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The Political Dynamics of EU Structural Funds Allocation: An Empirical Analysis

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Abstract

Several studies have pointed out that the allocation process of EU Structural and Investment Funds is not straightforward as the economic criteria would suggest. Indeed, the relationships between different layers of governance influence the distribution of Structural Funds across European regions. Using Structural Funds data for the 21 Italian regions over the period 1989-2018, this study seeks to assess which political variables can influence the allocation process. The hypotheses formulated are tested by employing a Generalized Linear Regression model with a logged link function and with Region-Programming Period clustered robust standard errors to account for the right-skewed distribution of Structural Funds transfers and for the heteroscedasticity between Italian regions. The findings suggest that economic criteria alone cannot explain the differences of Structural Funds transfers in the Italian case. Indeed, political alignment between national and regional authorities is found to affect consistently the allocation of Structural Funds. However, political variables are found to exert a significant degree of influence over the allocated amounts of Structural Funds especially among poorer regions, hence suggesting that the effects of political factors are contingent upon the regional levels of economic development.

Introduction

As outlined in Article 158 European Community, one of the main objectives of the European Union is the reduction of disparities between the level of development of the various Union regions. The European Union has sought to reduce differences in income levels between the several European regions by engaging in redistributive measures through regional policy; in other words, by shifting resources from wealthier regions to poorer regions.

Being the main policy devices through which the EU engages in regional policy, European Structural and Investment Funds (ESIF) have attracted prolonged attention by many scholars and have been the focus of a great number of analysis.

The significant attention paid towards Structural Funds is justified by the unprecedented scope of EU regional policy. For instance, more than €350 billion were allocated in the 2014-2020 Programming Period across all European regions. However, the majority of studies on Structural Funds have primarily focused on examining the effects of these funds on regional economic activity and output, neglecting the question of “who gets what, when and how” (Lasswell, 1951). According to the Treaties, the allocation of European Structural and Investments Funds is governed by the principle of progressivity, meaning that poorer regions should be the main recipient of Structural Funds transfers. On the contrary, wealthier regions should be allocated less Structural Funds transfers. Therefore, regions sharing similar levels of economic development should be allocated approximately the same amounts of Structural Funds transfers. However, this is not reflected in reality, as the amounts of Structural Funds transfers allocated to regions differs significantly despite similar income levels, suggesting hence that other factors may have an impact on the allocation process.

Recently, a compelling area of research has emerged and developed around this question, underlining that economic criteria alone cannot explain differences in the allocated amounts of Structural Funds transfers among European regions. Both political factors and political dynamics have been found to exert a significant degree of influence on the allocation of Structural Funds (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010; Chalmers, 2013; Charron, 2016; Dellmuth, 2011; Dellmuth et al., 2017; Dellmuth & Stoffel, 2012; Kemmerling & Bodenstein, 2006).

This study seeks to address and quantify the extent to which political factors can explain the variability observed in the allocated amount of Structural Funds transfers among the 21 Italian regions. The central hypothesis in this study is that political alignment – conceived as whether national and regional authorities share the same partisan affiliation – can explain the differences in the amounts of transfers observed in the Italian case. Moreover, as the greatest variability is observed

among regions with lower levels of economic development, this study seeks to explore whether the effects of political factors are contingent upon the level of economic development.

The study is structured as follows. Chapter 1 describes the architecture of the allocation process for Structural Funds together with the governance levels involved and provides an overview of the literature. Building upon the insights from Chapter 1, Chapter 2 formulates a series of hypotheses regarding the possible relationships between political factors and allocated amounts of Structural Funds. In line with the literature, the political factors addressed in this study are namely the political alignment between national and regional authorities, partisan politics at the national level and electoral competition at the regional level. Chapter 3 explains the methodology used to assess the set of hypotheses put forth in Chapter 2, and the results are further discussed in Chapter 4.

As opposed to previous studies, which focused on a limited time frame, the analysis carried out in this study covers the period from 1989 to 2018 and spans across five different Programming Periods. Moreover, yearly transfers are used as the dependent variable instead of the total allocated amount at the beginning of the Programming Period, as the latter may fail to capture the dynamics of fund allocation throughout the individual periods.

The main finding of this study is that political alignment between national and regional authorities is able to explain the variability of Structural Funds transfers observed in the Italian case among regions with similar level of economic development. Additionally, the effect of political alignment is found to be contingent upon the levels of economic development, meaning that this factor can accurately explain the variability observed especially among poorer regions.

However, this study focused only on the Italian case. Broadening the scope of analyses to other EU Member States and their regions is hence necessary to confirm the results obtained in this analysis. Accordingly, this would lead to a more nuanced understanding of the effect that both political factors and political dynamics exert on the allocation of European Structural and Investment Funds.

Chapter 1 – The EU Structural Funds Allocation Process

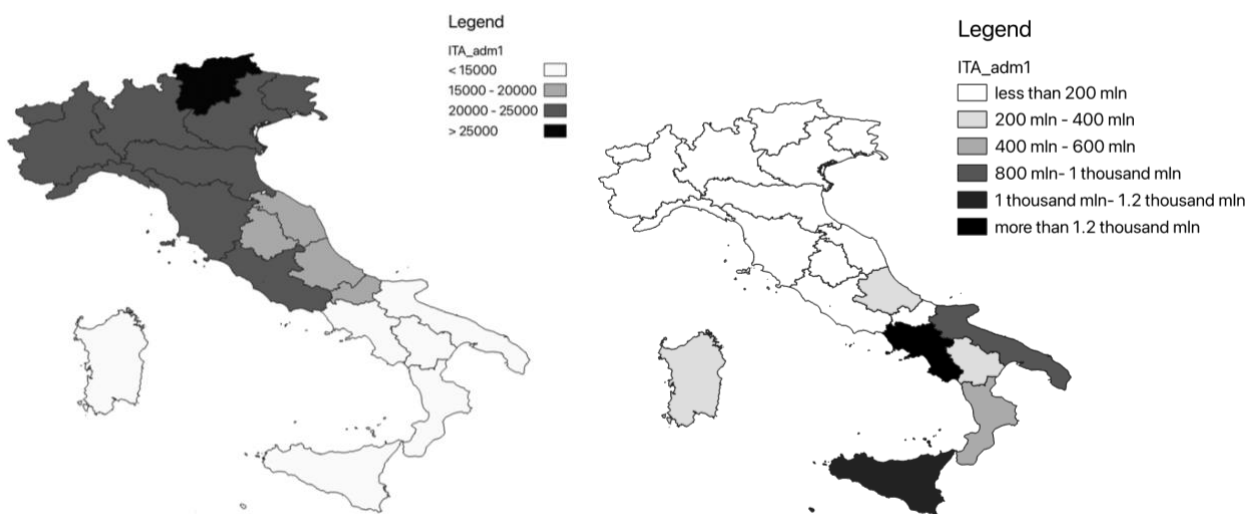
As any other confederation or union of states – i.e., the United States – the European Union does face the challenge of dealing with differences in living standards and financial capability between and within its various states and regions (Oates, 1999). The question of disparities is acknowledged inside Article 158 European Community, which establishes the reduction of disparities between the level of development of the various Union regions as one of the main policy objectives of the EU (Evans, 1999). Indeed, it is possible to observe significant differences in these dimensions to date, with some European regions that are lagging behind in terms of economic development with respect to others. In this regard, according to Article 159 EC, European Structural and Investment Funds (ESIF) can be deemed to be the main pillars of EU regional and cohesion policy and to represent the main instrument through which the European Union engages in redistributive policy, by shifting resources from wealthier to poorer regions. Hence, as suggested by Chalmers (2013), EU regional policy aims to reduce economic inequalities between its various regions by implementing a cross-border approach to the redistribution of wealth. Substantial differences in terms of economic development between European countries and within their regions have persisted overtime, and different policy devices falling under the category of the Structural Funds have been the tools through which the European Union has sought to promote and balance growth across Europe many regions since 1975, with the creation of the European Regional Development Fund. Since then, the European regional policy has undergone significant changes and expansion. According to intergovernmentalist scholars (Allen, 2005; Molle, 2007), the enhancement of EU regional policy may be seen as the result of the deepening and widening of EU integration, in which Structural Funds transfers were used as a side-payment to compensate Member States reluctant to enlargements. The signing of the Single European Act provides an example of this side-payments thesis. In this case, Italy, Spain, Portugal, Greece, and Ireland traded their approval of the SEA for a significant increase in the scope of European Regional policy, resulting in higher amounts of Structural Funds being allocated to them (Hooghe & Keating, 1994). These countries were able to exploit their position during negotiations at the European level and were successful in doubling the size of Structural Funds as a result of their initial reluctance towards the creation of the single market and the monetary union (Bouvet & Dall’Erba, 2010).

Over time, several Funds have been created to address specific policy issues. However, the majority of Structural and Investment Funds transfers have originated traditionally from three different policy devices, namely the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Regional Development (EAFRD). In spite

of the differences in terms of objective between these policy devices, they all share the same basic functionings. First of all, Structural Funds – being the core of EU Regional Policy – are allocated at the regional level as opposed to other EU Funds, such as the Cohesion Funds, which are allocated at the national level. Precisely, Structural Funds are allocated at the NUTS 2 level (Nomenclature of Territorial Units for Statistics), which represents relatively homogenous regions in terms of their economic and social characteristics and has been designed on purpose by the European Union for the application of regional policies. For instance, the NUTS 2 level corresponds to the “Regioni” in Italy and to the “Régions” in France. Secondly, Structural Funds transfers follow a multi-year financial plan, the so-called Programming Period. At the beginning of each Programming Period, a decision is made regarding the total amount of funding to be allocated to the various regions. This decision is the result of negotiations that take place at three different level of governance, namely European, national and regional. Member States negotiate at the European level the total budget for each policy device – i.e., Structural Fund – allocated to them and outline the criteria according to which the distribution of transfers to their regions should take place. After the allocation of Structural Funds to each country, national authorities are responsible for distributing the funds among their regions according to the specific criteria of each policy device and to the soundness and quality of the plans developed by regional authorities. Once this agreement is reached, the defined amount of Structural Funds is transferred to the respective regions in the form of annual payments within the time frame of the Programming Period. However, payments may continue to be issued for up to two or three years after the end of the Programming Period. Thus far, five programming periods have been completed – namely the 1989-1993, the 1994-1999, the 2000-2006, the 2007-2013, and the 2014-2020 – and a new Programming Period, the 2021-2027 is currently underway. Finally, despite continuous changes in policy measures and objectives across Programming Periods, the allocation of Structural Funds remains governed by the same underlying criteria. This distribution is based on the principle of progressivity; in other words, the more a region is lagging behind in factors such as wealth, development and unemployment, the more the allocated amount of Structural Funds should be (Charron, 2016). According to this set of criteria, the allocation of Structural Funds resembles a sort of technocratic decision in which political actors and their interactions play a negligible role in determining the final amounts allocated to each European region (Olsson, 2003). Therefore, one should observe that regions sharing similar levels of per-capita income, development and unemployment, are allocated similar amounts of Structural Funds. On the contrary, throughout the Programming Periods, a significant degree of variability was observed in the allocation of structural funds to regions with comparable levels of development. This observation suggests the potential for factors beyond mere economic indicators, such as political dynamics and the interactions between

different levels of governance, to exert a considerable influence on the distribution of these funds across Europe. In this regard, as Figure 1 illustrates, the Italian case is emblematic of this phenomenon, as it exhibits significant variability in the amounts of Structural Funds allocated among regions of comparable wealth and development. For instance, during the first Programming Period (1989-1993), the region of Campania received transfers amounting to €1.305.431.356, despite having an average GDP per capita of only €14,000. In contrast, the region of Basilicata was allocated €209.183.721, even though its GDP per capita was slightly higher than €14,000.

Figure 1. Average GDP per Capita (PPS) (Left) and Allocated amount of Structural Funds in the 1989-1993 Programming Period (Right)

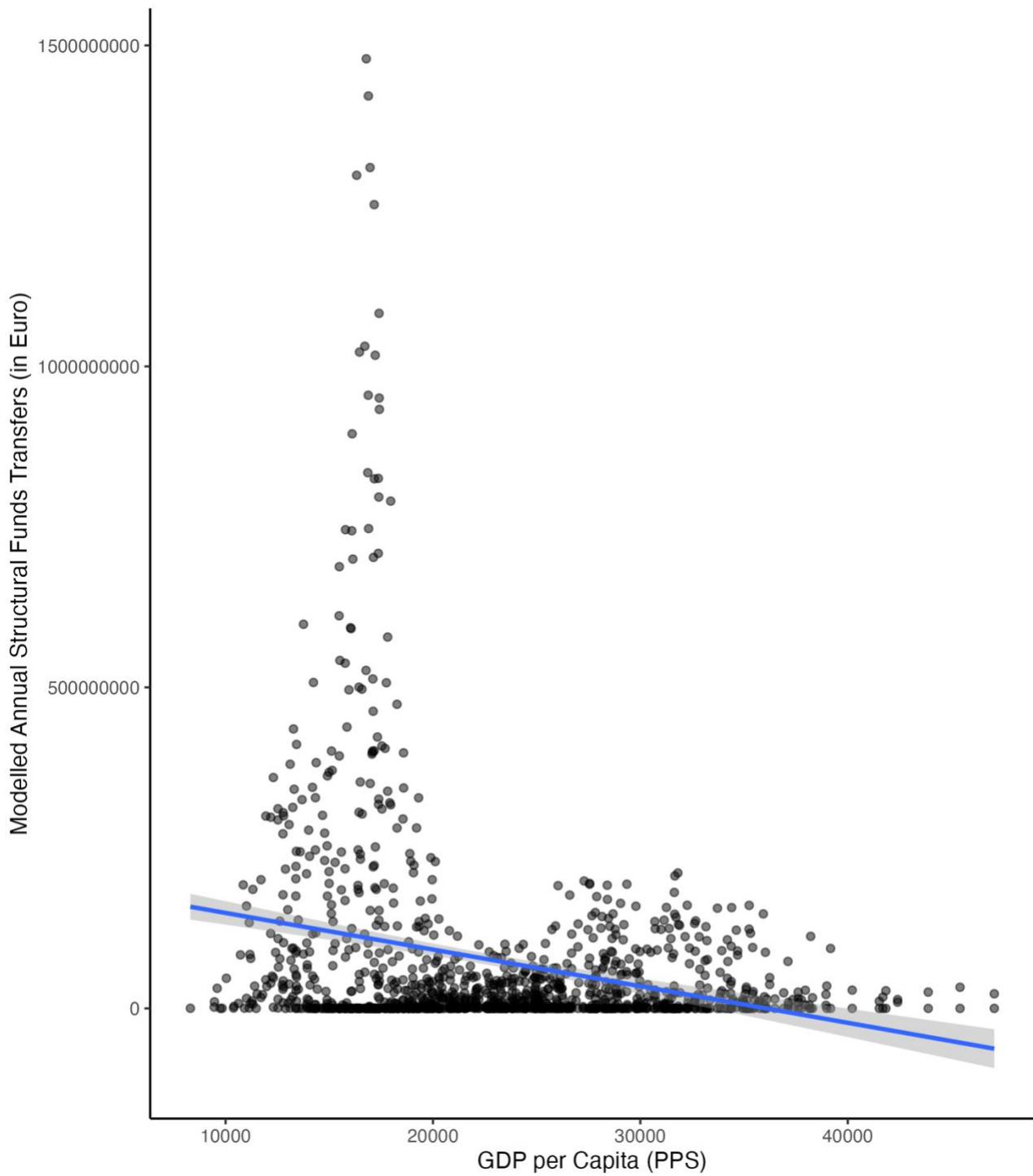


Source: European Commission (2020) and ARDECO database of the European Commission. Own elaboration through RStudio and QGIS.

This disparity of over a billion euros cannot be attributed solely to differences in population and land size, and warrants further investigation. The significant disparities that exist in the Italian case is further expressed by Figure 2. The Figure plots the annual Structural Funds transfers received by each region for the period 1989-2018 against regional GDP per capita in Power Purchasing Standard (PPS). Although the inverse relationship between levels of regional development and allocated amount of Structural Funds appears to be confirmed, not all the points are associated with the straight regression line. The figure illustrates that there is typically a higher and more significant degree of dispersion in the allocation of Structural Funds among poorer regions. In contrast, there is less variability in the distribution of Structural Fund transfers among richer regions, as it is more clustered along the regression line. This indicates that regions with equal levels of economic development, as measured by GDP per capita, receive different amounts of Structural Funds, hence

suggesting that “being poor is neither a strong nor a sufficient predictor of the amount of Structural Funds per head a region receives” (Kemmerling & Bodenstern, 2006).

Figure 2. The Relationship between GDPs per Capita and Annual Structural Funds Transfers for Italian Regions between 1989 and 2018.



Source: European Commission (2020) and ARDECO database of the European Commission. Own elaboration through RStudio.

Indeed, the allocation of structural funds is contingent upon the power dynamics that exist not only between European institutions and member states during the negotiation process, but also between member states and their regional authorities – which in turn influence the final agreements reached (Pollack, 1995). Although the process for the allocation of Structural Funds has changed over the different Programming Periods, the way in which funds are allocated can be simplified as a three-stage process which follows a sequential logic, whereby actors at three different levels – namely European, national and regional – interact with one another and fight to retain certain policy-making powers (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010). The first stage involves the negotiation within the European Council between the Member States on the overall fundings allocated to each country and the definition of the regions eligible to receive Structural Funds transfers. Once the overall budget has been defined, national authorities in collaboration with regional authorities formulate detailed plans which explain how the fundings would be used. Finally, the Commission approves the plans submitted by national and regional authorities, and disburses payments over the predefined time frame (Bodenstein & Kemmerling, 2012; Chalmers, 2013; Dellmuth et al., 2017). The power balance among these three levels of institutions has undergone change over successive Programming Periods and in spite of the Commission's significant powers during the first two periods Member States have been successful in effectively retaining significant policy-making powers in determining the allocation of funds across regions within their borders, resulting in the Commission's role being relegated to primarily advisory duties (Dellmuth et al., 2017). With the European Commission's responsibilities mainly limited to providing advice rather than taking on an active role, the political dynamics that can affect the asymmetric distribution of European Structural Funds are to be found in the interactions that take place within individual Member States between their national and regional authorities. In other words, political interactions between these two very levels are the one of interest to understand the differences in the amount of Structural Funds allocated to each Italian region.

Despite being a critical policy instrument for the implementation of European regional policy, the topic of Structural Funds distribution among European regions has received insufficient attention and has not been given due consideration by researchers for a prolonged period of time. Indeed, the majority of studies on Structural Funds have concentrated on investigating their impacts on regional economic activity and output, as the ones of Staehr & Urke (2022), Dall’Erba & Le Gallo (2008), Rodríguez-Pose & Fratesi (2004). However, a compelling area of research has recently emerged within the literature on this topic. Kemmerling & Bodenstein (2006) were the first to find out that “being poor is neither a strong nor a sufficient predictor of the amount of Structural Funds per head a region receives” through an analysis of 83 European Regions for the 2000-2006 Programming

Period which tested whether partisan politics at the regional level may affect the distribution of Structural Funds. The principal outcome of this investigation revealed a substantial influence of parties' ideological stances on regional policy, thereby impacting transfers of Structural Funds. In other words, the authors tested the hypothesis that the partisan orientation of political parties along the traditional left-right spectrum could affect the allocation process. Specifically, the study found that left-leaning parties were associated with larger allocations of Structural Funds. Accordingly, Bouvet & Dall'Erba (2010) analyzed the distribution of Structural Funds in the first two Programming Periods across 120 NUTS 1 and NUTS 2 regions in order to find whether classical political theories – such as the left-right cleavage and party competition intensity – applied to this case. What they did find was that the allocation of Funds cannot be solely attributed to economic factors and that the political alignment between national and regional authorities was a major predictor of higher amounts of allocated funds. Indeed, they highlighted the relevance of the political situation within a country and its regions – i.e., the level of Euroscepticism – and the relations between different layers of governance in shaping the allocation process. Other studies have concentrated on examining how characteristics of regional authority can impact the allocation of Structural Funds. Bodenstein & Kemmerling (2012) conducted an analysis on the 2000-2006 Programming Period across 137 European regions, which revealed that the Member States that scored higher in Lijphart's Federalism Index (Lijphart, 1999) received more significant transfers of Structural Funds. This finding suggests that regions with greater political competencies have a greater ability to exert influence during the bargaining process with national political authorities. These findings were further confirmed by Chalmers (2013), who analyzed the impact of regional authority on the distribution of Structural Funds across 181 regions in the 2007-2013 Programming Period. The novelties brought by this study were mainly two. Firstly, instead of using the Lijphart's Federalism Index, Chalmers (2013) made use of the so-called Regional Authority Index, which provides authority scores at the regional level and thus a more nuanced differentiation between various aspects of authority. Secondly, Chalmers (2013) explored the potential for Brussel-based regional lobbying offices of influencing the allocation of Structural Funds, finding that lobbying takes place primarily between regions and central government, reaffirming the greater relevance of the interactions between national and regional authorities to the detriment of those occurring between the national and European level. A step forward in the potential for regional authorities' characteristics to impact Structural Funds allocation is represented by the research conducted by Charron (2016) on 171 European regions during the 2007-2013 Programming Period, investigating the influence of both formal and informal institutions on the allocation of Structural Funds. The results complement the theory proposed by Bodenstein and Kemmerling (2012), as they demonstrate that regions with greater political competencies receive

more substantial allocations of Structural Funds only if they have satisfactory levels of Quality of Government (QoG). Conversely, when regional autonomy is restricted, larger portions of Funds are typically directed towards regions with lower Quality of Government. These studies confirm the fact that the allocation process of Structural Funds is not straightforward as the economic criteria would suggest as it involves several layer of governance (Bouvet & Dall’Erba, 2010). Conversely, other dynamics, such as political factors and institutional design, are fundamental in determining the level of transfers that a region receives.

Although the aforementioned studies examined various potential reasons for the uneven distribution of Structural Funds, they share certain commonalities. Firstly, the dependent variable in each case is consistently the total amount of Structural Funds allocated to a region at the outset of the Programming Period. Secondly, the analyses were restricted to a limited timeframe, generally encompassing only one or at most two Programming Periods. These common features may be perceived as limitations in some respects, as they restrict the scope and depth of the analyses conducted. Focusing solely on the total amount of funds allocated at the beginning of the Programming Period may fail to capture the dynamics of fund allocation throughout the period. Indeed, as suggested by Dellmuth et al. (2017) examining actual cash flows would be more correct as budgetary commitments to regions and actual payments in regions may vary considerably. In other words, the actual payments made to a particular region within the time frame of the Programming Period may not add up exactly to the established amount allocated at the start of the period. Moreover, examining only one or two Programming Periods may overlook important trends and developments in the distribution of Structural Funds over a longer time frame, although limited availability of data may have been the reason these studies focused on a shorter time span.

Therefore, the objective of this study is to provide a more nuanced understanding of the factors influencing the distribution of Structural Funds among Italian regions by looking at the actual transfers erogated between 1989 and 2018 and by examining the interactions between national and regional authorities. By doing so, this study seeks to address the limitations of previous research, which focused solely on the amounts of Structural Funds allocated at the beginning of the Programming Period and analyzed only one or two programming periods. Moreover, while previous literature has emphasized the role of political alignment between national and regional authorities in influencing the allocation of Structural Funds, no study has yet examined the potential combined effect of a region's level of development and its political alignment with national authorities, which may further impact the distribution of Structural Funds. In particular, as the greatest variability in the allocated amount of Structural Funds is displayed among poorer regions, it is possible to infer that as the level of GDP per capita increases the magnitude of the effect of political alignment between the

national and regional authorities decreases. In other words, the effect of the political alignment may be contingent on the regional level of economic development, confirming hence the hypothesis that economic and political factors interact with one another.

Chapter 2 – Framework of Analysis

In accordance with the previous chapter, the level of economic development of a region cannot be considered a sufficient criterion for the allocation of European Structural and Investment Funds. Additional variables play a significant role in determining the distribution of these funds among European regions. Primarily, these other variables are associated with the political domain, specifically the interplay between various levels of political authorities and their institutional configurations. The literature on these topics has extensively discussed on the significance of these factors in influencing the distribution of grants with regard to regional policy. Indeed, numerous studies indicate that both electoral institutions and motivations have a critical impact on shaping the efforts of politicians to obtain the electoral advantages resulting from receiving a higher amount of grants (Cadot et al., 2006; Golden & Picci, 2008; Kemmerling & Stephan, 2015).

In this respect, the allocation of Structural Funds bears some resemblance to the clientelistic politics paradigm outlined by Wilson (1989), in which costs are distributed across all European Member States, whereas benefits are concentrated in specific regions, and consequently, towards particular political actors. Thus, the allocation of Structural Funds carried out from Member States among their regions can be considered as a function of both economic criteria and political and electoral considerations of the political authorities at the national and regional levels (Dellmuth et al., 2017). By relying on the several academic works about political factors and institutional design and by drawing on the literature presented in Chapter 1, it is possible to formulate a series of hypothesis regarding the potential relationships between the amount of Structural Funds a region receives and various economic and political variables.

Economic criteria

Following the classification proposed by Lowi (1964), European regional policy can be classified as a distributive policy since the measures through which it is carried out – i.e., Structural Funds – affects the distribution of resources from the government to particular recipients.

According to Council Regulation No. 2052/88, the main criterion that explains the allocation and distribution of transfers in the framework of European Structural and Investment Funds across European regions is the regional level of development. The distribution of resources conforms to the so-called principle of progressivity, meaning that the more a region is lagging behind in terms of economic development – i.e., GDP per capita and unemployment rate – with respect to the other European regions, the higher the amount of transfers it should receive. Based on this principle and

the underlying rationale, it is possible to formulate a hypothesis regarding the relationship between the amount of Structural Funds allocated to a region and its level of economic development.

Hypothesis 1: The higher the GDP per capita in a region, the less the amount of Structural Funds allocated.

Political factors

As envisaged by the Italian case and by the literature presented in Chapter 1, economic criteria alone cannot explain the actual distribution of Structural Funds across European regions. The significance of political factors in influencing the distribution of this type of grants should not hence be underestimated as several studies have recognized their importance (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010; Chalmers, 2013; Charron, 2016; Dellmuth, 2011; Kemmerling & Bodenstein, 2006). The interactions between national and regional authorities serve as the political arena wherein political factors exert their influence on the allocation of Structural Funds, as the primary responsibility of the European Commission is to offer guidance rather than actively participating in the allocation process. In such cases, politicians at different levels of governance – namely national and regional – interact with each other, and the outcome of this interaction shapes the distribution of funds within a country.

It is widely acknowledged in the literature that politicians in the executive branch of both national and regional governments have strong incentives to influence the allocation of grants, as they typically seek to advance their own interests and agendas (Bertelli & Grose, 2009). As far as the politicians agenda is concerned, several studies confirmed the fact that left-wing cabinets tend to generally spend more than right wing cabinets (Bouvet & Dall’Erba, 2010). For instance, De Haan & Sturm (1994) through an analysis of twelve European countries, found that the growth of the share of government spending tends to be higher in countries governed by left-wing parties. The greater government spending registered for left-wing parties can be thought as the result of their ideologies – i.e., welfare state and a more pronounced government intervention in the economy – and hence of their agenda. With regards to European Structural Funds, it can be expected that governments led by left-wing politicians would lobby and advocate, in the European fora, for higher amounts of Structural Funds to be directed towards their respective regions (Kemmerling & Bodenstein, 2006). Consequently, a hypothesis may be proposed in relation to the link between partisan politics at the national level and the allocated amounts of Structural Funds.

Hypothesis 2: Left-wing governments tend to allocate higher amounts of Structural Funds.

However, politicians are primarily motivated by the desire for re-election, and they view the allocation of grants as a means of increasing their chances. In the context of European Structural Funds, this phenomenon appears to hold true as well, as Structural Funds may be used by politicians to engage in vote-buying behaviors. As a result, their decisions are likely to reflect strategic considerations that go beyond purely economic criteria, shaping hence the uneven distribution across a country's various regions (Dellmuth et al., 2017). When politicians at the national level decide on the distribution of European Structural Funds in pursuit of their interest in re-election, they must take into account the political situation at the regional level as voters often do not understand the differences between levels of government and may not attribute the funding to the national government. Indeed, it is uncertain whether voters will reward national politicians for their efforts to allocate Structural Funds to their regions, especially if the regional authority has a different partisan affiliation, which would hinder the national level politicians' efforts to increase their chances of re-election (Arceneaux, 2006). Therefore, this would suggest that politicians at the national level are more likely to target regions with the same partisan affiliation. Hence it can be expected that regions which share the same partisan affiliation as the national level will receive higher amounts of Structural Funds transfers with respect to regions that are not politically aligned. Nonetheless, there may be additional factors to consider. In particular, political alignment between the national and regional level makes it easier to reach compromise and agreements on how the Funds should be spent as politicians share more similar views. Numerous studies have investigated the relationship between political alignment and the distribution of Structural Funds and have confirmed the direction mentioned above (Bouvet & Dall'Erba, 2010; Chalmers, 2013; Dellmuth et al., 2017). Accordingly, a hypothesis can be made.

Hypothesis 3: Regions that are politically aligned with their national level are allocated higher amounts of Structural Funds.

Following the same line of reasoning – that politicians are primarily motivated by their re-election prospects – it can be expected that politicians at the national level may allocate funds to regions with larger numbers of swing-voters, where there is a weaker attachment to either the government or opposition parties (Milligan & Smart, 2005). In this sense, the allocation of funds from executive branches can be seen as a means of generating consensus and winning votes, consistent with vote-buying behaviors. Consequently, politicians at the national level are likely to target regions

based on how secure their current majority at the regional level is (Bouvet & Dall'Erba, 2010). In other words, regions with greater electoral competition are expected to receive higher levels of Structural Funds transfers. Based on this reasoning, a hypothesis can be formulated.

Hypothesis 4: The higher the level of electoral competition in a region, the greater the amount of Structural Funds that will be allocated to that region.

While numerous studies have explored the predictive power of political factors, namely partisan affiliation, party competition and political alignment between national and regional authorities, on the allocation of Structural Funds, none have yet examined the possibility of political factors interacting with economic ones at regional level. In other words, the impact of political factors on Structural Funds transfers may depend on the economic circumstances of a particular region. This implies that as the level of economic development in a region changes, the magnitude of the effects exerted by political factors on the amount of European Structural Funds allocated may also vary. This hypothesis stems from the strong interconnection between economic development and institutions. While mainstream literature emphasizes the direct causality between sound institutions and economic growth, Chang (2011) highlights the significant influence that economic development can have on institutional change. In particular, as economic growth generates higher demands for better institutions, it can be expected that regions with higher levels of economic development possess more robust and effective institutions. Therefore, it can be expected that regions with greater levels of economic performance possess more robust and effective political institutions. As the allocation of Structural Funds can be thought as an interaction game between different levels of governance, more economically developed regions should be better able to lobby and bargain for higher amount of Structural Funds with respect to poorer regions. This reasoning seems to be in line with the Italian case presented in Figure 2, Chapter 1, as the dispersion along the regression line is more pronounced among poorer regions. In particular, with regard to explanatory power of the political alignment between national and regional authorities, it is possible to expect that wealthier regions may have strong bargaining powers and may be able to secure more funding despite not sharing the same partisan affiliation of national governments. Moreover, regions with lower levels of economic development may have less capacity to absorb and utilize funds as they do not dispose of sound institutions and may therefore be more dependent on political alignment to receive funding. Based on this consideration, a hypothesis can be formulated regarding the potential effect of the combination of political factors – i.e., political alignment – and regional levels of economic development on the amounts of Structural Funds transfers a region receives.

Hypothesis 5: The magnitude of the effect of political alignment between national and regional authorities decreases as the regional level of economic development increases.

Chapter 3 – Data and Methods

The data

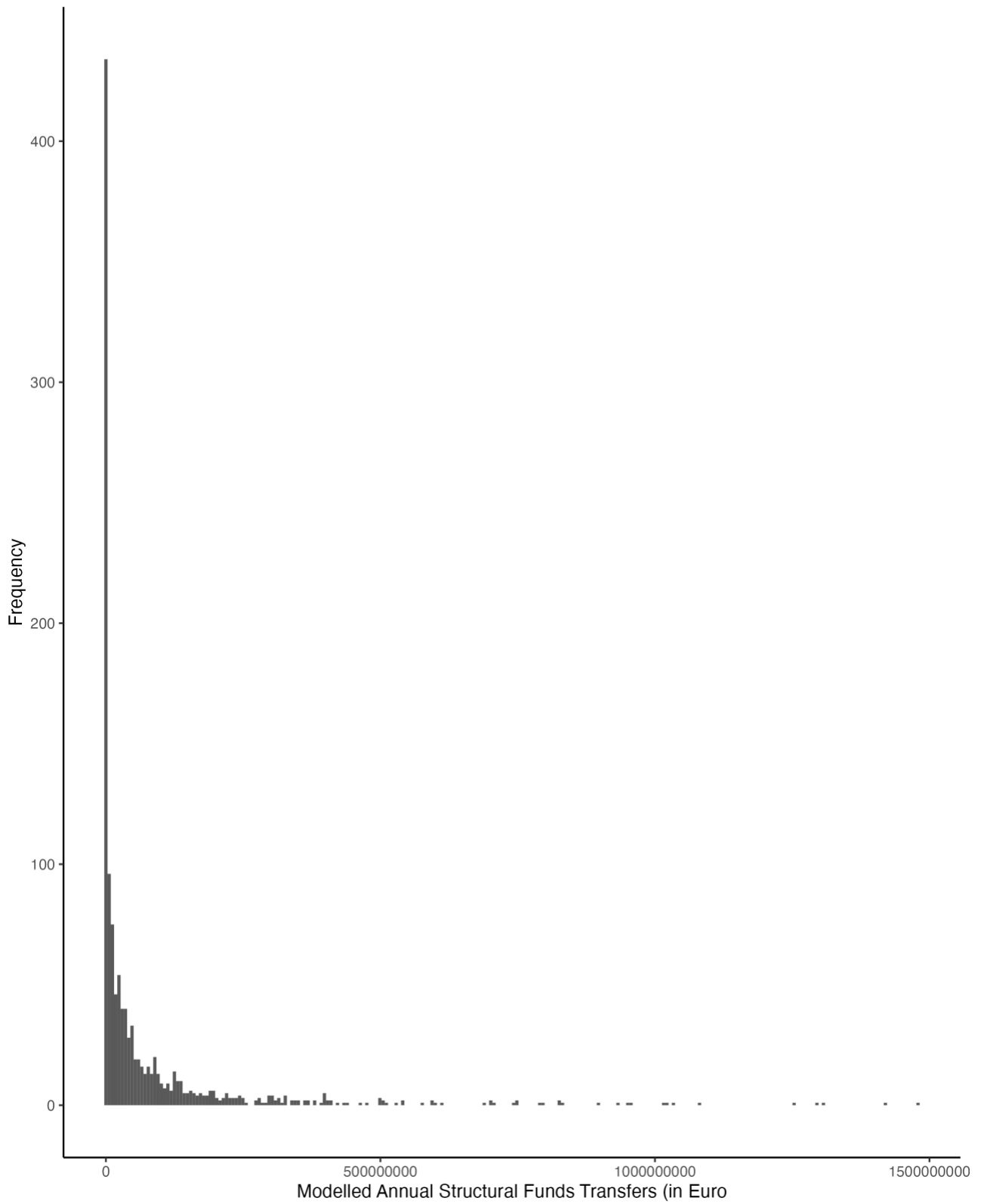
The hypotheses formulated in the previous chapter are tested by constructing a panel dataset for the Italian regions including data for the transfers of European Structural and Investment Funds and economic and political variables, which covers the period from 1989 to 2018. As explained in the previous chapters, the allocation of Structural Funds is carried out at the NUTS II level, which coincide with the “Regioni” in Italy. This happens to be particularly helpful as the “Regioni” in Italy represent governmental units and thus have the features needed to test the hypothesis that political factors may affect the distribution of European Structural Funds throughout the Italian territory.

Data on the transfers from each of the European Structural Fund under study to each Italian region are retrieved from the longitudinal (panel) dataset “Historic EU payments – regionalized and modelled” which is publicly available from the European Commission’s data catalogue (European Commission 2020). The data on the GDP per capita in Power Purchasing Standards (PPS) for Italian regions are sourced by the ARDECO Database of the European Commission (European Commission 2020, code: SUVGD). The Eligendo Database, maintained by the Italian Ministry of Home Affairs, was the primary source for data on political variables, including national and regional elections, for the majority of regions. In cases where data could not be obtained from this database, data on political elections were collected from the regional database for political elections of the relevant region. This was the case for certain "Statuto Speciale" regions. However, due to limitations in data availability, some political variables could not be coded for both Provincia Autonoma di Bolzano and Provincia Autonoma di Trento, which led to the exclusion of their observations from the analysis. The final dataset encompasses six Programming Periods – namely the 1989-1993, the 1994-1999, the 2000-2006, the 2007-2013, and the 2014-2020 – in 21 Italian regions. It should be noted that the dataset on European Structural Funds transfers provided by the European Commission only covers the first four years of the 2014-2020 Programming Period. However, this limitation does not affect the analysis since the transfers are studied at the level of yearly payments rather than focusing on the total amount allocated at the beginning of the Programming Period.

The dependent and independent variables

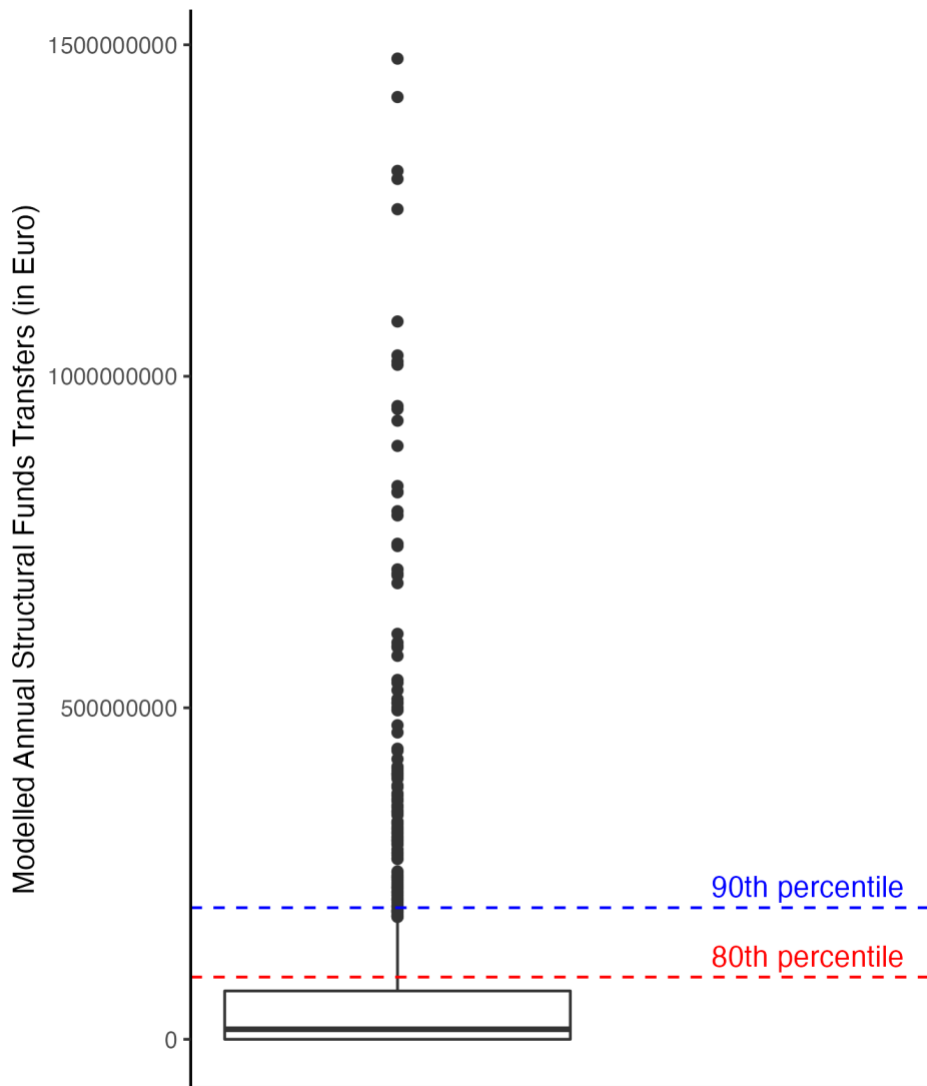
The dependent variable in this study is the yearly transfer of European Structural and Investment Funds to each Italian region, as opposed to the majority of studies in the literature that use the total amount of Structural Funds allocated at the outset of each Programming Periods as the dependent variable. The dependent variable has been calculated as the sum of transfers deriving from the three policy devices described in Chapter 1, namely the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Regional Development (EAFRD). As outlined by the European Commission (2020), the dataset from which data on yearly Structural Funds transfers have been retrieved follows the cycle of payments to the Member States and not the date on which real expenditures took place on the ground, hence potentially affecting the results from analytic works. However, the dataset contains a “modelled annual expenditure”, which is meant to track the expenditures as they are incurred by the regions, providing thus a more nuanced measure of Structural Funds transfers (Staeher & Urke, 2022). The time series for modelled annual expenditures are created using the Monte Carlo method for uncertainty propagation for 100.000 simulations, taking into account the institutional framework of each of the European Structural Funds, including the spending specifics of the recipient regions. Therefore, the dependent variable of this analysis is the sum of the “modelled annual expenditure” for the three Funds abovementioned, as it provides a more standardized and refined variable. In addition, this approach avoids excessive manipulation of data values – i.e., standardization – and enables working with more reliable data. Figure 3 and Figure 4 illustrate the distribution of the dependent variable.

Figure 3. Distribution of the Modelled Annual Structural Funds Transfers (in Euro) to Italian Regions between 1989 and 2018.



Source: European Commission (2020). Own elaboration through RStudio.

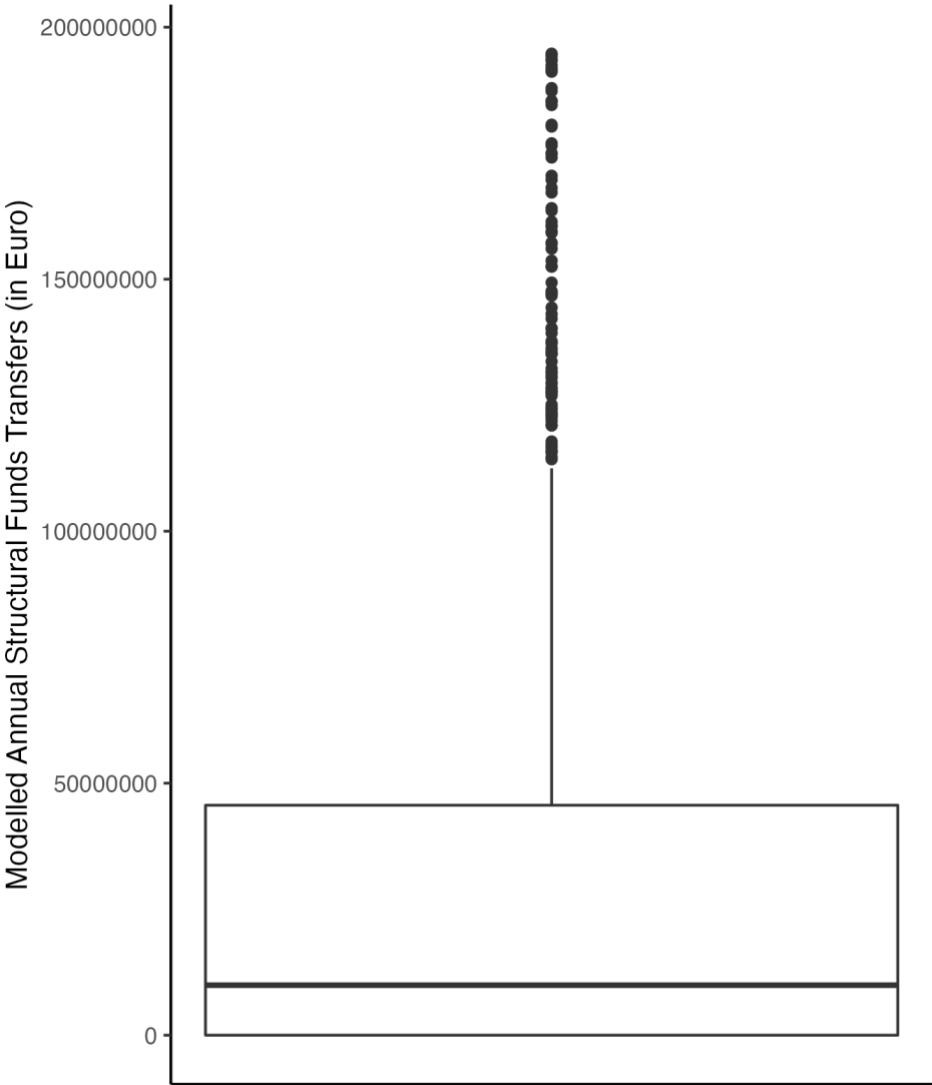
Figure 4. Boxplot for the Modelled Annual Structural Funds Transfers (in Euro) to Italian Regions between 1989 and 2018.



Source: European Commission (2020). Own elaboration through RStudio.

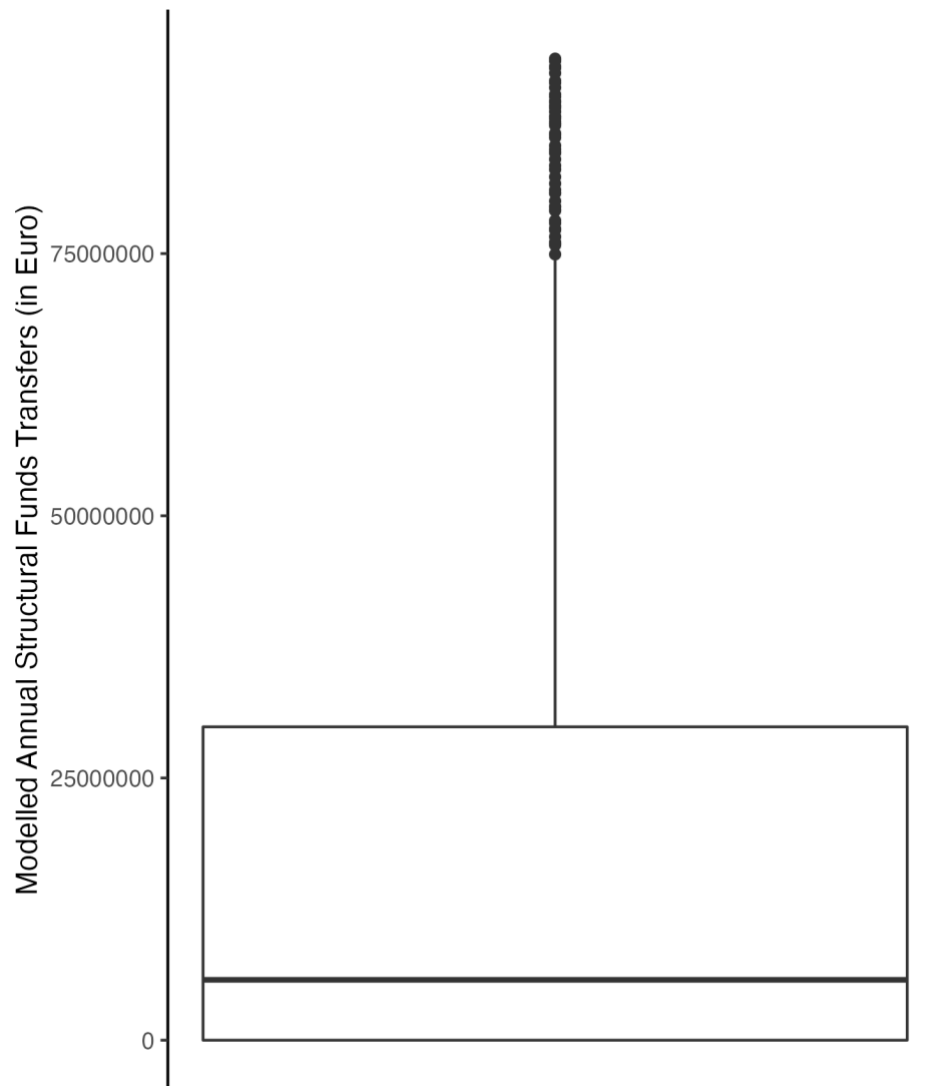
Looking at these Figures it is possible to notice how the distribution of yearly transfers is right-skewed, meaning that the yearly Structural Funds transfers tend to cluster towards relatively low values. In order to account for the asymmetric distribution of the dependent variable, a series of truncations will be performed over the complete dataset, specifically at the 90th percentile (€ 198.457.689) and at the 80th percentile (€ 93.852.315), before running the regression analyses. This should allow for the regression analysis not to be affected by the presence of outliers and to be more reliable. Figures 5 and 6 illustrate the distribution of the yearly Structural Funds transfers after the truncations at the 90th and 80th percentiles respectively.

Figure 5. Boxplot for the Modelled Annual Structural Funds Transfers (in Euro) to Italian Regions between 1989 and 2018 (truncated at the 90th percentile).



Source: European Commission (2020). Own elaboration through RStudio.

Figure 6. Boxplot for the Modelled Annual Structural Funds Transfers (in Euro) to Italian Regions between 1989 and 2018 (truncated at the 80th percentile).



Source: European Commission (2020). Own elaboration through RStudio.

The key independent variable is the political alignment between national and regional authorities. The political alignment variable has been operationalized as a dichotomy, distinguishing from authorities at the national and regional level politically aligned (=1) and not politically aligned (=0). In other words, a region is considered to share the political orientation of the national government if both authorities are aligned either as left-wing or right-wing at the outset of each Programming Period (Bouvet & Dall’Erba, 2010). As both the Italian political landscape and electoral system have undergone several changes over the time period under study, the political affiliation of the both the Italian Prime Ministers and the Presidents of the various regions in office on the 31st of December of every year has been taken as reference point to code the political alignment variable. This method is in line with the available literature (Bouvet & Dall’Erba, 2010; Charron, 2016;

Dellmuth et al., 2017) and enables the coding of this variable in cases where the presidency was the result of coalitions, whether between parties that share similar views and between grand coalitions comprised of ideologically different parties. For instance, the Italian political landscape has been dominated for a prolonged period of time by the so-called “Pentapartito”, composed by five different parties that were also distant in ideological terms, as the “Democrazia Cristiana” and the “Partito Socialista Italiano”. In this case, the affiliation towards left-wing or right-wing ideological stances was coded by identifying the party from which the President originated. In cases where the political affiliation of the President at both national and regional government could not be categorized as left-wing or right-wing – this was the case for the so-called technical governments or for grand-coalition governments led by independent Prime Ministers – the observations have been coded as missing values and thus have been excluded from the analysis.

Accordingly, the dummy variable indicating the ideological stance of national level authorities was coded based on the party affiliation of the President of each Italian government at the beginning of the Programming Period. Hence, executive branches may be governed by left-wing politicians (=1) or by right-wing politicians (=0).

The intensity of party competition at the regional level is captured by an independent variable that has been coded as the leading party’s margin of victory. In other words, the intensity of party competition is measured by the difference between the percentage of votes received by the first party and the percentage of votes received by the second party (Milligan & Smart, 2005; Solé-Ollé & Sorribas-Navarro, 2008). Given that elections are held at regular intervals, the intensity of party competition has been recorded for every year of a Programming Period as the differences between the first two parties’ shares of votes in the most recent election before the beginning of the Programming Period. While taking into account the difference between the parties’ seats may provide a more accurate measure, using the difference between the percentage of votes is still a reliable way to capture the intensity of party competition. Indeed, Bouvet & Dall’Erba (2010) have suggested that the correlation between the two measures at the regional level is very strong, indicating that differences in electoral systems do not significantly affect the measurement of party competition. The variable has been coded according to the following formula.

$$\text{electoral competition} = \text{first party's share of votes} - \text{second party's share of votes}$$

The independent variable accounting for the economic criteria in the allocation of European Structural Funds is the GDP per capita at current prices in Power Purchasing Standards (PPS). Current prices have been chosen over constant prices (with reference to 2015) as the unit of measure because

the yearly transfers of Structural Funds are expressed in current prices. This choice enables the use of a more consistent unit of measure for variables expressed in euros.

An interaction term has been created in order to test the hypothesis that the size of the effects of political factors varies as the regional level of economic development varies. More specifically, the interaction term has been coded as the product of the continuous variable for the regional levels of economic development – i.e., GDP per capita – and the binary variable for the political alignment between national and regional authorities. This computation allows to observe differences in the effects of regional levels of economic development across regions that are politically aligned with the national government and regions that are not politically aligned.

$$\text{political alignment: GDP per capita} = \text{political alignment} [0, 1] * \text{GDP per capita}$$

To account for the multi-year framework of the allocation of European Structural Funds and the possibility of payments continuing for a period after the end of the Programming Period, fixed-effects for the programming period are introduced in the analysis. These variables are included to control for time-effects and capture the temporal dynamics of the allocation process. As the period under study covers five Programming Periods, four variables have been coded in order to avoid multicollinearity. The time frame variables are coded as dichotomies, with a value of 1 assigned if the observation corresponds to a specific Programming Period and a value of 0 assigned otherwise. This approach is applied to four out of the five Programming Periods, allowing for the differentiation of the data based on their temporal association with each period. Moreover, as the dependent variable is the yearly transfer of European Structural and Investment Funds to each Italian region, the control variable Year – as continuous – has been introduced to account for the structure of the dataset at hand.

The model

The dataset is composed by observation about European Structural Funds transfers that are cross classified within 21 Italian regions by years. The total number of observations after all missing values have been removed is 1211. The dataset is not structured as a balanced panel dataset, as the number of observations varies considerably across regions. Additionally, as mentioned in the previous paragraph, the dependent variable exhibits a right-skewed distribution. Consequently, specific operations have been carried out on the dataset, and the model selection has been made with the aim of addressing and mitigating these challenges and issues.

The presence of outliers in the distribution of the dependent variable is accounted for by the series of truncations on the dataset at the 90th and 80th percentile of the dependent variable. This should prevent the regression analysis to be affected by the presence of outliers.

The unbalanced nature of the dataset and the right-skewed distribution are accounted for by the choice of the model. Previous studies available in literature (Bodenstein & Kemmerling, 2012; Bouvet & Dall'Erba, 2010; Chalmers, 2013; Charron, 2016; Dellmuth et al., 2017; Kemmerling & Bodenstein, 2006; Schraff, 2014), make extensive use of different regression models, namely the classic OLS models, the so-called Tobit Model, and the Generalized Linear Models (GLMs). The last two models mentioned are extremely useful in this case, as they allow to account for the presence of skewed distributions in which the dependent variable equals zero for a large number of observations (Bouvet & Dall'Erba, 2010). In accordance with Charron (2016), a generalized linear model (GML) modelling a gamma distribution with a logged link function has been employed in the analyses of this study. The adoption of this particular generalized linear model in this study is justified for multiple reasons. Firstly, as previously mentioned, it accommodates the analysis of unbalanced longitudinal datasets, which is suitable for the dataset at hand. Secondly, it is extremely useful as the dependent variable is a continuous variable which has a lower bound of zero (Dobson, 2002). In addition, it allows for the incorporation of clustered data, recognizing that observations within the same region and Programming Period are not independent of one another (Oberg & Mahoney, 2007). This is particularly relevant given the nested structure of the dataset, which includes the country (Italy) as the highest level, the 21 Italian regions, and their respective observations across five different Programming Periods. Accordingly, the data are analyzed with Region and Programming Period-clustered robust standard errors to account for heteroscedasticity.

Therefore, a series of generalized linear model regressions, modelling a gamma distribution with a logged link function, have been performed on the dataset and the findings are explained in the following chapter.

Chapter 4 – Results and Discussion

Before testing the hypotheses formulated in Chapter 2, a truncation of the dataset at the 80th percentile of the dependent variable – i.e., yearly Structural Funds transfers – has been carried out. This approach aimed to prevent any potential distortion that outliers could introduce and ensure more robust and reliable results. Hence, the dataset employed for the regression analyses included 968 observations for the 21 Italian regions across five Programming Periods, from 1989 to 2018.

In order to test the predictive powers of the factors explained in hypothesis 1, 2, 3, and 4, a series of bivariate analysis has been carried out. Table 1 presents the results of four generalized linear model regressions modelling a gamma distribution with a logged link function and with Region-Programming Period clustered robust standard errors, together with fixed-effects for the Programming Period and a control variable for the yearly structure of the transfers: in Model 1.1, the effect of political alignment between national and regional authorities has been assessed; Model 1.2 assesses the predictive power of the main economic criterion, the GDP per capita; in Model 1.3 the effect of partisan politics at the national level has been assessed; lastly, Model 1.4 evaluates the effect of the margin of victory in regional political elections.

Model 1.1 confirms the main hypothesis that regions that share the same partisan affiliation with the government at the national level are allocated higher amounts of Structural Funds transfers. The coefficient of political alignment is positive and statistically significant at a 95% confidence interval. The results suggest hence that, on average, regions that are politically aligned with national level authorities receive approximately 57% higher annual Structural Funds transfers per Programming Period.

Model 1.2 backs the fundamental proposition that economic criteria play a major role in establishing the amount of Structural Funds a region receives. Indeed, the coefficient of GDP per capita is negative and highly significant, thus confirming that the more a region is lagging behind in terms of economic development the greater the amount of Structural Funds transfers it receives. The coefficient suggests that for a thousand unit increase in their GDP per capita, regions are allocated approximately 7% less annual Structural Funds transfers.

Model 1.3 provides further support to the argumentation that political factors influence the allocation of Structural Funds at the regional level, by confirming the assumption that partisan politics at the national level influences the amounts of transfers. The coefficient is positive and highly significant, corroborating the hypothesis that left-wing governments at the national level tend to allocate higher amounts of Structural Funds with respect to right-wing governments as a result of their ideologies and agenda.

On the contrary, the effect of the margin of victory in regional political elections assessed in Model 1.4 denies the hypothesis that electoral competition is positively correlated with the amounts of Structural Funds transfers. On the contrary, the coefficient seems to indicate the opposite direction: the greater the margin of victory in regional political elections, the higher the amounts of Structural Funds transfers. However, as suggested by Cox & McCubbins (1986), this could be due to the fact that risk-averse politicians prefer to concentrate funding towards their political strongholds, as they fear that their efforts in allocating funds to regions with a significant number of swing-voters may not be adequately rewarded. Furthermore, the coefficient for the margin of victory is slightly positive and not statistically significant.

Table 1. Model 1: Generalized linear model regressions modelling a gamma distribution with a logged link function and Region-Programming Period clustered robust standard errors.

	Model 1.1	Model 1.2	Model 1.3	Model 1.4
Political alignment (1 =p.a.)	0.449** (-2.504)			
Year	-0.331*** (-12.98)	-0.320*** (-12.71)	-0.323*** (-12.72)	-0.323*** (-12.81)
Programming Period 1989-1993	-8.686*** (-14.60)	-9.373*** (-17.55)	-2.077*** (-7.375)	-8.487*** (-14.10)
Programming Period 1994-1999	-6.414*** (-13.14)	-6.959*** (-15.92)		-6.399*** (-13.62)
Programming Period 2000-2006	-4.037*** (-11.75)	-4.156*** (-12.21)	-4.008*** (-12.23)	-4.009*** (-12.19)
Programming Period 2007-2013	-1.734*** (-6.702)	-1.849*** (-7.220)	-1.649*** (-6.761)	-1.652*** (-6.745)
GDP per capita		-6.67e-05*** (-3.973)		
National government (1 =csx)			6.404*** (13.58)	
Margin of victory				0.00158 (0.171)
Constant	684.0*** (13.31)	664.3*** (13.15)	662.6*** (13.05)	668.2*** (13.15)
Observations	968	968	968	968

Note: Robust z-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

After each individual hypothesis has been assessed, the robustness of the key independent variable in this study – i.e., political alignment – has been tested by including the other independent variables in a series of regressions in order to control for possible errors stemming from omitted

variables. Table 2 presents the results of four regression analyses, replicating the specific of Model 1: in Model 2.1, the GDP per capita has been introduced as the only control variable; subsequently, the variables accounting for partisan politics at the national level and for the margin of victory have been introduced in Model 2.2 and 2.3 respectively; Model 2.4 presents the regression analysis of all the independent variables abovementioned on the amount of Structural Funds.

Table 2. Model 2: Generalized linear model regressions modelling a gamma distribution with a logged link function and Region-Programming Period clustered robust standard errors.

	Model 2.1	Model 2.2	Model 2.3	Model 2.4
Political alignment (1 =p.a.)	0.348** (2.185)	0.348** (2.185)	0.342** (2.071)	0.342** (2.071)
Year	-0.327*** (-12.73)	-0.327*** (-12.73)	-0.326*** (-12.78)	-0.326*** (-12.78)
GDP per capita	-6.25e-05*** (-3.832)	-6.25e-05*** (-3.832)	-6.28e-05*** (-3.785)	-6.28e-05*** (-3.785)
National Government (1 =csx)		6.972*** (15.33)		6.971*** (15.34)
Programming Period 1989-1993	-9.498*** (-17.17)	-2.526*** (-11.42)	-9.501*** (-17.11)	-2.530*** (-11.52)
Programming Period 1994-1999	-6.972*** (-15.33)		-6.971*** (-15.34)	
Programming Period 2000-2006	-1.926*** (-6.771)	-1.926*** (-6.771)	-1.927*** (-6.778)	-1.927*** (-6.778)
Programming Period 2007-2013	-4.198*** (-11.41)	-4.198*** (-11.41)	-4.197*** (-11.42)	-4.197*** (-11.42)
Margin of victory			0.000848 (0.110)	0.000848 (0.110)
Constant	677.7*** (13.15)	670.8*** (13.11)	677.2*** (13.21)	670.2*** (13.17)
Observations	968	968	968	968

Note: Robust z-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The hypothesis that politically aligned regions receive higher amounts of Structural Funds transfers appears to hold true even after severe controls have been introduced in the analysis. Indeed, despite a modest decrease in its size, the coefficient for political alignment is still positive and statistically significant at a 95% confidence interval across the board. In other words, political alignment between national and regional authorities exerts a strong influence on the amounts of Structural Funds transfers allocated to Italian regions. Moreover, Model 2.4 further confirms the hypothesis regarding the effects of GDP per capita and partisan politics at the national level, as the

coefficients for these variables keep the expected directions and are highly significant. As previously stated, the electoral competition at the regional level does not seem to be a strong predictor of allocated amounts of Structural Funds, as the coefficient is slightly above 0 and it is not statistically significant.

Overall, the results from these regression analyses are in line with the literature and confirm Hypothesis 1, Hypothesis 2, and Hypothesis 3. The significant variability in the amounts of annual Structural Funds transfers in the Italian case can be explained by political dynamics and political factors, both at the national and regional level.

In order to test Hypothesis 5, the same analysis carried out for the robustness check of the key independent variable – i.e., political alignment – has been replicated. Table 3 presents the results of the four generalized linear model regressions carried out to assess Hypothesis 5: in Model 3.1 the continuous variable GDP per capita is let interact with the dichotomy political alignment (GDP per capita*political alignment) to explore the effect of the political alignment between national and regional authorities over different levels of economic development; in Model 3.2 and 3.3, the control for partisan politics at the national level and the control for the margin of victory at regional political elections are introduced respectively; lastly, in Model 3.4 the interaction term is tested by including all the control variables abovementioned.

Table 3. Model 3: Generalized linear model regressions modelling a gamma distribution with a logged link function and Region-Programming Period clustered robust standard errors.

	Model 3.1	Model 3.2	Model 3.3	Model 3.4
Political alignment (1 =p.a.)	1.439** (2.100)	1.439** (2.100)	1.433** (2.118)	1.433** (2.118)
GDP per capita	-2.99e-05 (-1.150)	-2.99e-05 (-1.150)	-3.03e-05 (-1.186)	-3.03e-05 (-1.186)
GDP per capita*political alignment	-4.52e-05* (-1.693)	-4.52e-05* (-1.693)	-4.53e-05* (-1.686)	-4.53e-05* (-1.686)
National government (1 =csx)		6.890*** (15.31)		6.889*** (15.31)
Year	-0.328*** (-13.05)	-0.328*** (-13.05)	-0.328*** (-13.11)	-0.328*** (-13.11)
Programming Period 1989-1993	-9.508*** (-18.18)	-2.617*** (-12.53)	-9.511*** (-18.14)	-2.622*** (-12.51)
Programming Period 1994-1999	-6.890*** (-15.31)		-6.889*** (-15.31)	
Programming Period 2000-2006	-4.171*** (-12.46)	-4.171*** (-12.46)	-4.171*** (-12.46)	-4.171*** (-12.46)
Programming Period 2007-2013	-1.850*** (-7.147)	-1.850*** (-7.147)	-1.852*** (-7.170)	-1.852*** (-7.170)
Margin of victory			0.000977 (0.128)	0.000977 (0.128)
Constant	679.7*** (13.46)	672.8*** (13.42)	678.9*** (13.52)	672.1*** (13.48)
Observations	968	968	968	968

Note: Robust z-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

All the coefficients keep their expected signs across the four Models presented in Table 3. However, as the interaction term between the GDP per capita and political alignment has been introduced, the interpretation of the coefficients presented in Table 3 differs from the interpretation of the coefficients presented in both Table 1 and Table 2.

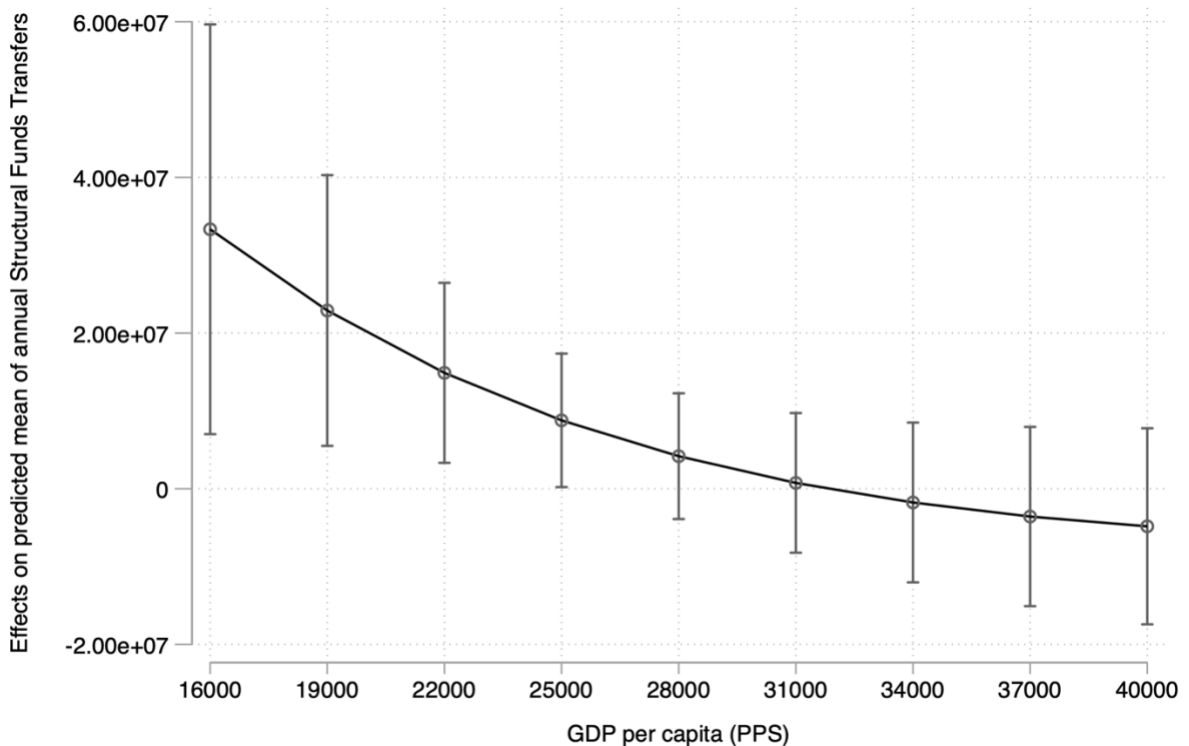
The coefficient for the political alignment between national and regional authorities is negative and statistically significant at a 95% confidence interval. These results suggest that the political alignment between national and regional authorities exerts a significant effect on the amount of Structural Funds Transfers at the minimum of GDP per capita levels.

The coefficient of the interaction term is negative, thus suggesting that as the level of economic development in a region increases, the effect of being politically aligned with national level authorities decreases. However, the coefficients for the interaction terms are not statistically

significant at a 95% confidence interval. Thus, the findings presented in Table 3 seems to dispute Hypothesis 5.

A visual exploration of the effect of political alignment over different levels of economic development is further provided in Figure 6, which presents the average marginal effect of political alignment at different levels of GDP per capita.

Figure 7. Average marginal effect of political alignment on Structural Funds transfers across different levels of economic development, with 95% confidence intervals.



Note: Model 3.1. Own elaboration through STATA.

Figure 6 suggests that the significance of the political alignment between national and regional authorities diminishes as the level of economic development increases, reaching a point where the effect becomes non-significant. Political alignment has a particularly significant impact in low-income regions, where it positively influences the allocated amount of Structural Funds transfers. However, in high-income situations, political alignment loses its significance as the GDP per capita becomes the primary criterion for fund allocation. In other words, political alignment between national and regional authorities has a positive effect on the amount of transfers received by Italian regions, but this effect is significant only in regions with low levels of economic development. Conversely, in regions with high levels of economic development, political alignment does not provide any additional rewards, as GDP per capita becomes the determining factor for the allocation

of Structural Funds, confirming hence the fact that European Regional Policy aims to reduce the disparities between the level of development of the various Union regions.

Moreover, Figure 6 aligns well with the findings presented in Figure 2 of Chapter 1. The average marginal effect of political alignment, at different levels of economic development, accurately explains the significant variability in Structural Funds transfers observed among regions with low levels of economic development. This provides further confirmation that the variability among poorer regions can be attributed to whether a region is politically aligned or not aligned with national level authorities.

To sum up, the findings presented in this chapter show that political factors and dynamics influence the allocation of Structural Funds. In particular, regions that are politically aligned with the authorities at the national level are allocated higher amount of Structural Funds transfers. However, the effect of being politically aligned or not has a different impact according to the level of economic development: political alignment exerts a significant positive effect on allocated Structural Funds among poorer regions, while its effect vanishes among wealthier regions.

Conclusion

This study has investigated the possibility for political factors and political dynamics to influence the amounts of European Structural and Investments Funds transfers. Several studies have confirmed that both political factors and institutional designs affect consistently the allocation of transfers at the regional level (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010; Chalmers, 2013; Charron, 2016; Dellmuth, 2011; Dellmuth et al., 2017; Dellmuth & Stoffel, 2012; Kemmerling & Bodenstein, 2006; Schraff, 2014). However, the majority of these studies focused on a limited time frame; indeed, this is the only study that measures the impact of political factors and political dynamics on allocated amounts of Structural Funds over an extended time frame, covering almost 30 years and spanning across five different Programming Periods. Moreover, the possibility of political factors to interact with the regional levels of economic development was yet to be addressed by the literature. Hence, this study aimed to fill the abovementioned gaps in the literature and provide a more nuanced understanding of the influence of political factors and political dynamics on the EU Structural and Investment Funds allocation process.

Focusing on the 21 Italian regions and covering a period of almost 30 years spanning across five different Programming Periods, this study has shown that political factors and political dynamics affect the allocated amounts of European Structural Funds and are able to explain the significant variability in the Italian case.

The results appear to be in line with the literature and the majority of hypothesis put forth in Chapter 2 has been confirmed. Specifically, the central finding is that political alignment between national and regional authorities has demonstrated a high level of significance in the analyses carried out, confirming the hypothesis that politicians at the national level – according to their interest in re-election – tend to target regions which share the same partisan affiliation in order to be certain that their efforts will be rewarded (Arceneaux, 2006).

However, when political factors – namely political alignment – have been let interact with regional levels of economic development, two different scenarios emerged. Political alignment – and in general political factors – are suited to explain the variability of the amounts of Structural Funds transfers among regions with lower levels of economic development. On the contrary, transfers towards wealthier regions are limited by the technical requirements of the European Structural Funds, particularly the GDP per capita criterion. Therefore, a constraint exists that prevents these transfers from exceeding a certain threshold. Indeed, both the size of the effect and significance of the political alignment decreases as the regional levels of economic development increases.

These findings further corroborate the idea that being poor is neither a strong nor a sufficient condition for receiving Structural Funds transfers (Bodenstein & Kemmerling, 2012).

However, it is important to note that this study focused solely on the Italian case, and therefore, further research is required. The dataset provided by the European Commission (2020) includes observations for all NUTS 2 regions that received transfers across multiple Programming Periods. By extending the scope of the analysis to other Member States and their regions, a more thorough understanding of the effects that political factors and political dynamics have on the allocated amount of Structural Fund transfers could be achieved. Such research would also provide useful insights into the generalizability of the results and would contribute to a more exhaustive analysis of the factors that determine the uneven distribution of funds among different regions of the European Union.

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Summary

Introduction

As outlined in Article 158 European Community, one of the main objectives of the European Union is the reduction of disparities between the level of development of the various Union regions. The European Union has sought to reduce differences in income levels between the several European regions by engaging in redistributive measures through regional policy; in other words, by shifting resources from wealthier regions to poorer regions.

Being the main policy devices through which the EU engages in regional policy, European Structural and Investment Funds (ESIF) have attracted prolonged attention by many scholars and have been the focus of a great number of analysis.

The significant attention paid towards Structural Funds is justified by the unprecedented scope of EU regional policy. For instance, more than €350 billion were allocated in the 2014-2020 Programming Period across all European regions. However, the majority of studies on Structural Funds have primarily focused on examining the effects of these funds on regional economic activity and output, neglecting the question of “who gets what, when and how” (Lasswell, 1951). According to the Treaties, the allocation of European Structural and Investments Funds is governed by the principle of progressivity, meaning that poorer regions should be the main recipient of Structural Funds transfers. On the contrary, wealthier regions should be allocated less Structural Funds transfers. Therefore, regions sharing similar levels of economic development should be allocated approximately the same amounts of Structural Funds transfers. However, this is not reflected in reality, as the amounts of Structural Funds transfers allocated to regions differs significantly despite similar income levels, suggesting hence that other factors may have an impact on the allocation process.

Recently, a compelling area of research has emerged and developed around this question, underlining that economic criteria alone cannot explain differences in the allocated amounts of Structural Funds transfers among European regions. Both political factors and political dynamics have been found to exert a significant degree of influence on the allocation of Structural Funds (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010; Chalmers, 2013; Charron, 2016; Dellmuth, 2011; Dellmuth et al., 2017; Dellmuth & Stoffel, 2012; Kemmerling & Bodenstein, 2006).

This study seeks to address and quantify the extent to which political factors can explain the variability observed in the allocated amount of Structural Funds transfers among the 21 Italian regions. The central hypothesis in this study is that political alignment – conceived as whether national and regional authorities share the same partisan affiliation – can explain the differences in

the amounts of transfers observed in the Italian case. Moreover, as the greatest variability is observed among regions with lower levels of economic development, this study seeks to explore whether the effects of political factors are contingent upon the level of economic development.

The study is structured as follows. Chapter 1 describes the architecture of the allocation process for Structural Funds together with the governance levels involved and provides an overview of the literature. Building upon the insights from Chapter 1, Chapter 2 formulates a series of hypotheses regarding the possible relationships between political factors and allocated amount of Structural Funds. In line with the literature, the political factors addressed in this study are namely the political alignment between national and regional authorities, partisan politics at the national level and electoral competition at the regional level. Chapter 3 explains the methodology used to assess the set of hypotheses put forth in Chapter 2, and the results are further discussed in Chapter 4.

As opposed to previous studies, which focused on a limited time frame, the analysis carried out in this study covers the period from 1989 to 2018 and spans across five different Programming Periods. Moreover, yearly transfers are used as the dependent variable instead of the total allocated amount at the beginning of the Programming Period, as the latter may fail to capture the dynamics of fund allocation throughout the individual periods.

The main finding of this study is that political alignment between national and regional authorities is able to explain the variability of Structural Funds transfers observed in the Italian case among regions with similar level of economic development. Additionally, the effect of political alignment is found to be contingent upon the levels of economic development, meaning that this factor can accurately explain the variability observed especially among poorer regions.

However, this study focused only on the Italian case. Broadening the scope of analyses to other EU Member States and their regions is hence necessary to confirm the results obtained in this analysis. Accordingly, this would lead to a more nuanced understanding of the effect that both political factors and political dynamics exert on the allocation of European Structural and Investment Funds.

Chapter 1 – The EU Structural Funds Allocation Process

As any other confederation or union of states – i.e., the United States – the European Union does face the challenge of dealing with differences in living standards and financial capability between and within its various states and regions (Oates, 1999). The question of disparities is acknowledged inside Article 158 European Community, which establishes the reduction of disparities between the level of development of the various Union regions as one of the main policy objectives of the EU (Evans, 1999). Indeed, it is possible to observe significant differences in these dimensions to date, with some European regions that are lagging behind in terms of economic development with respect to others. In this regard, according to Article 159 EC, European Structural and Investment Funds (ESIF) can be deemed to be the main pillars of EU regional and cohesion policy and to represent the main instrument through which the European Union engages in redistributive policy, by shifting resources from wealthier to poorer regions. Hence, as suggested by Chalmers (2013), EU regional policy aims to reduce economic inequalities between its various regions by implementing a cross-border approach to the redistribution of wealth. Over time, several Funds have been created to address specific policy issues. However, the majority of Structural and Investment Funds transfers have originated traditionally from three different policy devices, namely the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Regional Development (EAFRD). In spite of the differences in terms of objective between these policy devices, they all share the same basic functionings. First of all, Structural Funds – being the core of EU Regional Policy – are allocated at the regional level as opposed to other EU Funds, such as the Cohesion Funds, which are allocated at the national level. Precisely, Structural Funds are allocated at the NUTS 2 level (Nomenclature of Territorial Units for Statistics), which represents relatively homogenous regions in terms of their economic and social characteristics and has been designed on purpose by the European Union for the application of regional policies. Secondly, Structural Funds transfers follow a multi-year financial plan, the so-called Programming Period. At the beginning of each Programming Period, a decision is made regarding the total amount of funding to be allocated to the various regions. This decision is the result of negotiations that take place at three different level of governance, namely European, national and regional. Member States negotiate at the European level the total budget for each policy device – i.e., Structural Fund – allocated to them and outline the criteria according to which the distribution of transfers to their regions should take place. After the allocation of Structural Funds to each country, national authorities are responsible for distributing the funds among their regions according to the specific criteria of each policy device and to the soundness and quality of the plans developed by regional authorities. Once this agreement is reached, the defined

amount of Structural Funds is transferred to the respective regions in the form of annual payments within the time frame of the Programming Period. Thus far, five programming periods have been completed – namely the 1989-1993, the 1994-1999, the 2000-2006, the 2007-2013, and the 2014-2020 – and a new Programming Period, the 2021-2027 is currently underway. Finally, despite continuous changes in policy measures and objectives across Programming Periods, the allocation of Structural Funds remains governed by the same underlying criteria. This distribution is based on the principle of progressivity; in other words, the more a region is lagging behind in factors such as wealth, development and unemployment, the more the allocated amount of Structural Funds should be (Charron, 2016). On the contrary, throughout the Programming Periods, a significant degree of variability was observed in the allocation of structural funds to regions with comparable levels of development. For instance, during the first Programming Period (1989-1993), the region of Campania received transfers amounting to €1.305.431.356, despite having an average GDP per capita of only €14,000. In contrast, the region of Basilicata was allocated €209.183.721, even though its GDP per capita was slightly higher than €14,000. This observation suggests the potential for factors beyond mere economic indicators, such as political dynamics and the interactions between different levels of governance, to exert a considerable influence on the distribution of these funds across Europe. Indeed, the allocation of structural funds is contingent upon the power dynamics that exist not only between European institutions and member states during the negotiation process, but also between member states and their regional authorities. the allocation of Structural Funds has changed over the different Programming Periods, the way in which funds are allocated can be simplified as a three-stage process which follows a sequential logic, whereby actors at three different levels – namely European, national and regional – interact with one another and fight to retain certain policy-making powers (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010). The power balance among these three levels of institutions has undergone change over successive Programming Periods and in spite of the Commission's significant powers during the first two periods Member States have been successful in effectively retaining significant policy-making powers in determining the allocation of funds across regions within their borders, resulting in the Commission's role being relegated to primarily advisory duties (Dellmuth et al., 2017). a compelling area of research has recently emerged within the literature on this topic. Kemmerling & Bodenstein (2006) were the first to find out that “being poor is neither a strong nor a sufficient predictor of the amount of Structural Funds per head a region receives” through an analysis of 83 European Regions for the 2000-2006 Programming Period which tested whether partisan politics at the regional level may affect the distribution of Structural Funds. The principal outcome of this investigation revealed a substantial influence of parties' ideological stances on regional policy, thereby impacting transfers of Structural Funds. Specifically, the study found that

left-leaning parties were associated with larger allocations of Structural Funds. Accordingly, Bouvet & Dall'Erba (2010) analyzed the distribution of Structural Funds in the first two Programming Periods across 120 NUTS 1 and NUTS 2 regions. What they did find was that the allocation of Funds cannot be solely attributed to economic factors and that the political alignment between national and regional authorities was a major predictor of higher amounts of allocated funds. Bodenstein & Kemmerling (2012) conducted an analysis on the 2000-2006 Programming Period across 137 European regions, which revealed that regions with greater political competencies have a greater ability to exert influence during the bargaining process with national political authorities. This findings were further confirmed by Chalmers (2013), who analyzed the impact of regional authority on the distribution of Structural Funds across 181 regions in the 2007-2013 Programming Period. The novelties brought by this study were mainly two. Firstly, instead of using the Lijphart's Federalism Index, Chalmers (2013) made use of the so-called Regional Authority Index. Secondly, Chalmers (2013) explored the potential for Brussel-based regional lobbying offices of influencing the allocation of Structural Funds, finding that lobbying takes place primarily between regions and central government, reaffirming the greater relevance of the interactions between national and regional authorities to the detriment of those occurring between the national and European level. A step forward in the potential for regional authorities' characteristics to impact Structural Funds allocation is represented by the research conducted by Charron (2016) on 171 European regions during the 2007-2013 Programming Period, investigating the influence of both formal and informal institutions on the allocation of Structural Funds. The results complement the theory proposed by Bodenstein and Kemmerling (2012), as they demonstrate that regions with greater political competencies receive more substantial allocations of Structural Funds only if they have satisfactory levels of Quality of Government (QoG). These studies confirm the fact that the allocation process of Structural Funds is not straightforward as the economic criteria would suggest as it involves several layer of governance (Bouvet & Dall'Erba, 2010). Conversely, other dynamics, such as political factors and institutional design, are fundamental in determining the level of transfers that a region receives.

Although the aforementioned studies examined various potential reasons for the uneven distribution of Structural Funds, they share certain commonalities. Firstly, the dependent variable in each case is consistently the total amount of Structural Funds allocated to a region at the outset of the Programming Period. Secondly, the analyses were restricted to a limited timeframe, generally encompassing only one or at most two Programming Periods. These common features may be perceived as limitations in some respects, as they restrict the scope and depth of the analyses conducted. Focusing solely on the total amount of funds allocated at the beginning of the Programming Period may fail to capture the dynamics of fund allocation throughout the period.

Indeed, as suggested by Dellmuth et al. (2017) examining actual cash flows would be more correct as budgetary commitments to regions and actual payments in regions may vary considerably. In other words, the actual payments made to a particular region within the time frame of the Programming Period may not add up exactly to the established amount allocated at the start of the period. Moreover, examining only one or two Programming Periods may overlook important trends and developments in the distribution of Structural Funds over a longer time frame, although limited availability of data may have been the reason these studies focused on a shorter time span.

Therefore, the objective of this study is to provide a more nuanced understanding of the factors influencing the distribution of Structural Funds among Italian regions by looking at the actual transfers erogated between 1989 and 2018 and by examining the interactions between national and regional authorities. By doing so, this study seeks to address the limitations of previous research, which focused solely on the amounts of Structural Funds allocated at the beginning of the Programming Period and analyzed only one or two programming periods. Moreover, while previous literature has emphasized the role of political alignment between national and regional authorities in influencing the allocation of Structural Funds, no study has yet examined the potential combined effect of a region's level of development and its political alignment with national authorities, which may further impact the distribution of Structural Funds. In particular, as the greatest variability in the allocated amount of Structural Funds is displayed among poorer regions, it is possible to infer that as the level of GDP per capita increases the magnitude of the effect of political alignment between the national and regional authorities decreases. In other words, the effect of the political alignment may be contingent on the regional level of economic development, confirming hence the hypothesis that economic and political factors interact with one another.

Chapter 2 – Framework of analysis

By relying on the several academic works about political factors and institutional design and by drawing on the literature presented in Chapter 1, it is possible to formulate a series of hypothesis regarding the potential relationships between the amount of Structural Funds a region receives and various economic and political variables.

Economic criteria

According to Council Regulation No. 2052/88, the main criterion that explains the allocation and distribution of transfers in the framework of European Structural and Investment Funds across

European regions is the regional level of development. The distribution of resources conforms to the so-called principle of progressivity, meaning that the more a region is lagging behind in terms of economic development – i.e., GDP per capita and unemployment rate – with respect to the other European regions, the higher the amount of transfers it should receive.

Hypothesis 1: The higher the GDP per capita in a region, the less the amount of Structural Funds allocated.

Political Factors

It is widely acknowledged in the literature that politicians in the executive branch of both national and regional governments have strong incentives to influence the allocation of grants, as they typically seek to advance their own interests and agendas (Bertelli & Grose, 2009). As far as the politicians agenda is concerned, several studies confirmed the fact that left-wing cabinets tend to generally spend more than right wing cabinets (Bouvet & Dall’Erba, 2010). For instance, De Haan & Sturm (1994) through an analysis of twelve European countries, found that the growth of the share of government spending tends to be higher in countries governed by left-wing parties.

Hypothesis 2: Left-wing governments tend to allocate higher amounts of Structural Funds.

However, politicians are primarily motivated by the desire for re-election, and they view the allocation of grants as a means of increasing their chances. When politicians at the national level decide on the distribution of European Structural Funds in pursuit of their interest in re-election, they must take into account the political situation at the regional level as voters often do not understand the differences between levels of government and may not attribute the funding to the national government. Indeed, it is uncertain whether voters will reward national politicians for their efforts to allocate Structural Funds to their regions, especially if the regional authority has a different partisan affiliation, which would hinder the national level politicians’ efforts to increase their chances of re-election (Arceneaux, 2006). Therefore, this would suggest that politicians at the national level are more likely to target regions with the same partisan affiliation. Hypothesis 3: Regions that are politically aligned with their national level are allocated higher amounts of Structural Funds.

Following the same line of reasoning – that politicians are primarily motivated by their re-election prospects – it can be expected that politicians at the national level may allocate funds to

regions with larger numbers of swing-voters, where there is a weaker attachment to either the government or opposition parties (Milligan & Smart, 2005). In this sense, the allocation of funds from executive branches can be seen as a means of generating consensus and winning votes, consistent with vote-buying behaviors. Consequently, politicians at the national level are likely to target regions based on how secure their current majority at the regional level is (Bouvet & Dall'Erba, 2010). In other words, regions with greater electoral competition are expected to receive higher levels of Structural Funds transfers. Based on this reasoning, a hypothesis can be formulated.

Hypothesis 4: The higher the level of electoral competition in a region, the greater the amount of Structural Funds that will be allocated to that region.

While numerous studies have explored the predictive power of political factors, namely partisan affiliation, party competition and political alignment between national and regional authorities, on the allocation of Structural Funds, none have yet examined the possibility of political factors interacting with economic ones at regional level. In other words, the impact of political factors on Structural Funds transfers may depend on the economic circumstances of a particular region. This implies that as the level of economic development in a region changes, the magnitude of the effects exerted by political factors on the amount of European Structural Funds allocated may also vary. As economic growth generates higher demands for better institutions, it can be expected that regions with higher levels of economic development possess more robust and effective political institutions. Therefore, it can be expected that regions with greater levels of economic performance possess more robust and effective political institutions. As the allocation of Structural Funds can be thought as an interaction game between different levels of governance, more economically developed regions should be better able to lobby and bargain for higher amount of Structural Funds with respect to poorer regions.

Hypothesis 5: The magnitude of the effect of political alignment between national and regional authorities decreases as the regional level of economic development increases.

Chapter 3 – Data and Methods

The data

The hypotheses formulated in the previous chapter are tested by constructing a panel dataset for the Italian regions including data for the transfers of European Structural and Investment Funds and economic and political variables, which covers the period from 1989 to 2018. As explained in the previous chapters, the allocation of Structural Funds is carried out at the NUTS II level, which coincide with the “Regioni” in Italy. This happens to be particularly helpful as the “Regioni” in Italy represent governmental units and thus have the features needed to test the hypothesis that political factors may affect the distribution of European Structural Funds throughout the Italian territory. Data on the transfers from each of the European Structural Fund under study to each Italian region are retrieved from the longitudinal (panel) dataset “Historic EU payments – regionalized and modelled” which is publicly available from the European Commission’s data catalogue (European Commission 2020). The data on the GDP per capita in Power Purchasing Standards (PPS) for Italian regions are sourced by the ARDECO Database of the European Commission (European Commission 2020, code: SUVGD). The Eligendo Database, maintained by the Italian Ministry of Home Affairs, was the primary source for data on political variables, including national and regional elections, for the majority of regions. In cases where data could not be obtained from this database, data on political elections were collected from the regional database for political elections of the relevant region. This was the case for certain "Statuto Speciale" regions. However, due to limitations in data availability, some political variables could not be coded for both Provincia Autonoma di Bolzano and Provincia Autonoma di Trento, which led to the exclusion of their observations from the analysis. The final dataset encompasses six Programming Periods – namely the 1989-1993, the 1994-1999, the 2000-2006, the 2007-2013, and the 2014-2020 – in 19 Italian regions. It should be noted that the dataset on European Structural Funds transfers provided by the European Commission only covers the first four years of the 2014-2020 Programming Period. However, this limitation does not affect the analysis since the transfers are studied at the level of yearly payments rather than focusing on the total amount allocated at the beginning of the Programming Period.

The dependent and independent variables

The dependent variable in this study is the yearly transfer of European Structural and Investment Funds to each Italian region, as opposed to the majority of studies in the literature that use the total amount of Structural Funds allocated at the outset of each Programming Periods as the dependent variable. The dependent variable has been calculated as the sum of transfers deriving from the three policy devices described in Chapter 1, namely the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Regional Development (EAFRD). As outlined by the European Commission (2020), the dataset from which

data on yearly Structural Funds transfers have been retrieved follows the cycle of payments to the Member States and not the date on which real expenditures took place on the ground, hence potentially affecting the results from analytic works. However, the dataset contains a “modelled annual expenditure”, which is meant to track the expenditures as they are incurred by the regions, providing thus a more nuanced measure of Structural Funds transfers (Staehr & Urke, 2022).

The key independent variable is the political alignment between national and regional authorities. The political alignment variable has been operationalized as a dichotomy, distinguishing from authorities at the national and regional level politically aligned (=1) and not politically aligned (=0). In other words, a region is considered to share the political orientation of the national government if both authorities are aligned either as left-wing or right-wing at the outset of each Programming Period (Bouvet & Dall’Erba, 2010).

Accordingly, the dummy variable indicating the ideological stance of national level authorities was coded based on the party affiliation of the President of each Italian government at the beginning of the Programming Period. Hence, executive branches may be governed by left-wing politicians (=1) or by right-wing politicians (=0).

The intensity of party competition at the regional level is captured by an independent variable that has been coded as the leading party’s margin of victory. In other words, the intensity of party competition is measured by the difference between the percentage of votes received by the first party and the percentage of votes received by the second party (Milligan & Smart, 2005; Solé-Ollé & Sorribas-Navarro, 2008).

The independent variable accounting for the economic criteria in the allocation of European Structural Funds is the GDP per capita at current prices in Power Purchasing Standards (PPS). Current prices have been chosen over constant prices (with reference to 2015) as the unit of measure because the yearly transfers of Structural Funds are expressed in current prices. This choice enables the use of a more consistent unit of measure for variables expressed in euros.

An interaction term has been created in order to test the hypothesis that the size of the effects of political factors varies as the regional of economic development varies. More specifically, the interaction term has been coded as the product of the continuous variable for the regional levels of economic development – i.e., GDP per capita – and the binary variable for the political alignment between national and regional authorities.

The model

The dataset is composed by observation about European Structural Funds transfers that are cross classified within 21 Italian regions by years. The total number of observations after all missing values

have been removed is 1211. In accordance with Charron (2016), a generalized linear model (GML) modelling a gamma distribution with a logged link function has been employed in the analyses of this study. The adoption of this particular generalized linear model in this study is justified for multiple reasons. Firstly, as previously mentioned, it accommodates the analysis of unbalanced longitudinal datasets, which is suitable for the dataset at hand. Secondly, it is extremely useful as the dependent variable is a continuous variable which has a lower bound of zero (Dobson, 2002). In addition, it allows for the incorporation of clustered data, recognizing that observations within the same region and Programming Period are not independent of one another (Oberg & Mahoney, 2007). This is particularly relevant given the nested structure of the dataset, which includes the country (Italy) as the highest level, the 21 Italian regions, and their respective observations across five different Programming Periods. Accordingly, the data are analyzed with Region and Programming Period-clustered robust standard errors to account for heteroscedasticity.

Chapter 4 – Results and discussion

In order to test the predictive powers of the factors explained in hypothesis 1, 2, 3, and 4, a series of bivariate analysis has been carried out. Model 1.1 confirms the main hypothesis that regions that share the same partisan affiliation with the government at the national level are allocated higher amounts of Structural Funds transfers. The coefficient of political alignment is positive and statistically significant at a 95% confidence interval. The results suggest hence that, on average, regions that are politically aligned with national level authorities receive approximately 57% higher annual Structural Funds transfers per Programming Period.

Model 1.2 backs the fundamental proposition that economic criteria play a major role in establishing the amount of Structural Funds a region receives. Indeed, the coefficient of GDP per capita is negative and highly significant, thus confirming that the more a region is lagging behind in terms of economic development the greater the amount of Structural Funds transfers it receives. The coefficient suggests that for a thousand unit increase in their GDP per capita, regions are allocated approximately 7% less annual Structural Funds transfers.

Model 1.3 provides further support to the argumentation that political factors influence the allocation of Structural Funds at the regional level, by confirming the assumption that partisan politics at the national level influences the amounts of transfers. The coefficient is positive and highly significant, corroborating the hypothesis that left-wing governments at the national level tend to allocate higher amounts of Structural Funds with respect to right-wing governments as a result of their ideologies and agenda.

On the contrary, the effect of the margin of victory in regional political elections assessed in Model 1.4 denies the hypothesis that electoral competition is positively correlated with the amounts of Structural Funds transfers. On the contrary, the coefficient seems to indicate the opposite direction: the greater the margin of victory in regional political elections, the higher the amounts of Structural Funds transfers. However, as suggested by Cox & McCubbins (1986), this could be due to the fact that risk-averse politicians prefer to concentrate funding towards their political strongholds, as they fear that their efforts in allocating funds to regions with a significant number of swing-voters may not be adequately rewarded. Furthermore, the coefficient for the margin of victory is slightly positive and not statistically significant. After each individual hypothesis has been assessed, the robustness of the key independent variable in this study – i.e., political alignment – has been tested by including the other independent variables in a series of regressions in order to control for possible errors stemming from omitted variables. The hypothesis that politically aligned regions receive higher amounts of Structural Funds transfers appears to hold true even after severe controls have been introduced in the analysis. Indeed, despite a modest decrease in its size, the coefficient for political alignment is still positive and statistically significant at a 95% confidence interval across the board. In other words, political alignment between national and regional authorities exerts a strong influence on the amounts of Structural Funds transfers allocated to Italian regions. Moreover, Model 2.4 further confirms the hypothesis regarding the effects of GDP per capita and partisan politics at the national level, as the coefficients for these variables keep the expected directions and are highly significant. As previously stated, the electoral competition at the regional level does not seem to be a strong predictor of allocated amounts of Structural Funds, as the coefficient is slightly above 0 and it is not statistically significant.

Overall, the results from these regression analyses are in line with the literature and confirm Hypothesis 1, Hypothesis 2, and Hypothesis 3. The significant variability in the amounts of annual Structural Funds transfers in the Italian case can be explained by political dynamics and political factors, both at the national and regional level.

In order to test Hypothesis 5, the same analysis carried out for the robustness check of the key independent variable – i.e., political alignment – has been replicated. All the coefficients keep their expected signs across the four Models presented in Table 3. However, as the interaction term between the GDP per capita and political alignment has been introduced, the interpretation of the coefficients presented in Table 3 differs from the interpretation of the coefficients presented in both Table 1 and Table 2.

The coefficient for the political alignment between national and regional authorities is negative and statistically significant at a 95% confidence interval. These results suggest that the

political alignment between national and regional authorities exerts a significant effect on the amount of Structural Funds Transfers at the minimum of GDP per capita levels.

The coefficient of the interaction term is negative, thus suggesting that as the level of economic development in a region increases, the effect of being politically aligned with national level authorities decreases. However, the coefficients for the interaction terms are not statistically significant at a 95% confidence interval. Thus, the findings presented in Table 3 seems to dispute Hypothesis 5. The significance of the political alignment between national and regional authorities diminishes as the level of economic development increases, reaching a point where the effect becomes non-significant. Political alignment has a particularly significant impact in low-income regions, where it positively influences the allocated amount of Structural Funds transfers. However, in high-income situations, political alignment loses its significance as the GDP per capita becomes the primary criterion for fund allocation. In other words, political alignment between national and regional authorities has a positive effect on the amount of transfers received by Italian regions, but this effect is significant only in regions with low levels of economic development. Conversely, in regions with high levels of economic development, political alignment does not provide any additional rewards, as GDP per capita becomes the determining factor for the allocation of Structural Funds, confirming hence the fact that European Regional Policy aims to reduce the disparities between the level of development of the various Union regions. To sum up, the findings presented in this chapter show that political factors and dynamics influence the allocation of Structural Funds. In particular, regions that are politically aligned with the authorities at the national level are allocated higher amount of Structural Funds transfers. However, the effect of being politically aligned or not has a different impact according to the level of economic development: political alignment exerts a significant positive effect on allocated Structural Funds among poorer regions, while its effect vanishes among wealthier regions.

Conclusion

This study has investigated the possibility for political factors and political dynamics to influence the amounts of European Structural and Investments Funds transfers. Several studies have confirmed that both political factors and institutional designs affect consistently the allocation of transfers at the regional level (Bodenstein & Kemmerling, 2012; Bouvet & Dall’Erba, 2010; Chalmers, 2013; Charron, 2016; Dellmuth, 2011; Dellmuth et al., 2017; Dellmuth & Stoffel, 2012; Kemmerling & Bodenstein, 2006; Schraff, 2014). However, the majority of these studies focused on a limited time frame; indeed, this is the only study that measures the impact of political factors and

political dynamics on allocated amounts of Structural Funds over an extended time frame, covering almost 30 years and spanning across five different Programming Periods. Moreover, the possibility of political factors to interact with the regional levels of economic development was yet to be addressed by the literature. Hence, this study aimed to fill the abovementioned gaps in the literature and provide a more nuanced understanding of the influence of political factors and political dynamics on the EU Structural and Investment Funds allocation process.

Focusing on the 21 Italian regions and covering a period of almost 30 years spanning across five different Programming Periods, this study has shown that political factors and political dynamics affect the allocated amounts of European Structural Funds and are able to explain the significant variability in the Italian case.

The results appear to be in line with the literature and the majority of hypothesis put forth in Chapter 2 has been confirmed. Specifically, the central finding is that political alignment between national and regional authorities has demonstrated a high level of significance in the analyses carried out, confirming the hypothesis that politicians at the national level – according to their interest in re-election – tend to target regions which share the same partisan affiliation in order to be certain that their efforts will be rewarded (Arceneaux, 2006).

However, when political factors – namely political alignment – have been let interact with regional levels of economic development, two different scenarios emerged. Political alignment – and in general political factors – are suited to explain the variability of the amounts of Structural Funds transfers among regions with lower levels of economic development. On the contrary, transfers towards wealthier regions are limited by the technical requirements of the European Structural Funds, particularly the GDP per capita criterion. Therefore, a constraint exists that prevents these transfers from exceeding a certain threshold. Indeed, both the size of the effect and significance of the political alignment decreases as the regional levels of economic development increases.

These findings further corroborate the idea that being poor is neither a strong nor a sufficient condition for receiving Structural Funds transfers (Bodenstein & Kemmerling, 2012).

However, it is important to note that this study focused solely on the Italian case, and therefore, further research is required. The dataset provided by the European Commission (2020) includes observations for all NUTS 2 regions that received transfers across multiple Programming Periods. By extending the scope of the analysis to other Member States and their regions, a more thorough understanding of the effects that political factors and political dynamics have on the allocated amount of Structural Fund transfers could be achieved. Such research would also provide useful insights into the generalizability of the results and would contribute to a more exhaustive analysis of the factors that determine the uneven distribution of funds among different regions of the European Union.