

Evaluating the Determinants of EU Funds Absorption across Old and New Member States – the Role of Administrative Capacity and Political Governance*

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This article assesses the impact of administrative capacity and political governance factors on the absorption of structural and cohesion funds (SCF). We drew on EU-27 country level data and developed a dynamic panel data model for the 2007–15 implementation period. By using a tobit estimation technique, the results indicated that government effectiveness and public diversion of funds significantly affect the recipient countries ability to absorb EU funds. The results revealed that increasing government effectiveness and combating corruption had significant stronger boosting effects on the absorption of SCF, especially in the new member states (NMS). This might explain why bottlenecks of administrative capacity and political governance are highly relevant for NMS and why these countries generally faced lower absorption rates, as compared to EU-15. Moreover, the results also underlined that the recent great recession reduced the ability of countries to absorb SCF. Against our expectations, domestic financial capacity and political decentralization were not shown to be decisive for EU funds absorption. In policy terms, our study suggests a focus on administrative capacity-building and fighting corruption in NMS and across lagging regions of older member states in order to improve absorption rates, while also focusing more on the efficiency and effectiveness of European cohesion policy. Finally, several suggestions are made on how our analysis can be replicated and taken forward by analysts of the European Union's internal development cohesion policy.

Keywords: SCF absorption; administrative capacity; political governance; absorption capacity; Cohesion policy; Central and Eastern Europe

Introduction

In recent years there have been key discussions in several member states across different political and societal forums over EU funds absorption. EU funding addresses strategic thematic priorities, and has been particularly aimed at economic, social and territorial cohesion ever since the first multiannual financial framework (1989–92) on which it is based. As integration has advanced to an economic and monetary union, achieving cohesion has become more important, as the enlargement process has widened development disparities. Therefore, more and more financial resources from the European budget have been allocated to rectifying this situation, using the cohesion and structural funds (SCF)

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as a pillar of the cohesion policy. In total, these funds amounted to more than one-third of the EU multi-annual budget for 2007–13 (the same was true for the 2014–20 financial cycle) and were implemented via political and technical legislation designed in Brussels (Council Regulation (EC) No 1083/2006). Given the increasing amounts of this funding, one of the major concerns of cohesion policy in member states was how to increase their capacity to use the allocated amounts and attain higher absorption levels, while also improving their effectiveness, and thus maximize their contribution to the Union's strategic objectives.

Therefore, the issue of EU funds absorption has captured public opinion attention, particularly in relation to the new member states (NMS). Despite the learning process, enabled by the implementation of pre-accession funds, and the 2007–13 multiannual financial framework experience, many countries still seem to face considerable difficulties in accessing SCF. In the first five years of the 2007–13 programming period, six of the NMS had an absorption rate of less than 35.6 per cent (EU average). By 2015, six NMS were still displaying absorption rates below the EU average of 90.3 per cent. Similarly, the first years of the current implementation period (2014–20) reveal a comparable scenario for many NMS.¹ For instance, about five years after the start of the new programming period, seven² of the NMS, which were allocated 79 per cent of the total amount for the NMS,³ received payments from the EC below the EU average level (29.5 per cent), varying between 25.0 per cent for Malta and 29.2 per cent for Poland.⁴

Based on the above, some key observations motivated the inquiry behind this study. Firstly, with a few exceptions, three large groups of countries may be defined in terms of implementing the cohesion policy: (1) most of the NMS, with a relatively low absorption capacity, especially in the first period of the cohesion policy implementation (with notable outliers such as Lithuania, Estonia and Poland); (2) southern periphery member states such as Italy and Spain, which had consistently low absorption rates throughout the period; (3) most other EU-15 countries that had a relatively high performance in its implementation in the early stages of SCF implementation. Secondly, although differences in absorption performance have considerably decreased in the last years of implementation, they have generally persisted over the entire programming period, with significant delays and bottlenecks for several NMS (see Table S3).

Given these circumstances, and the fact that despite some changes, cohesion policy mainly kept its thematic orientation and procedural requirements, what explains the variation in absorption across EU member states? Are administrative capacity and political governance significant drivers in explaining the differences between the new and the old member states in absorption performance? And are they important in explaining the persistence of delays in implementing cohesion policy between the new and the old member states?

EU enlargement has raised concerns over the capacity of NMS to comply with EU law and policies. Among them, many post-communist countries shared a common trajectory post-World War II that had strong implications for their economic systems, institutions

¹The study focuses on the NMS that joined the EU in 2004 and 2007. As Croatia became the EU member later, in 2013, at the end of 2007–13 programming period and had access to smaller EU funds we have not included it into our analysis.

²Malta, Slovakia, Slovenia, Czech Republic, Bulgaria, Romania and Poland.

³And 77.2 per cent of the amount allocated for the NMS over the 2007–13 period.

⁴The best performers in terms of absorption were Finland (56.1 per cent), Ireland (49.9 per cent) and Austria (48.8 per cent).

and governance. Even though their accession involved the adoption of the *acquis communautaire*, countries from this area still have a limited level of administrative capacity and their governance is marred by political instability and corruption, which could hinder their ability to take advantage of EU financial support (Bachtler *et al.*, 2013; Dimitrova, 2002; Kersan-Škabić and Tijanić, 2017; Meyer-Sahling, 2004; Milio, 2007, 2008; Surubaru, 2017a, 2017b; Tosun, 2014; Zubek and Henning, 2016). Several scholars have thus focused on the analysis of political and administrative determinants as the main drivers for explaining the relatively low performance of EU funds absorption in new and old member states. This applies equally to studies looking at the impact of foreign direct investment flows, job creation, income increase or R&D performance (Katsaitis and Doulos, 2009; Kersan-Škabić and Tijanić, 2017; Kirankabes and Erkul, 2019; Pike *et al.*, 2016; Rodríguez-Pose and Garcilazo, 2015; Zubek and Henning, 2016). Various other factors have been also identified in the literature as being relevant to a country's performance in implementing the cohesion policy; namely, economic conditions (Cappelen *et al.*, 2003; Marchis, 2009); macroeconomic and financial absorption capacity (Tosun, 2014) and fiscal and political decentralization (Kersan-Škabić and Tijanić, 2017; Tosun, 2014). In most cases, empirical research clearly reveals significant differences between new and old member states.

The article provides a more refined understanding than the works cited above of conditions conducive for EU funds absorption. Firstly, it develops Tosun's (2014) analysis and provides more insights by including the political governance factor along with administrative capacity and by capturing their effect on the whole SCF. Secondly, the analysis seeks to trace the differences in roles of these factors between NMS and the old member states (EU-15). Third, the study makes use of four other explanatory variables (macroeconomic and financial absorption capacity, economic growth and political decentralization) considered relevant in the literature. It highlights the limits of cohesion policy governance in old and new member states. The overall analysis enables us to argue that improving government effectiveness and tackling corruption could act as core drivers for the absorption of SCF in EU member states. In addition, apart from showing that administrative and political factors are conducive to implementing EU policies domestically, our results show that a country's macroeconomic capacity, together with the economic downturns and potential differences between old and NMS (our results show that a country's macroeconomic capacity, together with the economic downturns could affect the variation in terms of EU funds absorption performance, as well as the potential differences between old and NMS) could affect the variation in their performance in EU funds absorption. These also equally provide evidence for EU policy-makers and stakeholders for improving the implementation of cohesion policy.

In terms of methodology, our study produces further evidence on EU funds absorption drivers by analysing dynamic relations in the previous multiannual financial framework. We carried out a macroeconomic analysis of the 2007–15 period using a dynamic panel data model and the tobit estimation technique, which has the advantage of taking into account restrictions in the range of the dependent variable, as absorption rates vary on a 0 to 1 scale. Moreover, interaction effects were used in order to check for differences in terms of the impact of the cohesion policy between new and older EU member states. Unlike similar studies that focus on absorption drivers, our analysis controls for the SCF amounts allocated which also affects the spending rate of EU funding.

The remainder of the article is structured as follows. Section I describes the literature on cohesion policy absorption drivers and dwells on the specific role of administrative and political conditions, especially in NMS. Section II describes the main variables used for estimating absorption drivers and the assumptions to be tested. Section III sets out the estimation methods and model specifications, while Section IV outlines and discusses the results of our estimations. The conclusions discuss the theoretical and practical implications of our analysis.

I. Absorption Capacity Drivers in EU Member States - Theoretical and Empirical Evidence

During 2007–13 most NMS had been integrated in the cohesion policy system. The 12 NMS had to spend more than half (52.0 per cent) of the total amount allocated for that period. Considering their GDP before entering the multiannual financial framework (2006), these NMS received, on average, funds that were over nine times higher than the EU-15 (21.2 per cent compared with the EU-15 average of 2.2 per cent of GDP; see Figure 1). In relative terms, Lithuania, Hungary, Latvia, Slovakia and Estonia were allocated the highest amounts which constituted over 25 per cent of their GDP in 2006 (Figure 1). However, in absolute terms, Poland, Spain, Italy and Czech Republic were given access to the highest amounts. Moreover, the contribution of cohesion policy funds (ERDF, the European social fund and the cohesion fund⁵) during the whole 2007–15 period to public investment funding in NMS countries exceeded 34.6 per cent out of total government capital investment, varying from 10.7 per cent in Cyprus to 56.3 per cent in Hungary, as opposed to an average of only 7.8 per cent at the EU-27 level.⁶ Overall, these numbers show the public investment potential and significance of SCF, especially in NMS.

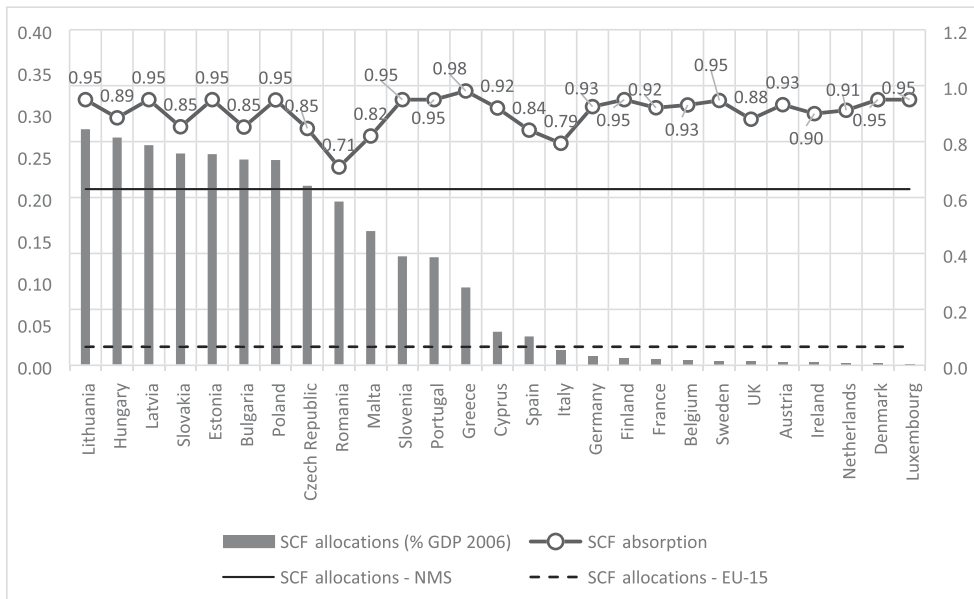
Nevertheless, and despite initial European concerns of a possible eastern problem,⁷ by the end of the implementation period several NMS had reached absorption rates close to that of EU-15 countries (see Figure 1 and Table S3). However, some of them faced major difficulties, especially during the early years of the programming period, which led to different absorption dynamics in this group. Looking beyond the averages of the two groups of countries, we must differentiate among countries that joined the EU in 2004 and those that joined in 2007. The countries accessing the EU in 2004 had roughly 3 additional years to accommodate to the procedures of submission, evaluation, implementation and monitoring of projects, which translated into their relatively better performance during the 2007–13 programming period (see Figure 1 and Table S3), while Romania and Bulgaria proved to be among the worst performers. In 2015, the last year to be considered in this study (in accordance with the rule $n+2$),⁸ Estonia, Latvia, Lithuania, Slovenia and Poland were the best performers, as they managed to absorb around 95 per cent of the allocated amounts. At the other end, Slovakia,

⁵ERDF – European regional development fund.

⁶The share of SCF to public investments represents the SCF payments over the 2007–15 period to the gross fixed capital formation by general government over the same period.

⁷The eastern problem generally refers to the difficulties that the former communist countries face in complying with European legislation, as well as to a possible legislative reversal once the accession objective has been achieved (Dimitrova, 2002; Ferry and McMaster, 2013; Sissenich, 2007; Sedelmeier, 2008; Meyer-Sahling, 2009; Paliokaitė *et al.*, 2016).

Figure 1: Allocated Cohesion and Structural Funds (SCF) during the 2007–13 Programming Period and Absorption Rates (2015) in EU-27 countries.



Notes: Absorption rates are displayed along the right axis; SCF allocation rates to GDP in 2006 are displayed on the left axis. During the 2007–13 programming period the SCF included the following sub-programmes: the European regional development fund, the cohesion fund and the European social fund. NMS, new member states.

Source: Authors' elaboration using data from DG Regional Policy, EC (2017a) and Eurostat, 2007–13.

Bulgaria, the Czech Republic and Malta displayed absorption rates below average, while Romania was the last by far, reaching slightly above 70 per cent. However, analyses of the data at the level of individual member states showed that most of the NMS displayed a lower absorption performance than EU-15.

In the implementation process, one of the main concerns was the ability of countries to absorb and spend this funding. Developing an absorption capacity has been a recurring issue for both old and new member states. In light of the negative effects of the financial crisis and delays in the absorption of funding, several EU institutions adopted various different measures to respond to this, including additional advance payments, simplifying procedures or increasing co-financing rates (EC, 2010; European Parliament and Council of the European Union, 2011). As a result, the absorption rates surged near the end of the

⁸The decommitment rule gives member states with certain financial difficulties and with a low absorption rate up to 2 or 3 years to implement their allocated EU funding over a longer time-span than the one initially agreed upon. It represents an accounting artifice that allows countries to spend EU funds beyond the legally agreed yearly spending deadlines. Moreover, in order to make sure that they manage to spend their allocations, member states often transfer funds between different funding programmes or towards financial instruments, of which the latter are allegedly, easier to distribute, in particular, towards the private sector.

programming period due to an extension of the implementation period (by applying the $n + 2$ and $n + 3$ rules).

In light of these issues, three sets of coherent explanations have been advanced in the literature on the implementation of cohesion policy and difficulties in absorption capacity. The first set focuses on the administrative capacity of these states; namely, the institutional, bureaucratic and human resource-related infrastructures used to process and absorb this type of funding (Bachtler *et al.*, 2013; Milio, 2007; Netherlands Economic Institute (NEI), 2002; Smeriglio *et al.*, 2015; Surubaru, 2017a). Weaknesses in administrative capacity and in the quality of post-communist public administrations have generally constituted a barrier in these NMS both before and after accession processes such as compliance with EU law (Dimitrova, 2010; Dimitrova and Toshkov, 2009; Verheijen, 2007) or generally in implementing EU policy (Falkner and Treib, 2008; Tiganasu *et al.*, 2018). Enforcement may depend greatly on strengthening formal institutions such as the rule of law, property rights, contracts and the free market (den Butter and Morgan, 2000). The implementation of EU policy may also depend on bargains struck between key national actors. Moreover, the gap between formal and informal institutions may affect the development and formation of national administrative capacity, thus also hindering the absorption of EU funding.

Secondly, recent studies have looked into the effects of the quality of government found in central and regional level administrations and how it moderates the absorption of EU funding (Charron *et al.*, 2015; Rodríguez-Pose and Garcilazo, 2015). Good governance is promoted by EU policy-makers as being indispensable for development (EC, 2014; Smeriglio *et al.*, 2015). Political stability and commitment are vital in order to guarantee that the existing administrative capacity can produce the desired effects. Therefore, governance and domestic political factors may mediate the effects of redistributive policies, affecting both their performance and their impact (Bachtler and McMaster, 2008; Ezcurra and Rodríguez-Pose, 2013; Milio, 2008; Rodríguez-Pose and Garcilazo, 2015; Surubaru, 2017b). Again, political factors may perhaps play a fundamental role for cohesion policy implementation in NMS compared with old member states. The need to address bottlenecks in the quality of government is backed not only by the need to foster absorption and to maximize the returns of cohesion investment, but also by the possible negative economic outcomes of failure. Some argue that where institutional quality is poor European funds can generate distortions that leave countries much worse off than they would have been without any intervention in the economy (Katsaitis and Doulos, 2009; Midelfart-Knarvik *et al.*, 2002). Having sound institutions may influence avoid the distortions exerted by different interest groups and curb rent-seeking practices. Moreover, domestic political factors may also influence the way in which funds are allocated (for example, by making use of EU funds to obtain votes in regions where the authorities are unpopular (Bouvet and Dall'Erba, 2010), thus generating distortions in their impact by inducing political pressure, instability in decision-making or by resorting to politicization at the management level (Hagemann, 2017; Surubaru, 2017b). Moreover, it has been found that European funds are often distributed according to the region's level of development and quality of government (Charron *et al.*, 2015), so that the allocation and implementation capacity could in fact favour relatively rich regions. For instance, during the 1989–1999 period, if state co-financing is included, the more developed northern Italy benefited from

higher amounts than the south (Dall'erba and Le Gallo, 2008). Regions with a political alignment to the centre may also benefit more from the allocation of SCF (Dotti, 2015). Overall, such political factors and the distortion they bring about could negatively affect the ability of states to absorb this funding and, equally the policies' potential impact and effectiveness. Lastly, the macro-economic and financial conditions have also been shown to be relevant to countries' ability to use this funding structurally and to co-finance EU-funded operational programmes (Constantin *et al.*, 2011; Horvat, 2007; NEI, 2002; Šumpíková *et al.*, 2003). The next section provides in-depth details of the variables, methodological approach and data used here to estimate absorption patterns.

II. Explanatory Variables: Absorption Drivers and Hypotheses

Taking advantage of the recent data on the 2007–13 programming period, this study estimated the importance of administrative capacity and political governance in enhancing absorption between 2007 and 2015 (including two additional years for implementation, given the EU's $n+2$ rule) by carrying out a dynamic panel data analysis. Administrative capacity was measured in terms of government effectiveness and regulatory quality while political factors and governance were measured by analysing the levels of political stability and corruption (for more details on the variables and data sources, see Table S1 and S2).

As shown before, the administrative capacity of beneficiary states is an essential factor for explaining funds absorption, namely the extent to which they are able to comply with the EU legal framework and design a functional management system in order to achieve a good performance (Bachtler *et al.*, 2013; Milio, 2007; Surubaru, 2017a; Tosun, 2014). Besides a states' administrative capacity, their political governance also plays a fundamental role in enhancing absorption (Jaliu and Radulescu, 2013; Kersan-Škabić and Tijanić, 2017; Milio, 2008; Surubaru, 2017b). Whereas most studies on implementing the cohesion policy fail to integrate political determinants into their assessments, this study fills in this gap by taking addressing two dimensions: political stability and the diversion of public funds. While political stability is indispensable for preserving continuity and coherence in implementing programmes (Milio, 2008; Surubaru, 2017a), combating corruption and distortions caused by rent-seekers is essential for guaranteeing the implementation of the cohesion policy. Interruptions or suspensions of payments by EC may occur when irregularities have been unveiled, which can hinder absorption performance. Thus, the first two sets of hypotheses to be tested were:

H1a: Improving a state's administrative capacity leads to higher SCF absorption

H1b: Absorption improves along with political governance

Our second set of hypotheses derives from the latter and states that

H2a: Improving a state's administrative capacity exerts a stronger influence in boosting absorption in NMS than the EU-15

H2b: Ameliorating political governance has a stronger enhancing effect in NMS, compared with the EU-15

Previous studies have pointed out important institutional deficiencies, partially due their transition from a centrally planned system to a democratic one (Sissenich, 2007), but also due to their relative lack of experience in dealing with EU policies (Bachtler and McMaster, 2008). Furthermore, additional concerns were related to the possible decrease in their efforts and even the reversal of the reforms they agreed to after their accession to the EU (Dimitrova, 2010; Meyer-Sahling, 2009), that may have effects on implementing the cohesion policy efficiently.

In addition to these two main variables, their SCF absorption performance may also depend on a wide range of other factors, which is why we introduced in our analysis four distinct explanatory variables, often invoked in literature on implementing the cohesion policy (Constantin *et al.*, 2011; Katsarova, 2013; NEI, 2002; Šumpíková *et al.*, 2003), but less tested in similar empirical studies: the state's macroeconomic capacity and financial absorption capacity, their economic downturn and their level of political decentralization.

Macroeconomic absorption capacity is measured by the total amounts allocated to GDP before the start of the programming period (2006) and reflects the size of these amounts for each economy. The higher the GDP, the higher the potential of the economy to absorb macroeconomic effects generated by the supplementary expenses incurred as a result of the SCF (for example, the aggregate supply will require a supplementary labour force in order to respond to the increased aggregate demand generated by SCF absorption) (Constantin *et al.*, 2011; Oprescu *et al.*, 2005). Therefore, our third hypothesis was that

H3: The higher the amounts allocated to GDP, the lower the macroeconomic absorption capacity is, and thus the harder absorption gets

Moreover, apart from relying on a state's domestic economic potential, the SCF absorption capacity also depends on the ability of states to co-finance EU-funded projects (for example, the level of public funds available for this, the sophistication of the financial sector and the private capital sources available). The relatively lower co-financing capacity in NMS compared with the EU-15 may explain the discrepancies in their absorption performance. Following Tosun (2014), GDP per capita was included in our model in order to control for the states' financial capacity to co-finance these programmes and, therefore, our fourth hypothesis was:

H4: Absorption is positively influenced by the financial capacity of a member state

Thirdly, a dummy variable for the economic crisis was included in order to control for the effects of the recent financial and economic recession, which may have undermined absorption both by reducing the capacity of economies to generate investment opportunities and their capacity to co-finance projects because of their diminished financial liquidities. Therefore, we hypothesized that

H5: Absorption is negatively influenced by economic downturns

Finally, political decentralization has been proven to influence the absorption of EU funds, although its net effect can go either way. For instance, Bachtler and McMaster (2008) point to a number of barriers to regional participation in EU funds management that can cause delays in absorption (for example, the administrative burden that can overload regional administrations or their lack of funds for co-financing projects). Moreover, coordination with central government may be more difficult when there are many administrative subdivisions, so the size of the administration may matter (Milio, 2007). Decentralization may increase efficiency by improving resource allocation (Martinez-Vazquez and McNab, 2003). Therefore, the regional authority index developed by Hooghe *et al.* (2008) was used to capture the level of political decentralization, while hypothesizing that

H6: Absorption improves along with levels of political decentralization in a member state

A similar indicator was used in recent studies on the role of political decentralization for implementing the cohesion policy (Ezcurra and Rodríguez-Pose, 2013; Schakel, 2018; Tosun, 2014).

III. Econometric Strategy

To estimate the contribution of absorption drivers defined above and test the six hypotheses we performed a dynamic panel data analysis for the period 2007–15. This method is increasingly being used in econometric research as it leads to a more accurate inference of model parameters and it allows the analyst to control for the impact of omitted variables and also to deal with endogeneity and measurement errors (Hsiao, 2005). While the ordinary least squares estimator has been shown to generate inconsistent estimates for censored data (Baltagi, 2005; Greene, 1981), our approach relies on a doubly censored tobit model (Tobin, 1958). The tobit estimator allows the analyst to control for restrictions in the range of the dependent variable' and consequently has been used in other studies focusing on SCF (Bouvet and Dall'Erba, 2010; Tosun, 2014).

The tobit model uses a maximum likelihood estimation and is based on a random-effects specification due to the problems occurring in fixed-effects estimates (Honore, 1992, 1993; Hu, 2002), and the dependent variable is doubly censored, with a lower limit of 0.01 as the lowest absorption value considering the countries and period analysed, and an upper limit at 0.99, as the maximum absorption value.⁹

Considering that our dependent variable is autoregressive as it reflects the annual cumulative absorption of SCF, we used the following dynamic panel data model:

$$SCF_{i,t} = \alpha + \beta SCF_{i,t-1} + \gamma admin_{i,t-1} + \delta pol_gov_{i,t-1} + \theta X_{i,t-1} + \eta_i + \mu_t + \varepsilon_{i,t},$$

where $SCF_{i,t}$ is the absorption rate in country i in year t , α is the intercept, $SCF_{i,t-1}$ is the absorption in the previous year, $admin_{i,t-1}$ refers to administrative capacity, $pol_gov_{i,t-1}$ refers to political governance, $X_{i,t-1}$ is a set of explanatory variables, η_i is the random effects, μ_t are the sets of time-specific intercepts that control common time-specific shocks and $\varepsilon_{i,t}$ is the error term, where v_i is i.i.d. $N(0, \sigma_\eta^2)$, and $\varepsilon_{i,t}$ is i.i.d. $N(0, \sigma_\varepsilon^2)$ independently of η_i . The explanatory variables refer to macroeconomic and financial absorption capacity, political decentralization and a dummy for the economic crisis period. Interaction terms for the NMS were also included to check for differences regarding the impact of administrative capacity and political governance variables in NMS as compared to the EU-15 member states.

In order to control for any possible endogeneity issues that may have occurred due to simultaneity, we opted for a model specification that includes explanatory variables lagged over one period (as a robustness check, results for a model specification which relies on explanatory variables in the same year are also displayed: see Tables S4). Endogeneity concerns may be related to the explanatory variable of financial capacity, measured by GDP per capita, as boosting economic growth and reducing disparities are among the main goals of cohesion policy (Pascariu and Incaltarau, 2018), and, thus, reciprocity problems may occur. The positive impact these instruments has already been empirically shown in several studies (Fratesi and Perucca, 2014; Rodríguez-Pose and Garcilazo, 2015). Furthermore, SCF are meant to improve administrative capacity at the level of the national authorities (Bachtler and McMaster, 2008), besides the role that the administrative capacity plays in triggering absorption. Thus, one lag explanatory variables help us to avoid any possible simultaneity issues. The following section outlines and discusses our results.

IV. Estimation Results and Discussion

With regard to the main hypotheses tested in this study, and in light of the results, it can be stressed that the variation in terms of administrative capacity and political governance matters and affects the pace and final absorption rates of countries. A doubly censored tobit model was fitted in order to account for the concentration of SCF absorption rates near the limits of the interval (with 0.01 as the lower limit and 0.99 as the upper limit). Full estimation results are displayed in Tables S4 and S5. While Table S4 displays estimation results for a model specification including explanatory variables in levels, Table S5 displays results with explanatory variables lagged over one period. This specification controls for a possible simultaneity bias, as SCF absorption may also lead to administrative capacity or income per capita improvements in beneficiary member states. Therefore,

⁹Our results were shown to be robust to changes of censoring limits. A slight decrease in both Akaike's information criterion and Bayesian information criterion IC was observed when the censoring limits were being pushed closer to the minimum and maximum values of our sample, so we opted to keep them closer to the minimum and maximum values of the SCF.

Table 1: Summary of Tobit Estimation of Administrative Capacity and Political Governance Impact on structural and cohesion funds (SCF) Absorption in New Member States (NMS) and EU-15 Countries, 2007–15

	2b	3b	4b	5b	7a	8	9	10
SCF _{t-1}	0.804*** (0.0409)	0.858*** (0.0405)	0.859*** (0.0383)	0.801*** (0.0430)	0.781*** (0.0433)	0.782*** (0.0432)	0.814*** (0.0404)	0.808*** (0.0430)
Macroeconomic capacity _{t-1}	0.132** (0.0642)	0.131* (0.0681)	0.167** (0.0726)	0.218*** (0.0727)	0.184** (0.0737)	0.216*** (0.0621)	0.158*** (0.0559)	0.176*** (0.0619)
GDP pc _{t-1} (log)	-0.00931 (0.0126)	0.0193 (0.0121)	0.0284** (0.0132)	0.0131 (0.0100)	-0.00746 (0.0137)			
Political decentralization _{t-1}	-0.0396 (0.0293)	-0.0372 (0.0303)	-0.0292 (0.0308)	-0.0166 (0.0305)	-0.0262 (0.0306)			
Crisis	-0.145*** (0.0284)	-0.109*** (0.0285)	-0.108*** (0.0268)	-0.150*** (0.0304)	-0.162*** (0.0304)	-0.163*** (0.0302)	-0.138*** (0.0280)	-0.148*** (0.0305)
NMS	-0.110** (0.0447)	-0.0175 (0.0649)	0.0354 (0.0520)	-0.0694** (0.0291)	-0.133** (0.0542)	-0.115*** (0.0380)	-0.0894** (0.0406)	-0.0671** (0.0292)
Government effectiveness _{t-1}	0.0176** (0.00825)			0.00964 (0.0174)	0.00964 (0.0174)		0.0162** (0.00705)	
NMS × government effectiveness _{t-1}	0.0224** (0.0114)			0.0232 (0.0226)	0.0232 (0.0226)		0.0189* (0.0107)	
Regulatory quality _{t-1}		-0.00198 (0.0104)						
NMS × regulatory quality _{t-1}		-0.0000428 (0.0175)						
Political stability _{t-1}			-0.00392 (0.00888)					
NMS × political stability _{t-1}			-0.0153 (0.0152)					
Public funds diversion _{t-1}				0.00792 (0.00539)	0.00750 (0.0124)			0.0117** (0.00479)

Table 1: (Continued)

	2b	3b	4b	5b	7a	8	9	10
NMS × public funds diversion t_{-1}				0.0159* (0.00851)	0.00687 (0.0149)			0.0153* (0.00849)
Administrative and governance index t_{-1}						0.0163*** (0.00583)		
NMS × administrative and governance index t_{-1}						0.0274*** (0.0105)		
Constant	0.303** (0.127) 216 27	0.0388 (0.120) 216 27	-0.0529 (0.128) 216 27	0.109 (0.102) 216 27	0.304** (0.143) 216 27	0.225*** (0.0347) 216 27	0.196*** (0.0369) 216 27	0.226*** (0.0338) 216 27
Observations								
Countries								
BIC	-735.3	-725.3	-726.8	-732.3	-726.9	-747.1	-744.0	-740.8

Notes: Standard errors are in parenthesis. The Stata *xtoibit* command was used. The lower limit was set at 0.01, while the upper limit at 0.99. Time dummies coefficients are not displayed in the table. BIC, Bayesian information criterion. For the sake of space, the table summarizes how we reached the preferred model specifications. The full estimation results are available in Table S5. Source: Authors' estimations * $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$.

the discussions are mainly grounded in the results displayed in Table S5 (summarized in Table 1).

Firstly, each of the two dimensions capturing administrative capacity (namely, government effectiveness and regulatory quality) and the other two capturing political governance (political stability and diversion of public funds) have been entered separately into the models in order to test their explanatory power on SCF absorption. While models 2a–5a estimate the overall role of these dimensions at EU-27 level, models 2b–5b are augmented with interaction terms to capture any potential difference between NMS and EU-15. Our results shown some notable differences between these groups of state in terms of the significance and the impact magnitude of these factors. Only government effectiveness and the diversion of public funds (used for measuring corruption) were shown to exert a significant positive effect on SCF absorption. Our results show that improving government effectiveness and reducing the diversion of public funds could have a stronger boosting effect in the NMS than in the EU-15. Therefore, our findings emphasize that the higher that government effectiveness and control of corruption is in a country, the better the management of cohesion policy, and, thus, the higher the amounts of SCF absorbed, which confirms H1a and H1b. Furthermore, allowing differences in terms of the impact between NMS and EU-15 reveals that the impact is stronger in the NMS, which validates H2a and H2b. Additionally, whereas both variables for government effectiveness and diversion of public funds have a stronger positive effect in NMS than in EU-15, it is government effectiveness that has a higher effect on stimulating SCF absorption, a result that is consistent across all the model specifications. This shows that levels of administrative capacity are more important than political governance conditions when it comes to SCF absorption.

However, this is not the case for regulatory quality and political stability, which remain statistically insignificant (see Appendix A in Supporting Information for additional discussions). It can therefore be inferred that regulatory quality and political stability did not represented significant barriers for implementing the cohesion policy during the period analysed. Hence, progress in terms of regulation or political stability may not be sufficient conditions for guaranteeing coherence and consistency in implementing the cohesion policy, unless they are accompanied by improving levels of government effectiveness and controlling corruption. With regard to these latter factors, our findings do not show any significant differences between NMS and EU-15. This may be due to the fact that there are only small differences between the two groups in terms of both indicators. For regulatory quality, the small differences are explained by the fact that the NMS underwent an important process of optimization, by adopting the *acquis communautaire* prior to their EU accession. Regarding political stability, the poor economic conditions caused by the recent economic and financial recession could have increased political destabilization in the party systems of older member states (Hernández and Kriesi, 2016), thus, reducing differences in this area between the NMS and EU-15. The latter group of countries faced more severe electoral punishments for worsening economic conditions than the NMS, whereas in the latter, electoral gains were shown to be more sensitive to tackling corruption rather than dealing with economic performance issues (Emanuele and Chiramonte, 2018). In spite of the important role played by having the administrative capacity for financial compliance (Mendez and Bachtler, 2017) and SCF absorption (Tosun, 2014), one of the issues that emerges from our results is that fighting against corruption domestically could improve

the spending of SCF assistance and levels of absorption. Reducing the diversion of public funds appears to exert a stronger effect in the NMS than in the EU-15, which confirms there are still plenty of problems caused by political interference in implementing the cohesion policy. For instance, public procurement irregularities (EC, 2017b; KPMG, 2016; PwC and Ecorys, 2013) as well as privileged fast-track reimbursements, pork-barrel politics or pursuing electoral gains (Dellmuth and Stoffel, 2012; Surubarau, 2017b) have often led to the suspension of disbursements and financial corrections on SCF expenditure, particularly in the NMS.

Some additional simulations were carried out in order to clarify the above results and discern why a more effective government and a reduction in rent-seeking behaviour the diversion of public funds, exert considerable influence on cohesion policy absorption (see Appendix A). Models 7a and 8 report the results for model specifications that accounted for both government effectiveness and the diversion of public funds. However, the enhancing effect of these two dimensions for NMS was validated only in the model where these were combined into the administrative and governance index (which also shows the overall best fit, as indicated by the smallest BIC value, in our statistical analysis). Finally, models 9 and 10 sought to increase the precision of our estimations, as well as to untangle the specific impact of the two significant variables. The results are consistent with our previous findings and reinforce our thesis that enhancing government effectiveness and tackling corruption have a significant stronger effect on SCF absorption in NMS compared to EU-15. It is interesting to point out that while model 9 displays a better fit as compared to model 1), as indicated by BIC scores, we argue that ameliorating levels of domestic administrative exerts a higher effect on SCF absorption, as compared to reducing corruption.

Apart from the two main absorption drivers examined, other explanatory variables were confirmed as significant for SCF absorption. Firstly, our results show that, if all other factors are kept constant, there is a positive relation between the share of allocations to GDP and absorption (H3 is rejected). This indicates that lower absorption rates are not necessarily related due to the higher allocations, but to other factors which enhance implementing the cohesion policy, like more effective institutions and lower corruption levels. These claims that further research might be needed regarding the actual ceilings of EU funds allocations to GDP. Secondly, financial absorption capacity, measured by GDP per capita, seems to not have a significant impact on absorption levels (which rejects our H4).¹⁰ These findings challenge the previous results of Tosun (2014) which showed that member states with higher incomes are actually less likely to maximize EU funds absorption. The difference may be linked to the fact that our model specifications control for the size of allocations with the member states' economies, we focus also on a longer time span and on all SCF funds, not just ERDF. Thirdly, our results show support for H5, namely that, the effects of the recent economic recession have reduced the ability of countries to absorb SCF. While some studies found evidence of a weaker effect of the SCF during the crisis (Becker *et al.*, 2018), our findings show that this is related to a lower SCF absorption. One explanation for the negative relation may be that countries have struggled in securing co-financing for projects during the economic crisis period. Despite

¹⁰The variable referring to financial capacity did not display consistent coefficients across the models, and did not become statistically significant in our preferred models.

the additional efforts made by both the EC and member states to improve the implementation of cohesion policy by increasing flexibility, so that the SCF can offset the fall in investment sources during the crisis and, thus, support economic recovery (EC, 2010), the crisis hampered the ability of countries to absorb SCF. This indicates that increasing efforts are required in order to support implementing the cohesion policy during economic downturns and in increasing the efficiency of SCF (Berkowitz *et al.*, 2015). Last but not least, political decentralization did not turn out to be statistically significant in neither of the models and, thus, we find no support for H6. While political decentralization was equally shown by others to not be a significant predictor of absorption (Tosun, 2014) or fiscal compliance (Mendez and Bachtler, 2017), extending the analysis at the regional level (NUTS2 level) might unravel more findings on the role of political decentralization for implementing the cohesion policy.

To sum up, the analysis brings forward further nuances on the weaknesses that NMS still face and which hinder their SCF absorption rates. Their relatively lower absorption performance was, moreover, evidenced by the NMS intersection dummy that showed a negative sign (see Table 1) in most equations.¹¹ Given that this group of countries does not reunite a whole set of characteristics that would enhance their SCF absorption capabilities, reducing administrative and governance bottlenecks would have a direct positive influence on absorption levels. Despite all this, the performance of the NMS was better than expected and as compared to the EU-15, proving that scepticism relating to their performance was not entirely warranted (Bachtler *et al.*, 2013). Weaknesses and shortcomings were more obvious in countries such as Bulgaria and Romania (Jaliu and Radulescu, 2013; Surubar, 2017a), which had a shorter time span to adapt to and to internalize implementing the cohesion policy requirements.

Conclusions

This article contributes to the literature on drivers of structural and cohesion funds absorption by focusing on the impact of administrative capacity and political governance on European cohesion policy implementation, the policy through which these funds are distributed across the EU. Few articles have tried to capture the dynamic relation between administrative capacity/political governance and the implementation of European cohesion policy (Kersan-Škabić and Tijanić, 2017). Our study fills in this gap by carrying out a dynamic panel data analysis, for the 2007–15 period, by using a tobit model which allowed us to consider restrictions in the range of the absorption variable. Interaction terms were included in order to reveal differences in terms of impact intensity between new and older member states with regard to the role of administrative capacity and political governance on absorption, also given the formers' 'administrative and policy inertia' (Paliokaitė, *et al.*, 2016; Sissenich, 2007). Besides administrative capacity and political governance, our study captured the effects of domestic macroeconomic and financial capacity, levels of political decentralization and economic downturns (Katsarova, 2013; Šumpíková *et al.*, 2003), factors often invoked as important for explaining SCF absorption, but less tested in empirical studies.

¹¹The coefficient gets lower and statistically insignificant when the macroeconomic capacity variable is dropped from the model (in the models with no interaction terms), proving the importance of also capturing the magnitude of the allocations to their economy.

One of our most interesting findings relates to the higher role played by government effectiveness and fighting corruption in explaining absorption levels in NMS as compared to the EU-15. Our findings are in line with part of the compliance literature that points out the limits of capacity and governance in the NMS (Angelova *et al.*, 2012; Dimitrova and Toshkov, 2009) and emphasizes that these countries still need to solve issues of institutional sclerosis and reduce levels of corruption in order to achieve a sound implementation of public policies, at the domestic level. Clientelism, corruption and rent-seeking are equally relevant in explaining differences in implementing the cohesion policy and addressing these institutional bottlenecks that could help countries achieve their growth potential through a more efficient delivery of the cohesion policy (Breidenbach *et al.*, 2019). While most of the lagging regions are from NMS, policies for improving government effectiveness and controlling public funds diversion should underpin efforts from all member states as to help developing regions reach their development potential (EC, 2017b; Farole *et al.*, 2018; Rodríguez-Pose and Ketterer, 2019).

Contrary to expectations, unlike government effectiveness and public funds diversion, the quality of regulation and political stability were not decisive factors for increasing SCF absorption levels during the analysed period. Furthermore, a state's macroeconomic absorption capacity has been confirmed to be important absorption driver. Despite the fact that SCF amounts allocated to NMS have been much higher than those transferred to older member states (and also considering the relative size of their economies), our results do not confirm the higher volumes of money as a significant reason for their relative lower absorption rates on average. On the contrary, in some countries, higher allocations have overall translated into higher absorption rates. Of course, increasing the threshold for allocations, in the light of their economic potential, should account for their efficiency, given that other studies point out that this may lead to a decrease in the impact of funds (Becker *et al.*, 2012; Rodríguez-Pose and Garcilazo, 2015). Moreover, our findings identify a slowdown in absorption during the recent great recession despite the increasing efforts made during this period to foster the implementation of the cohesion policy (EC, 2010). Our findings reinforce the need to strengthen EU economic governance and to examine more closely the link between macroeconomic conditionalities and implementing the cohesion policy.

Finally, our results have important policy implications. Firstly, adopting a tailored approach to cohesion policy could also strengthen governmental effectiveness and reduce the diversion of funds generated by corrupt practices. Enhancing the so-called territorial identity (Capello, 2018) of the policy may lead to a better match between public and private interests. Secondly, in light of growing discussions about the relevance of administrative capacity for the governance of cohesion policy, our study reinforces the need to address this issue more thoroughly. Our results bring forward strong evidence for the need to focus more on building capacity and designing effective institutions (Bachtler and Begg, 2018; Mendez and Bachtler, 2017; Tosun, 2014). Both the EU and national institutions should take further steps to address institutional deficiencies, particularly through technical assistance funding. Improving the quality of institutions would amplify the impact of cohesion policy by at least two mechanisms. On the one hand, it will ease implementing the cohesion policy and help beneficiary states to maximize absorption rates and, thus, help deliver more investment. On the other hand, it may result in higher returns from investments financed through the SCF (Breidenbach *et al.*, 2019;

Rodríguez-Pose and Garcilazo, 2015). To this aim, our study supports a renewed focus on Strengthening institutional capacity and the efficiency of public administrations brought by the recent cohesion policy reform of 2013, and provides strong arguments for increasing efforts on administrative capacity-building, especially in NMS, during the next financial cycles.

There are several avenues through which our analysis could be developed in order to enhance the application, efficiency and the effectiveness of the European cohesion policy. Our analysis could be replicated at the regional level (given the high degree of variation, in terms of the factors discussed, between regions between and within countries). Moreover, more in-depth qualitative analyses could provide more grounded insights on the specific problems hindering absorption in NMS and in EU-15 member states. Thirdly, future studies should be launched to test the theoretical mechanisms assessed in this study, based on similar evidence from the 2014–20 implementation period. Such studies could take use different measurements for our suggested variables, as well as rely on more qualitative data to explain administrative capacity and the shortcomings of political governance. All these could provide academics and policy-makers with a more refined understanding of the domestic conditions shaping EU sponsored public policy interventions for development.

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¹²[Correction added on 22 January 2020, after first online publication: The complete reference details for Kirankabeş & Erkul (2019) have been added in this current version.]

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Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Table S1: Summary statistics for the determinants of the absorption of cohesion and structural funds in new member states, EU-15 and EU-27, 2007–15

Table S2: Description of variables

Table S3: Evolution of Absorption rates during 2007–13 programming period.

Table S4: Tobit estimation of administrative capacity and political governance impact on absorption of cohesion and structural funds in new member states and EU-15 countries, 2007–15.

Table S5: Tobit estimation of the effect of administrative capacity and political governance on the cohesion and structural funds in new member states and EU-15 countries (one lag explanatory variables specification), 2007–15.