for the EU and Russia in order to develop better economic and political cooperation.

In essence, the present study revolves around the concept of interdependence, in order to define and characterize the economic and political relations between Russia and the EU, both at regional and Member State level. In literature, both in political science and in economics there have been conducted extensive research around the concept of interdependence. Whatever the field of study or perspective from which is analysed, in essence, interdependence is an economic phenomenon but induces a variety of effects on multiple spheres: economic, political, social or cultural.

### **The methodological approach**

In pursuing the research objectives and aim, the scientific approach is based on both qualitative and quantitative analysis. Given the two-dimensional nature of the analysed concept the methodological approach will correlate the economic outlook with the political perspective.

The analysed actors in this thesis are Russia and the European Union (EU). Since the EU Member States develop very complex and diverse economic and political relations with Russia, it is not sufficient and relevant an analysis that takes into account the European Union as a whole. Politically, the analysis focuses on the main groups of Member States on the basis of their

foreign policy and paradigms promoted in relation to Russia. Economically, in order to provide a comprehensive analysis there are consulted the individual cases of all EU member states.

The qualitative approach is mainly focused on the analysis of interdependence and its related concepts, in terms of politics and economics, in order to identify the most appropriate analytical tools necessary to shape its typology when it comes to the European Union and Russia, by applying the main theories in literature that addressed this issue. A central interest in this process is to identify and analyse the main features and effects of interdependence, such as: (a)symmetry, intensity, vulnerability and political leverage (advantage).

*The quantitative approach essentially aims to conduct an analysis of the economic aspects of interdependence; however, the interpretation of the results will also consider the main paradigms and foreign policies of the two actors. The proposed scientific approach is going to link the economic with the political perspective in order to develop a more complete interpretation, stressing the interdisciplinary nature of this current research. Mainly, the quantitative analysis will involve two main approaches:*

- 1. Analysis of regional economic interdependence using coefficients of intensity dependence and symmetry, based on the calculation methods developed by Barbieri, Oneal and Russett, as well as based on author's own methods of quantifying interdependence in the spheres trade, energy and investments.*
- 2. Analysis of interdependence at member states level, by:*

*2.1. Grouping the EU Member States by Jenks's optimization method (method of optimal limits) applied both to the interdependence coefficients existing in literature (TradeShare and intensity) as well as to the proposed coefficients of dependency and vulnerability in the sphere of energy, trade and investment.*

*2.2. Identifying the correlations between the economies of the actors involved, energy being the centre of gravity for the relations between Russia and the EU, by using a multiple regression index (composite) based on energy (energy demand and prices), energy trade and investment in the energy sector of the form:*

$$Y = \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n +$$

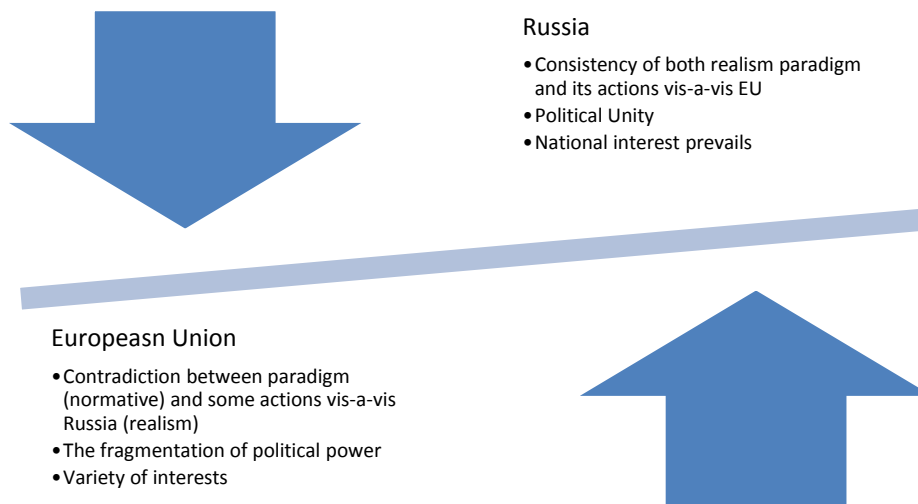
Where  $x_1 - x_n$  are independent variables and Y is the dependent variable.

## **Research results**

### **I. POLITICAL PERSPECTIVE**

Applying the theory of complex interdependence in the case of EU-Russia relations has brought to light a defining aspect of their political ties: *the absence of complex interdependence validates the idea that, regardless of the intensity of economic interdependence between Russia and the EU, the political power and military capabilities remain relevant.*

#### **Interdependence between the EU and Russia – political approach**



Source: Author's representation

*As a result, in the political sphere, the regional interdependence between Russia and the European Union is asymmetric and the Russian Federation holds the bargaining advantage. (H1)*

### **2. ECONOMIC PERSPECTIVE**

#### **Regional Level:**

The values of the integrated coefficient of dependence have shown that at regional level in the spheres of trade, investment and energy, the European Union and Russia have an asymmetric

interdependence in favour of the European Union, with trends of increased asymmetry, given that the EU dependence has a downward trend, while there is a growth trend for Russia. By defining the typology of interdependence between the EU and Russia at regional level validates the second hypothesis of this study (H2) which states that, from an economic perspective, the regional interdependence between the EU and Russia is asymmetric in favour of the European Union.

### **Member States Level:**

Summary picture of interdependence between Russia and EU member states in the spheres of trade, energy and investment as proposed by the author through vulnerability coefficients (2014)

Member States UE27	TRADE		ENERGY		FDI		GENERAL	
	Typology	Leverage	Typology	Leverage	Typology	Leverage	Typology	Leverage
Germany	Asymmetry strong	Germany	Asymmetry strong	Germany	Asymmetry medium	Germany	Asymmetry strong	Germany
Austria	Symmetry weak	/	Asymmetry weak	Russia	Asymmetry strong	Russia	Asymmetry medium	Russia
Belgium	Asymmetry weak	Belgium	Symmetry weak	/	Symmetry weak	/	Asymmetry weak	Belgium
Bulgaria	Asymmetry strong	Russia	Asymmetry medium	Russia	Asymmetry strong	Russia	Asymmetry strong	Russia
Cyprus	Asymmetry strong	Russia	Symmetry weak	/	Asymmetry strong	Russia	Asymmetry strong	Russia
Denmark	Symmetry weak	/	Symmetry weak	/	Asymmetry medium	Denmark	Asymmetry medium	Denmark
Spain	Asymmetry weak	Spain	Symmetry weak	/	Symmetry weak	/	Asymmetry weak	Spain
Estonia	Asymmetry strong	Russia	Symmetry weak	/	Asymmetry strong	Russia	Asymmetry strong	Russia
Finland	Symmetry weak	Russia	Asymmetry medium	Russia	Symmetry weak	/	Asymmetry weak	Russia
France	Asymmetry medium	France	Symmetry weak	/	Asymmetry medium	France	Asymmetry medium	France
Greece	Asymmetry weak	Russia	Symmetry weak	/	Symmetry weak	/	Asymmetry weak	Russia
Hungary	Asymmetry weak	Russia	Asymmetry medium	Russia	Symmetry weak	/	Asymmetry medium	Russia
Ireland	Symmetry weak	/	Symmetry weak	/	Symmetry weak	/	Interconnect	/
Italy	Asymmetry strong	Italy	Asymmetry medium	Italy	Asymmetry medium	Italy	Asymmetry medium	Italy
Latvia	Asymmetry strong	Russia	Asymmetry weak	Russia	Asymmetry strong	Russia	Asymmetry medium	Russia
Lithuania	Asymmetry strong	Russia	Asymmetry strong	Russia	Asymmetry strong	Russia	Asymmetry strong	Russia
Luxemburg	Symmetry weak	/	Symmetry weak	/	Asymmetry medium	Luxemburg	Asymmetry medium	Luxemburg
Malta	Symmetry weak	/	Symmetry weak	/	Symmetry weak	/	Interconnect	/
Netherland	Asymmetry weak	Netherland	Symmetry weak	/	Asymmetry medium	Netherland	Asymmetry medium	Netherland
Poland	Symmetry		Asymmetry		Symmetry		Asymmetry	

		medium	/	weak	Russia	weak	/	weak	Russia
Portugal	Symmetry weak	/	Symmetry weak	/	Symmetry weak	/	Interconnect	/	
CZ Rep.	Symmetry weak	/	Asymmetry weak	Russia	Symmetry weak	/	Asymmetry weak	Russia	
Romania	Asymmetry medium	Russia	Symmetry weak	/	Symmetry weak	/	Asymmetry weak	Russia	
Great Britain	Asymmetry medium	Great Britain	Symmetry weak	/	Symmetry weak	/	Asymmetry medium	Great Britain	
Slovakia	Asymmetry weak	Russia	Asymmetry medium	Russia	Symmetry weak	/	Asymmetry medium	Russia	
Slovenia	Asymmetry weak	Russia	Symmetry weak	/	Asymmetry weak	Russia	Asymmetry weak	Russia	
Sweden	Asymmetry weak	Sweden	Symmetry weak	/	Symmetry weak	/	Asymmetry weak	Sweden	

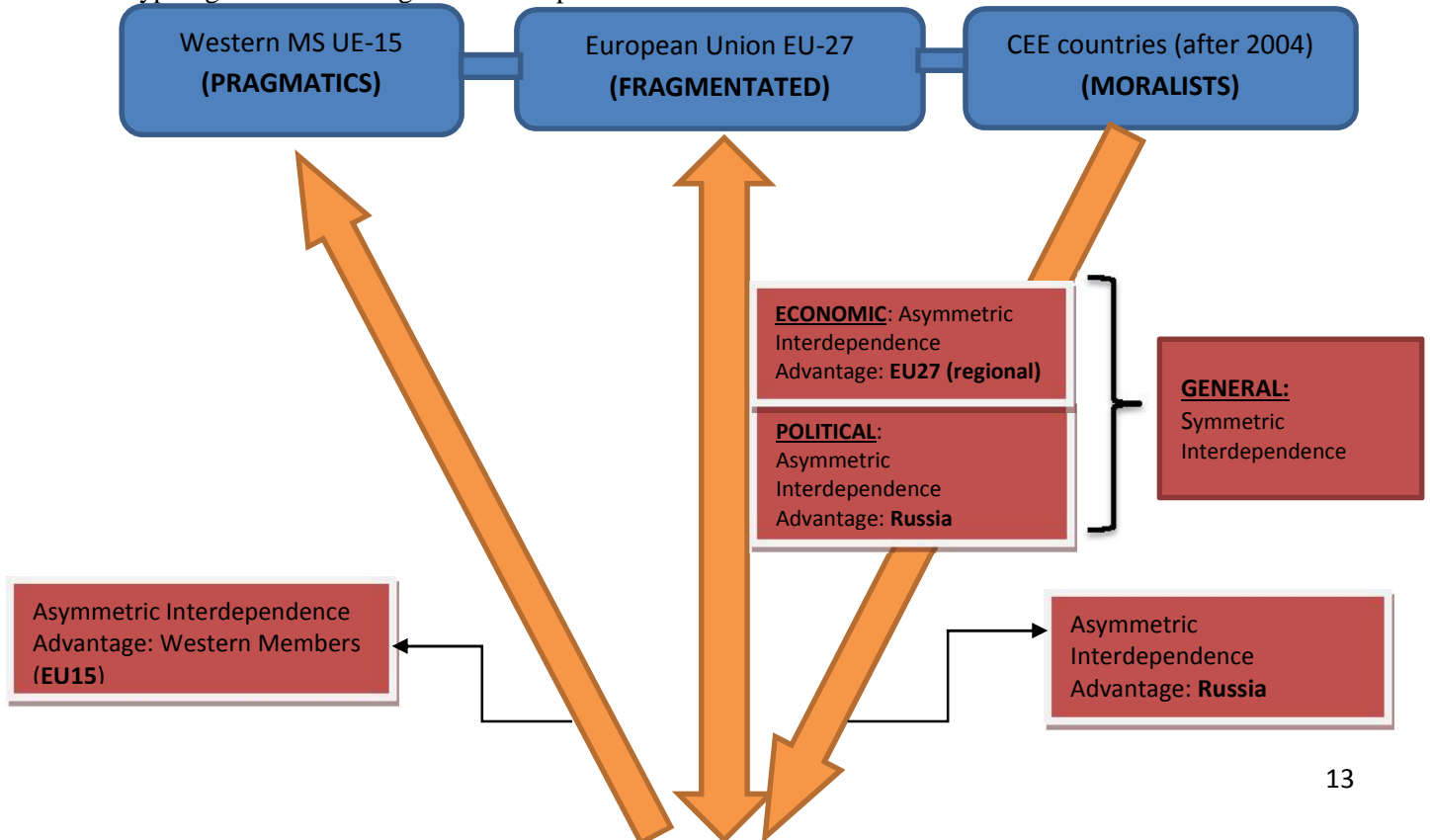
Source: Author's representation

*In conclusion, given that most of the countries in Eastern Europe (CEE) have disadvantages in dealing with Russia while most of the West (EU15) report advantages in relations to Russia we can confirm the validity of the third hypothesis (H3) of this research.*

### 3. CORRELATION BETWEEN POLITICAL AND ECONOMIC PERSPECTIVES

By correlating the political and economic perspectives, as well as the regional to bilateral analysis it can be shaped an overview of the interdependence between Russia and the European Union:

Typologies and advantages of interdependence between the EU and Russia





Source: Author's representation

It can be notice within the scheme above the symmetry of EU-Russia interdependence at regional level (assuming that the political and economic have the same importance), while the asymmetry of the interdependencies between Russia-EU Member States at bilateral level, so that in the case of Russia / old Member States the advantage is hold by the Western European Members, while in the Russia / new Member States case, the advantage is on Russia's side.

**RESEARCH CONCLUSIONS**

The scientific approach tracked step by step the eight initial goals in order to test the three hypotheses. The results of the current research validate all assumptions exposed. In this context, the asymmetrical interdependence among Member States, characterised by the east-west division, implies the existence of long-term adverse consequences. Without the Nabucco pipeline and the lack of diversification of gas imports in the new EU Member States, the disparities in development between EU members in the East and those in the West will increase. This division leads to the formation of a more fragmented energy market having the EU's eastern part highly dependent on energy supplies from Russia, while the Western part is becoming more diversified on energy resources, especially on natural gas suppliers. Such a development could have serious consequences not only for the consolidation of a common market and liberalized gas, but also for the future EU energy policy, for the development of the CFSP, as well as for the strategic guidelines of the EU's member states foreign policy.