

The Dynamics of Institution Building: State Aids, the European Commission, and the European Court of Justice

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Abstract

This work takes a dynamic perspective on institution building and studies the interactions between the European Commission and the European Court of Justice in the construction of the European Union. We focus in particular on how these two bodies attempt to strengthen their legitimacy by making decisions in line with the mandates they got from the member states. The Commission is mandated to deepen the EU integration, while the Court establishes is aimed at establishing the rule of law. Consequently, the Commission puts pressure of those states who are resistant to the integration, and the Court checks for potential decisions by the Commission that would surpass its mandate. To do so, we focus on the decision of both bodies related to state aids; i.e. subsidies granted by national governments in favor economics players involved in the provision of services related infrastructures. Relying on an original database covering all state aids programs between 2000 and 2015, we show that the Commission tends to reject programs originating from countries who are resistant to the integration of internal market, which is proxied by transposition deficit. On the other hand, we show that when firms or national governments appeal the decision made by the Commission, the reversal of the Commission decision by the European Court of Justice is positively correlated with the transposition deficit. Since the Commission acts before the Court, we interpret these two results as evidence showing that the Commission is actually biased against countries with greater resistance to European integration, while the Court corrects the bias created by the Commission. Overall our analysis suggests that both institutions make their decisions according to their different mandates, while resulting in a positive dynamic of EU integration and legitimization of European institutions based on credible checks and balance among the Commission, the European Court of Justice and the Member States.

Keywords: Checks and Balances, European Union, Institution Building, State Aids
JEL Codes: F55, K33

1 Introduction

Political institutions are never built in one day. Despite their careful design and implementation, it is not necessary that they will be functioning as they are supposed to be. It takes time, and also some critical junctures that lead the institutions to economic success and political stability (Acemoglu and Robinson, 2013). In particular the competition between the different components of a power system (Weingast, 2017) and the dynamic through which their legitimacy is progressively established (Greif and Rubin, 2014) seem to be strong explaining factors of the design and performance of political and economic institutions. When Schuman launched the process that led to the establishment of the European Union, his idea was to make war not only unthinkable, but also materially impossible. More than 60 years after the EU Steel and Coal agreement that triggered the dialogue of a stronger relationship among European countries, the European Union has evolved and reached a state no one had imagined 50 years ago. Although its success may require a hundred years to be concluded, it has undoubtedly established the basis of stable and strengthening institutions.

The European Union is primarily built as an economic confederation. It aims at establishing an internal market where people, labor and capital are free to flow. The single market is clearly aimed

at triggering political integration, but in the same time is an acceptable objective for Nation-States and their citizens since it provides promises of economic benefits without relinquishing too much sovereignty. There are some principles that guide the EU law. Those principles aim at respecting the sovereignty of member states and at providing the boundaries between the powers conferred to the EU and the member states. The separation is never crystal clear, however. Ambiguities may therefore lead to conflicts between the European Institutions and the member states; even if main decisions are voted by representatives of member states (which have a *de facto* veto power both at the decision stage and at the implementation stage). Member states tend to have a complex relationship with the EU institutions. On the one hand, they are likely to compromise since on many issues the benefits of the European integration are high both in terms of wealth and political influence at the global level. On the other hand, national politicians and voters would like to minimize the costs of adaptation of national “social contracts”, resulting into slowness in implementing reforms and complying with EU commitments.

In such a context, the European Commission has been established with a clear mandate to push forward the harmonization and integration among member states. It is designed as a trustee and not simply as an agent of its stakeholders (Majone, 2001). Member states granted authority to the Commission so as to allow it to impose decisions to member states in matter of implementation of the European treaties. This trusteeship system results from the necessity for member states to credibly commit to the integration. The Commission, though its committee members are appointed by the member states, is thus mandated to promote integration, which is not different from extension of authority over national sovereignties.

Competition policy is the most powerful tool granted to the Commission. National governments accepted to relinquish sovereignty on the matter since this was a necessary condition to build the single market: all barriers to trade had to be removed. That said, many other dimensions of public policies — i.e. energy policy, regulation of utilities, local development, transportation, etc. — remained in the hands of the national governments, resulting in numerous competitive biases hindering further economic integration. This led member states to give authority to the Commission to check whether “State Aids” — i.e. any subsidy in the form of grants or tax cut granted to investors and business — would not lead to unfair competitive conditions operating or based in different jurisdictions.

State-aid policy is therefore the entry point for understanding how in practice the Commission balances the interest of member states with its mandate to establish a level playing field and a single market. Historically, indeed, most of the European economies were organized around “national champions” strongly supported by the state and often state owned. The EU integration resulted in policies of liberalization of market, privatization of state owned companies and design of EU regulation substituting to national ones. The European Union has therefore established rules concerning state aids in their treaties, which empowers the Commission to decide in this sphere.

As the European Union is a political arena where different stakeholders including the Commission itself could pursue their own interests, we expect the Commission to be biased in allowing and rejecting the use of state aids. We explore the possibility that the Commission’s decisions are biased against those countries who are resistant to the single market integration, as an implicit retaliation aimed at changing the balance of power with the related national governments.

In this game, the European Court of Justice emerges as an important player with the mandate to solve conflicts. However, the Court is not a political instrument in the hands of national government that would be able to manage coalitions to resist to the policies of the Commission. It was established as a credible court of justice, and the appointed judges have strong incentives to establish their reputation as independent judges in charge of guaranteeing due process and the rule of law in implementing the European treaties.

While the Commission has incentives to establish itself as the political actor in charge of promoting the interest of the Union toward its member states, the Court is building up its credibility through strengthening the rule of law. A virtuous loop might be at play. Bit by bit the Commission succeeds in expanding its power and the Court builds up independence and credibility. At the end

of this dynamic interactions, both institutions could reinforce their mutual legitimacy and become deeply-rooted with sound mandate and trust, forming a stronger Union.

A similar dynamic is nicely presented by [Greif and Rubin \(2014\)](#)'s discussion of endogenous political legitimacy. Henry VIII of England empowered the parliament, which limited its political discretion, to benefit in turn from a recognition by the Parliament of the legitimacy of the British Crown. The dynamics went on and the Parliament gradually encroached the power of the Crown and even dethroned two kings in 1640 and 1688. However, this development has contributed to the construction of arguably the most stable and successfully constitutional monarchy in the world's history.

From this dynamic perspective of establishment of institutions, we expect the Commission to approve or reject state aids in function of its mandate to favor economic integration. It should be more stringent against the member states less prone to European integration. To the opposite the European Court of justice should corrects any bias made by the Commission when the later do not comply with the letter of the European treaties. Empirically studying the issue is a challenging task. First, no systematic database is available to analyze the decisions of both the Commission and the Court. Second, there is no identical process of decision across all cases. Several state aid decisions are reversed across different steps, and it takes substantial human efforts to track the timeline of each case. Finally, it is not straightforward to establish the connections between Commission's verdicts on state aids and the Court's cases that asked for their judicial reviews. In this work, we did our best to construct a complete dataset covering all state aid programs from 2000 to 2015. We then rely on a Probit model, where the dependent variable is whether the state aid program is given a favorable decision/judgment, to estimate the conditional probability. We find that the Commission's favorable decisions are negatively correlated with transposition deficit, by which we proxy the resistance towards European integration at the governmental level, while the deficit is positively correlated with the Court's favorable judgments. Since the Commission acts before the Court, the result is evidence supporting the hypothesis that the Commission is biased while the Court corrects the bias.

To supplement the analysis, we investigate further into the ECJ decision dataset to check if the Court is influenced by the applicants' characteristics. However, financial power and number of employees cannot significantly explain the likelihood of success of the applicants, pointing to the fact that the Court is sufficiently independent when making the judgments.

The paper proceeds as follows. We give an overview of state aid control in the European Union and the roles played by different European institutions in the process in Section 2. We present the literature review in Section 3, the description of the data and the regression results follow in Section 4 and 5. A discussion of the results and policy implications is presented in Section 6 and the conclusion follows.

2 A closer look into the European Union, its institutions, and dynamics

As explained by [Acemoglu and Robinson \(2013\)](#), usually critical junctures give rise to new institutions. Indeed, the case of the European Union was no different. After some devastating conflicts such as the World Wars, stronger economic cooperation was considered the solution to avoid new conflicts in the region. The European dialogue started with the EU Steel and Coal agreement in 1953. Later, in 1958, the western European countries signed the Treaty of Rome that established the European Union at that time named the European Economic of Communities. 60 years have passed, and the European Institutions have shown its resilience. From the six initial member states, it reached twenty-eight members in 2013. During this time, some tough events such as the 2008 crisis and the Brexit in 2017 proofed that the EU institutions are strong enough to prevail over the time and gradually continue its development process.

The European Union is a unique political system, it is more than international cooperation,

but it does not reach the level of a federal system. It relies on the relinquishment of some member states power and sovereignty that are delegated to the European sphere aiming at the construction of a European single market. We can interpret such decision as a trade-off for member-states. They transfer part of their decision-making power from the national level to the supra-national level, but they benefit of the European single market that offers real opportunities for their economic development and places them in a more strategic position in the international scenario.

The constitutional basis of the European Union is laid down in the European Treaties signed by the member states. The most recent is the Treaty of Lisbon that came into force in 2009. It covers two main pieces of legislation named The Treaty of the European Union (TEU) and the Treaty of Functioning of the European Union (TFEU) that establish the first rules to ensure the free movement of people, services, goods, and capital. They include the main constitutional provisions and the policies and the functioning of the Union. They are the roots of the European institutions and define their primary objectives and the extension of power that member states relinquish to them. The design of new institutions is the centerpiece to safeguard the enforcement of treaties. As well as in the development of the Champagne fairs in the 12th and 13th century narrated by [Milgrom et al. \(1990\)](#) where the Law Merchant System was the critical factor for their longevity in that period, the establishment of credible and stable institutions was crucial for the materialization of the European integration project.

In the design of the EU institutions, three fundamental principles guide their work: conferred powers, subsidiarity and proportionality. The first establishes that the Union can only act on issues that it has conferred powers. The second states that the Union cannot act where objectives can be better achieved by member states. Finally, the proportionality ensures that the Union will rule only where a measure is appropriate and necessary. Those principles aim at respecting the sovereignty of member states and at providing the boundaries between the powers conferred to the EU and the member states.

In practice, this thin line that set each responsibility is not clear. Thus, some conflicts may emerge and proof the capabilities of the EU institutions to respond to them accordingly to continue the process of the EU integration. It requires member states abide by their decisions which in turn depends on how legitimate the EU institutions are under the lens of these states. As pointed out by [Weber \(1964\)](#), legitimacy is the basis of every system of authority. In the case of the EU institutions, some research points to a democratic deficit of the EU that would weaken its legitimacy. However, the primary source of legitimacy of the European institutions come from the trust deposited on them by national governments which are entrusted by their people.

At first sight, one may consider that the combination of a reasonable institutional design with legitimacy is the key to understand the development of the European Institutions and their increasing power over the time. The explanations for the survival or demise of institutions are not straightforward. Also, this interpretation is limited in the sense it looks to institutions as static bodies. Some research has called attention to an endogenous and dynamic model of institutional change along with historical case studies to understand the institutions' pathways ([North, 1991](#), [Acemoglu et al., 2005](#)). We agree that this dynamic analysis is also useful to understand the development of the European institutions.

In this dynamic view of institutions, political legitimacy is still relevant. The survival of institutions depends on the maintenance of their legitimacy. It is only possible if they can keep the support of their legitimizing agents over the time as it was witnessed in the case of the development of the UK institutions. After the Crown broke with the Roman Church, it transformed the British Parliament in its legitimizing agent which entailed several institutional changes. Because the bargaining power of the Crown with the parliament was inferior vis-à-vis the Roman Church, the Crown started to promote better policies to maintain its legitimacy which triggered the UK economic growth. The consequences of this relationship over the time are beyond the economic issues. There was a progressive increase in the legitimacy of both institutions that contributed to their survival, strength, and stability ([Greif and Rubin, 2014](#)).

We can conclude from the British case that legitimacy maintenance over the time is dependent

on the political outputs that follow the expectations of the institutional legitimizing agents. Logically, they expect that institutions act according to the mandates assigned to them. However, in a changing environment, institutions may face situations that can influence their stability and challenge their survival. Therefore, [Greif and Laitin \(2004\)](#) decided to study how the institutions persist in such scenario. They concluded that self-reinforcement is an essential mechanism for the persistence of institutions. It refers to the range of situations in which the associated behavior is self-enforcing does not decrease over the time. They consider that a self-enforcing institution is one in which each player's behavior is the best response. We derive that the institutional governance and decision making should be aligned with their mandates to enable their prosperity in the long-run.

Turning our attention back to the dynamics of the European institutions, we consider, therefore, that political legitimacy and self-reinforcement are relevant concepts to understand their equilibria. As [Moravcsik \(2002\)](#) already observed, the European institutions are constrained by constitutional checks and balances that successfully maintains the legitimacy of the Union. In this perspective, it is expected the European institutions will act according to the fundamental principles and follow the provisions of the treaties. Their decisions and the dynamics of their interactions will be guided by the mandate they got from member states to achieve their goal of establishment and sustainability of the European internal market. We propose to study these dynamics by analyzing the governance, the structure, and the decision-making of the European Institutions that is understanding the rules and the play of the game.

Such purpose may sound ambitious considering the complexity of the institutional arrangements of the EU. Thereupon, our strategy was to select an institutional setting that could represent a sample of the dynamic process we want to study. Among all the EU institutions, the two that stand out in the process of the European integration is the European Commission and the European Court of Justice because they are responsible for the enforcement of the EU law. The first has a clear mandate to increase integration. The latter is responsible for litigation resolution. Little by little, they prepare the ground for further integration because of their achievements enforcing the EU law. Therefore, the chosen institutional setting must contemplate an analysis of the decisions of these two institutions. To respect this specification, we focused on the state aid granting process in the European Union. It seems an interesting scenario because it is a core issue for European integration and a source of many conflicts. The Commission is in charge of the analysis and decision of the subsidies. Its decision can be challenged in the Court. Member states and European firms are also part of the game because they represent the granters and the beneficiaries of the subsidies. To proceed with our analysis, we continue this section with a more in-depth analysis of the target institutions, the Commission and the Court, and the process of state aids in the EU. We highlight the main features of each institution, how they interact in this process and the expected behavior that contributes to explain the stability of the EU institutions.

2.1 The European Commission as a Trustee

The European Commission is the executive power of the European Union. Its duties include the proposal of legislation to the Parliament and Council, management and implementation of EU policies and budget, and the enforcement of the EU law. A noteworthy aspect of the Commission attributions is that it has a double role: the legislative one when it proposes new texts of law and the regulatory one while monitoring the functioning of the EU. Such broad scope of action reflects in the profile of the staff of the Commission which combines technical staff who are members of the EU civil service with political actors who are the appointed commissioners.

Because the European Commission was entrusted to defend the general interests of the EU, the appointment process of Commissioners was designed to keep the independence of the institution. The member states governments select the Commissioners that are also subject to the approval of the Parliament for a 5-years mandate. Thus, pressures from partisan, voters or nationally elected politicians tend to fall off. In the governance structure of the Commission, the technical staff supports both their legislative and regulatory tasks. They prepare the drafts of legislative texts and ensure the monitoring of the functioning of the EU internal market. The final decisions, however,

are agreed by the college of commissioners. Such governance avoids that commissioners pursue their political interests. We cannot ignore they are political actors that usually account for previous experience in other political positions either at the national level or the supra-national level.

The multiple attributions of the Commission transform it into a powerful actor in the European Union. Nevertheless, it does not have a dominant position in the most of its attributed tasks. For instance, the policymaking process also counts with the participation of the Council and Parliament, and the regulation of some economic sectors has a considerable weight of national regulation. A different situation appears in the regulation of competition in the EU level where it has autonomy on its decisions *ex ante* which can be subject to the check and balance of the court *ex post*.

The empowerment of the Commission to take the main decisions on competition issues, transformed this policy area in its strategic tool to achieve the European integration. Competition policy has five components including the prohibition of agreements that limit competition, the prohibition on the abuse of dominant position, the control of mergers which create a dominant position, the control of aid given by member state and liberalization of utilities (Wilks, 2005b). Therefore, the commission has authority to punish unfair market behavior as well as to interfere in the markets by allowing or denying mergers and state aids. It is a powerful weapon of the Commission to interfere in the national economies and shape the European market.

The central role of the Commission in the development of the EU project caught the attention of many researches that studied its characteristics, its behavior, and its influence in the institutional development of the European Union. For instance, Majone (2001) discusses that the Commission is both an agent and a trustee. A trustee is superior to a pure agent to the extent that the trustee has a transfer of rights guaranteed through constitutional means. Despite the possible agency problems that might arise from this scenario, he argues that upgrading an agent to a trustee helps to complete incomplete contractual arrangements and, then, reducing possible agent problems. Wilks (2005a) also recognizes the Commission as a trustee, but it claims that such power allows the Commission to pursue its own agenda and, thus, increases the risk of institutional power. However, Majone (2002) claims that an overseeing institution free from the election and partisan influence can rule impartially in regulating the private sector, thus performing better than a government.

Additionally, it is broadly discussed in the literature the mixed roles of the Commission and the potential risks that emerge from such institutional arrangement. Pollack (1997) discusses the double function of the Commission which has both agenda-setting and regulatory powers and highlights the risks of ruling according to its own interests instead of the ones of the principals, the member states. According to Moe (1990), regulators are political actors in their own rights even if they are not exposed to electorate issues. Regulators want to reduce the political uncertainty that is inherent to their activities and also develop exchange relationships with actors that could support their agent needs. Majone (2002) extends this idea to the Commission context affirming that supranational institutions have their interests and act on behalf of their supranational objectives. Even though member states try to limit its regulatory discretion, the Commission will push for their preferences. It converges with the view presented in Pollack (2003) that states the commission is competence maximizer and seeks more "Europe".

There is also literature discussing the preference of the European Commission to favor small states. They regard the Commission as their ally because its supposed independence may help them counterbalance the influence of the big states. Meanwhile, the Commission needs the support of the small states to put forward reforms that hurt the vested interests of the big states. However, Bunse et al. (2005) find that the Commission is not always small states' friends by examining the experience of Belgium, Greece, Finland, and Hungary.

The reviewed research is utile to advance the knowledge on the European institutions, but they provide an isolated analysis of the Commission that may lead to imprecision. To understand the role of the Commission and its impact on the European project, we should analyze the entire institutional context where the Commission interacts with other EU institutions. For example,

there are many check and balances in the governance of the EU that constraint the institutional power of the Commission and limit its regulatory discretion. Also, we should point out that the European Commission's mandate is to promote European integration. Therefore, it is expected the Commission will act on behalf of supranational objectives to keep its political legitimacy that is essential for its institutional sustainability. Even though the pursuit of integration would guide the Commission, it is probably less evident in the situations it has less dominant power such as the EU policy-making which also accounts for the preferences of the Council and the Parliament. Nonetheless, more explicit indications of their effort to promote EU integration should appear in competition issues where it has more decision power. It worth to highlight that there is a lack of empirical research to confirm the theories discussed above.

2.2 The European Court of Justice as a check and balance

The European Court of Justice is the central institution for the enforcement of the EU law. Its mission includes to control the lawfulness of decisions of other institutions of the European Union, to assure that member states will respect their obligations as stated in the EU Treaties, and they will interpret EU law upon the demand of the national courts. Two courts form the European Court of Justice: The Court of Justice and the General Court.

The General Court was created in 1989 with a twofold mission. At first, it would relieve the charge of economic cases that was generating bottlenecks in the Court of Justice. At second, it would offer a second level of decisions where the General Court would be the first instance court whereas the second instance would be the Court of Justice. This measure would increase the judicial protection of natural and legal persons that decide to appeal to the court. The complexity of the cases will guide the definitions of the number of judges that will decide a case. Usually, a chamber of 3 or 5 judges decides on the cases.

The Court of Justice exists since 1952. It deals with requests for preliminary rulings from national courts, some actions for annulments of illegal actions of EU institutions and appeals of cases judged in the General Court. The judgment in the Court of Justice is very similar to the one of the General Court. A chamber of judges will rule a case. Again, the complexity of the case will define the number of judges assigned. A remarkable difference is the presence of advocates general that present their opinion on the cases to assist the judgment.

Regarding size, the courts are slightly different. While the Court of Justice counts with 28 judges (one from each member state) and 11 advocates general, the General Court has 47 judges (at least one per member state). The appointment of judges is similar in both Courts. The judges must be independent and own the capabilities to exercise the highest jurisdictional functions. Member states appoint them for a 6-year term. The choice of member states is previously validated by a panel of 7 specialists that assess if the candidate fulfills all the requirements. The President of the Court suggests the composition of the panel and the Council approves it.

Courts are often assumed to be independent. Still, they may also be under pressures from various stakeholders. Judges are often dragged by governments (Posner and De Figueiredo, 2005), by policy preference (Voeten, 2008) or by the economic environment (Ichino et al., 2003). The appointment and judgment rules in the European Court of Justice was designed to avoid this pressure. However, since the ECJ has much power in the European arena, its decision-making raised the interest of some researchers.

Carrubba et al. (2008) suggest that the risk of a decision override by the Council or the threat of noncompliance of a Member State may constrain the ECJ rulings. Sweet and Brunell (2012) contested Carrubba et al. (2008) using the same data and show that the ECJ is usually aligned with Commission's preferences. However, there is no evidence of the influence of the Member States in the Court. Garrett et al. (1998) claim that analysis of the ECJ decisions should outpace the ideological discussions of the European Integrations theories. They contend that the ECJ is a strategic actor that will enforce the law impartially to keep their reputation. Also, a recent study by Pollack (2017) discusses the legitimacy of the ECJ. He highlights its important role as being

one of the oldest, busiest and most influential international courts in the world and conclude that despite much research defending that the ECJ rules according to the rule of law, recently there are many debates about bias and judicial activism in the Court. Over again, it misses some empirical evidence to draw more precise conclusions.

2.3 State Aid Control

As we discussed before, the European Commission has much power over the Competition policy in the EU. Regarding state aids, there are strict rules that define the types and circumstances of the grants allowed in the European Union because it is a fundamental aspect to guarantee the proper functioning of the internal market. Their legal basis is laid down in Article 107 and 108 (TFEU) that ensures any aids granted through State resources be compatible with the internal market and their application rules are detailed by the Council Regulation 659/1999.

This set of legislation stipulates the limits for a member state intervention in the internal market and empowers the Commission to investigate and to decide about the lawfulness of the state support. According to the law, the European Union should allow state aids to social issues and exceptional occurrences like natural disasters. Nonetheless, the European Commission can allow state aids for other purposes which includes grants to the economic development of disadvantaged regions, specific economic activities, the promotion of culture in the EU as well as aids to remedy for a severe disturbance in the economy of a member state. In summary, the current legislation opens precedents for issuing several types of supports and, strategically, sets the Commission as the powerful decision-maker for state aids.

The governance of the state aid in the European Union provides that a member state planning to grant it must notify the European Commission and no support scheme should enter into force before its authorization. Additionally, when a state aid that lasts for several years, the Commission must keep track of them and regularly assess if they are still compatible with the internal market. In such scenario, interested parties also play a surveillance role in the state aid schemes because they can notify the Commission about the misuse of authorized aids or the existence of unlawful ones. After being notified of a planned or existing scheme, the Commission assesses its adequacy and publish an official decision that will allow it or not. The favorable decisions may impose constraints to adequate the aid scheme to the rules of the internal market; they are known as conditional decisions, whereas an unfavorable decision may include a recovery aid clause for the cases of ongoing aids.

Although the Commission recognizes the central role of interested parties to keep control of the state aid scenario in the European Union, their participation is limited. The state aid process is based on a bilateral negotiation between the member states which are responsible for providing all the required information to assess the compatibility of the scheme within the internal market and the Commission which has much discretion to allow it or not relying on the given information. The participation of third parties is only possible when the Commission opens the formal investigation procedure. The procedure indicates the Commission has not enough information to deliberate and, then, invites other parties to contribute with their views.

Between 2000 and 2015, the European Commission department for competition analyzed more than 6000 cases. Different outcomes take place. About 1% of the cases were canceled before the issue of a final decision. Most of the cases, around 91%, had the state aid approved while less than 6% received a contrary decision by the commission. The remaining cases either are still under evaluation or fit in the category of automatic allowed exempted of the official decision. We highlight that the formal investigation procedure that enables third-party participation was invoked for only 11% of the evaluated cases.

State aid schemes are restricted to selected beneficiaries and, as a consequence, the decisions to approve it or reject it may not please all stakeholders in the market. On the one hand, an adverse ruling from the commission jeopardizes the interests of the undertakings who receive no state support. On the other hand, an affirmative decision may impose obstacles to the performance

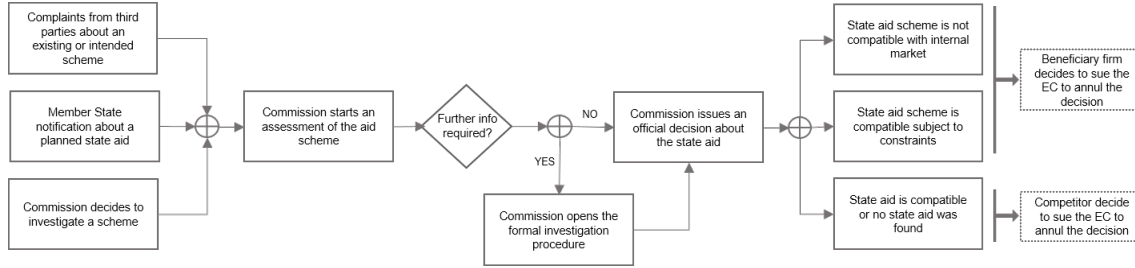


Figure 1: The whole process of State Aid approval or denial.

of competitors in the market. Both circumstances may result in legal disputes as an attempt to change an official decision in the Court. Figure 1 summarizes the functioning process of state aid in the European Union.

The General Court works as the first instance court in the resolution of state aid cases. Cases can be appealed in the Court of Justice, that in this case works as a second instance court. The cases may include the participation of interveners that are natural or legal persons as well as Member States and EU institutions that give support or reinforce the opposition to the plaintiff. However, a requirement to intervene in the case is to prove that the decision directly affects them which impose constraints on some parties intending to participate in the case. In short, the European Court of Justice is an important institutional check-and-balance in the context of state aid control.

State aid control, though a relevant element in maintaining the sustainability of the internal market, does not draw sufficient attention from researchers. [Dewatripont and Seabright \(2006\)](#) argue that political accountability may, in fact, encourage more wasteful public spending and thus a trans-frontier agency is helpful in stopping excessive state aids. [Nicolaidis and Bilal \(1999\)](#), however, find that the actual practice of the European Commission did not conform with what economic theory suggests and often acted in a way to accommodate some industries and countries. [Buts et al. \(2011\)](#) find that most of the Commission’s decisions were in line with the State Aid Action Plan (2005-2009). [Özbuğday and Brouwer \(2016\)](#) find that cases with multiple objectives tend to have longer duration approved and the more substantial amount of state aids received.

The current research on EU state aids focused on their general impacts on the economy and how they are in line with the EU law. However, what we propose is to extrapolate the analysis of the state aids to understand the dynamics of the EU institutions. The state aid process represents the interaction of the main stakeholders of the EU: The Commission, the European Court of Justice, member states and private actors. This environment allows us to investigate both the behavior of the EU institutions and how their interactions shaped the construction and development of the EU.

Some previous research gave us some clue of the relevance of state aids in this regard. For instance, according to ([Majone, 2002](#), [Wilks, 2005a](#)), the expansion of the competencies of the Commission concerning competition regulation at the European level has increased the number of judicial reviews as private parties appeal to the Court to seek justice. Thus, the Court has also become an essential actor in the policy-making process responsible for reinforcing and to expand the application of the law. Also, [Kleiner \(2011\)](#) points out that during the development of state aid regulation, the ECJ had a crucial role in limiting its boundaries either by confirming Commission’s decision or by restraining them. The ECJ’s judgments contributed to pushing for better framing of the aids allowed. However, some research points to the Commission’s discretion concerning state aid decisions.

Furthermore, some research demonstrated that even if the private sector is not a protagonist in the state aid process, they contribute to change the dynamics. The participation of private actors as plaintiffs in the state aid cases has increased since the 90’s ([Adam, 2016](#), [Smith, 1998](#)). Simultaneously, there was a decrease in the national government’s appeals which demonstrates the impact of private actors’ initiative in their willingness to litigate ([Adam, 2016](#)).

Recapping on the dynamics of the EU institutions, we proposed that political legitimacy and self-reinforcement be necessary for their sustainable development. Therefore, we expect the EU institutions will act according to the mandate they got from member states. The main mission of the European Commission is to promote EU integration whereas the European Court of Justice will applicate the EU law. By transposing this analysis to the state aid process, we propose that the Commission will use the authorization of the state aids to push for more integration. In practice, it implies that its decisions will be biased to favor countries that are prone to the European integration. In the same rationale, we expect that the European Court of Justice will pursue its mandate to applying the EU law and it will be independent and just on its rulings. It means that if the Commission introduces any bias, the Court will clear it through its fair judgments.

Within these dynamics, we suppose that the Court and the Commission are following their mandates. Their interactions trigger a feedback loop where the Commission abides by the Court decisions and the Court take into consideration the EU law to review the decisions of the Commission. Because of their interactions, the Commission succeeds in gradually expanding its powers, and Court builds up independence and credibility. They are self-reinforcing and, as a result of this behavior, they increase their mutual legitimacy. In the next sections, we present the data and the empirical approach used to test this hypothesis.

3 The Data

To understand the state aid control in the European Union, we have two complementary analysis. The first aggregates the state aid cases subject to the review of the Commission. The second analyzes the cases appealed to the General Court in an attempt to change Commission's decisions about state aids. The next subsections present in more detail the construction process of these datasets and their main variables.

3.1 Dataset of Commission's State Aid Cases

The competition cases in the European Union are registered in the ISEF database where the data is open to the public, complying with the transparency requirements of the governance of the Commission. Within the Commission, not only the competition department is in charge of the analysis of state aid cases, the agriculture and fisheries teams also evaluate the notifications in their respective sectors. However, in this paper, we limit our sample to cases decided by the competition team during 2000 and 2015. Taking into consideration that agriculture and fisheries sectors are subject to specific policies that may interfere in the concession of state aid, we think it is prudent to disregard these cases. We consider only cases after 2000 because it is the year when the procedural regulation of state aid entered into force.

Our sample of state aid cases contains more than 6200 cases. For each of them, the information available are: the Member State willing to grant the state aid, the instrument (i.e. direct grants or tax exemptions), its type (scheme, individual application or ad hoc cases), its purpose, a brief description of the case, the official decision of the Commission and its date. For each observation, we coded the official decision, presented in legislative terms, in a binary field to identify if the state aid was approved or denied. Some complex cases are subject to many official decisions, and some of them are controversial, for example, a positive decision that changes to a negative decision. In this situation, we classified the aid according to the last decision appearing in the data extraction.

We then enrich the dataset by matching some country-specific variables aligned with the year of the decision date. From the World Bank Indicators, we take GDP per capita and inflation rate. From the Eurostat indicators, we take the unemployment rate. Additionally, we calculate the time length a country is part of the EU as the difference between its entry in the EU and the decision date. Transposition deficit, which is the percentage of untransposed directives in the member state legislation, is taken as a proxy of the degree of resistance to integration.¹ This information is

¹One criticism against using transposition deficit in statistical analysis is that those directives reported completed

available on the Single Market Scoreboard website that provides some performance and governance indicators of the European Union countries.

Finally, the dataset contains some governance indicators taken from the worldwide governance indicators project as described in [Kaufmann et al. \(2011\)](#). They are calculated from a set of surveys that combines companies, citizens and expert views about governance. There are six indicators named voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption. They range from -2.5 for weak performance to 2.5 to strong performance in matter of governance.

3.2 Dataset of ECJ Cases on State Aid

To investigate the factors explaining the ECJ decisions on state aid cases, we have collected information about all the state aid cases which application dates from 2000 at least and judgment occurred until July 2017. This data is available in InfoCuria, the European Court of Justice official Case-law database. Since decisions' explaining factors could vary among different types of applicants, we have decided to focus our analysis on the cases which applicants are companies and the defendant is the European Commission, the responsible institution to assess state aid cases. The observations are constructed at the case-level resulting in a dataset with 205 observations.

We construct a binary variable that indicates whether the state aid program is given a favorable judgment by the Court, which means either the state aid program is approved or given a second chance of review by the Commission. Note that the constructed binary variable does not refer to a favorable decision by the Court. An unfavorable decision on a competitor case means the state aid program is actually given a favorable judgment. To correctly code the outcome, we carefully study all 238 cases and identify the nature of the cases; whether the case is presented by the potential beneficiary (the state aid is not approved or only partially approved), or by a competitor of the beneficiary of the state aid (the state aid is approved by the Commission but the competitor is unsatisfied). To maintain comparability, we include the same set of independent variables, which will further be discussed in next section.

Table 1 displays basic summary statistics of the two samples and shows the unpooled variance t-test to check the equality of two-sample means. Note that it does not reject that the means of transposition deficits are equal at 5 percent significance level.

4 Empirical Strategy and Results

4.1 Empirical Strategy

Briefly speaking, a member state may have to go through two stages to get the state aid approved. Governments first notify the European Commission that will decide whether the state aids meet the exemptions laid by Article 107 and Article 108. If the answer is positive, the beneficiary's competitors possess the legal right to sue the Commission in the Court trying to repeal the decision. If the answer is negative or conditional, the beneficiary can also demand a judicial review by the ECJ. Therefore, by comparing the decisions of the Commission and the Court, it is possible to detect biases in the decisions. There could be several scenarios categorized into two main types.

4.1.1 The Commission is biased

In principle, the quality of the state aid programs should be independent of any country-specific variables, except some economic indicators. By "quality", we refer to the degree the case fits into the exemptions laid by the legislation. If the Commission's decisions are systematically correlated with some relevant variables, we may conclude that the Commission is deciding cases according to

may be in fact incorrectly transposed and it takes time for the Commission to verify whether they are correctly transposed. The Commission gives the benefit of the doubt to member states and excludes those self-reported non-verified completed transpositions from the computation of transposition deficit. However, we believe that the error is small since the cumulative compliance deficits are less than 1 percent for all member states.

a specific line of thinking. There are two sub-cases. First, the Court is independent and corrects any biases due to the Commission. Thus, we should find the correlation reversed in sign. Second, the Court is also biased and judges according to some other rationale. We will find the judgments by the Court correlated with some explanatory variables, but it does not necessarily correct the bias introduced by the Commission.

4.1.2 The Commission is not biased

If the Commission's decisions are not systematically correlated with any variables, we may conclude that the Commission is in fact fair in its decision making. However, the Court could be biased still. In such scenario, we will find its judgments correlated with some explanatory variables. If we do not observe any systematic correlation between the approval of cases and any relevant explanatory variables in both stages of the decision-making process, we find no evidence showing any bias in the state aid control process at the European level.

4.2 Empirical Result from the First Stage: The European Commission

We employ a Probit model to estimate the correlations between the approval of state aids and some country-specific variables.

$$\pi_i = \Phi(\alpha + \beta X_i) \quad (1)$$

where π is the conditional approval probability of case i and $\Phi(\cdot)$ follows the normal distribution. The vector X_i are the explanatory variables associated with the case i . Each case is associated with a member state (where the state aid would be approved) and a decision year (when the case is approved or rejected by the Commission). Therefore, most of the explanatory variables are in fact country-year specific. Note that multiple observations are found for a year in a country, and thus the dataset is not a panel. To be precise, we consider the following model:

$$\pi_i = \Phi(\alpha + \beta X_{tc} + \tau t + \gamma_c) \quad (2)$$

where t is a linear time trend and γ_c is the country fixed effect for country c . The reason why we include a linear time trend instead of 17 binary year fixed effects is that we want to keep the analysis comparable with that of the next section where we cannot afford including too many dummies in a regression of a much smaller sample.

Table 2 reports the results. All reported standard errors allow clustering in countries. In Column 1, we explain the state aids approval, a binary variable, by a linear time trend, the time (number of years) in the past being within EU, the log-difference in GDP per capita, the difference in the unemployment rate, and the difference in inflation rate between the member state who submits the state aid program and the EU-average in the decision year.² Since it is argued that the Commission is trying to help economically weaker members to catch up with the stronger through state aids approval, the expected approval rate should be higher for low income, high unemployment, and high inflation countries. We do not reject the hypothesis concerning unemployment.

In Column 2, we further include transposition deficit into the regression. We find it negative and significant. We then control for country fixed effects, as shown in Column 3. The significant result of unemployment is no longer found, while transposition deficit is still significant.

The European Union is a union of many sovereign states. Governments and their fellow citizens may resist the European integration because they may have their selfish motives that go against the interests of the Union. We propose to take transposition deficit as a proxy for the degree of resistance to integration at the governmental level. Transposition deficit is the proportion of directives adopted by the European Union not yet transposed by the member state. It also accounts for directives that were only partially transposed and the ones considered as entirely transposed by the Member States, but for which the Commission has opened an infringement proceeding³. [Kaeding \(2006\)](#) finds that the higher the number of institutional veto players, the greater the delay

²It is computed by subtracting the EU-average of the year from the country figure.

in transposition. Following his line of thinking, transposition deficit is in effect a good proxy for the degree of resistance to integration. The Commission is a political body, whose decisions are not only economic but also political ones. Thus, we conjecture that the Commission considers the identity and also the behaviors of the member states when making the decisions and then manipulates the state aid approval to punish or reward "bad students" and "good students" respectively.

The approval of the state aids may also be related to the governance quality of the member states. According to Dewatripont and Seabright (2006), a more democratic political system may induce more wasteful state aid programs because of politicians' incentive to buy votes. Besides, we may expect the Commission would punish more corrupt or politically chaotic member states. It is possible that the negative coefficient we find is a result of omitting a measure of governance quality. Besides, the inclusion of governance indicators may capture the effect of the general quality of the applications, e.g. supply and verifiability of information and evidence. We include three Governance Indicators, namely, Voice and Accountability, Rule of Law and Control of Corruption, compiled by the World Bank separately and altogether in Column 4-7. The inclusion does not take away the significance of transposition deficit. A positive and significant coefficient of rule of law may hint that state aids are likely be approved if the applications are filed with care and a fair mind. However, we are surprised that control of corruption enters the equation negatively. Note that the overall correlation between rule of law and control of corruption is 0.9622. The Governance Indicators are themselves of interest to political scientists, though the explanations of the correlation fall outside of our discussion in this paper.

According to the results obtained in Column 3-7, a one percentage point increase in the transposition deficit is approximately associated with 11-12 percent fall in the odds of getting approved.

we conduct some robustness checks, as shown in Table 3. We first adopt the specification of Column 3 of Table 2 but estimate instead with linear probability model and logit model, as shown in Column 1-2 of Table 3. We find negative but less significant correlation. In Column 3, we keep probit and bootstrap the standard errors with 273 successful trials. In Column 4, we divide the observations into two types, namely, Scheme and Non-Scheme. Thirty-nine percent of the state aid applications in our dataset fall into various schemes agreed between member states and the Commission. Non-Scheme applications are less likely be approved while the correlation with transposition deficit is more negative, suggesting the bias, if it is, is larger concerning Non-Scheme cases.

4.3 Empirical Result from the Second Stage: The European Court of Justice

The previous section has shown that the Commission seems to make decisions according to transposition deficit, or more plausibly what it proxies: how resistant to European integration the member state is. However, it does not establish that the correlation is actually a bias. If the Court is to correct any bias, an opposite sign of transposition deficit would help establish the claim. We again employ a Probit model but this time to estimate the correlation between favorable judgments about the state aid programs after the ECJ review, and country-specific variables. The sample size shrinks to 238 of which 62 cases were initiated by either national or local governments. The other appeals are initiated by the private sector. In this later case, there are two types of appeal: the first type — labelled as "beneficiary" in our data — means that the state aid program was denied and the potential beneficiary filed the lawsuit; the second type — qualified as "competitor" — refers to cases where a competitor of the beneficiary of an approved state aid filed a lawsuit. All cases presented by governments are "beneficiary" cases, while 53 of cases filed by the private sector are "competitor" cases. Note that we exclude a small amount of cases initiated by individuals and non-profit associations as their successful rate (all of them were potential beneficiary) is comparatively low.

Table 4 reports the results. Column 1 shows the probit regression result with explanatory variables including economic indicators, a linear time trend, the length of time being in the EU (all measured in the ending year of the case), a binary variable indicating competitor case and country fixed effects. The length being in the EU is positive and significant, suggesting an exposure effect. More experienced countries tend to receive favorable decisions. This correlation maintains even if we limit the sample to only companies, as shown in Column 5.

As the Commission is supposed to have investigated into the "quality" of the state aid program and accepts or rejects them accordingly, the state aid programs of the competitor cases, in general, are of higher quality and hence, the programs are expected to maintain a higher probability of favorable judgment after the judicial review.⁴ The positive and significant correlation is thus well expected.

Next, we include transposition deficit of the ending year into the picture. We do not find a significant correlation, as shown in Column 2. However, we should not measure the deficit in the judgment year because what we want to check is whether the Court corrects the bias made by the Commission at the time the Commission made the decision. Thus, we include instead in the regression, as done in Column 3, the transposition deficit measured in the starting year of the lawsuit, which is exactly the year when the Commission decided with a few exceptions since undertakings have only three months to appeal to the ECJ concerning the Commission's decision. Transposition deficit is positive and significant. This result is, however, not sufficient for us to conclude that the Court corrected the bias induced by the Commission because of the different nature of the two types of cases. If the Commission is actually biased against countries of high transposition deficit, some of the beneficiary cases coming from those countries might have been approved given no bias. If the court would correct the bias, the correlation of transposition deficit for beneficiary cases should be positive. However, the same logic does not apply to competitor cases. Those cases were approved by the Commission, despite of the existence of the bias, and a favorable judgment by the Court is equivalent to maintaining the decision by the Commission. We delay the discussion on competitor cases for the moment.

The interaction between transposition deficit and competitor binary variable is included in the specification of Column 4-5. To be precise, we consider the following model:

$$\pi_i = \Phi(\alpha + \beta X_{tc} + TD_{tc} + Comp_i + TD_{tc}Comp_i + \tau t + \gamma_c) \quad (3)$$

where TD_{tc} is the transposition deficit for year t for country c , $Comp_i$ is the binary indicator for Competitor case.

As shown in Column 4, the interaction term is negative and significant while transposition deficit and length of time remain significant. Column 5 includes only companies and we find similar results.

For easier understanding, we plot the predictive margins of the two types of cases against transposition deficit in Figure 2. The point estimate is the predicted probability of a favorable answer to a state aid program given the type of the case at a certain level of transposition deficit. When transposition deficit is low, beneficiary cases are associated with lower predicted probability because they were very likely poor quality applications and thus rejected by the Commission. When the transposition deficit increases, aid programs of those beneficiary cases get more chances to be given a favorable answer by the Court. Comparing with the result of Table 2, we find that the coefficient of transposition deficit is reversed. The explanation we put forward is that the Court actually corrects the bias induced by the Commission. The Court may not be aware of the bias and the subsequent correction. The reversal of the sign may be simply because the applicants are more able to present reasons and evidence in an open and fair lawsuit in the Court.

What remains to be explained is the falling predicted probability (with the transposition deficit) of a favorable decision for cases initiated by competitors. Note the the fall (the slope) is not always significantly different from zero, and the confidence intervals at the high values of transposition deficit is large. Following the same logic of over-rejection, one may expect over-acceptance of applications when transposition deficit is low. But if that is true, we should see an upward sloping curve because the Court should repeal some unfairly approved cases when the deficit is low. One explanation for the pattern is that the original decisions were not made on the basis of a detailed and neutral analysis of the specificities of the case (but rather on the basis of its "political context") when the cases were coming from high transposition deficit countries, and therefore the Court was more likely to reverse the decisions or ask for another review. This explanation also applies to beneficiary cases: rejected cases were studied with biases. To reconcile all the results, we propose the following: the Commission was biased when deciding on cases originating from high transposition deficit member states and likely to limit the number of approval cases.

Table 5 presents some robustness checks. First, we try OLS and logit regression in Column 2-3. Signs are correct, though transposition deficit is less significant. In Column 3, we bootstrap

⁴By "quality" we refer to how much the application fits into the exemptions listed in the legislation.

the standard errors (46 successes) and obtain similar results. Again, we check if the significant correlation is due to the omission of a measure of the governance of the member states. We interact the Competitor binary variable with Voice and Accountability, Rule of Law, and Control of Corruption and include them one by one in the regressions, as shown in Column 4-6. The newly introduced interaction terms are significant, while the governance indicators alone are not. All three are negatively correlated with the expected favorable decision. In other words, for case initiated by competitors, the better the governance, the lower the expected probability of benefitting a favorable answer: approved cases originating from countries characterized by a better governance are more likely to be reversed. Since it is not our focus, we prefer not to infer too much. In any case, transposition deficit and its interaction term with competitor binary variable are significant for all three specifications. Finally, we divide cases into Scheme and Non-Scheme (Ad-hoc cases). Figure 3 shows the predictive margins of Scheme and Ad-hoc cases given that they are initiated by potential beneficiaries. We find that the slope of Ad-hoc cases is steeper, suggesting the correction is stronger, which is consistent with the finding that the bias is stronger towards Ad-hoc cases, given that the Court corrects the bias fairly towards two types of cases.

5 Discussion

5.1 Is the Court influenced by the Private Sector?

The previous section investigates whether the Court corrects any bias induced by the preference of the Commission, but does not lead us to the conclusion that the Court is, in fact, independent and solid. It may bow to the financial influence of the applicants. In this section, we modify our regression. First, the dependent variable is now a binary variable equal to one if the applicants obtain a favorable decision by the Court, and equal to zero otherwise. For instance, a favorable decision by the Court refers to a rejection or partial rejection of the state aid program. We consider only the final decision by the Court as some cases are appealed to the second instance. Second, we change the observation's country from where the state aid would have been implemented to where the applicants belong. It is not uncommon that competitors from one country are complaining about a state aid program in another country. Therefore, all country-year specific variables refer to the parameters of the applicants' countries. Third, we expand the dataset to case-applicant level but due to the lack of some applicant-specific information the sample shrinks to at most 192 observations.

Table 6 reports the regression results. All regressions reported include a binary variable that discerns competitor cases, a linear time trend and country fixed effects. In Column 1, we test if financially more powerful applicants are likely to win the lawsuits. But the log of total assets and the log of the number of employees do not explain the success rate. In Column 2, we also include the number of total applicants of the case and how many ECJ cases the applicants have experienced by the time of the observation into the regression to capture any size and experience effects. Again we do not find a significant correlation. In Column 3, we further include a categorical variable that indicates either negative, neutral or positive support from a member state. No significant result is found. In Column 4, a binary variable that indicates if the applicant is registered in the Transparency Register of the EU is included in the regression, which is also insignificant. In Column 5, we include nine sectoral fixed effects, and now we find that the number of total applicants is positively and significantly correlated with the success rate.⁵ In short, we find evidence showing that cases with more applicants are more likely to win, but the inclusion of many fixed effects casts doubt on the robustness of the correlation.

5.2 Selection Bias

A frequent, and very reasonable, challenge to the empirical finding is selection bias. After the Commission has made its decision, the stakeholders may or may not appeal the decision in the ECJ. Who are they? We test the equalities of variables of the two samples, as shown in Table 1. Although many variables show significant differences between two samples, Some of them are well expected. The increases in decision year and in length within EU are logical because cases must

⁵We follow the NACE definitions of sectors.

first be presented to the Commission. Besides, the slight increase in transposition deficit (only significant at $\alpha = 0.1$) is consistent with the finding that cases originating from high transposition deficit countries are more likely to be denied by the Commission.

It is intuitive to assume that those who believe they tend to win the lawsuits would be more eager to move on to the second stage, but the incentive to sue and transposition deficit are hardly related. The only thinkable reason is our finding: they feel unfairly treated by the Commission and thus hold the belief that they are more likely to win, which is correlated with the hidden bias against more resistant countries.

5.3 Does information availability matter?

Another criticism is that, the Commission may not have sufficient information to judge and thus rejects a state aid program but, when information is unfolded over time, the Court is able to make a better and fairer decision. If transposition deficit is positively correlated with the incentive or ability to provide accurate and sufficient information in the beginning of the process, we will find a negative correlation between approval rate and transposition deficit. The positive correlation found in the ECJ stage is thus not a correction of the bias, but simply implies better decisions with more information.

This criticism is however not valid. First, national governments are well-motivated to provide all the "favorable" information before the Commission makes any decisions. The nature of the information unfolded over time should be in general "less favorable" or "unfavorable" to the state aid application. Furthermore, the Commission often asks for further information and communicates with the national governments before they make any decisions. Lack of relevant information seems not a plausible explanation.

Some may argue that the national governments or stakeholders may not know what information is favorable in the Commission stage, but somehow learn that along the process and successfully persuade the Court to revoke the decision. It may be true in a one-shot game but is very shaky in a repeated-game setting. To capture this possibility, we have included the length within EU as a control variable in the regression and found it positively correlated with favorable decision. The effect we find on transposition deficit, therefore, has been isolated from the experience effect.

5.4 Estimation of the Cost of the Bias

Although it is not the main focus of this work, we estimate by our model the economic cost of the bias induced by the Commission. Since we do not have the actual amounts of state aids of all cases presented to the Commission, we cannot pin down exactly the economic values of all rejected cases. Moreover, it is not possible to tell which cases are in fact rejected due to the bias. A simple way to estimate the cost is to input the country-specific characteristics of member states into the model to obtain a predicted probability of acceptance of those member states in a year. The model we choose is the one of Column 7 of Table 2. Next, we assume that the transposition deficit dimension does not exist and recompute the predicted probability of acceptance using the same coefficients. The predicted values can be interpreted as the expected acceptance probability given no bias. The difference, together with the amounts of state aids (except aids to railways and agriculture) actually distributed by each member state each year, allows us to estimate the economic cost of bias.⁶ The total state aids without railways and agriculture of 24 member states from 2009 to 2015 and the estimations of the bias are shown in Table 7 and 8 respectively.

Take France as an example. The average bias is €105 million and is roughly 0.78 percent of the total state aids distributed. However, we cannot tell if it is inefficient because state aid programs could be inefficient and also non-distortionary. Over-rejection may not be suboptimal from social welfare point of view.

⁶Although we can retrieve all applications of state aids over the years, we do not know the value of the state aid of each application. Some of them were tax rebates or allowance, making it impossible to estimate the amount. What we have is the actual state aids of a year. But we only know roughly the components of the total amounts and do not have the information of the approval year. Some approved programs may last for years. The estimation is thus based on a strong assumption that the total approved amount of state aid applications of a member state in a year is equal to the total amount of state aids distributed.

5.5 Policy Implications

During the whole research process, we reckon a lack of transparency in the Commissions' decision-making. The private sector is very often put aside in the process of the decision. However, companies are responsible for initiating the majority of legal proceedings against the Commission, implying that the private sector plays an essential role in the oversight of state aids distribution. The discussion between the EC and the member states concerning state aids is mostly behind closed doors. The private sector is not officially involved during the process, unless the Commission calls for a formal investigation. Would it be a more accountable system if the private sector would be invited to discuss at the first stage? For those 11 percent of cases that were open to formal investigation, and hence involved the private sector, a quarter of them were subject to judicial review. It clearly shows the power of information. During a formal investigation, individuals and firms are more informed of the details of the scheme, of the logic behind the decision, and of their rights. A more transparent environment would allow the Commission to build more informed decision, and all stakeholders to anticipate potential decision by the the Court in case of appeal, resulting in a lower degree of uncertainty for all. Public scrutiny would on the one hand weaken the Commission ability to "punish" high transposition deficit countries, but would on the other hand decrease the likelihood of decision made by the Commission reversed by the Court. This later effect should improve the credibility of the Commission.

To improve the state aids control, we propose to involve the private sector right from the beginning so that beneficiaries and competitors will access enough information to act as an observer and thus improve the internal control of the state aids before appealing to a judicial review. This measure will undoubtedly upgrade the credibility of the Commission. The only obstacle is that the Commission may not be willing to lose the benefit of its discretion in the political allocation of state aids.

6 Conclusion

This work takes the view that the European institutions are continuously evolving and striving for both power and legitimacy. The Commission pursues its own political aims through competition policy and state aids control. Meanwhile, the European Court of Justice acts as the check and balance to establish its credibility by maintaining the rule of law. We thus argue that the Commission may bias its decision over state aid programs to achieve its goals, leading the Commission and the Court to go against each other over some cases. In particular, we hypothesize that the Commission tends to reject programs originating from countries who are resistant to the integration of internal market, which is proxied by the transposition deficit. We find that the higher the transposition deficit, the lower the expected approval rate of the state aid program by the Commission, suggesting that the Commission is biased. On the other hand, we find that the expected approval rate is positively correlated with the transposition deficit for those cases presented to the Court. Since the Commission acts before the Court, this is an evidence showing that the Commission is actually biased against countries with greater resistance to European integration while the Court is more independent and corrects the bias induced by the Commission during the game of dynamic institutional building.

Table 1: Basic Summary Statistics of the Two Samples

Variable	Commission		Court of Justics		2-sample t-test
	Mean	Std. Dev.	Mean	Std. Dev.	
ln GDP pc	.0026964	.1991043	.0283299	.1367361	-2.78
Unemployment	-.4881238	4.145106	.9096487	5.198566	-4.10
Inflation	-.0509695	1.022819	-.193337	.753921	2.82
Decision Year	2007.853	4.815866	2010.718	3.73948	-11.46
EU length	33.11104	17.77373	39.51681	14.21466	-6.75
Transposition Deficit	1.463561	1.030183	1.583193	1.087079	-1.67
Voice	1.237182	.237881	1.219337	.226122	1.19
Rule of Law	1.325107	.5090314	1.223408	.5415493	2.85
Control of Corruption	1.318299	.6997943	1.172147	.7303675	3.03
Sample size	6268		238		

Table 2: Dependent Variable: State-aids approved by the Commission

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log diff GDP pc	0.381 (0.320)	0.193 (0.312)	0.425 (1.243)	0.340 (1.251)	-0.129 (1.463)	0.857 (1.274)	0.042 (1.359)
diff unemployment	-0.029*** (0.007)	-0.032*** (0.007)	-0.020 (0.021)	-0.024 (0.024)	-0.017 (0.022)	-0.024 (0.020)	-0.028 (0.022)
diff inflation	-0.042 (0.034)	-0.047 (0.032)	-0.006 (0.039)	-0.005 (0.040)	-0.017 (0.040)	-0.004 (0.039)	-0.023 (0.039)
Trend	0.027*** (0.009)	0.006 (0.007)	-0.008 (0.008)	-0.010 (0.007)	-0.007 (0.008)	-0.016* (0.010)	-0.032*** (0.011)
Length EU	-0.013*** (0.004)	-0.011*** (0.003)	0.008*** (0.002)	0.008*** (0.002)	0.012*** (0.002)	0.010*** (0.002)	0.022*** (0.004)
TD		-0.132*** (0.040)	-0.123** (0.059)	-0.122** (0.058)	-0.114** (0.058)	-0.128** (0.059)	-0.116** (0.053)
Voice				-0.233 (0.520)			-0.449 (0.505)
Rule of law					0.540** (0.243)		1.343*** (0.322)
Control of corruption						-0.351 (0.290)	-0.957*** (0.328)
Country FE	No	No	Yes	Yes	Yes	Yes	Yes
<i>N</i>	6455	6430	6268	6268	6268	6268	6268
Pseudo R2	0.027	0.034	0.053	0.053	0.054	0.054	0.059
log likelihood	-1399.882	-1388.869	-1352.697	-1352.460	-1350.444	-1351.342	-1342.968

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 3: Robustness Checks

	Dep. Variable: State-aids approved			
	(1)	(2)	(3)	(4)
	OLS	Logit	Probit	Probit
diff ln GDP pc	-0.006 (0.121)	-0.951 (2.566)	-0.425 (0.991)	0.107 (1.150)
diff unemployment	0.003 (0.002)	0.046 (0.042)	0.020* (0.012)	0.019 (0.020)
diff inflation	0.001 (0.003)	0.020 (0.085)	0.006 (0.034)	0.012 (0.042)
Trendr	-0.001 (0.001)	-0.022 (0.017)	-0.008 (0.013)	-0.001 (0.008)
Length EU	0.000 (0.000)	0.022*** (0.004)	0.008 (0.011)	0.010*** (0.002)
TD	-0.015* (0.008)	-0.240* (0.123)	-0.123*** (0.032)	-0.141** (0.065)
Scheme				0.423*** (0.089)
TDxScheme				0.070* (0.038)
Country FE	YES	YES	YES	YES
N	6430	6268	6268	6268
R2/Psedudo R2	0.025	0.052	0.053	0.087
log likelihood	262.904	-1353.307	-1352.697	-1303.764
Bootstraps			273	

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 4: Probit Regression: ECJ Stage

	Dep. Variable: State-aids favorable				
	(1)	(2)	(3)	(4)	(5)
log diff GDP pc	13.026* (7.571)	13.301* (7.711)	10.420 (7.949)	10.894 (7.993)	14.530 (11.124)
diff unemployment	0.116* (0.063)	0.117* (0.064)	0.079 (0.072)	0.086 (0.065)	0.090 (0.083)
diff inflation	0.185 (0.158)	0.209 (0.153)	0.115 (0.159)	0.132 (0.146)	-0.051 (0.182)
Trend	-0.061** (0.030)	-0.077*** (0.030)	-0.025 (0.032)	-0.050* (0.029)	-0.049 (0.035)
Length EU	0.063*** (0.022)	0.067*** (0.023)	0.072*** (0.021)	0.094*** (0.025)	0.086*** (0.020)
Competitor	1.817*** (0.286)	1.820*** (0.297)	1.835*** (0.273)	2.841*** (0.568)	3.121*** (0.657)
TD (ending)		-0.171 (0.162)			
TD (starting)			0.251** (0.122)	0.339** (0.158)	0.459** (0.222)
CompXTD				-0.566* (0.291)	-0.692** (0.322)
Country FE	YES	YES	YES	YES	YES
Sample	All	All	All	All	Companies
N	238	238	238	238	176
Pseudo R2	0.268	0.270	0.279	0.295	0.328
log likelihood	-117.983	-117.675	-116.328	-113.727	-81.738

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 5: Robustness Checks

	Dep. Variable: State-aids approved						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log diff GDP pc	2.889 (2.091)	17.107 (14.195)	10.894* (6.382)	10.259 (7.936)	9.391 (8.404)	9.613 (8.304)	15.480* (8.896)
diff unemployment	0.026 (0.019)	0.132 (0.113)	0.086 (0.064)	0.100 (0.066)	0.075 (0.070)	0.077 (0.066)	0.101 (0.067)
diff inflation	0.047 (0.044)	0.198 (0.248)	0.132 (0.203)	0.092 (0.122)	0.067 (0.130)	0.092 (0.142)	-0.003 (0.178)
Trend	-0.007 (0.008)	-0.089* (0.053)	-0.050 (0.063)	-0.050 (0.036)	-0.073* (0.038)	-0.063 (0.044)	-0.076* (0.040)
Length EU	0.020*** (0.002)	0.166*** (0.046)	0.094 (0.062)	0.104*** (0.030)	0.125*** (0.037)	0.118*** (0.034)	0.143*** (0.037)
Competitor	0.722*** (0.129)	4.801*** (0.970)	2.841*** (0.891)	6.806*** (2.082)	5.253*** (0.644)	4.490*** (0.672)	4.126*** (0.927)
TD	0.101* (0.050)	0.588** (0.275)	0.339** (0.169)	0.316* (0.178)	0.392** (0.162)	0.382** (0.165)	0.468*** (0.156)
CompxTD	-0.131 (0.082)	-0.967* (0.501)	-0.566 (0.361)	-0.546** (0.243)	-0.706*** (0.217)	-0.641*** (0.243)	-1.009*** (0.339)
VA				2.091 (1.615)			
CompxVA				-3.103* (1.677)			
Rule of law					0.709 (1.114)		
CompxRL					-1.509*** (0.351)		
Control of corruption						0.467 (0.891)	
CompxCC						-1.062*** (0.276)	
Scheme							-0.443 (0.565)
TDxScheme							-0.209 (0.190)
ComxScheme							-1.371 (1.120)
TDxComxScheme							0.561 (0.417)
<i>N</i>	255	238	238	238	238	238	238
R2/Psedudo R2	0.366	0.293	0.295	0.310	0.310	0.309	0.341
log likelihood	-120.971	-114.022	-113.727	-111.325	-111.197	-111.492	-106.284
Bootstraps			46				

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 6: Is ECJ sufficiently independent?

	Dep. Var.: The Applicant obtains favorable decision				
	(1)	(2)	(3)	(4)	(5)
ln Asset	0.024 (0.059)	0.036 (0.060)	0.031 (0.060)	0.025 (0.063)	0.057 (0.083)
ln Employee	0.009 (0.063)	0.018 (0.063)	0.023 (0.064)	0.022 (0.064)	-0.023 (0.080)
Competitor	-0.647** (0.262)	-0.716** (0.278)	-0.606* (0.348)	-0.511 (0.352)	-0.388 (0.385)
Trend	-0.092*** (0.032)	-0.095*** (0.034)	-0.089*** (0.034)	-0.094*** (0.034)	-0.119*** (0.041)
Total Applicants		0.118 (0.105)	0.118 (0.265)	0.127 (0.105)	0.336** (0.136)
Cases before		-0.057 (0.053)	-0.057 (0.287)	-0.060 (0.054)	-0.075 (0.065)
Support.neutral			0.333 (0.365)	0.333 (0.368)	0.385 (0.425)
Support.positive			0.158 (0.420)	0.400 (0.417)	0.676 (0.487)
Lobbying				0.119 (0.320)	0.330 (0.374)
Country FE	YES	YES	YES	YES	YES
Industry FE	NO	NO	NO	NO	YES
<i>N</i>	192	192	192	192	173
Pseudo R2	0.132	0.143	0.143	0.148	0.246
log likelihood	-103.546	-102.174	-101.623	-101.653	-83.708

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Table 7: Total State Aids in a Year without railways and agriculture (in million of euro)

	2009	2010	2011	2012	2013	2014	2015	Average
Belgium	2399.60	2368.03	1768.72	1589.86	1596.52	1760.14	1961.02	1920.55
Bulgaria	29.09	18.89	22.92	31.17	46.48	158.97	240.42	78.28
Cyprus	69.72	94.94	140.93	107.10	130.05	119.23	125.26	112.46
Czech Republic	844.55	1000.71	1259.92	1431.42	1606.36	1598.66	1938.89	1382.93
Denmark	2159.36	2089.34	2260.24	2542.62	2545.65	2498.77	3311.69	2486.81
Estonia	11.49	14.79	19	31.41	84.77	155.31	193.86	72.95
Finland	988.92	946.84	1743.67	1269.12	1469.9	1625.36	1543.04	1369.55
France	13489.12	13930.70	12567.25	14015.27	12417.05	14421.58	13381.17	13460.31
Germany	17722.90	15402.50	12642.01	12480.41	12814.50	36980.84	36520.65	20651.97
Greece	2173.12	1739.38	2230.27	1707.67	2675.59	1677.58	2205.22	2058.41
Hungary	1291.30	2019.19	959.14	925.23	1219.27	1495.44	1335.33	1320.70
Ireland	785.90	953.38	674.94	554.04	905.00	691.64	444.90	715.69
Italy	4895.90	3250.02	2924.60	3560.90	2782.91	3194.93	3981.40	3512.95
Luxembourg	95.90	77.24	84.29	73.90	129.71	134.16	147.32	106.08
Malta	101.3	78.51	97.78	126.83	187.13	96.62	131.61	117.11
Netherlands	1984.14	2221.46	2331.55	2107.32	1998.79	2074.48	1998.89	2102.37
Poland	2574.80	2894.30	2211.22	2347.13	2218.84	4874.00	3192.86	2901.88
Portugal	1631.66	1528.05	1539.60	876.32	461.37	737.90	773.05	1078.28
Romania	195.74	199.06	387.65	619.13	886.43	1046.52	1224.21	651.25
Slovakia	271.67	253.86	160.85	136.83	181.54	298.8	403.11	243.81
Slovenia	306.46	301.47	430.83	392.30	419.51	411.92	422.57	383.58
Spain	5076.77	4494.39	3924.43	3308.99	2694.48	2903.39	2052.16	3493.51
Sweden	2712.03	3054.93	3211.34	3387.65	3507.05	3415.09	3320.17	3229.75
UK	4177.75	4923.55	4536.55	5636.87	6039.16	8154.43	8731.18	6028.50

Table 8: Estimation of Economic Cost of the Bias (in million of euro)

Country	2009	2010	2011	2012	2013	2014	2015	Average
Belgium	39.10	38.18	87.46	73.13	45.00	20.89	47.42	50.17
Bulgaria	0.15	0.15	0.51	0.36	0.59	2.31	2.57	0.95
Cyprus	0.05	0.18	0.62	0.43	1.39	0.57	0.38	0.52
Czech Republic	1.65	1.67	2.79	0.22	0.31	0.31	1.41	1.20
Denmark	2.91	3.59	5.12	5.56	2.41	0.83	2.05	3.21
Estonia	0.10	0.29	0.22	0.04	0.41	0.28	1.42	0.39
Finland	2.52	3.11	11.91	5.02	4.79	1.01	3.83	4.60
France	149.76	88.86	155.00	45.11	70.28	76.09	150.18	105.04
Germany	108.08	161.81	146.83	77.57	81.70	155.69	288.25	140.70
Greece	27.66	14.72	28.23	11.86	13.79	6.12	39.71	20.30
Hungary	8.48	47.50	22.32	9.10	174.87	11.38	8.51	17.45
Ireland	7.61	5.17	1.39	0	4.33	1.81	0.87	3.03
Italy	141.64	120.67	108.62	47.84	77.57	27.59	79.24	86.17
Luxembourg	3.81	2.25	4.43	1.59	3.22	3.05	7.74	3.73
Malta	0.29	0.12	0.19	0.29	0.89	0.26	0.91	0.42
Netherlands	9.80	14.69	32.95	8.42	12.34	5.06	7.23	12.93
Poland	20.56	25.85	23.60	25.92	8.11	13.58	21.41	19.86
Portugal	25.35	20.32	52.16	13.64	3.05	4.80	2.58	17.42
Romania	0.76	1.30	6.15	2.42	9.93	12.00	19.67	7.46
Slovakia	0.55	0.67	0.52	0.21	0.35	0.31	0.84	0.49
Slovenia	0.53	0.94	2.17	0.95	1.85	1.59	1.70	1.39
Spain	36.44	62.85	66.42	49.46	37.63	29.23	11.76	41.97
Sweden	9.56	25.19	14.87	3.17	9.06	4.44	9.69	10.85
UK	6.11	7.64	15.86	13.90	10.91	6.64	10.56	10.23

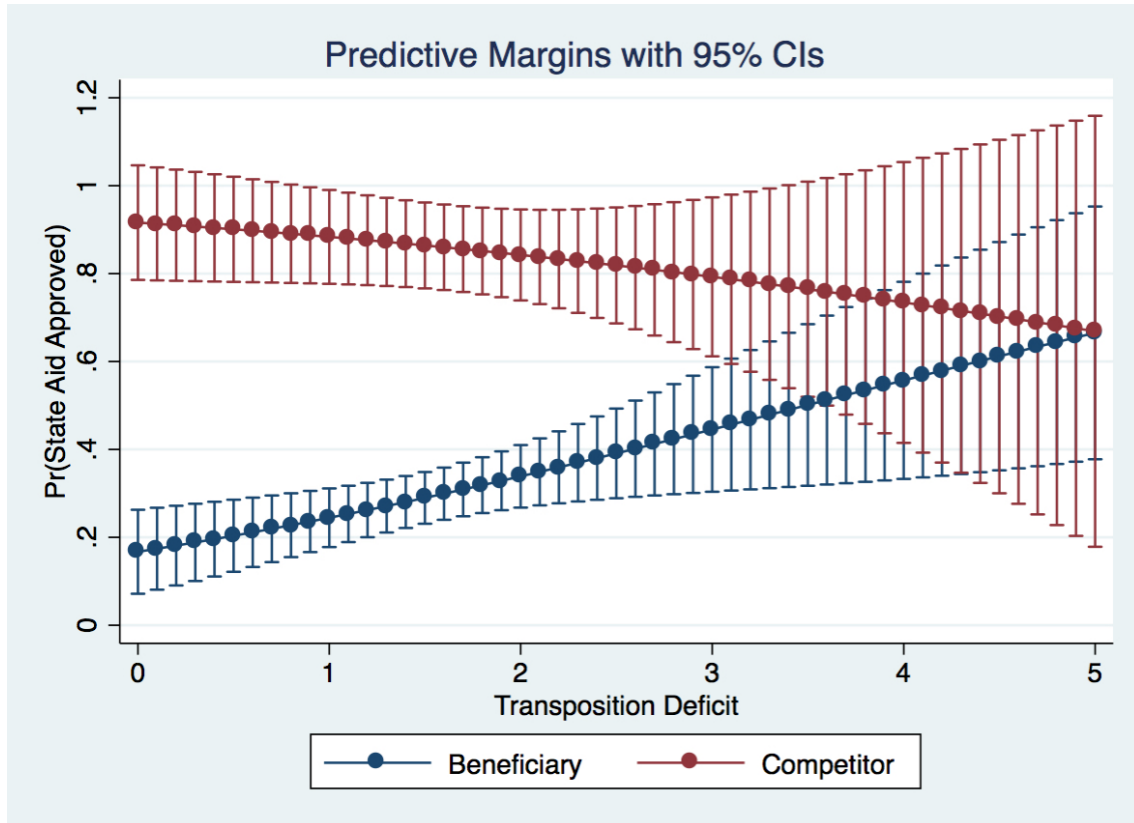


Figure 2: It shows the predicted probability of being a Beneficiary or a Competitor Case at differential levels of Transposition Deficit, using the estimates of Column 4 of Table 4. When transposition deficit is low, competitor cases are associated with higher probability of approval because they were initially accepted by the Commission, implying that the cases are of higher quality. On the other hand, beneficiary cases are of lower quality because they were initially rejected by the Commission. The decision of the court is consistent with what we expect from a fair screening mechanism by the Commission. When the transposition deficit gets higher, the aids of those beneficiary cases get more chances to be approved. It suggest that the court is correcting the decision by the Commission

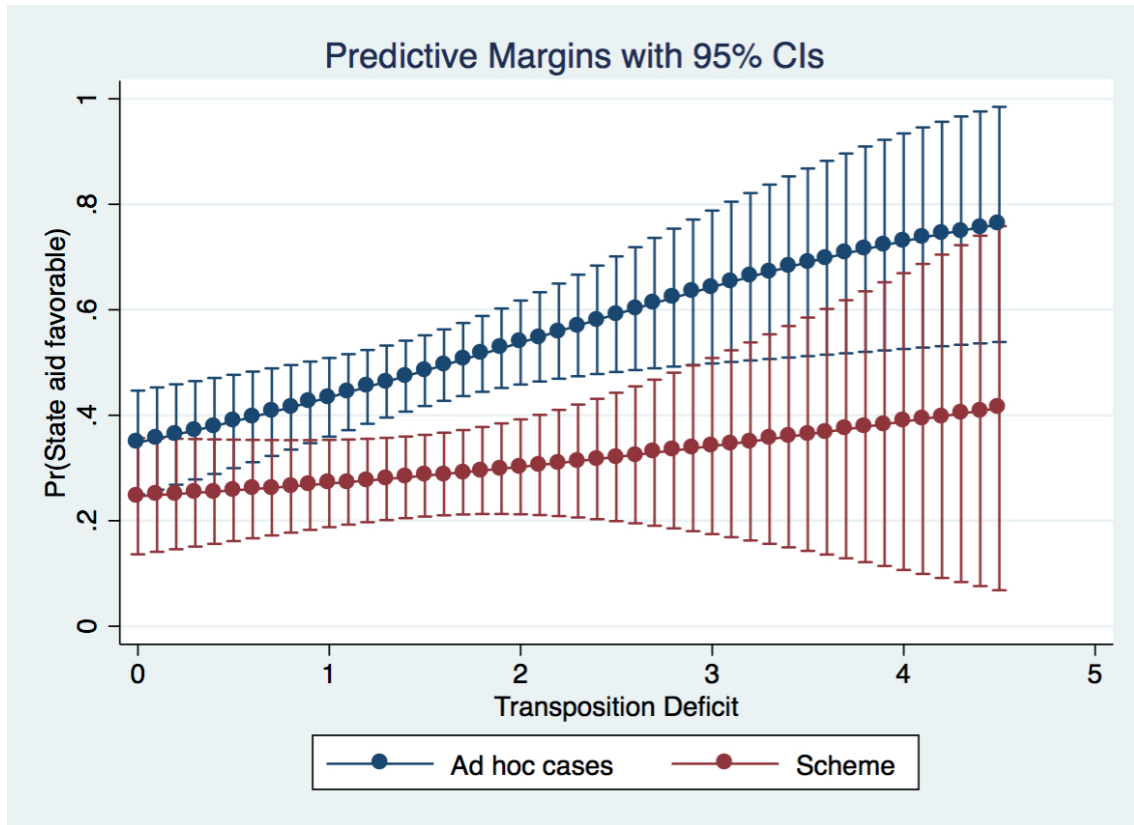


Figure 3: It shows the predicted probability of Scheme and Non-Scheme (Ad-hoc cases) beneficiary cases. We find that, though the difference is not statistically significant, the expected favorable rate of Ad-hoc cases lies above that of Scheme cases. The correction of the bias is stronger in Ad-hoc cases.

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