COMBINING MULTI-LEVEL AND NETWORK GOVERNANCE WITH A SPILLOVER EFFECT: THE CASE OF THE EUROPEAN "INNOVATION UNION" FLAGSHIP INITIATIVE

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Abstract

The purpose of this paper is to demonstrate the possibility of a theoretical up-grade to the framework offered by the theory of governance: from a middle-range theory to a full theory through adding a neofunctionalist component that would enhance its explanatory capabilities by projecting them at the systemic level. The authors have chosen, as a case study, the flagship initiative "Innovation Union" within the Europe 2020 Strategy; this initiative provides a set of actions that can be undertaken at different levels of political authority (supranational, national, etc.) and involving several types of actors (state, supranational, non-state, etc.), context which validates the theoretical components of governance, represented by multi-level governance and network governance. The authors consider that the integration of the research policy of the Member States will produce a spillover effect (in neofunctionalist terms) on other policy areas; the argument is based on the fact that the Europe 2020 Strategy, in general, and the flagship initiative "Innovation Union", in particular, require concerted actions within different policy directions (research, education, industrial policy, fiscal policy, employment, communications, environment, etc.), context that determines an "integration" trend of these policies on the basis of a spillover process. The authors believe that the integration of all policy areas involved in the flagship initiative "Innovation Union" would lead, through a spillover effect, to a better European economic integration. The normative foundation of the analysis is the Treaty of Lisbon, as the flagship initiative is part of the research and development policy of the European Union, in which the EU currently holds not only the competence to support, coordinate and complement the actions undertaken by the Member States, but also to define and implement programs.

Keywords: Multi-Level Governance, Network Governance, Spillover, Europe 2020, Innovation

Introduction

The global financial and economic crisis had a great impact on the European Union, cancelling part of the social and economic progress that has been achieved in the years preceding the crisis. Now, the most important objective of the EU is to recover soon and continue with the reforms. The world has changed, but Europe is still failing to adapt to the new reality around it. Besides the effort to overcome the crisis, the EU faces a number of other internal and external challenges (aging population, resource scarcity, climate change, globalization, the spread of new information and communication technologies, the emergence of new economic powers etc.) which are continuously multiplying. In this context, it becomes imperative for the EU to reconsider its priorities and to

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¹ For more information about the internal and external challenges which the EU has to face at the moment, see European Commission *Communication from the Commission*. *Europe 2020 – A strategy for smart, sustainable and inclusive growth*, COM (2010) 2020 final, Brussels, 3.03.2010.

review its sources of competitive advantage on global scale. Europe's only chance to return as a major player on the international stage depends on all Member States acting together as a Union. Therefore, the current developments within the EU are an important testing ground for EU scholars, who can closely analyze the means through which the integration/convergence of the Member States can be achieved, thus developing an improved theory of European integration.

This paper is meant to explore the possibility of a (theoretical) up-grade of the theory of governance: from a middle-range theory to a full theory by adding a neofunctionalist component that would enhance its explanatory capabilities by projecting them at the systemic level. This research initiative is based on the belief that the great theories in European integration (neofunctionalism and intergovernmentalism) aren't able to explain the current developments of the EU and that the recent theoretical perspectives on EU governance (multi-level governance and network governance) aren't enough to form a comprehensive theory of EU integration (they seem to lack the prescriptive component). Thus, it calls for a rethinking of the EU integrationist theories in order to be able to reflect the present reality of the European Union.

The authors of this article believe that the good explanatory capacity of the EU governance theory, in both of its forms – multi-level governance and network governance, can be improved by adding a neofunctionalist component of spillover. For proving this assumption, we have chosen to analyze – as a case study – the flagship initiative "Innovation Union" within the Europe 2020 Strategy. We believe this initiative is the most important of all seven flagship initiatives because it focuses on innovation, a thing which, in our opinion, must define every EU policy in order for the EU to develop and to become a significant player on the global stage; thus, the integration of the research and innovation policies of the Member States can produce a spillover effect on other policy areas.

The theoretical framework of this paper is represented by the neofunctionalist approach and the theory of governance; these perspectives on European integration are presented in the light of the existing specialized literature in the domain and by trying to identify a correlation between them, in order for a new, more comprehensive EU integration theory to emerge. The methodology used for this article consists in the study of documents, especially research papers of the main authors in the field of EU studies or official documents of the EU, such as the Treaty of Lisbon and other documents that establish the framework and the functioning of the Europe 2020 strategy and of the Innovation Union flagship initiative.

The analytical approach is structured in three chapters as follows: the first chapter presents the theoretical framework of the analysis; the second chapter corresponds to the case study and the third is meant to draw the conclusions of the paper.

1. Theoretical Framework

1.1. The Theory of Governance

Within recent decades, the area of European Studies has become extremely flexible; the very concept of integration has been strongly challenged, both in terms of its traditional neofunctionalist perspective (emphasizing the importance of different types of actors pressing for integration, which would eventually lead to a supranational state able to satisfy both the security and welfare needs of its components), or from an intergovernmentalist point of view (focusing on integration as a type of cooperation between countries seeking to meet their national interests, like the model of classic international organizations). New approaches have emerged in the '80s, which were more interested in issues such as streamlining the decision-making process or in other aspects of daily political life; we are talking about "the governance turn", when studies became less concerned about international relations theory, but more focused on comparative studies and public policy. Currently, there are either theories concerned about conceptual clarification or theories which seek to build explanatory

political models, but, unlike the classical theories, they remain at a middle-range and seem to ignore the prescriptive aspect rather much.

Of all these middle-range theories, the governance perspective distinguishes itself both as a research interest in its own right and as an orientation that underlies the majority of the new approaches developed within the EU studies. In this case, the EU studies are perceived (see Chryssochoou 2009) as a combination of instruments coming from the two lines of research (the international relations theory and the comparative policy studies), in a context where traditional conceptions of both the international system and the nation-state are caused by a phenomena that determines a change of the old analytical categories (Chryssochoou 2009, p. 72)². According to Rosamond, the questions addressed by this kind of analysis refer to "the nature of authority, statehood, the organization of the international system in the contemporary period", researchers being now less interested in explaining the EU *per se*, but more in the impact of the European construction on other factors/actors/ entities etc. (see Rosamond 2007, pp. 117, 119-121).

As we already stated within the introductory section, the purpose of this paper is to demonstrate the possibility of a theoretical up-grade to the framework offered by the theory of governance: from a middle-range theory to a full theory through adding a neofunctionalist component that would enhance its explanatory capabilities by projecting them at the systemic level.

Since the voices who insisted that the EU should not be considered strictly a classic international organization or a state in the making, have currently gained more power, the topical question remains: how can we tackle the EU phenomenon theoretically? By further applying the tradition of the great theories of integration or preferring to focus on particular aspects of the European experience? In our opinion, a solution may consist of the EU governance theory – one of the newest elements within the theories of integration – which distinguishes itself from the classical theories or form the once developed in the 80s especially through the way of conceiving/perceiving the levels of authority and the types of actors involved in the process of policymaking. However, a discussion about the theory of governance starts with the operationalization of the concept of governance. Analyzing the literature, we note that the presence of governance assumes an irregular distribution of power between administrative levels and between different types of actors (public and private, but also from the voluntary sector) and a constant process of negotiation between all these elements. One of its main merits is its capacity to bring together institutions and citizens (as individuals or, more often, as interest groups). When talking about governance, we tackle the issue of the "re-allocation of [formal] authority" in relation to state actors - individual decision-making levels, subnational (local or regional), supranational, international or transnational, are being developed and the fact that "networks of diverse kinds have multiplied at every level"; therefore, we refer to the multiplication of actors, within an increasingly decentralized decision-making context (Hooghe and Marks 2001, p. 2; see also Gallagher, Laver and Mair 2006, p. 154).

As a working definition for governance, the following interpretation (proposed by Chhotray and Stoker) is worth mentioning: "governance is about the rules of collective decision-making in settings where there are a plurality of actors or organizations and where no formal control system can dictate the terms of the relationship between these actors and organizations" (Chhotray and Stoker 2009, p. 3). The debate on the idea of EU governance has occurred in the context of the extremely dynamic beginning of the millennium, when some European policy makers wanted to change the EU's institutional scaffolding for this to be consistent with new developments and the new political and social challenges. Thus, for the European Commission, the discussion on governance has been primarily centred on how the "the Union uses the powers given by its citizens" or on the existing solutions in order to increase transparency in policy making through involving as many elements of

² Pollack also believes that the development of governance studies has been influenced equally by both research perspectives (Pollack 2005, p. 42)

civil society as possible³. The proposals presented by the Commission in the *White Paper on European governance* for the achievement of the above mentioned objective, seek: (a) to increase citizen participation in the process of public policies making and bring greater openness to EU citizens, (b) to improve policies, regulations and results (quality improvement of the policy implementation process), (c) to promote global governance (increasing EU's role in the international system), (d) to redefine the role of EU institutions⁴. Summarizing the ideas of the European Commission, "«Governance» means rules, processes and behaviour that affect the way in which powers are exercised at European level, particularly as regards openness [of the European institutions towards other actors], participation [of actors], accountability [of actors], effectiveness and coherence [of policies]⁵".

When exploring the theoretical aspects of governance, we must start by saying that the idea of governance is intensively used in analysis about the European Union, especially in its multi-level aspect - multiple decision centres, multiple territorial levels involved in decision-making, multiple actors (Chhotray and Stoker 2009, p. 16-22). In any case, in Gary Marks' articles, multi-level governance was mainly a simple description of processes related to the implementation of structural policies (George 2004, p. 107); this phrase (multi-level governance) was assumed later also by other analysts, like Liesbet Hooghe in 1996, at the beginning in similar contexts and afterwards in different other areas. The emergence and development of the concept of "multi-level governance" was determined also by the exponential growth of the number of analysis on the EU in terms of being a political system, in detriment of those interested in finding the causes and purpose of the integration process. Ben Rosamond argues that the EU has a vague character ("a hybrid form: neither political system nor international organization, but something in-between" - 2000, p. 110)⁷, which is why studies on governance in general, and especially in its multi-level expression, are extremely useful for exploring the originality of this Union, which is seen as an expression of postmodernism; in this context, (multi-level) governance is not considered a theory, but more of "a metaphor used to depict the mature stage of the EU polity" (Rosamond 2000, p. 201), in which authority is no longer located within the nation-state, but divided among various types of actors involved in the decision making that simultaneously takes place within several levels. In the context of the governance turn that led to a shift towards "studying the EU as a political system in its own right", M. Cini sees multi-level governance as "an approach to the study of EU politics which emphasizes the interaction of many different actors who influence European policy outcomes" (Cini 2007, p. 460, 462)8. Papadopoulos (2005, p. 316) doesn't consider this phenomenon to be representative enough for an analysis; he is rather seeing it at the confluence between organizational theory and the policy networks analysis. Thus, among the theoretical principles of multi-level governance features the fact that power is

The Commission of the European Communities, European Governance. A White Paper, COM(2001) 428 final, Brussels, 25.7.2001, p. 3.
 The Commission of the European Communities, European Governance. A White Paper, COM(2001) 428

⁴ The Commission of the European Communities, *European Governance*. A White Paper, COM(2001) 428 final, Brussels, 25.7.2001, pp. 4-6.

⁵ The Commission of the European Communities, *European Governance*. A White Paper, COM(2001) 428 final, Brussels, 25.7.2001, p. 8.

⁶ See Hooghe, Liesbet, ed. 1996. *Cohesion Policy and European Integration: Building Multi-Level Governance*. Oxford: Oxford University Press.

⁷ For William Wallace, in the EU one should "remark on the persistence and adaptability of the provisional", that is why the organization is seen as "relatively stable *provisorum*" and "a partial polity", although it remains "a stable structure of collective governance" (Wallace 2005, p. 471, 473).

⁸ A type of multi-level governance analysis preferred by "those studying federalism, decentralization, European integration, regional and global regimes" is the one which "prepares a list of policy areas and sees how authority is allocated among them" (Hooghe and Marks 2001a, p. 3).

⁹ For other authors, multi-level governance is not an alternative in itself but a "gradual incremental development in which institutions still play a decisive role" as a "complement for intergovernmental relations in a certain regulatory framework" (Peters and Pierre 2004, p. 75-76).

spread among several levels of asymmetric authority and several actors - there are differences both horizontally and vertically - the interaction between public actors and other types of actors (coming from the secondary or tertiary sector) leading to the removal of "the debate about authority away from the zero-sum notions associated with discourses of sovereignty" (Rosamond 2000, p. 110).

Another aspect of governance is the **network governance** perspective of carrying out public policies, which is perceived as an alternative for hierarchy and market. Not denying the fact that following this "third way", most processes are conducted through a network, the term "network governance" as a mode of governance seems a bit restrictive; however, networks are just one part – although significant – of governance. Thus, in our opinion, governance represents a type of governing, and its two main characteristics are its multi-level aspect and the presence of networks. An analysis of the elements of network governance (Kohler-Koch 1999, p. 24; see also Eising and Kohler-Koch 1999, p. 6) would lead to conclusions on:

- The activating role of the state through mobilizing stakeholders and carrying out strategies to "reduce transaction costs and give stability to self-regulatory agreements";
- The dominant orientation of decisions the negotiation to achieve the common interest without omitting to maximize private interests (however, the maximization is, usually, a sub-optimal one, compared to other cases)¹⁰;
- Models of non-hierarchical interaction, overlapped interactions, involving both public and private actors, which differ from one context to another;
- The dominant actors different government authorities (not the "state" as an abstract entity) and numerous interest groups;
- The level of political action difficult to identify, with horizontal and vertical cooperation actions in order to achieve goals; Kohler-Koch insists much on the idea of the emergence of problems associated with the application of the principle of subsidiarity within the EU (the "rise to provincialism and the exploitation of the general interest").

The relationship between multi-level governance and network governance remains rather loosely defined, although theorists explicitly recognize the link between the two events occurring within governance, still the nature and purpose of the interaction between the two aren't explained as accurate as they should be. Papadopoulos, for example, mentions the recent efforts on trying to tie multi-level governance, "which developed in response to state-centric approaches to integration – and the literature on network governance, which focuses on the local level, but also on specific policy sectors at the national level" (Papadopoulos 2005, p. 316). However, his own version of their correlation is not satisfactory: multi-level governance should be intrinsically linked to "formulation and implementation of public policies by networks" (Papadopoulos 2005, p. 316), but there may be networks operating at a single decision-making level, as well as multi-level process carried out through other means than networks.

In our opinion, governance can be interpreted as a mixture of different theoretical approaches brought together under the same roof, multi-level governance and network governance being the most developed of its branches. Multi-level governance or network governance, taken separately, may represent ideal and symbolic models for the European Union; as Bunge (1974) explains: having the same referent (the EU), the two types of governance can serve as models for different – competing or not (the new institutionalism or constructivism, for example) – theories. Put together, however, the two gain the valences of a middle-range theory that explains the daily political processes of the European Union; in addition, with a neofunctionalist input, oriented towards processes at systemic level, it could lead to a full theory of European governance, having a major predictive capacity linked to the development of the system.

¹⁰ The consensus-oriented nature of negotiations and the "sub-optimal policy outcomes" within the EU would be determined by "the complexity" and "unpredictability of the EU policy agenda" (Eising 2007, p. 207).

1.2. The Neofunctionalist Theory

Many of the researchers interested of the phenomenon of the European integration (independent of the way one looks at it – as a process or as a final target) consider that between the concept of neofunctionalism and the notion of *integration theory* there is a practical equivalence and some of the main reasons for supporting this view are that this stream is omnipresent in the theoretical approaches concerning the EU and also the similarity between the development of the EU and the predictions of early neofunctionalist analysts. In fact, we can say that the experiences of the neofunctionalist theory – the fundamental explicative theoretic framework in the first years of the EU; the main theoretical opponent of the major stream developed afterwards, the intergovernmentalism; the current significant influence on the new types of analysis of the European frame – follow rather exactly the sinuous course of the evolution of the EU, all the way from the excessive optimism of the 50's, to the difficult times of the 70's and to the recovery from these during the 90's.

The key elements of neofunctionalism, according to the systematization of Ben Rosamond, would be the spillover and the loyalty transfer. From an adjacent point of view influenced by Charles Pentland, C. Strøby Jensen (2007) also mentions the thesis of the socialization of elites and that of the supranational interest groups, besides the spillover component, indicating that these three elements are perceived as "different reasons" aimed at explaining the "dynamic integration process".

The spillover process has been introduced by Ernst Haas and was afterwards refined by other researchers. The spillover refers to the way that the creation and deepening of integration in a certain economic sector will produce pressures for a wider economic integration in and outside that sector and for a higher authority given to the European level (E. Haas, 1968 *apud* Rosamond 2000, p. 60). The example that neofunctionalists prefer is that of the creation of the European Coal and Steel Community. In a context dominated by national sensitivities of the member units interested only in a formal cooperation limited at the lowest possible level, the evolution of the idea of spillover, monitored by the researchers concerned with the evolution of the integration theories, indicates however Haas's subsequent conviction related to the need for a strong supranational institutional framework that would be able to supervise and provide the essential impetus for integration, both in terms of its scope and the increase of its own authority in the new emerged space.

If we limit the analysis to the classic type of spillover supported at first by E. Haas, we can distinguish two types of spillover, differentiated by the importance it gives either to cooperation by areas and the pressures that are being involuntarily generated by it in the direction of a wider integration – functional spillover, or to a political input, as limited as it may be, which would provide the basis for a similar cooperation.

The second main element of the neofunctionalist theory is the so called loyalty transfer from the national to the European level, and one of the explications for this kind of transfer has envisages the exemplary manner in which the new institutions at this level are supposed to action, in a way that their relationship with the citizens will be almost as direct as that of the nation-states (or even closer in some areas). In fact, in order to maintain the accuracy of the terminology, the word "citizens" appears quite rarely in the neofunctionalist analysis, as they are more interested in the role of the supranational interest groups and elites, as it is indicated also in Strøby Jensen's two thesis. Thereby, by emphasizing the role of training and socialization of these categories (let us not forget that pro-European approaches that come from that loyalty transfer have a positive extrinsic motivation), Haas, however, seems not to regard the success of the integration process as an automatic consequence of the spillover, feeling the need of constant pressures of sub-national entities, but especially those of supranational ones (those new emerged institutions that would have a political development that would eventually get out of the control of the initial design established by egocentric states; the

phenomenon was actually proved by the evolution of the European Commission and the EU Court of Justice). In other words, it would also be necessary a political spillover¹¹.

The transition from the functional spillover to the political one, especially through the intervention of elites and interest groups, is insufficiently argued by neofunctionalists and often criticized by analysts. In fact, this extremely important role assigned to the elites was one of the main sources of critics towards neofunctionalism. We can recall for example Rosamond's vision that said that neofunctionalism is "an attempt to theorize the strategies of the founding elites of post-war European unity" (Rosamond 2000, p. 51) and also Strøby Jensen's questions regarding the importance of a "democratic and accountable governance" (Strøby Jensen 2007, p. 87).

Leon Lindberg seemed to be more interested in the way decisions were taken at the supranational level than in the change of attitudes and preferences, meanwhile Ben Rosamond points out the possibility that "the likes of Monnet were playing typical games of power politics, but employing the fashionable rhetoric of supranationalism and European unity" (Rosamond 2000, p. 53). Although the progress of the EU offered a possible answer to the critique regarding the democratic deficit and the opacity towards its own citizens by increasing the European Parliament's powers and through various programs of information/communication/consultation for direct contact with the EU's nations, the neofunctionalist thesis that stipulated that "interests, loyalty, and power must lie at one level or another: to be *retained* by states, or *transferred* to a new entity" has proven to be inadequate, given the fact that they can actually be "shared and dispersed" (Wallace 2005, p. 463).

For a while, neofunctionalism was an integration strategy with pretty convincing results in an environment clearly defined by researchers of the international relations as anarchical (or intergovernmental as the Europeans would put it). Despite the criticism that neofunctionalism had to face during the 60s and 70s, it (relatively recent) returned to the attention of researchers. As a concession to the years when neofunctionalism couldn't explain the evolution of the EU, Philippe Schmitter doesn't think that the EU will follow the steps that the nation-state made in its consolidation process, but neither the ones of an interstate organism, no matter under what aspect. He considers that what will remain will be something new, with "major implications for the actors, the processes and the outcomes of policy-making at all levels in Europe: supranational, national and subnational" (Schmitter 1996, p. 14), outlining the need for a level of authority that could avoid the situation in which the multiplying of actors should lead to "free riders" of the public policy making process (it is also reminded the important role that the EU's Court of Justice has had over the years in this respect).

The current rediscovery of the main concepts and principles of neofunctionalism may also mean their dilution in various research approaches that are resistant to the idea of building a megatheory of integration and focused on explaining the specific elements of the EU phenomenon (the so called middle-range theories). Although constantly present in the explanatory dichotomy of the mainstream EU visions, neofunctionalism is in C. Strøby Jensen's opinion currently just a middle-range theory, "a partial theory [...] which would explain some but not all of the European integration process" (Strøby Jensen 2007, p. 96).

¹¹ The definition of political integration and that of supranationality in Haas's case: (1) the political integration represents "the process whereby political actors in several distinct national settings are persuaded to shift their loyalties, expectations and political activities toward a new centre, whose institutions possess or demand jurisdiction over the pre-existing national states. The end result of a process of political integration is a new political community, superimposed over the pre-existing ones" (Haas 1968, p. 16); (2) "Supranationality in structural terms means the existence of governmental authorities closer to the archetype of federation than any past international organization, but not yet identical with it" (Haas 1968, p. 59).

2. Case Study

As mentioned before, the purpose of this paper is to demonstrate the possibility of a theoretical up-grade to the framework offered by the theory of governance: from a middle-range theory to a full theory through adding a neofunctionalist component that would enhance its explanatory capabilities by projecting them at the systemic level. After reviewing the main features of the theory of governance and of the neofunctionalist approach on EU integration, in order to sustain our assumption about making the two perspectives complement each other, we have chosen to analyze the flagship initiative "Innovation Union" within the Europe 2020 Strategy. From all the seven initiatives, we have chosen this one because we believe it is the most important of all due to the acute need of innovation in every policy field of the EU and the spillover potential of innovation.

2.1. Defining the Issue

First of all, we must define what we understand under the term *innovation*. Ann Mettler (2009, p. 14-15) cautions that innovation mustn't be seen only as a "social phenomenon that is mostly about research and technology", but as a means that provides change within the society (both in the economy and in the social structure); innovation shouldn't be considered an exclusive feature of private companies, which seek to gain profit through using it, because in the public or in the third sector innovation is also needed to "solve societal challenges or empower users and citizens". In the documents of the EU institutions, innovation is mainly seen as an instrument for increasing EU's economic competitiveness¹², but also as EU's "best means of successfully tackling major societal challenges" Thus, innovation is especially associated with research and technology through which new products and services can be delivered to the citizens, but it also implies a renewal of business and social processes and models.

The importance of research and innovation to the European construct is first stated in Article 3 (2) of the Treaty on European Union¹⁴ within the Treaty of Lisbon¹⁵, where, besides the commitment to enforce an internal market and work for the sustainable development of Europe, the EU engages to "promote scientific and technological advance". By including this statement in the General Provisions of the TEU, scientific and technical innovation becomes one of EU's core values; thus, every EU policy and activity must be designed and implemented in an innovative manner, by both using the latest technical and scientific findings and contributing to the development of new research outcomes.

¹² See The Commission of the European Communities, *Putting knowledge into practice: A broad-based innovation strategy for the EU*, 2006, The Commission of the European Communities, *Towards world-class clusters in the European Union: Implementing the broad-based innovation strategy*, 2008, The Commission of the European Communities, *Assessing Community innovation policies in the period 2005-2009*, 2009.

¹³ The European Commission, Europe 2020 Flagship Initiative "Innovation Union", 2010, p. 2.

When referring to the Treaty of Lisbon we mean both documents adopted in December 2007 and entered into force on 1 December 2009, i.e. the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU); in all other cases, the document being referred to will be indicated: TEU or TFEU.

legislation to the global economic and political context of the early 21st century: a Union of 27 states - or maybe more sometimes in the future - that one can not apply the same rules which were valid for six states. As stipulated in the Treaty, some of the main changes in the functioning of EU institutions and to the EU in general are: the redefinition of EU powers, the strengthening of the role of the European Parliament and of the national parliaments, the social partners' active involvement facilitating social dialogue at all levels and the horizontal "social clause" etc. (For a brief review of the changes brought by the Treaty of Lisbon to the functioning of the EU, see http://europa.eu/lisbon_treaty/glance/index_en htm). The legislative and political reform within the EU has been necessary in order to create the favourable prerequisites for internal economic and social reforms, but also in order to strengthen the EU's external action.

The increased pressure for the progressive integration of research activities within the EU is revealed by the fact that, in the research and technological development field, the EU shares with the Member States the competence to legislate and adopt legal binding acts¹⁶. Thus, according to the TFEU (Article 4.3), in the area of research and technological development, the European Union is entitled to "carry out activities, in particular to define and implement programmes", but by doing so, the Union should by no means prevent the Member States from exercising their competence in this field. Articles 179 to 188 of the TFEU outline the main features of the R&D domain within the EU. Thus, the EU seeks to create a European research area (n.b. some sort of "internal research market") where researchers, knowledge and technology circulate freely, and supports research within the European enterprises, including SMEs, research centres and universities, by facilitating the cooperation between such entities at EU level, but also with similar entities from third countries. As mentioned before, the Union encourages research activities to be delivered within every policy field of the EU and urges for the dissemination and use of research outcomes within all its activities, which is expected to lead to an increase of the external competitiveness of the Union. In order to carry out the outlined objectives, the Union and the Member States have to coordinate all their actions in the field of research and technical development. Therefore the European Commission, with the support of the Member States, has the task of developing guidelines and indicators in this field, but also of creating the necessary conditions for a fair exchange of good practices and a just monitoring and evaluation process. According to Article 182 of the TFUE, a multiannual framework programme, which includes all EU actions in the R&D field, is adopted by the European Parliament and the Council, following the ordinary legislative procedure and after consulting the European Economic and Social Committee. This framework programme is implemented through a number of specific programmes, which are adopted by the Council acting according to a special legislative procedure after consulting with the European Parliament and the European Economic and Social Committee. All decisions regarding the establishment of the European research area are also taken by the European Parliament together with the Council on the basis of the ordinary legislative procedure, after a consultation with the European Economic and Social Committee. Therefore, we can conclude that, according to the Treaty of Lisbon, the decision making process in the field of research involves a multitude of actors coming from different levels of authority - national and European - which interact with each other in order to influence the research policy outcomes.

2.2. Presenting the Data

In a time of big social and economic uncertainties, like the period we are currently going through, after the global financial crisis, the best way for the European economy to recover is to capitalize the innovation and development potential of its Member States. To give an impetus to the EU's future development, the European Commission defined in March 2010, the Communication "Europe 2020 - A European strategy for smart, sustainable and inclusive growth", laying out the main objectives and initiatives for the Europe 2020 Strategy, which was approved by the European Council in June 2010 and thus formally became the new EU's development strategy. This isn't EU's first such attempt, because the Union went through a similar process in 2000, when the Lisbon Agenda¹⁷ was adopted, whose final results were far below expectations. Hence, the following (justified) question may arise: why would Europe 2020 have a different fate from the previous initiative? One possible answer might be that, learning from past mistakes, in the new EU strategy,

¹⁶ For more details about what a "shared competence" means, see TFEU Article 2 (2).

¹⁷ The Lisbon Agenda was EU's development plan to turn the European economy into "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion" by 2010 (*Presidency Conclusions* of the Lisbon European Council Meeting on 23-24 March 2000). Based on its modest progress in reaching its goals, seen at the mid-term report, the Lisbon Agenda has been reviewed in 2005 through focusing on achieving a strong and sustainable economic growth and on the creation of more and better jobs. In 2010, the final year of the Lisbon Agenda, its unfulfillment has been intensively debated upon.

the coordination of national economic policies and the monitoring progress will be stricter. This will be possible, especially due to new legislative framework provided by the entry into force of the Treaty of Lisbon.

The Europe 2020 strategy was designed as EU's response to the crisis and as EU's development plan for the next 10 years, which would make the EU smarter, sustainable and more inclusive. As stated in the European Commission's Communication¹⁸, the EU will focus on 3 main priorities:

- ✓ Smart growth the development of a genuine knowledge and innovation based economy,
- ✓ Sustainable growth the establishing of a resource-effective, greener and more competitive economy,
- ✓ Inclusive growth the built of an economy with a high employment rate, which will be able to ensure economic, social and territorial cohesion throughout the EU.

These three priorities, as well as the five goals¹⁹, through which they are developed and given a more concrete shape, and the seven flagship initiatives²⁰, which support the strategy, all are deeply inter-connected. Thus, the strategy provides guidelines for actions to be undertaken, by both the EU and the Member States (as an example of multi-level governance), in policy areas such as education, employment, research, ITC, environment, energy, industry, economic, social and territorial cohesion. It rests on the idea that by taking a collective action in one domain (e.g. the coordination of Member States' research and innovation activities) – thus acting as a Union – it will encourage the integration of other policy fields as well (e.g. industry and employment). The strategy also provides an institutional framework which has the task to ensure the surveillance of the process and give it an integrationist boost²¹: the European Council first approves the strategy, the EU and national targets and the integrated guidelines and afterwards keeps an eye on the implementation of the Europe 2020 programme, while focusing, in its meetings, on specific issues (e.g. research and innovation). In each domain, the relevant Council formations ensures the implement of the programme through facilitating the exchange of information and good practices between different Member States; on the basis of a set of indicators, the European Commission will annually monitor the overall progress in achieving the Europe 2020 goals, but it will also assess the country reports and convergence programmes of the Member States, and make policy recommendations, warnings or proposals; the European Parliament has the task to convince and mobilize the citizens and the national parliaments to contribute to the success of the strategy.

Through the inter-connections it creates between different policy areas and the well defined institutional framework responsible for the strategy's management, Europe 2020 is a good example for the use of the spillover effect within the EU. Integrationist pressure in the policy areas targeted by the strategy is expected to come from the local, regional and national authorities within the Member States, as well. By involving these authorities in the development and the implementation of national

¹⁸ The European Commission, Communication from the Commission. Europe 2020 – A strategy for smart, sustainable and inclusive growth, p. 10.

¹⁹ The strategy sets five measurable goals to be achieved by the EU by 2020: - a 75% employment rate for women and men aged 20-64; - 3% of EU's GDP to be invested in R&D (by both public and private entities); - the reduction of school drop-out rates below 10% and at least 40% of 30-34–year-olds completing third level education; - the reduction of greenhouse gas emissions by 20% compared to 1990 levels, the increase of the share of renewables in final energy consumption to 20% and a 20% increase in energy efficiency; - at least 20 million fewer people in or at risk of poverty and social exclusion.

risk of poverty and social exclusion.

20 As mentioned before, the Europe 2020 strategy is accompanied by seven supportive flagship initiatives, which demand actions from both the EU and the Member States: "Digital Agenda for Europe", "Innovation Union", "Youth on the Move", "Resource Efficient Europe", "An Industrial Policy for the Globalization Era", "An Agenda for New Skills and Jobs", "European Platform against Poverty".

New Skills and Jobs", "European Platform against Poverty".

21 The European Commission, Communication from the Commission. Europe 2020 – A strategy for smart, sustainable and inclusive growth, pp. 28-31, 34.

reform programmes²², side by side with the national parliaments, the social partners and the civil society, the strategy aims to establish a permanent dialog between different levels of governance and bring the EU decisions and initiatives closer to the stakeholders, to EU citizens (thus, moving towards a neofunctionalist loyalty transfer from national to the European supra-national level or to the regional and local level). Another implicit goal of the strategy is to encourage the establishment of policy networks within the EU in order to involve more citizens, business entities, civil society organizations and other public or private entities in the making and implementation of the much needed socio-economic reforms. In order to ensure both the loyalty transfer and the implication of various stakeholders in the success of the Europe 2020 strategy, several information programmes and consultations have been initiated by the European Commission, so that the importance of taking action towards the Europe 2020 goals is well understood by everyone and concrete measures will be taken.

As part of the integrated framework of the Europe 2020 strategy, the **Innovation Union flagship initiative** focuses on improving access to finance for research and innovation, and ensuring that innovative ideas can be turned into products and services that create growth and jobs²³. The initiative is part of EU's efforts to achieve smart growth through improving the level and conditions for innovation within the Member States. It aims at readjusting the research and innovation policy to the societal challenges of the 21st century (climate change, resource scarcity, aging population, globalization etc.) by intensively exploiting Europe's innovative potential and strengthening every link of the innovation chain – from 'blue sky' research to commercialization²⁴.

As we said before, innovation is the fundamental value for the EU, therefore the initiative urges for the embracing of a strategic approach where all EU policies and funds "are designed to contribute to innovation²⁵". This desire to make innovation a cross-cutting policy, is a sample of the functioning of the spillover effect within the EU: it is believed that, through integrating the innovation policies of the Member States, the appropriate conditions for the integration of other policy areas, such as education, industry, employment etc. are created. The European Commission²⁶ admits that the Innovation Union initiative has been developed and will only have the expected outcome when it is accompanied by other EU initiatives, such as An Industrial Policy for the Globalization Era, Digital Agenda for Europe, Youth on the Move, An Agenda for New Skills and Jobs, which are meant to improve the conditions for innovation through their specific lines of action. Other already much more integrated EU policy areas (i.e. single market, competition policy, trade policy) are also designed to support and strengthen the goal of achieving a European innovation union. This comes as a proof for the fact that, in the case of innovation, the spillover effect works both ways: innovation acts as an integrator for other EU policies, but, at the same time, the integration of the research and innovation field is encouraged by actions coming from outside this policy area. Responsible for the political boost towards the integration of research activities within the EU are the European institutions (the European Council, the EU Council, the Commission and

²² The European Commission, Communication from the Commission. Europe 2020 – A strategy for smart, sustainable and inclusive growth, pp. 29-30.

²³ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", p. 6.
²⁴ The European Commission, Communication from the Commission. Europe 2020 – A strategy for smart,

²⁴ The European Commission, Communication from the Commission. Europe 2020 – A strategy for smart, sustainable and inclusive growth, p. 12.

²⁵ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", p. 2.

²⁶ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", p. 6.

the European Parliament) which set out the main strategic guidelines and monitor the implement of the innovation agenda. According to the European Commission²⁷, the delivering and implementation of the tasks within the Innovation Union initiative fall in the burden of regional, national and European entities; thus a multilevel governance approach is imprinted to the process of creating EU's innovation union. The EU and national research policies have to be closely aligned and, in order to achieve that, all types of actors (local, regional and European) must act together creating a network for promoting innovation (this is a proof of the need for network governance in order to achieve the innovation union).

2.3. Data Analysis

In the next part of the paper, the main actions included in the Innovation Union initiative will be analyzed through the grid of the two European integration theories described in the theoretical part of the paper: governance and neofunctionalism.

One of the main goals of the European Union is to promote innovation throughout its member states and an important part of this process concerns the education of the European citizens. This involves improving the education system from every point of view. For example, one of the weaknesses of the basic education system that were identified by the European Commission refers to the gender dimension, more specifically the small percentage of girls that reach an advanced level in science in the case of some Member States²⁸. The higher education system should also be strengthened in order to become more attractive to potential talents, offering smarter specializations across different fields²⁹. Europeans must become more competitive in this R&D field because, as it is underlined in the European Commission's Communication regarding the Innovation Union Flagship Initiative, by comparing the number of researchers as share of the population, Europe is "well below" that of the US, Japan and other countries.

Therefore, the EU and the Member States will work together for promoting excellence in education and skills development³⁰ so that more young people are attracted and trained in the research field. The EU's support can be illustrated by the Marie Curie fellowships under the Research Framework Programme, and the one of the member states by the Finish example of using inter-disciplinary approaches in universities as to bring together skills from different areas. More specifically, the Member States must take provisions so that by the end of 2011, they have enough researchers as needed for reaching their national R&D target and so that they promote attractive employment conditions in public research institutions (it is outlined the importance of taking into account the gender and dual career considerations at the moment of developing these strategies). The role of the European Commission is to support an independent multi-dimensional international ranking system to benchmark university performance that will make it easier to identify the best European universities. Furthermore, the European Commission will propose an integrated framework regarding e-skills for innovation and competitiveness, in accordance with the stakeholders. Not only the national and supranational authorities should be part of this process, but also other actors, like the business sector, that should have a more consistent contribution to the curricula development and

The European Commission, Communication from the Commission. Europe 2020 - A strategy for smart, sustainable and inclusive growth, p. 12.

²⁸ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 8-9.

²⁹ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", p. 9.

³⁰ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 8-10.

doctoral training. As to make this possible, the European Commission will create *Knowledge Alliances*, which will support business-academia collaborations, in order to develop new curricula addressing innovation skills gaps. All these emphasize the fact that we are dealing with more than just a multilevel governance (highlighted by the national and supranational examples examined before), but with a real network governance, that involves not only actors from different authority levels, but at the same time from different activity sectors (like universities, non-state actors like the business sector, supranational state actors or national state actors).

Another important aspect of the R&D development is the creation of a European Research Area³¹, which is meant to reduce unnecessary costs that may appear in case of duplication in national research. In 2012, the European Commission will propose a European Research Area framework and also a set of supporting measures to remove obstacles to mobility and cross-border operation, so that they can be in force by 2014. The neofunctionalist perspective in this case is obvious, given the spillover effect that is expected with the creation of the European Research Area, because first of all, a part of the national attributes in the research area pass on to the supranational level, and at the same time, this unification of an important part of the research policies will determine a wider cooperation in more aspects of the education national policies or even other policies (for example a possible harmonization of the PhD areas or an enlargement of the variety of these areas so that they can be correlated to the demands on the European single market). Along with the neofunctionalist theory, the multilevel governance is the component that can help us fully understand the integration process. Thereby, the collaboration between the European Commission and the Member States on account of reaching by 2015 the 60% target of the construction of the priority European Research infrastructures is significant, given the fact that they are already identified by the European Strategy Forum for Research Infrastructures (the European Commission), leaving the Member States with the mission of reviewing the Operational Programmes so that they facilitate the use of cohesion policy money for this purpose.

Furthermore, the EU funding instruments shall focus on Innovation Union priorities³², making them more efficient in accordance with the European goals in this area. The idea of all EU research and innovation programmes focusing on promoting excellence at European level highlights the neofunctionalist effect of the spillover, which will determine the integration of research and innovation at the supranational dimension. As always, the spillover will affect other dimensions of public policies that have to be taken into account, such as the societal challenges, the industrial and technological priorities). In this case the European Commission, the supranational actor, plays the main role in supporting this part of the European Strategy, because it will design future EU research and innovation programmes and took the commitment to strengthen the science base for policy making through its Joint Research Centre (creating also a European Forum on Forward Looking Activities in order to add coherence and efficiency to this step).

The promotion of the European Institute of Innovation and Technology as a model of innovation governance in Europe³³ emphasizes the fact that the network governance pattern is clearly applied in the European innovation strengthening process, as the EIT must set out by 2011 a Strategic Innovation Agenda to expand its activities, close links with the private sector and build a stronger

³¹ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 10-11.

³² The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 11-12.

³³ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 12-13.

role in entrepreneurship (thus outlining the importance of the cooperation between the state and non-state actors).

Due to insufficient funding opportunities for investing in innovation, European companies can hardly develop new products and technologies; therefore the EU aims to improve the innovative companies' access to financing. In order to do so, actions both at European and national level have to be undertaken; hence, a multilevel governance perspective is embraced. The main actor which ensures the implementation of all actions at EU level is the European Commission³⁴: by 2014, it will have to make a proposal, to the Council and the European Parliament, for financial instruments meant to increase private financing in the field of R&D; by 2012, it will make sure that venture capital funds established in one of the Member States will function in the whole EU; it will strengthen cross-border investment in innovation and focus on innovative SMEs' financing problems; by 2011, it will make a mid-term review of the state aid R&D and innovation framework. In finding solutions for increasing private financing of innovation, the Commission will work closely with the European Investment Bank Group and other national financial intermediaries and private investors, thus creating a policy network for developing the best response to the critical gaps in investing in R&D. The European Commission had a spillover effect in mind when it engaged in liberalizing the venture capital market in order to ease investment in innovation. Since venture capital is a type of capital, it ought to "run freely" within the single market of the EU (free capital movement is one of the features of the European single market); by reading between the lines, we understand that the EU seeks to strengthen its single market and thus create an integrationist pressure on R&D and innovation. The European Commission plays also a mobilizing role through bringing together innovative firms with potential investors and building a network through which companies have better access to capital.

The establishing of the single innovation market³⁵ implies a series of actions to be undertaken at EU level – by the European institutions – and within every Member State (multilevel governance approach). One of the most important steps towards the integration of the EU innovation market is the adoption of the EU patent. The European Parliament together with the Council are encouraged to adopt the EU patent, its linguistic regime and the unified system of dispute settlement as soon as possible, so that the first EU patents be delivered in 2014. A significant pressure towards the integration of the European innovation markets is being delivered – through a spillover effect – from other EU policy areas such as competition policy (an effective competition policy is expected to stimulate the demand for innovation), environment policy (stricter environmental standards would stimulate eco-innovation) or telecommunication policy (the liberalization of the telecom market together with the GSM standard started the success story of mobile phones in Europe). Another important issue, having a spillover effect on the innovation domain, is the establishing of EU-wide standards. The European Commission plays the central role in integrating EU standards by presenting a communication accompanied by a legislative proposal on modernizing of standardsetting procedures in order to be able to enhance interoperability and stimulate innovation; the communication will include an analysis of how to adapt the standardizing system to a constantly changing environment, how this system could best contribute to EU's internal and external objectives and what kind of influence the European standardization system would have on innovation.

In 2011, under the guidance of the European Commission, both the EU and the Member States will engage in evaluating the regulatory framework of key areas such as eco-innovation and

³⁴ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 14-15.

³⁵ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 15-17.

the European Innovation Partnerships in order to identify which rules need to be changed, updated or introduced so that innovation can be promoted. By early 2011, the European Commission will present an action plan for eco-innovation, focusing on finding ways to achieve environmental goals through innovation (this action plan counts on a spillover effect resulting from the integration of the innovation field which will determine the integration of environment policies). Making use of the multilevel governance principle, starting 2011, the Member States and the regions will have to adopt budgets exclusively devoted to pre-commercial procurements and public procurements of innovative products and services. The European Commission has the task to provide the necessary guidance and create the financial support mechanism to help the regional and national authorities deliver the procurements in an open and non-discriminatory manner.

In the process of promoting openness and capitalizing Europe's creative potential³⁶, the European Commission plays a key role by collaborating with stakeholders for the development of a set of model consortium agreements, thus creating a policy network meant to ease the knowledge transfers and research collaboration initiatives. After working together with the Member States and the stakeholders, the Commission will have to present, by the end of 2011, a proposal for the establishing of a European knowledge market for patents and licensing. The initiative encourages the recognition of the so-called "fifth freedom" – the free movement of researchers and innovative ideas within the EU, which could be added to the four features of the European single market, thus consolidating it and making pressure towards the integration of the innovation markets. Through EU-wide networks (i.e. Enterprise Europe Network) large companies are brought together with SMEs, universities, research centres and communities of scientists and practitioners to exchange knowledge and ideas, but also contribute with suggestions to the improvement of the functioning of knowledge transfer offices within the public research organizations in order to make the results of publicly-funded research more available to everyone.

Another EU goal is to maximize the social and territorial cohesion, first of all by spreading the benefits of innovation across the Union³⁷. The EU is a heterogeneous structure and any development initiatives must take this into account so that the effect of such action does not deepen the current gaps in the core of the Union. Consequently, the Innovation Union must involve all regions, avoiding the situation in which it produces disproportionate effects that result in less performing regions, endangering the convergence that has been reached so far. In order to succeed, the EU can use the Structural Funds, that are not fully taken advantage of and that should be used more effectively for innovation and achieving the Europe 2020 objectives, especially in a way that each region can become excellent in a certain area in which it has relative powers. Accordingly, the Member States should start improving their use of Structural Funds for research and innovation projects, by helping people to acquire the necessary skills in this respect and implementing smart specialization strategies and trans-national projects. The neofunctionalist element of the existence of trans-national interest groups can be found in this part of the strategy because it supports the cooperation between this type of actors and national state actors in the advantage of the supranational progress, which in turn produces benefits for all member states and European citizens. As a matter a fact, an important role is given to the Member States, which have to prepare post 2013 Structural Funds programmes with an increased focus on innovation and smart specialization. The spillover's influence is found here because of the crossing of different types of policies at the EU's level (that regard for example the structural policy and the innovation dimension).

³⁶ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 18-20.

³⁷ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 20-21.

The EU wants to increase the social benefits that innovation can produce³⁸. The European Commission's document uses the phrase social innovation to define the idea that brings together the actors in charge of meeting this goal and the benefits of their set of actions. Although thanks to its influence in the institutional system of the EU and the fact that it represents the supranational interest, the European Commission may have a leading role (given the fact that it has made a commitment for: a) promoting innovation through the European Social Fund, which will be complemented by the social experiments developed in the framework of the European Platform against Poverty, b) launching a European Social Innovation pilot partnership that will provide expertise for the social entrepreneurs and the public and third sectors and c) supporting a research programme on public sector and social innovation that emphasizes on measurements, evaluation, financing and barriers to scaling up and development), it doesn't work alone, but in cooperation with the Member States (that will also have to step up efforts regarding the promotion of social innovation through the European Social Fund) and different non-state actors (like the social partners that are to be consulted on how the knowledge economy can be spread to all occupational levels and sectors). Consequently, we have a very good example of the functioning of not only multilevel governance, but true network governance, which involves supranational, national and non-state actors. Furthermore, the development of an Innovation Union becomes more than just a goal, but also a mean to be used as to increase the social welfare of the European society and its citizens, in an obvious use of the spillover, the main element of the neofunctionalist theory and in the same time the way that the EU uses as to gain the progress it aspires to, by using all the instruments it has at hand, even if that involves the need of further cooperation in that specific area or in other related ones.

The establishment of European Innovation Partnerships³⁹ is another important issue aimed to be delivered through the Innovation Union flagship initiative. A wide range of actors coming from both the European supra-national level and the national level, as well as from the local and regional level, are all involved in the creation and implementation of these partnerships (a multilevel governance approach combined with a network governance perspective): the Council, the European Parliament, the Member States, the industry and other stakeholders are first invited to determine the extent to which they will get involved in making these partnerships work; afterwards, they are expected to contribute with competences and resources to the achievement of each partnership goals. As to be expected, the central role in defining and carrying out of the European innovation partnerships belongs to the European Commission, which, alongside with the Council and the European Parliament, will secure the political support of each partnership. Following a neofunctionalist perspective, the Commission is the supranational institution which launches – after taking account of the Council's and European Parliament's views and of the stakeholders' opinion – a wide series of innovation partnerships in key areas addressing societal challenges and, more or less directly, watches over their implementation. For defining the EU innovation partnerships, the Commission has to first develop a set of selection criteria and a transparent selection process; afterwards, it has to present the partnership proposals which have met the criteria and then set out the governance and financial arrangements for the selected partnerships; last, but not least, the Commission would evaluate the efficiency of the partnerships and decide whether it is worth continuing with the partnership in the context of the next Research Framework Programme and under what circumstances.

³⁸ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 21-22.

³⁹ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 22-26.

The idea of creating innovation partnerships in areas such as energy and water supply efficiency, sustainable supply and management of raw materials, transport with lower greenhouse gases emissions, digital society, agricultural sustainability and active and healthy aging, comes from the belief that by contributing to the deepening of the integration of the innovation sector within the EU – through a spillover effect – an integrationist impulse would be given to other EU policy areas. An issue that requires special attention in the developing of the European innovation partnerships is the establishing of an appropriate governance framework for the implementation process of these partnerships. Thus, each partnership will be led by a Steering Board, composed of a certain number of high representatives of the Member States (Ministers), members of Parliament, industry leaders, researchers and key stakeholders; the board will be chaired by the lead Commissioner(s) and supported by a secretariat assigned by the Commission, but also by operational groups of experts, practitioners and users coming from both the private and the public sector. Once again, a multilevel governance approach is used alongside with a network governance perspective which has the purpose of bringing the policy making process closer to its stakeholders.

In the context of a globalization of the competition for knowledge and markets, Europe has to reverse "several decades of a relative *brain-drain*" so that it can assure the possibility of remaining in Europe for the ones who leave their countries in search of a better career in the research field. The EU should work together with the Member States in order to take measures meant to ensure that leading academics, researchers and innovators reside and work in Europe, but also for attracting a sufficient number of highly skilled third country nationals to stay in Europe. For this end, both the EU and its Member States (as parts of a multilevel governance functioning) should treat scientific cooperation with third parts as an issue of common concern and develop common approaches. The European actor who plays an important role is once again the European Commission, that will propose common EU-Member States priorities in S&T as a basis for coordinated positions or joint initiatives vis-à-vis third countries.

After setting the targets and the measures which would lead to the establishing of the Innovation Union, the role and responsibilities of every actor engaged in this process, alongside with the evaluation methods must be very well defined⁴¹. In order for the research and innovation systems of the Member States to integrate, some reforms have to be made to their national and regional policies. For conducting this reform of the research and innovation policies, a multilevel governance approach needed to be embraced. Thus, the European Commission has identified the set of key policy features for a best-performing system. The Member States have to assess their research and innovation systems based on the features presented by the Commission and then define, within their National Reform Programmes, the reforms they need to undertake. In this multilevel policy framework, the Council – to be more precise, the Competitiveness Council component – could play an important role in monitoring the progress of the Member States on reforming their R&D policies via the integrated economic coordination framework, the so-called "European semester". The Commission will support the Member States in their assessments by facilitating the exchange of best practices regarding the reform of innovation policies between EU states. The degree to which the national innovation systems of the Member States converge and thus the European Innovation Union is achieved, are measured through two indicators set by the European Council together with the European Commission, which can be analyzed, in neofunctionalist terms, as being the institutions which monitor and boost the integration process.

⁴⁰ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 27-28.

⁴¹ The European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union", pp. 28-31.

The first indicator for measuring the performance towards the Innovation Union is the Europe 2020 target of achieving a R&D investment value of 3% from EU's GDP; the second innovation-related indicator needs to be developed by the European Commission. For finding the best way to measure the share of fast-growing innovative companies in the economy, the Commission will call on the help of Member States and international partners, thus applying a network governance approach. Last, but not least, the Innovation Union flagship initiative describes the role and responsibilities of each actor involved in creating this Union, by basically using a multilevel governance approach. Thus:

- the European Council is responsible for the coordination and the political impetus of the initiative:
- the Council should adopt the necessary measures for improving EU's framework conditions and, through its semester meetings as an "Innovation Council", should evaluate the progress and identify the areas where more actions are needed;
- the European Parliament should have annual debates on the progress of the initiative with members of national parliaments and different stakeholders (this way, a loyalty transfer in neofunctionalist terms from the national to the European level comes out);
- the Commission is responsible for developing the main lines of actions within the initiative, for assisting the Member States in their reforms and facilitating the exchange of best practices within the EU, but also for systematically monitoring the progress, reporting once a year the achieved progress and giving country-specific recommendations in the field of innovation;
- the Member States should reform their innovation systems, review their operational programmes co-financed by EU Structural Funds in order to respond to the priorities set by the Europe 2020 strategy and allocate extra financial resources for R&D and innovation;
- in the attempt to involve more and more stakeholders in the policymaking process, the European Economic and Social Committee, the Committee of the Regions and other stakeholders are invited to support the initiative and help disseminate the good practices;
- also for filling in the gap between the policymakers and the stakeholders, the European Commission plans to call for an annual Innovation Convention which would complement the European Parliament's debate on the progress of the Innovation Union;
- in the debates of the convention a large range of actors should be involved: Ministers, Members of the European Parliament, business leaders, deans of universities and research centres, bankers and venture capitalists, top researchers and innovators, and last, but not least, citizens.

Due to the fact that the actors coming from different levels of authority need to permanently interact with each other and act together towards achieving the integration of the R&D and innovation sector, we can conclude that a network governance perspective has also been in mind of the European Commission when writing this initiative.

3. Conclusions

The recent global financial crisis reshaped the international environment profoundly. As one of the important global players, Europe has to recover soon from the losses it suffered due to the crisis (i.e. economic recession in most of its Member States, the Euro-Zone crisis) and start engaging in serious reforms in order to ensure a better life for its citizens. The EU started reforming in 2009 with the entry into force of the Treaty of Lisbon and continued in 2010 with the Members States agreeing on the Europe 2020 strategy and its initiatives and with the setting of guidelines for future developments through the Project Europe 2030.

Regarding the process of European integration, reality has by far overcome theory. Classic theories have many times failed to describe the evolution of the EU and recent theoretical approaches seem to be incapable of fully explaining the complexity of the EU. In this paper, we followed the assumption that the theory of governance can be upgraded from a middle-range theory to a full theory by adding a neofunctionalist component to it, so that the explanatory capabilities of the governance theory can be increased and thus a more exhaustive theory of European integration can be developed.

In our attempt to prove our assumption, we first reviewed the main features of the theory of governance (putting a great emphasis on multi-level governance and network governance) and of neofunctionalism (especially the spillover element) as they are shown in the literature. Then, we applied these concepts on an EU initiative - the "Innovation Union" flagship initiative within the Europe 2020 strategy. Through our in-depth analysis of the initiative, we emphasized that the actions included in the initiative must be undertaken at different levels of political authority (supranational, national, regional and local), involving several types of actors (state, supranational or non-state actors) which permanently interact with each other - all these being characteristics of multi-level governance and network governance as components of the EU theory of governance. The analysis has also shown us that the initiative is based upon the belief that the integration of the research and innovation policies of the Member States would lead to a better economic integration within the EU. through the spillover effect it produces on other policy areas. The fact that the actions included in the initiative target not only the R&D policies of the Member States, but also other policies, such as education, industrial, fiscal, employment, ICT and environment, is very likely to create a spillover between all these policies. Through increasingly involving non-state actors (including supranational European entities) in the delivering of EU's innovation objectives, a significant loyalty transfer (in neofunctionalist terms) from the national to European level appears and thus the EU decisions are brought more closely to their true stakeholders, to the citizens.

The concrete examples provided by the "Innovation Union" flagship initiative come to acknowledge the fact that the current evolution and functioning of the EU cannot be explained solely through a governance perspective; multi-level governance and network governance aren't enough for delivering a full, exhaustive image on the present European integration process. Therefore, by adding a "touch" of neofunctionalism (some spillover effect) to the mixture, a clearer theoretical explanation of the real EU integrationist process can be provided. The initiative also shows that the gradual involvement of the stakeholders in the policymaking process (another aspect of neofunctionalism) can occur through using policy networks.

The implications of the conclusion we have reached after the analysis are quite important because this study aims to offer a different theoretical approach for the explication of the European integration process. The mixture of the two theories in order to create a new way of understanding the EU's internal functioning and its consequences for the future of the European construction seems to be the best theoretical framework for analysis in this area because it has a larger explanatory capability than other theories or than each part separately considered.

We believe that, when researching the European construction and its integration incentives, a particular, increasing attention should be given to the impact that the inter-connectivity and inter-dependence of various types of actors coming from different sectors of activities and different levels of decision-making have on EU law and EU's way of functioning. The main reason why it is imperative that this issue ought to be taken account of is the fact that there is a wide range of actors already involved in EU's decision-making (having specific ways of collaborating and acting, depending on the policy area in question) and this number is expected to increase in the future. The spillover effect is also present in more and more policy areas, transmitting integrationist impulses from one domain to another. Thus, we believe future research in European integration should focus more on combining the elements of the existing theories of integration – as we have done in this article – in order to develop a comprehensive theory of European integration.

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