



Towards the Greater Good? EU Commissioners' Nationality and Budget Allocation in the European Union

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Abstract:

We analyze whether the nationalities of EU Commissioners influence budget allocation decisions in favor of their country of origin. This is inherently difficult as no country related data on budget allocations for individual Commissioners are published by the EU. We are the first to propose a solution to this problem by using data on EU funds allocation and focusing on the Commissioners for Agriculture, who are exclusively responsible for a specific fund that accounts for the largest share of the overall EU budget.

On average, providing the Commissioner is associated with increases in a country's share of the overall EU budget of about one percentage point, which corresponds to half a billion Euro per year. We consider alternative explanations using flexible country-specific time trends in addition to country and time fixed-effects and examining pre- and post-treatment effects. There are no signs of selection bias in terms of significant differences in trend behavior both before and after providing the Commissioner. The results are not driven by any individual country and selection-on-unobservables would have to be implausibly high to account for the estimated coefficient.

Keywords: Fiscal Federalism, Political Economy, Budget Allocation, European Union, EU Commission, EU Commissioners, National Origin

JEL codes: D7, H3, H7, F5, F6

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Article 17, Treaty on European Union (TEU):

“The Commission shall promote the general interest of the Union and take appropriate initiatives to that end. [...] In carrying out its responsibilities, the Commission shall be completely independent. [...] [T]he members of the Commission shall neither seek nor take instructions from any Government or other institution, body, office or entity” (European Union, 2010).

1 Introduction

The European Union (EU) is at a turning point in its history. One of the greatest political and economic projects in the last decades seems to be lost between proponents of an ever closer union and others pushing for a return of decision-making power back to national governments or even for an exit of their country from the EU. During the various treaty changes, the European Commission has more and more taken over the role of the executive arm of the European governing system. Those pushing for more integration aim to move towards a political entity with its own fully functional executive, with the European Commission (EC) usually being regarded as the obvious candidate to take over that role. At the same time, the ‘democratic deficit’ and the lack of political accountability are among the most commonly cited complaints about the working of European institutions. It is against this background that we consider it crucial to better understand the working of the EC in order to base upcoming EU reforms on sound scientific evidence.

There is a simple reason why the literature so far has not been able to provide an assessment of the influence of nationality on EU Commissioners’ behavior. The EU publishes no detailed data on the specific budget of individual Commissioners’ portfolios which would allow a decomposition into country specific spending. We solve this challenge by using the allocation of EU funds instead, focusing on the Commissioner for Agriculture who is the only Commissioner exclusively responsible for one specific fund. This allows us to bypass the data limitations and evaluate whether individual Commissioners’ budget decisions are related to their home countries. Specifically, we analyze whether providing the Commissioner for Agriculture is related to an increase in the spending on agriculture for the respective country of origin.¹

While there is a large related literature on log-rolling and state-specific spending related to political interests in the U.S., mostly placing emphasis on the legislative chambers of government (e.g. Gawande & Hoekman 2006; Brooks *et al.* 1998; Stratmann 1992), barely any such work has been done for the EU (Aksoy, 2012). Our contribution does not only differ by focusing on the executive arm of government; in addition, the EU, in contrast to the U.S.,

¹ We also consider the Budget Commissioner’s relationship to the overall budget and the Commissioner for Regional Policy’s relationship to the allocation of social and regional funds. Both are related to the allocation of funds, however, as we will argue later, they either have very limited influence or cannot be directly and uniquely related to a specific fund.

is still more an international organization than a state. It has installed several institutional specificities and a bureaucracy strongly mixed in nationality to reduce the influence of individual national backgrounds. As the opening statement indicates, the EC, as the main executive body of the EU, is eager to maintain an image of simply representing “the interests of the EU as a whole.”² Commissioners work independently and unaffected by their cultural and national background, and the Commission pursues only the ‘common good’ of their respective principal constituents. However, it is unclear to which degree these attempts are successful, given the evidence that nationality continues to play a role in shaping actor’s decision-making in other international organizations like the European Central Bank or the United Nations (see, e.g., Novosad & Werker, 2014; Sturm & Wollmershäuser, 2008). Thus, it remains an open and unresolved question whether the EU succeeds in overcoming these features inherent to comparable institutions.

Member states actively engage in effort to acquire seemingly attractive Commissioner posts for ‘their’ Commissioner (cf. description in Napel & Widgrén, 2008; Nugent, 2001). Repeatedly, former Commissioners gain important positions in their home country after their term in Brussels. Vaubel *et al.* (2012) suggest that rational Commissioners should thus to some degree take their or their parties’ future electorate and career prospects into account. As an illustrative case, the official portfolio description of the Commissioner for Economic and Financial Affairs emphasizes the responsibility “for [e]nsuring enforcement of the Stability and Growth Pact and reviewing its fiscal and macroeconomic surveillance legislation [...] and budgetary rules”.³ Nevertheless, the current Commissioner, Pierre Moscovici, a former national minister in France, was one of the first to sign a request from the French Socialist Party for communitization of national government debt on the European level. This caused massive controversies among member states, and suggests that member states have vested interests in their Commissioners’ behavior.⁴

Despite these incentives, it is unclear to what degree Commissioners actually possess the means to favor their country of origin, and whether the extent of the variation is large enough to be quantitatively measurable. It is advantageous for our approach that the Commissioner for Agriculture can not only be linked to a specific fund; the agricultural budget is also of high economic importance. Since its inception, the Common Agricultural Policy (CAP) has been among the most important pillars of the EU’s work and consumed a major share of the overall EU budget.⁵ Until the 1980s, it represented more than 70% of the community’s overall budget and currently accounts for approximately 40%.⁶ A key component of the CAP is the support of the agricultural sector with a specifically created EU fund, the European

² http://ec.europa.eu/atwork/index_en.htm (last accessed on May 4, 2015).

³ http://ec.europa.eu/commission/2014-2019/moscovici_en (last accessed on May 16, 2015).

⁴ See: https://magazin.spiegel.de/digital/?utm_source=spon&utm_campaign=inhaltsverzeichnis#SP/2015/19/134762470 (last accessed on May 15, 2015).

⁵ http://ec.europa.eu/agriculture/cap-history/index_en.htm (last accessed on May 3, 2015).

⁶ http://ec.europa.eu/agriculture/index_en.htm (last accessed on April 16, 2015).

Agricultural Guidance and Guarantee Fund (EAGGF). The related fund budget decisions are of high political salience (cf., [Schneider, 2013](#)) and the Commissioner can influence the budgetary process as an agenda setter or due to information advantages. Thus, if national background matters, we can plausibly expect to have enough statistical power to identify its effects.⁷

Our paper relates to the literature on the effects of national and regional identity or ethnicity on political decisions and budget allocations. Recently, [Jennes & Persyn \(2015\)](#) showed how political representation explains variations in the geographical distribution of social security and tax transfers in Belgium over the 1995-2000 period. They find that providing a minister leads to increased transfers to the respective home region. Likewise, [Dreher *et al.* \(2015\)](#) use a newly developed database that coded Chinese development finance projects across 3,545 locations in Africa over the 2000-2012 period to investigate how African leaders redirect Chinese development aid towards their home region. In a similar vein, but with a worldwide focus, [Hodler & Raschky \(2014\)](#) use a panel of 38,427 subnational regions from 126 countries over the 1992-2009 period to study whether political leaders favor their birth region.

More specifically, we also relate to a large literature on European institutions – mostly focused on the European Council – and EU politics (for an overview see, e.g., [Baldwin & Wyplosz, 2012](#)). [Aksoy \(2010\)](#) shows an influence of voting power and agenda-setting on the allocation of the EU budget. Similarly, a study of the EU cohesion fund over the 1989-1999 period by [Bouvet & Dall’Erba \(2010\)](#) indicates that factors like national and regional electoral margins also influence the allocation process. [Schneider \(2013\)](#) finds that member states receive larger shares of the EU budget in the years prior to domestic elections. We build on recent, mostly qualitative work, which started to examine the behavior of the individual actors who form the EC (see for instance [Smith, 2003](#); [Wonka, 2007](#)), by studying the influence of the EU Commissioners for Agriculture on the share of EU spending received by their home countries quantitatively.

A closer look at the the assignment of our treatment, the Agricultural Commissioner, reveals a very complex selection process. While the Heads of State or Government and the Commissioner candidates usually try to lobby the designated President of the EC to assign them one of their preferred portfolios (see [Nugent, 2001](#)), it is the President who finally decides on the portfolio distribution.⁸ The complicated bargaining process has to take internal demands and political power into account and often results in surprising outcomes. Which country out of

⁷ Farmers usually constitute a well organized lobby group (see, e.g., [Olson, 1965](#)), which can set incentives for the respective national governments to lobby on their behalf or for the Commissioners to take account of their future support if they consider returning to national politics in the future.

⁸ The position of the President of the EC in the appointment process was strengthened in the Treaty of Amsterdam. [Napel & Widgrén \(2008\)](#) provides an in-depth description of the appointment procedure for the EC President and the Commissioners.

all members is assigned *one particular post* is nearly unpredicable *ex ante*.⁹

Our identification strategy with country and time fixed-effects is equivalent to a difference-in-differences approach, and thus does not have to assume random treatment assignment. Even though outcomes are hard to predict, there are certainly states with little interest in agriculture and a systematically lower likelihood of treatment. If some countries are constantly less likely to provide the Commissioner, the country fixed-effects suffice in avoiding selection-bias. We also remedy this most obvious selection problem by excluding all the largest member states, with potentially less interest in holding this position, as well as consecutively excluding each member state individually. In addition, we control for relevant selection factors, like the importance of the agricultural sector, economic downturns or the level of support for the EU in the member states (cf., [Schneider, 2013](#)). We find a significant positive relationship between the Commissioners' country of origin and the agricultural fund spending these countries receive during their terms in office. This translates on average into about 510 million EUR per year for the country of origin of the respective Commissioner.

A consistent estimation of the average treatment effect in our set-up relies on the assumption of parallel trends between treated and untreated states. We find no signs of problematic pre- and post-treatment trends when we add lead and lag variables in a setting similar to [Autor \(2003\)](#). In addition, the results remain robust when we account for potentially different developments with country-specific time trends. Any remaining selection-on-unobservables would have to be between one and nearly five times as strong as selection on the comprehensive set of observable factors to account for the positive relationship (cf., [Oster, 2013](#); [Altonji et al., 2005](#)). Thus, we cannot find a compelling reason to reject the notion of a causal link between EU Commissioner nationality and their budget allocation behavior.

The paper is structured as follows: Section two summarizes the relevant literature and shortly explains the structure of the EU Commission with its members. Subsequently, it outlines why examining the Commissioner for Agriculture and the directly related agricultural fund provides a promising opportunity to assess the effect of nationality on budget allocation decisions in the EU. In section three, we describe the data and our empirical strategy. Section four presents the main results and robustness checks and section five concludes.

⁹ This is illustrated by the example of the current Commissioner for Agriculture, Phil Hogan, from Ireland. Several states had nominated candidates suitable for the Agricultural position, including Romania and Spain (<http://www.independent.ie/irish-news/politics/phil-hogans-big-job-interview-in-brussels-30560917.html>, last accessed December 15, 2015), along with Eastern European states. Another recent example is the appointment of the current German Commissioner Günther Oettinger in 2014. The German Government and Oettinger himself had expressed a preference for the trade portfolio and, until a few days before the decision, media expected him to be the next Trade Commissioner. To general surprise, Oettinger was appointed as Commissioner for Digital Economy and Society, instead. See, for example, on the common expectations: German weekly *Wirtschaftswoche* at <http://www.wiwo.de/politik/europa/eu-kommission-merkel-will-oettinger-als-handelskommissar/10219282.html>. For the surprise after the final decision see e.g., *Borderlex* at <http://www.borderlex.eu/trade-commissioner-malmstrom-appointment-comes-surprise/> (last accessed on April 30, 2015).

2 Theoretical Considerations

2.1 The Role of National Background in the European Union

In recent years, political economy research has examined many factors that determine money allocation in international politics. Political power in international organizations is among other things reflected in the distribution of money. Dreher *et al.* (2009a) and Kuziemko & Werker (2006), for instance, find that temporary membership in the United Nations Security Council increases the amount and extent of official development assistance a country receives during its appointment. Other studies show the importance of political leaders for a nation's advancement in various dimensions. Franck & Rainer (2012) indicate that the ethnicity of leaders in sub-Saharan countries is crucial for the development of favoritism in terms of education and health expenditures. Dreher *et al.* (2009b) point out that the individual background of political leaders affects the reforms they implement and Olken & Jones (2005) that leaders have a great level of influence on the economic performance of their country. Thus, it is evident that the roles of individuals have to be taken into account when analyzing political and economic processes.

The European Union is a particularly interesting object of study, and the development of its role in European politics has been at the core of a considerable number of studies (e.g., Alesina *et al.*, 2005). Previous research carves out different centers of power in the European political game. The majority of empirical analyses focuses on the Council of the European Union (Council) as the essential legislative organ of the EU, where the member states' governments are represented.¹⁰ These studies (e.g., Aksoy, 2010; Carrubba, 1997; Schneider, 2013) investigate the distribution of EU funds, suggesting that member states try to increase their share of the amounts allocated.

Kauppi & Widgrén (2007; 2004) show that voting power in the Council (measured by the Shapley-Shubik index) explains a significant share of the variation in the budget allocation.¹¹ In a similar vein, Rodden (2002, p. 170) states that “empirical analysis demonstrates a close connection between the distribution of votes and fiscal transfers in the legislative institutions of the European Union.” Aksoy (2010) and Mazumder *et al.* (2013) present arguments and empirical evidence suggesting that holding the rotating EU Council Presidency can be used to achieve the respective country's strategic interests. Carnegie *et al.* (2014) show that former colonies of countries who hold the Council presidency obtain significantly more foreign aid. Furthermore, Schneider (2013) finds that countries receive larger shares of the EU budget

¹⁰ Together with the European Parliament, the Council of the European Union, sometimes also referred to as the Council of Ministers, forms the EU's legislative. Depending on the policy area, the Council meets in different compositions, because all member states dispatch their national ministers who are responsible for each portfolio.

¹¹ For explanations, performances, and discussion of different power indices, see Barr & Passarelli (2009).

in years before domestic elections. She explains her finding with an increase in the member states' bargaining powers resulting from the government's need for successful negotiation results. Carrubba (1997) points out that countries with weaker domestic EU support within the population receive larger net transfers.

The Commissioners' influence on the EU budget distribution has, to the best of our knowledge, not been systematically examined in the existing literature. Yet, theoretical literature indicates that Commissioners are potentially influential in every phase of the legislative process (Bachtler & Mendez, 2007; Tömmel, 2014), even though the EC has no final right to decide about EU policy directly as far as voting is concerned. Figure 1 depicts the structure of EU decision-making and the central role of the EC in interaction with the parliament and the national governments.

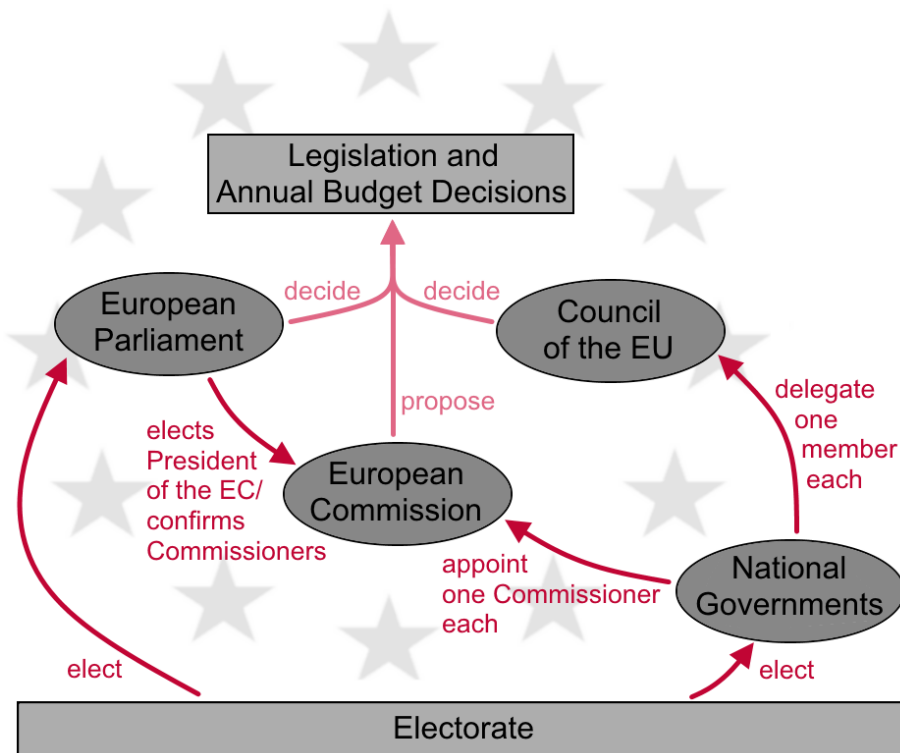


Figure 1: **Simplified Structure of the EU**

The main actors and the structure of decision-making in the European Union (own illustration); compare e.g. Baldwin & Wyplosz (2012) and Tömmel (2014).

The European Commission is the main executive and administrative organ of the EU. Its wide range of functions includes an exclusive right for policy initiation, implementation, and monitoring (cf., König & Mäder, 2014), as well as control over EU programs, mediation between the member states' governments, and external representation tasks (Egeberg, 2010). It is organized in a cabinet structure and Commissioners are – comparable to national ministers – responsible for a certain portfolio and in most cases related to one specific “Directorate

General” in the Commission’s administrative section.¹² The appointment of the 27 Commissioners follows the principle: one country, one Commissioner. However, it is the President of the EC who assigns the portfolios to the Commissioner candidates, which often results in unexpected portfolio allocations (Nugent, 2001). As outlined above, it is common that the specific choices remain unclear until the day of the announcement, making the final allocation of the Commissioner positions close to random.

One can observe that, in contrast to past terms, member states nowadays increasingly delegate high ranked politicians (e.g., former national ministers) and members of the governing party as Commissioners to Brussels (Egeberg, 2010; Döring, 2007). According to Wonka (2007), 67.4% of the Commissioners, chosen by the member states from 1958 to 2006, came from the governing party and only 18.1% from the opposition. This suggests a principal-agent-structure (Vaubel, 2006; Wonka, 2007), where governments select reliable actors who are expected to take national interests into account at the EU-level (Wonka, 2007). Although national governments have weaker means of exerting pressure and controlling the EC’s decisions in the post-nomination phase (Vaubel, 2006), career-prospects (e.g., getting a leading position in national politics or elsewhere as a reward) and the option to be renominated for the lucrative job are potential incentives to keep the country of origin’s (government’s) policy preferences in mind (Döring, 2007; Vaubel *et al.*, 2012).¹³ In line with these arguments, Vaubel *et al.* (2012, p.59) demonstrate how many Commissioners systematically plan their “life after the Commission”: In their sample, they find that 36% change to the private sector or lobby groups and 43% return to national politics.

This political self-interest and the fact that candidates for the position are chosen by the national governments suggests the possibility of potential conflicts of interest (Tömmel, 2014).¹⁴ On the one hand, all Commissioners owe their position to a system of proportional national representation and a proposal of ‘their’ national government, but, on the other hand, they are supposed to act independently and in the “general interest” (TEU). This conflict of interests casts doubts on initial studies in political science which often described the Commission as a unitary technocratic actor, pursuing interests distinct from those of member states, and supports authors like Wonka (2007), who more recently have rejected this assumption. He deems it rather unlikely that the delegates – who are assumed to act like politicians – will collectively turn against the governments which once helped them take office. Thomson (2008) supports this notion by showing that Commissioners share the policy positions of the government of their country of origin.

¹² See also http://ec.europa.eu/commission/2014-2019_en (last accessed on May 4, 2015) for details on the EC.

¹³ In the context of two German cities, Potrafke (2013) provides another example of the relationship between voter preferences and public spending in a principal-agent structure.

¹⁴ In addition, current outside earnings could also create conflicts of interests, which we do not further consider here as they are not systematically related to our research question. Focusing on members of the German Bundestag, Arnold *et al.* (2014) find no clear relationship between outside earnings and parliamentary effort.

In fact, the nature of the EC has at all times raised the general suspicion of being an arena for national interests. *The Economist* calls it “one of the better jokes in Brussels” that Commissioners are “completely independent” of their home countries.¹⁵ This notion is supported by some anecdotal evidence. In 2007 and 2008, for example, the German Commissioner for Enterprise and Industry, Günter Verheugen, repeatedly opposed a Commission proposal to reduce new car’s carbon dioxide emissions. This was widely perceived as support for the car industry, one of Germany’s most important economic sectors. Due to the opposition of Verheugen, the initial proposal by the Commissioner for Environment, Stavros Dimas, was weakened. Afterward, Dimas admitted that Verheugen “won against him” in the negotiations.¹⁶

Another example illustrates that nominated candidates do consider the promotion of national interests part of their task. Before taking office in 2014, Věra Jourová, the current Commissioner for Justice, Consumers and Gender Equality, was asked about her aims as the new Czech EU Commissioner. She said that “[t]he European Commissioner must of course be impartial, without regard to national interests. Beyond this, however, I would like to focus on coordinating the activities of Czech people in EU institutions to promote Czech national interests – after my working hours, if you will.”¹⁷ These examples are in line with Egeberg (2006, p. 13) who remarks that “Commissioners as well as cabinet ministers have their ‘local’ community back home which imposes certain expectations on them while in office.”

2.2 Identifying the Link Between Commissioners and Budget Items

Despite these studies and anecdotal evidence, it is not clear whether the above examples constitute exceptions or can be supported by empirical evidence. To be able to identify this relationship, it is of particular interest to consider the role, room to maneuver, and power of the Commissioners in the legislative process. The Commission’s most relevant power is its monopolistic position as the agenda setter, characterized by an exclusive privilege to make legislative, budgetary and program proposals in areas that fall under EU responsibility (Article 17, TEU). It can decide, on the whole, whether to take up policy propositions from the European Parliament (EP) and the Council or not (Bachtler & Mendez, 2007; Egeberg, 2010): “The Council, the EP and member states may make suggestions to the Commission and can call on the Commission to present new proposals, but it is the European Commission that actually drafts proposals” (Roozendaal & Hosli, 2012, p. 449). As a consequence, the Commission can exert influence by defining “the terms in which issues are discussed” (Hosli

¹⁵ See *The Economist*, under <http://www.economist.com/node/10171795> (last accessed on April 28, 2015).

¹⁶ See *Deutschlandfunk* for the translated direct quote under http://www.deutschlandfunk.de/autolobby-contra-klimaschutz.724.de.html?dram:article_id=98703 (last accessed on April 28, 2015) and *EU Observer* under <https://euobserver.com/economic/25453> (last accessed on April 28, 2015).

¹⁷ For the direct quotation see *Radio Praha* under <http://www.radio.cz/en/section/curraffrs/minister-vera-jourova-nominated-for-czech-eu-commissioner> (last accessed on April 30, 2015), written July 21, 2014.

& Thomson, 2006, p. 397).¹⁸

In the run-up to the introduction of a new policy proposal, the Commissioners try to anticipate and consider possible supporting coalitions in the Council or EP. As “interface managers” (Tömmel, 2014, p. 152), it is their task to mediate between the legislative organs and to find compromises with majority appeal. According to Hosli & Thomson (2006), the Commissioners are also continuously involved in discussions in the Council, and negotiations between the EP and the European Council. In addition to organizing majorities in the Council or EP, they also need to win the support of their colleagues in the Commission. Hence, it is common practice to do “package deals” (Tömmel, 2014, p. 152) in order to gain enough support for one’s proposal. Nevertheless, the intra-Commission decision-making process is a first control-level that might limit the ability of individual Commissioners to pursue their own agendas.

It seems plausible that Commissioners would use their informational advantages vis-à-vis the EP and the member states’ representatives in the Council (Döring, 2007; Hosli & Thomson, 2006). These advantages are derived, for example, from the staff of their associated Directorate General or their consultations with external experts and acquisition of information from interest groups in the early stages of the legislative process. As a consequence the Commission, which takes part in Council meetings, can try to forge political deals. Likewise, Commissioners supposedly have informational advantages (albeit in a weaker form) in negotiations with other Commissioners (Thomson, 2008), when decisions in their field of activities are made. The decision-making process at these meetings and negotiations is opaque, however, and only scarcely documented; thus not allowing a systematic analysis of the relationship we are interested in. To the best of our knowledge there exist no data that allows for the decomposition of individual Commissioners’ budgets so that they may be compared to the shares that each member country receives. The only data that are available in the necessary form relate to the various funds that the EU manages.

We focus on the EU Commissioner for Agriculture, the one case where an individual Commissioner is solely responsible for payments from a specific fund, namely the European Agricultural Guidance and Guarantee Fund (EAGGF). This fund is the main pillar of the EU’s Common Agricultural Policy and came into force in 1962. Up until now, the agricultural fund has made up the greatest part of the EU’s overall expenditures (cf. Figure 2). In spite of two substantial reforms of the CAP in 1992 and 2003 that gradually shifted the EU’s agricultural expenditure from guaranteeing price support for agricultural products to individual direct

¹⁸ Empirical evidence about the budgetary impact of such proposal powers is provided by Knight (2005). Investigating the allocation of transportation projects in the U.S. in 1991 and 1998, he finds that congressional districts which have a member on the transportation authorization committee and thus possess proposal power, receive significantly more project spending than districts without a member on this committee. Bailer (2004) distinguishes between exogenous and endogenous power in the European Council. Exogenous power includes economic strength and votes, while endogenous power is drawn from the proximity to the EC, which she relates to bargaining success.

payments for farms (decoupling) and rural development programs (Baldwin & Wyplosz, 2012; Fouilleux, 2010), the EAGGF was allocated consistently annually until 2007.

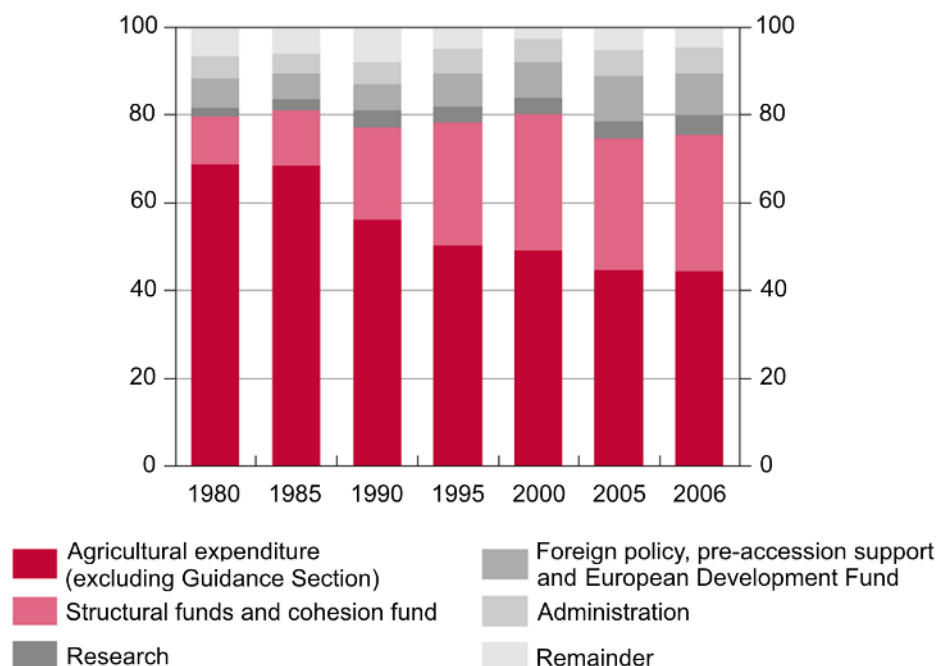


Figure 2: **EU Budget Structure**

Structure of EU Expenditures, percentages of the total. Source: European Commission, adapted from Butzen *et al.* (2006).

The CAP scheme is particularly well-suited to analyze the relationship between national background and budget allocation. It has a re-distributional nature and provides a classic example of pork-barrel politics (Weingast *et al.*, 1981), where each country supposedly aims to acquire as many fund resources as possible. The CAP is a major and salient budgetary item in the overall budget. Hence, it is plausible that member states are interested in trying to make use of “their” Commissioner as their popularity with the electorate at home can depend on their bargaining performance (Baldwin & Wyplosz, 2012; Schneider, 2013).¹⁹

A precise description of the annual CAP budget negotiations, which take place a year ahead of the actual budget year is provided by Fouilleux (2010, p. 344):

“CAP decision making usually begins with a proposal from the Commission [...]. The Agricultural Council meets monthly, more frequently than most of the EU Councils. One of these

¹⁹ We do not discuss the general welfare implications of this controversial redistributive policy here. A similar case of how origin matters in politics documented at the within-country level is Stratmann & Baur (2002). In their analysis of the German Bundestag, they indicate that particularly first-past-the-post elected parliamentarians seize opportunities for pork-barreling in an attempt to satisfy “their” electorate. Whether and why more market-based approaches and less pork-barrel politics could lead to welfare improvements is beyond the scope of this paper. Evidence that more reliance on market forces does not only lead to higher growth rates but also relates to higher subjective well-being is, for example, presented by Gehring (2013).

meetings was usually set aside to discuss what was called the ‘price package’ for the following year, at which the member states decided on such issues as the level of guaranteed prices for each product and the amount of quota by country” (Fouilleux, 2010, p. 344).²⁰

Accordingly, the Agricultural Commissioner has multiple opportunities to influence budget distribution that go beyond gaining leverage through the EC’s budget proposals. Negotiating ‘price packages’, their agenda setting position, and information advantages can be used to redirect funds.

The requirements for reliable identification of a causal relationship that we formulated above are only partly fulfilled by two of the other Commissioners: the Commissioner for the Budget and the Commissioner for Regional Policy. Both are agenda setters in their respective realm, and responsible for EU funds. Regional policy is closely related to two structural funds: the European Social Fund (ESF) and the European Regional Development Fund (ERDF). The allocation of these funds is to a larger degree based on formal criteria, however, and the Regional Commissioner’s portfolio cannot be separated from the portfolios of other Commissioners as clearly.²¹ Schneider (2013, p. 466) explains that “since ERDF/ESF transfers are allocated on a project-level basis, states are more restricted in their annual negotiations to move around already stipulated funds.”

The Budget Commissioner has the main responsibility for managing the budget negotiations with the member states.²² However, he has more of an influence on the allocation of budgets towards the individual budget items than on the distribution across member states, a responsibility which falls to the respective Commissioners or is decided by the whole Commission. Moreover, there is only limited room to maneuver in the annual budget negotiations due to the constraints set by the long term multi-annual financial frameworks of the EU.²³ Hence, we are convinced that examining the Commissioner for Agriculture provides the best option to analyze the relationship between national background and Commissioners’ behavior. It is a case where the Commissioners have the leeway to exert influence on an economically significant decision where we can directly trace their decisions back to impacting a specific fund.

²⁰ Before the Lisbon-Treaty (2007), the European Parliament had little influence on budget decisions in the field of CAP (see e.g. Crombez & Swinnen, 2011; Schneider, 2013).

²¹ For example, one criterion is that “to be eligible for most of the ERDF/ESF resources, the per capita GDP of the country has to fall below 75 percent of the average GDP in the EU” (Schneider, 2013). For further details on the funds and criteria of the ERDF and ESF fund see http://ec.europa.eu/regional_policy/en/funding/erdf/ and <http://ec.europa.eu/social/main.jsp?langId=en&catId=1>.

²² See the official homepage of the current Commissioner for official goals and responsibilities under http://ec.europa.eu/commission/2014-2019/georgieva_en (last accessed on April 30, 2015).

²³ The multi-annual financial frameworks of the EU act as a severe constraint and are negotiated by the heads of governments for seven (previously five) years (Schneider, 2013). In the multiannual budget negotiations, the member states “outline EU spending by setting ceilings on expenditures for each budget category and on total expenditure” (Schneider, 2013, p. 465). Thus, relating annual budget data to the Budget Commissioner might not provide enough variation to find a significant relationship.

3 Data and Empirical Strategy

3.1 Data

In the following we describe our variables of interest, and give a brief description of the relevant control variables which are derived from [Schneider \(2013\)](#). Since the EU has undergone several enlargement rounds (cf. Figure 3), the length of time that is covered depends on the respective country's timing of joining the EU. Bulgaria and Romania are not included as their one year of membership from 2005-2006 does not allow for an estimation with country fixed-effects. We thus analyze a non-balanced panel for a maximum of 25 countries.

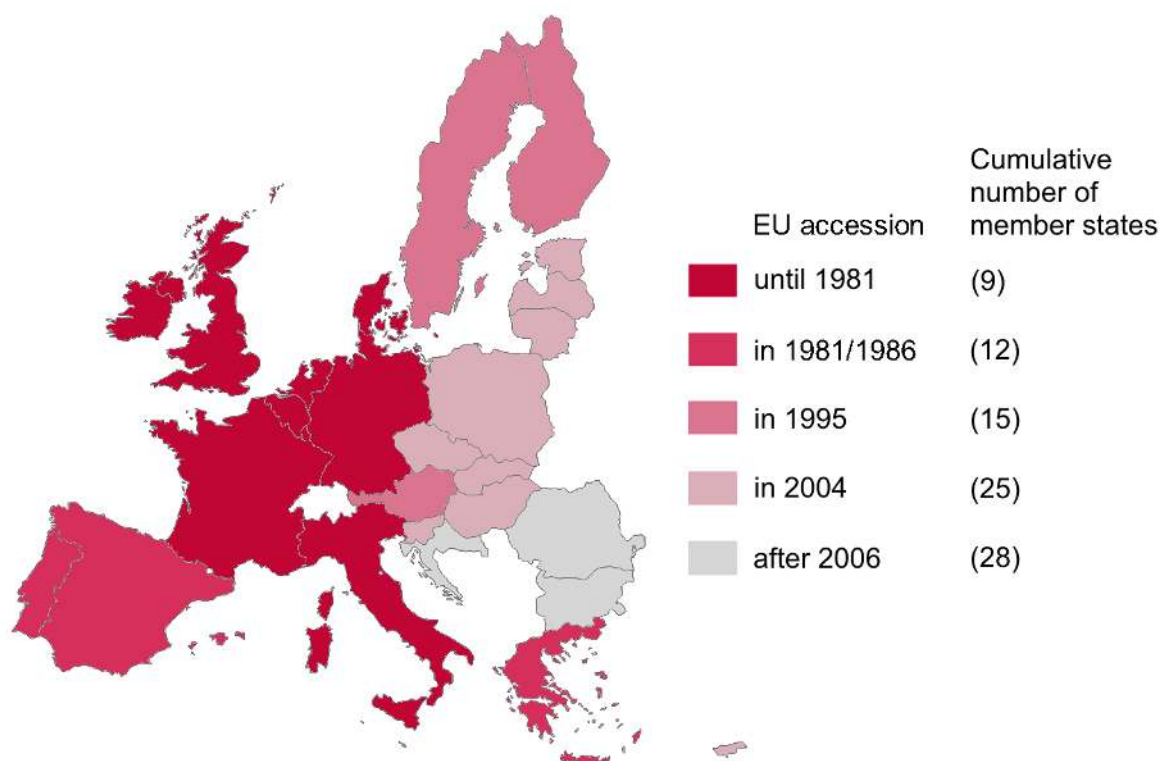


Figure 3: **Dates of EU Accession**

Own graphic based on data provided by the European Commission.

As dependent variables, we are interested in the share of the EU budget that a particular country i receives at time t . Our main variable and the focus of our paper is the share of the EAGGF Budget that country i receives as a percentage of the total EU budget. The budget shares are derived from the annual reports of the European Court of Auditors and range from 1979 to 2006. More recent information does not exist in a comprehensive way at

the moment.²⁴

At present, there exists no comprehensive information for more recent years. We use the share to be able to easily disentangle changes in the overall budget sizes from changes in relative allocation. This way of measuring negotiation success is more robust when examining a total budget that changed over the course of time (Aksoy, 2010; Butzen *et al.*, 2006).²⁵ In addition to our focus on shares of the agricultural funds, we also test whether similar relationships exist for the overall budget and the regional and social funds.

Our variable of interest is the nationality of the respective Commissioner. We use multiple sources (see Appendix A) to gather the terms of the EU Commissioners for Agriculture over our sample period. We code a variable *Commissioner* that contains the share of a year that country *i* provides this Commissioner (measured by months in office). Appendix A shows the respective appointment and resignation dates of all Commissioners during our sample period. With few exceptions, *Commissioner* has the nature of a binary variable (being 1, if the member state appoints the Commissioner in a certain year and 0 otherwise), because Commissions were usually replaced in January. The average tenure of office is three years.²⁶ In addition, we also code variables *Commissioner(B)* and *Commissioner(R)* for the EU Commissioner for the Budget and the Commissioner for Regional Policy respectively.

For reasons of transparency and to allow comparability with the existing literature, we do not propose our own set of control variables but rather adopt those in Schneider (2013). Her set of control variables is based on EU distribution principles (see, e.g., Bouvet & Dall’Erba 2010) as well as on previous findings in the literature. Note that our results holds when adding, for example, the changes or lags of this comprehensive set of control variables in addition. Appendix B provides the exact definitions and data sources. For our identification strategy

²⁴ The EAGGF was replaced by two follow-up funds in 2007 (http://ec.europa.eu/agriculture/index_en.htm, last accessed on April 16, 2015). This is the main reason that our sample ends in 2007. As one of these funds, the European Agricultural Fund for Rural Development (EAFRD) co-finances economic rural development programs of the member states (see http://ec.europa.eu/agriculture/cap-funding/funding-opportunities/index_en.htm, last accessed on April 22, 2015), it is more difficult to directly trace its changes back to the actions of the Commissioner for Agriculture. It pursues goals similar to those of the cohesion and regional funds and might thus be influenced by other Commissioners as well. Specifically, it mostly “co-finances the rural development programs of the Member States” (see http://ec.europa.eu/agriculture/cap-funding/funding-opportunities/index_en.htm, last accessed on May 20, 2015). Compare Schneider (2013) for a short description of the data sources. The original reports are available from the authors on request.

²⁵ Within the scope of this paper, we disregard contractual amendments which altered the distribution of power between the EU’s three main organs and changed the budgetary procedures. Crombez & Hix (2011) for instance argue that under qualified majority voting, it should be easier for the Commission to push its interest through by focusing on pivotal member states. The length of our sample, however, does not offer enough statistical power to make valid estimations for sub-periods. See Crombez (2000), Hosli & Thomson (2006), and Aksoy (2010) for consequences of the particular treaties, voting rules and the differences between ‘consultation’ and ‘co-decision’ procedures and Heinemann (2003) for an investigation of the political economy of EU enlargement and treaty amendments.

²⁶ Due to the fact that we focus on one out of all Commissioners, the treatment is relatively rare in comparison to the counterfactual. Note that our results hold also with robust regression techniques which specifically tackle this concern.

it is most important that the controls condition on the most likely selection mechanisms.

Election Year (Binary) and *Pre-election Year (Binary)* are binary variables that account for the years before and during domestic elections, which could relate to receiving “supportive” financial flows. Most importantly for us, we need to control for factors that could directly relate to receiving the Agricultural Commissioner: States with higher unemployment, a lower development and higher dependence on agriculture might be more likely to provide the Commissioner. We use data for *Unemployment Rate, Per Capita GDP (EU=100)* (100 equals the EU average) and *Employment Agriculture (ln)* (measuring the number of people employed in the agricultural sector as a natural logarithm in millions) from Eurostat to account for selection on these observables. We also use data are from Eurobarometer to measure *Domestic EU Support (%)*. The EU might be more likely to grant a member state the Agricultural Commissioner and increased budget shares if there is a high share of eurosceptics in the electorate.

Table 1: **Descriptive Statistics**

| | N | Mean | SD | Min | Max |
|------------------------------------|-----|--------|-------|--------|--------|
| <i>Agricultural Fund Share</i> | 383 | 3.89 | 3.90 | 0 | 17.49 |
| <i>Overall Funds Share</i> | 383 | 5.98 | 5.21 | 0.02 | 20.84 |
| <i>Regional/Social Funds Share</i> | 383 | 1.46 | 1.73 | 0 | 9.19 |
| <i>Commissioner</i> | 383 | 0.07 | 0.26 | 0 | 1.00 |
| <i>Commissioner (Binary)</i> | 383 | 0.08 | 0.27 | 0 | 1.00 |
| <i>Commissioner (B)</i> | 383 | 0.06 | 0.24 | 0 | 1.00 |
| <i>Commissioner (R)</i> | 383 | 0.07 | 0.26 | 0 | 1.00 |
| <i>Time in Office</i> | 383 | 0.26 | 1.12 | 0 | 9.83 |
| <i>Pre-election Year (Binary)</i> | 383 | 0.26 | 0.44 | 0 | 1.00 |
| <i>Election Year (Binary)</i> | 383 | 0.27 | 0.45 | 0 | 1.00 |
| <i>Employment Agriculture (ln)</i> | 383 | 5.60 | 1.58 | 0.99 | 8.01 |
| <i>Number of EU Members</i> | 383 | 15.20 | 5.19 | 9.00 | 25.00 |
| <i>Unemployment Rate</i> | 383 | 8.28 | 3.65 | 0.70 | 21.30 |
| <i>Per Capita GDP (EU=100)</i> | 383 | 100.15 | 41.51 | 23.05 | 301.18 |
| <i>New Member State (Binary)</i> | 383 | 0.22 | 0.42 | 0 | 1.00 |
| <i>Voting Power Council (%)</i> | 383 | 7.24 | 4.67 | 0.90 | 17.86 |
| <i>Domestic EU support (%)</i> | 383 | 45.78 | 22.81 | -30.00 | 86.00 |

Observations in sample from Table 2, column 4. N = number of observations, Mean = arithmetic mean, SD = standard deviation, Min = minimum value, Max = maximum value.

Bargaining power in the EU Council is quantified using the Shapley-Shubik index with the variable *Voting Power Council (%)*.²⁷ *New Member State (Binary)* is a binary variable for all new members until the next enlargement round of the EU, which is coded as 1 if a country is a new member in this period and 0 otherwise. It accounts for the fact that new members

²⁷ For the exact calculation of the power indices see Bräuninger & König (2005).

receive lower budget shares initially because of their inferior administrative capacity and less developed bargaining experience in attracting a share of the funds (Plümper & Schneider, 2007; Schneider, 2013). The variable *Number of EU Members* accounts for the enlargements by controlling for the number of member states. Due to the enlargement rounds, the budget shares that single member states receive decrease over time. These factors together should capture the most important observable selection variables. Descriptive statistics are provided in Table 1.

3.2 Empirical Strategy

Our main estimation equation is

$$Y_{i,t} = \alpha + \beta C_{i,t} + X'_{i,t}\gamma + \vartheta_i + \tau_t + \epsilon_{i,t},$$

where $Y_{i,t}$ is the budget share country i gets in year t , α is a constant, $C_{i,t}$ is the variable for appointing the Commissioner for Agriculture, $X_{i,t}$ represents the vector of control variables, ϑ_i are fixed-effects for country i , τ_t indicate time dummies and $\epsilon_{i,t}$ is an error term.

As mentioned above, we follow Schneider (2013) in the choice of control variables. We differ in some aspects from her specification, however. First, we add year dummies δ_t that account for unobservable year-specific variation that might bias the estimate of $C_{i,t}$. Second, Schneider (2013) uses panel-corrected standard errors (PCSE) to allow for panel-heteroscedasticity and contemporaneously cross-sectionally correlated errors (Hoechle, 2007), and the Prais-Winsten estimator to allow for panel-specific first-order auto-correlation. The Feasible Generalized Least Squares (FGLS) approach of PCSE offers potential efficiency gains, as it assumes only first-order auto-correlation of error terms within clusters. Though, it rests on the assumption of correct specification of the error term structure and can be biased in the presence of cluster-specific fixed-effects.²⁸

The fixed-effects (FE) within estimator with cluster-robust standard errors provides a more conservative estimation that is less sensitive to misspecification. In cases of relatively small cluster sizes, it is appropriate to use the within estimator standard errors for inference (see Dube and Lindo in Cameron & Miller, 2015). Our estimates are robust to using PCSE, as we will demonstrate below, but we prefer the more conservative fixed-effects within estimator. We use two-way clustering where we cluster at the country and year level (Cameron *et al.*, 2011). Because the dependent variable is a share out of all member states, there necessarily exists correlation across observations at each point in time, which makes it important to cluster on years as well. To estimate our regressions, we make use of the procedures developed by Baum *et al.* (2002) and Schaffer (2010).

²⁸ This happens because the standard errors of the fixed-effects are not consistently estimated. This would not be problematic in settings where we are not specifically interested in the fixed-effects and their significance level. Here, however, the FGLS estimator is formed using these residuals (see Cameron & Miller, 2015).

4 Results

4.1 Main Results

Table 2 shows the main results for the 1979-2006 period. For reasons of transparency and comparability, the specification in column 1 uses PCSE as in [Schneider \(2013\)](#), and adds our *Commissioner* variable. The coefficient for *Commissioner* is positive and significant at the 1%-level, and remains nearly unchanged when adding year fixed-effects in column 2. In column 3, we replicate column 2, but use the more robust FE within estimator with standard errors clustered at the country and year level. The coefficient for *Commissioner* is 0.924 and is significant at the 1%-level. Having the EU Commissioner for Agriculture is thus associated with an increase in the share of the overall EU budget obtained by the respective country of approximately 1 percentage point. This change relates on average to an increase of about 25% percent in the agricultural receipts for the home country and would translate to 850 million EUR per year (for a fictive average sized country) based on the 2006 EU budget.

However, using general year dummies and country fixed-effects might not capture all unobserved variation over time. In their analysis of labor market regulation on manufacturing performance in Indian states, for example, [Besley & Burgess \(2002\)](#) show that their main findings disappear after controlling for cluster-specific time trends. To resolve this matter, we add country-specific time trends in addition to the year dummies to account for changes in the share of agricultural funds within a country over the sample period. If sectoral changes in the industrial structure of individual countries lead to less money being allocated to these countries, this could bias our results if it coincides with providing the EU Commissioner. In fact, adding the trends leads to a decrease in the coefficient to 0.553 in column 5. The estimate becomes more precise, however, and the standard error decreases, which again leads to a rejection of the null-hypothesis of no relationship at the 1%-level. Hence, in this most conservative specification, providing the Commissioner for Agriculture is still related to about 0.5 percentage points higher fund shares. This is our preferred estimation which we use for most further tests.

Recently, [MacKinnon & Webb \(2014\)](#) suggested that inference, i.e., estimating the correct significance level of coefficients, might be affected by wildly different cluster sizes. Cluster sizes hereby refer to the number of observations included in each cluster. In our sample, the countries are contained with different numbers of years due to differences in their respective timing of EU access. We programmed a wild cluster bootstrap procedure based on the suggestions in the appendix of [MacKinnon & Webb \(2014\)](#), [Cameron *et al.* \(2008\)](#), and [Cameron & Miller \(2015\)](#).

Table 2: Regression Results

| Dependent Variable | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Overall Funds Share</i> | <i>Regional/Social Funds Share</i> |
|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--------------------------------|--|
| <i>Commissioner</i> | 0.428*** [0.095] | 0.351*** [0.105] | 0.924*** [0.291] | 0.553*** [0.149] | 0.553*** [0.149] | - | - |
| <i>Commissioner (B)</i> | - | - | - | - | - | -0.070 [0.746] | - |
| <i>Commissioner (R)</i> | - | - | - | - | - | - | 0.102 [0.122] |
| <i>Pre-election Year (Binary)</i> | 0.108** [0.043] | 0.074 [0.047] | 0.075 [0.096] | 0.059 [0.089] | 0.059 [0.089] | 0.051 [0.128] | 0.075*** [0.010] |
| <i>Election Year (Binary)</i> | 0.060 [0.044] | 0.034 [0.046] | -0.001 [0.116] | 0.054 [0.112] | 0.054 [0.112] | 0.036 [0.111] | 0.009 [0.015] |
| <i>Employment Agriculture (ln)</i> | 1.197*** [0.171] | 0.135 [0.371] | -0.835 [1.065] | -0.120 [0.465] | -0.120 [0.465] | -0.103 [1.042] | -0.764** [0.357] |
| <i>Per Capita GDP (EU=100)</i> | 0.018*** [0.003] | 0.023*** [0.004] | 0.023*** [0.005] | 0.018* [0.010] | 0.018* [0.010] | 0.057** [0.025] | 0.006 [0.005] |
| <i>Unemployment Rate</i> | -0.057*** [0.014] | -0.002 [0.014] | -0.018 [0.056] | 0.031 [0.033] | 0.031 [0.033] | 0.184* [0.098] | 0.053* [0.029] |
| <i>Voting Power Council (%)</i> | 0.581*** [0.024] | 0.387*** [0.043] | 0.358*** [0.128] | 0.337*** [0.107] | 0.337*** [0.107] | 0.635*** [0.207] | -0.002 [0.063] |
| <i>Domestic EU Support (%)</i> | 0.000 [0.002] | 0.004 [0.003] | 0.008 [0.008] | -0.011 [0.009] | -0.011 [0.009] | -0.011 [0.010] | -0.001 [0.004] |
| <i>New Member State (Binary)</i> | -0.991*** [0.169] | -1.284*** [0.207] | -1.947*** [0.372] | -0.545** [0.242] | -0.545** [0.242] | -0.823 [0.549] | -0.576* [0.344] |
| <i>Number of EU Members</i> | -0.029* [0.017] | -0.863*** [0.240] | -0.127** [0.055] | -0.054 [0.042] | -0.054 [0.042] | 0.056 [0.280] | -0.028 [0.028] |
| Estimated Model | <i>PCSE</i> | <i>PCSE</i> | <i>FE</i> | <i>FE</i> | <i>FE</i> | <i>FE</i> | <i>FE</i> |
| Year Fixed-Effects | <i>no</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Country-specific Time Trend | <i>no</i> | <i>no</i> | <i>no</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Adj. R-Squared | 0.88 | 0.92 | 0.65 | 0.78 | 0.78 | 0.57 | 0.59 |
| Observations | 383 | 383 | 383 | 383 | 383 | 401 | 383 |
| Bootstrap p-value (2-point) | | | | | 0.019 | | |
| Bootstrap p-value (6-point) | | | | | 0.018 | | |

The table displays regression coefficients with standard errors in brackets. PCSE refers to FGLS estimation with panel-corrected standard errors to allow comparison with Schneider (2013). FE refers to the more robust fixed-effects within estimator. Standard errors with FE are multiway-clustered and allow for arbitrary correlation at the country and year level using the xtivreg2 command in Stata. The sample runs from 1979-2006 in all regressions. Bootstrap p-value refers to wild cluster bootstrap as described in the text. * p<0.10, ** p<0.05, *** p<0.01.

The program relies on a cluster bootstrap with asymptotic refinement, which is achieved by bootstrapping the pivotal Wald t-statistic. The Wald statistic is pivotal as it does not depend on any unknown parameters in $V[\epsilon|X]$. To generate the bootstrap dependent variables we used the “Rademacher”-2-point distribution as well as the “Webb”-6-point distribution (Webb, 2013). The results with 10,000 repetitions can be seen in column 5. The p-value with the Rademacher-distribution is 0.019, i.e., still corresponds to significance at the 5%-level. With the 6-point distribution, which, as Webb (2013) argues, further improves the reliability of statistical inference, the p-value becomes 0.018. Hence, we conclude that our baseline estimates of the relationship between providing the EU Commissioner for Agriculture and the share received by the respective country of origin is robustly positive and significant. It is also economically significant. The coefficient of 0.553 would translate into an increase in allocations of about 510 million EUR per year. This is a significant amount, particularly for smaller member states. For example, Denmark’s overall EU fund receipts sum up to 1,455 million EUR.

Other Commissioner positions might be used to redirect funds to their respective home countries as well. As argued above, the other obvious candidates where such a relationship could be measured are the position of Budget Commissioner and Commissioner for Regional Policy. Yet, these relationships are less well-suited for a quantitative assessment than the Agricultural Commissioner as outlined above. We use our variables for *Commissioner (B)* and *Commissioner (R)* to test for a relationship with the overall budget share and the regional and social fund’s share of the respective country of origin. As expected, we find no significant relationship. *Commissioner (B)* relates to a coefficient of -0.070 and *Commissioner (R)* to 0.102, and both are far from conventional significance levels. The most likely explanation is that either there is not enough leeway associated with these positions, the multi-annual financial framework restricts their room for maneuver, or there is too much noise in the data to be able to identify a significant relationship.²⁹

With regard to the Agricultural Commissioner, it seems possible that the Commissioners’ effectiveness in redirecting funds to their home country is enhanced with the time they stay in office. In practice, huge differences exist between Commissioners in terms of the degree of power they develop in office. Smith (2003) identifies several crucial factors, including their personal network, or their ability to learn to use their latent power effectively. Suvarierol (2008) highlights that international contacts in Brussels are especially potent in this regard. Bases on this our hypothesis is the Commissioners’ personal networks (both within and outside of the EC) improves with their time in office. This could improve their ability to pursue national interests.

Table 3 shows the test of this hypothesis. First, column 2 demonstrates that our main results remain qualitatively unchanged when using a binary variable instead of the monthly shares of

²⁹ Placebo tests using *Commissioner (B)* and *Commissioner (R)* are provided in Table 4, Appendix D. As expected, neither of them can explain a significant amount of the variation in *Agricultural Fund Share*.

Table 3: **Regression Results**

| Dependent Variable | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> |
|--|------------------------------------|------------------------------------|------------------------------------|
| <i>Commissioner</i> | 0.553*** [0.149] | - | - |
| <i>Commissioner (Binary)</i> | - | 0.496*** [0.126] | 0.320** [0.143] |
| <i>Commissioner (Binary)</i> \times <i>Time in Office</i> | - | - | 0.065 [0.075] |
| Controls | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Observations | 383 | 383 | 383 |
| Adj. R-Squared | 0.78 | 0.78 | 0.80 |

The table displays regression coefficients with standard errors in brackets. All columns use the fixed-effects within estimator. Standard errors are multiway-clustered and allow for arbitrary correlation at the country and year level using the `xtivreg2` command in Stata. ‘Controls’ includes all control variables in Table 2, column 5. This includes country and year fixed-effects, as well as country-specific time trends. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

the year that the respective country provided the Commissioner. This binary variable allows for a more straightforward interpretation of the interactions with time in office. We can see in column 3 that the interaction is positive, as expected, with a value of 0.065, but insignificant at conventional levels.

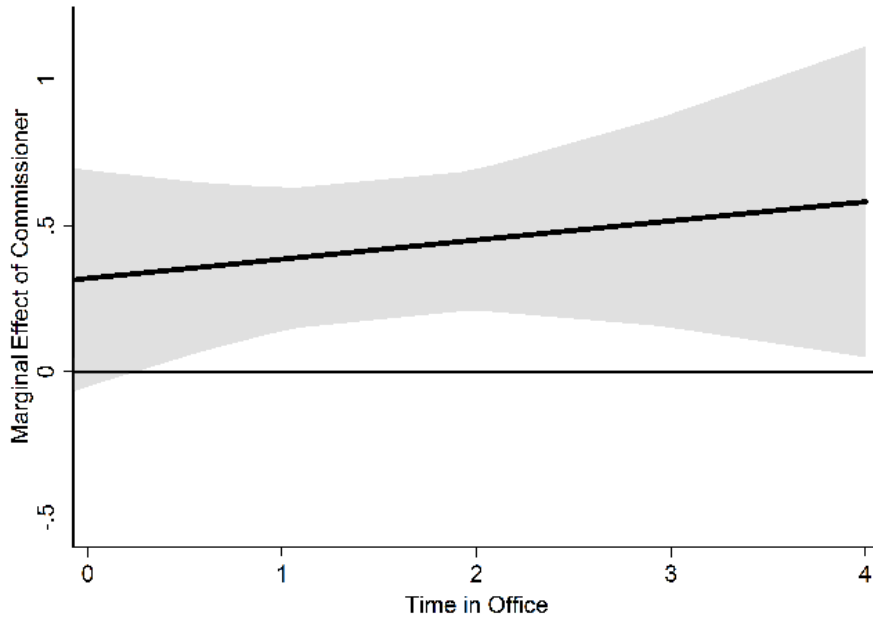
Figure 4: **Marginal Effect of *Commissioner* Conditional on *Time in Office***

Figure 4 shows the marginal effect of *Commissioner* conditional on time in office for 1 to 4 years in office, and the 99%-confidence intervals. The reason for restricting the periods to 4 years is that, in all except one case, the Commissioners remain in office for 4 years or less.

Although we remain cautious in interpreting the marginal effects due to the insignificance of the interaction term, they might tell us something about the mechanisms at work. It seems plausible, that the Commissioner needs some time to adjust the budget due to his preferences. This is supported by the fact that the positive change becomes significant only after being in office for at least one full year, and continues to increase over time. While using country-specific time trends alleviates endogeneity concerns, non-linear country-specific trends could still bias our estimations.

With the binary variable for *Commissioner* and year fixed-effects, our setting is exactly identical to a difference-in-differences (DiD) estimation where providing the *Commissioner* in year t is the treatment and all other countries form the respective control group. This comparison is helpful as with DiD the crucial assumption that assures a causal interpretation of the estimated coefficient is common trends. In our multi-period setting, we can test this assumption by examining whether different pre- or post-treatment trends exist for treated and untreated countries which would indicate non-random selection. Including lead-variables makes it possible to inspect pre-treatment trends; including lag-variables allows for an assessment of differences after the treatment is stopped.

In this case, our theoretical considerations suggest that the Commissioners are able to affect budget allocation in favor of their home country only once they are in office. A positive and significant lead-variable would thus cast doubts on the causal interpretation of our earlier results as it would indicate different trends between treated and untreated countries. Significant lags are theoretically possible and not implausible; the Commissioners could either install staff that support their cause even after their dismissal or change internal processes or rules which take some time to reverse. Additionally even once agreed upon, implementing a policy change usually takes some time.

We thus code two lead-variables, which take the value 1 only in the year $(t - 1)$ and two years $(t - 2)$ before a country provides the Commissioner, and 0 otherwise. For post-trends, we code four lag-variables that take the value 1 from one year after dismissal $(t + 1)$ to four years after dismissal $(t + 4)$, and 0 otherwise.³⁰

Table 4 depicts the results including different leads and lags. The specification is otherwise identical to our preferred specification above and includes the same controls. We estimate $Y_{i,t} = \alpha + \beta C_{i,t} + \sum_{\varphi=-2}^4 (\beta_{t+\varphi} C_{i,t+\varphi}) + X'_{i,t} \gamma + \vartheta_i + \tau_t + \epsilon_{i,t}$ with the binary indicator used for $C_{i,t}$ and with $X_{i,t}$ including linear country-specific time trends (cf. the setting in Autor, 2003). In column 1 it can be seen that both added lead-variables remain insignificant, whereas the coefficient for *Commissioner* (t) increases marginally to 0.545 and remains significant

³⁰ We assign the 1 only for those cases where the country stopped providing the Commissioner in $(t+1)$, i.e., where we can correctly identify post-treatment trends. We exclude the second to fourth year in office, where possibly the first to third lag could be coded as a 1. Otherwise, the variable would not capture a post-treatment effect the result be biased.

at the 1%-level. Column 2 adds lags instead of leads. Again, all the lag-variables are far from conventional significance levels, while *Commissioner (t)* increases to 0.692 and remains significant at the 1%-level. Finally, column 3 adds all leads and lags. *Commissioner (t)* increases further to 0.704 and remains significant at the 1%-level. All leads and lags are insignificant, giving no indication of pre- and post-treatment trends, while *Commissioner (t)* remains significant throughout.

Table 4: **Pre- and Post-Treatment Trends**

| Dependent Variable | <i>Agricultural</i> | <i>Agricultural</i> | <i>Agricultural</i> |
|---------------------------|---------------------|---------------------|---------------------|
| | <i>Fund Share</i> | <i>Fund Share</i> | <i>Fund Share</i> |
| <i>Commissioner (t-2)</i> | -0.050 [0.243] | - | 0.053 [0.194] |
| <i>Commissioner (t-1)</i> | -0.040 [0.378] | - | 0.040 [0.320] |
| <i>Commissioner</i> | 0.545*** [0.149] | 0.692*** [0.225] | 0.704*** [0.218] |
| <i>Commissioner (t+1)</i> | - | 0.732 [0.613] | 0.740 [0.611] |
| <i>Commissioner (t+2)</i> | - | 0.477 [0.355] | 0.484 [0.347] |
| <i>Commissioner (t+3)</i> | - | 0.039 [0.198] | 0.048 [0.177] |
| <i>Commissioner (t+4)</i> | - | 0.093 [0.159] | 0.099 [0.127] |
| Controls | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Adj. R-Squared | 0.78 | 0.78 | 0.78 |
| Observations | 383 | 383 | 383 |

The table displays regression coefficients with standard errors in brackets. All columns use the fixed-effects within estimator. Standard errors are multiway-clustered and allow for arbitrary correlation at the country and year level using the `xtivreg2` command in Stata. ‘Controls’ includes all control variables in Table 2, column 5. This includes country and year fixed-effects, as well as country-specific time trends. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Table 6, Appendix D, demonstrates that our results are also robust to including all lead- and lag-variables individually.

Figure 5 illustrates this graphically. The red squares indicate the coefficient and the grey-shaded area the 95%-confidence interval. It can be easily seen from the confidence-band that all leads and lags are far from being significantly different from 0. The graph shows that the increase in fund shares occurs only during the time in office, remains positive but indistinguishable from 0 in the two years directly after the appointment of a new Commissioner from a different member state, and reverts back to 0 in $(t + 3)$. This is a crucial result for the causal interpretation of the identified relationship, as differences in trends were our most serious concern. The next part will present further sensitivity tests and an assessment of the robustness of the coefficient to selection-on-unobservables.

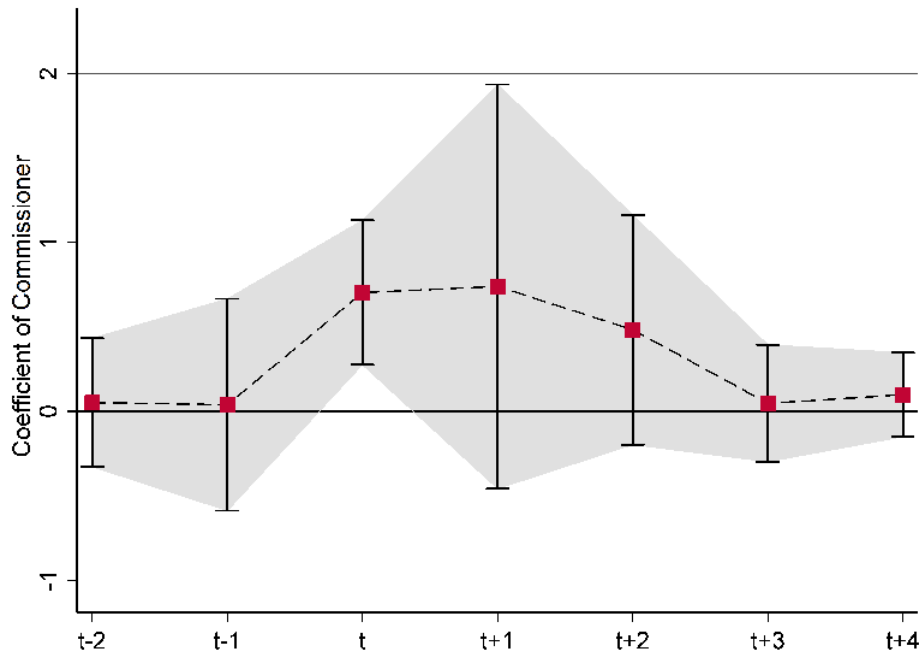


Figure 5: **Leads and Lags**

Regression coefficients and confidence intervals based on Table 4, column 3. The red squares indicate the coefficient and the grey-shaded area the 95%-confidence interval with twoway-clustered standard errors.

4.2 Sensitivity Tests and Identification of Causal Effects

So far, we have demonstrated that the positive relationship between *Commissioner* and *Agricultural Fund Share* is robust to employing panel-corrected standard errors and fixed-effects within estimation. Adding year dummies and country-specific time trends to alleviate concerns about common trends further strengthens this conclusion. The significance of the coefficient is robust to twoway-clustering as well as using a wild cluster bootstrap to take the unbalanced panel into account. Furthermore, we showed that there are no pre- and post-treatment effects using leads and lags, which can also be understood as a placebo check.

One concern with our identification strategy could be the relatively low number of Commissioners, i.e., the fact that the treatment is relatively rare. Theoretically, an individual country could thus have a strong influence on the estimated coefficients. There exist various methods to identify potential outliers and observations with greater influence. Either they propose to drop certain observations or to use a different weighting matrix, however, they all involve some arbitrary choices. To avoid relying on these specific assumptions, we opt for a more drastic and in our opinion more conservative option. We re-run our preferred specification (Table 2, column 4) $n = 25$ times, leaving out each of the countries in the sample once. This way, we can determine whether the coefficient and significance level is related not only to single observations but whether it is caused by any individual country in the sample.

Table 5: **Robustness to Outliers and Selection Effects**

| Omitted Country | <i>Comm.</i> | Obs. | Omitted Country | <i>Comm.</i> | Obs. |
|-----------------|---------------------|------|-----------------|---------------------|------|
| Belgium | 0.554*** [0.146] | 355 | Sweden | 0.561*** [0.150] | 371 |
| Denmark | 0.561*** [0.212] | 355 | United Kingdom | 0.530*** [0.159] | 356 |
| Germany | 0.557*** [0.164] | 355 | Cyprus | 0.553*** [0.149] | 380 |
| Greece | 0.530*** [0.135] | 358 | Malta | 0.554*** [0.149] | 380 |
| Spain | 0.544*** [0.135] | 362 | Czech Republic | 0.553*** [0.149] | 380 |
| France | 0.579*** [0.203] | 355 | Poland | 0.553*** [0.148] | 380 |
| Ireland | 0.689*** [0.197] | 356 | Slovenia | 0.553*** [0.149] | 380 |
| Italy | 0.496*** [0.144] | 355 | Slovakia | 0.553*** [0.149] | 380 |
| Luxembourg | 0.593*** [0.170] | 355 | Hungary | 0.553*** [0.149] | 380 |
| Netherlands | 0.414*** [0.104] | 355 | Estonia | 0.553*** [0.149] | 380 |
| Austria | 0.547*** [0.154] | 371 | Latvia | 0.557*** [0.149] | 380 |
| Portugal | 0.568*** [0.139] | 362 | Lithuania | 0.553*** [0.149] | 380 |
| Finland | 0.557*** [0.151] | 371 | Large Countries | 0.451** [0.211] | 251 |

The table displays regression coefficients with standard errors in brackets. All columns use the fixed-effects within estimator. Standard errors are multiway-clustered and allow for arbitrary correlation at the country and year level using the `xtivreg2` command in Stata. They include all control variables from Table 2, column 5. This includes country and year fixed-effects, as well as country-specific time trends. Large Countries include Germany, France, UK, Italy, Spain. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5 shows that this does not seem to be the case. The left column indicates which country was left out of the estimations, which, depending on the time of EU access, leads to different numbers of observations. We can see that the coefficient takes on values between 0.414 (omitting the Netherlands) and 0.689 (omitting Ireland), but remains significant at the 1%-level in all cases. Hence, the relative rareness of the treatment is not a serious problem for identification. In addition, a sample without larger countries should exhibit a smaller selection bias as it excludes some countries that have a lower likelihood of being interested in the Agricultural Commissioner post. When omitting the largest countries with more than 40 million inhabitants, the relationship remains stable and significant at the 5%-level.

As a further robustness test, we also model non-linear selection on observables using an endogenous selection model. The model yields a larger coefficient for our main variable of interest, which remains significant at the 1%-level (see Appendix E for details). So far, we find no reason to doubt the interpretation of our coefficient as a causal effect of EU Commissioners' nationality on budget allocation behavior. Most importantly, we saw that while our treatment is relatively rare, the coefficient estimate is surprisingly robust to the omission of each member state individually or all large countries jointly. In an admittedly somehow bold attempt, we now test how far we can extend our set of control variables.

First, not only the level of factors like the importance of the agricultural sector or EU support in a member state, but also the change in these variables might affect the selection of the Agricultural Commissioner. When adding the changes to the levels, country and year fixed-effects, and linear time trends, our coefficient is barely affected and remains significant at the 1%-level (see Table 7, Appendix D). Second, while the country specific linear trends control for important changes like the decline or rise of the agricultural sector in a member state, they might not fully capture these movements. Adding further polynomials captures further potentially unobserved trend differences, but at the risk of capturing more and more of the variation caused by the treatment, and inflating standard errors.³¹ In column 2-4 of Table 7, Appendix D, we first add quadratic, then cubic and finally quartic trends. As expected, this captures part of the variation and slightly decreases the point estimates, but the coefficients remain significant at the 5%-level. Third, the results are nearly identical when we combine all time trends and the changes in the control variables (see column 5, *ibid.*).

The fact that no form of selection-on-observables affects the estimations increases our confidence in interpretation of the results. To be able to speak about a causal interpretation, it would still be desirable to assess to what degree selection-on-unobservables could still bias the results. Thus, we finally compute the likelihood that our results can be explained by selection-on-unobservables. We first apply the methods developed in [Altonji *et al.* \(2005\)](#) to assess how much larger selection-bias based on unobserved factors would have to be compared to observed factors to fully explain our results.

The strategy is to use selection-on-observables to assess the severity of potential selection bias for the results. We compare two kinds of regressions: one with a limited set of controls ($L = \text{limited}$) to one with a full set of controls ($F = \text{full}$). Comparable to [Nunn & Wantchekon \(2011\)](#) we use two different sets for L and F . L_1 contains country and year fixed-effects, L_2 contains only country-fixed-effects. F_1 comprises all variables from Table 2, column 3, and F_2 adds the country-specific linear time trends to the former, i.e. responds to our most restrictive

³¹ [Mora & Reggio \(2012\)](#) show that adding time trends and polynomials of further time trends is a more flexible way to account for heterogeneous unobserved variation. They also state that this procedure alters the assumptions of the DiD framework. In addition, the correct average treatment effect would add the change in the treated units captured by the time trend. We abstain from doing so here, and do not test the adjusted assumptions. Rather, we are interested in the stability of our point estimate and the significance level, which do not signal problematic divergences.

specification. We then calculate a ‘‘Selection ratio’’ (SR), which is the necessary ratio of selection-on-unobservables to observables to fully explain our coefficients as $|\hat{\beta}_F/(\hat{\beta}_F - \hat{\beta}_L)|$. The denominator, i.e., the difference between the $\hat{\beta}$ coefficients indicates the degree to which our estimate is affected by selection-on-observables. A small difference indicates little selection effects. $\hat{\beta}_L$ in the nominator enters positively in the ratio, as we need stronger selection-on-unobservables to explain a larger coefficient. [Altonji *et al.* \(2005\)](#) provide the underlying assumptions and [Bellows & Miguel \(2008\)](#) a formal derivation.

We have applied the relevant control variables as identified in [Schneider \(2013\)](#), without arbitrarily ‘picking’ our own set of control variables. These observed factors explain a large share of the variation in the dependent variable. So how likely is a bias due to unobserved time-variant factors captured neither by the controls nor the country-specific time trends? The resulting ratios indicate that for $\{L_1, F_1\}$, selection-on-unobservables would have to be 1.9 times as large as selection-on-observables to fully explain the positive relationship of the fund’s share with Commissioner for Agriculture. The respective ratios increase to nearly 5 times for the $\{L_1, F_2\}$ and $\{L_2, F_1\}$ combinations. The smallest ratio is found when comparing $\{L_2, F_2\}$, but is still above one.

Table 6: **Sensitivity to Selection-on-Unobservables**

| Controls in the Limited Set | Controls in the Full Set | β_L | β_F | $SR = \beta_F/(\beta_L - \beta_F) $ | <i>Identified</i> β -Set |
|--------------------------------------|---|-----------|-----------|--------------------------------------|-----------------------------------|
| L ₁ : Country-FE, Year-FE | F ₁ : Country-FE, Year-FE, Control Variables | 0.43 | 0.92 | 1.88 | [0.92; 1.52] |
| L ₁ : Country-FE, Year-FE | F ₂ : Country-FE, Year-FE, Control Variables, Timetrends | 0.43 | 0.55 | 4.59 | [0.55; 0.61] |
| L ₂ : Country-FE | F ₁ : Country-FE, Year-FE, Control Variables, | 1.10 | 0.92 | 5.36 | [0.85; 0.92] |
| L ₂ : Country-FE | F ₂ : Country-FE, Year-FE, Control Variables, Timetrends | 1.10 | 0.55 | 1.02 | [0.44; 0.55] |

The table reports regression coefficients for *Commissioner* and selection ratios (SR) based on the formula depicted. Control variables include all country-specific and time-variant variables from prior regressions. A detailed definition of the identified set is provided in the main text. The set is well identified if it does not include 0.

[Oster \(2013\)](#) provides an important formal extension of the intuition above. Due to space restrictions, we outline only the intuition and refer the reader to the paper for details. Again, we examine the change from $\hat{\beta}_L$ to $\hat{\beta}_F$. As outlined above, we are less concerned by selection-

on-unobservables if the coefficient moves away from 0 or shows only small changes towards 0 when adding observables. However, [Oster \(2013\)](#) shows that small changes in the coefficient only help in coming closer to a causal interpretation if the added variables also explain additional variation in the dependent variable.

We need assumptions about the bounding value for R_{max} , the maximum share of the variance that can be systematically explained, and δ , the relationship of selection-on-unobservables with observables. She argues that $R_{max} \in [R_F, 1]$ and $\delta \in [0, 1]$ are plausible boundaries. For simplicity, we use the most conservative setting with $R_{max} = 1$ and $\delta = 1$. We then calculate the boundary of the set $\beta^* = \beta_F - \delta \times \frac{(\beta_L - \beta_F) \times (R_{max} - R_F)}{(R_F - R_L)}$ and the identified set $\Delta_s = [\beta_F, \beta^*] \forall \beta_F \leq \beta^* \wedge \Delta_s = [\beta^*, \beta_F] \forall \beta_F > \beta^*$.

[Oster \(2013\)](#) suggests that to assess a causal interpretation of the coefficient estimate, one should, for those cases where conditioning on observables moves β towards 0, examine whether the set includes 0, and whether its boundaries are within the confidence-interval of β_F . Table 6 shows that our identified set for the two cases where observables move us closer to 0 are [0.44; 0.55] and [0.85; 0.92]; far from including 0. This is strong evidence that even with the most conservative choice of the suggested boundaries, our full set is precisely estimated within the confidence intervals and does not include 0. Overall, we find no plausible explanation that holds as an argument against a causal interpretation of the identified relationship.

5 Concluding Remarks

The aim of this study was to examine whether and to what extent national background influences budget allocation decisions in the European Union, which is in a continuous struggle about the optimal level of integration. Proponents of more intense cooperation want to establish a European state with strong central political authorities, while others pledge for a looser confederation or federal system with largely independent states with arguments relating to heterogeneous preferences and common pool problems.³² At the same time, a growing number of radical parties want to largely reverse many of the prior integration steps. Against this background, examining the degree to which decisions of European Union actors are shaped by their respective national background is an important research question.

³² [Schneider \(2014\)](#) argues that preference heterogeneity, bargaining dynamics, and the ability to find compromises for deeper cooperation on the EU level particularly depend on current domestic politics of the EU members and the number of member states. Preference heterogeneity seems to present the larger obstacle to cooperation, but adding new members does not in all circumstances amplify the problem. [Janeba & Wilson \(2011\)](#) model the optimal division of public good provision in a federal system with tax competition and show that, while some goods should be centrally provided, complete centralization is never desirable for all public goods. [Dreher et al. \(2013\)](#) point at the role that differences in ‘soft’ private information between the different layers in a federal system play in explaining the choice of sub-optimal decentralization levels. They also highlight that whether the upper or lower layers constitute the ‘principal’ in the principal-agent structure determines how much information is shared and to what extent decision-making is in equilibrium decentralized.

Our focus was on the individual members of the European Commission, which is the main executive organ of the EU. In contrast to other Commissioners where it is hard to trace and quantify their decisions, the Agricultural Commissioners fulfill all necessary requirements to test the impact of national background. First, their roles actually give them enough influence to be able to shift decisions in favor of their home countries. Second, the agricultural budget was and still is the main budgetary item in the overall EU budget, thus making the relationships under examination economically relevant. Third, we are able to calculate the share of the budget that each member state receives for a sufficiently long time period by using encoded EU budget lists and documents over the 1979-2006 period.

Our findings indicate that providing the Commissioner for Agriculture is related to increases of about one percentage point in the share of the overall EU budget that the country of origin receives. This positive relationship is significant at the 1%-level. We remain cautious, but cannot find compelling reasons against a causal interpretation. Despite an extensive series of tests we find no plausible alternative explanations. These include testing the main assumption of no pre- or post-treatment trend differences, country specific time-trends, wild cluster bootstrap-procedures that are less sensitive to unequal cluster sizes, additional control variables, as well as omitting each member state individually and all large countries jointly. While omitted variables should always be a concern, we additionally computed that based on the remaining variation in the dependent variable and the sensitivity to observables, alternative explanations based on unobserved factors would have to assume an improbably high impact of omitted variables (Oster, 2013). Hence, the results suggest that providing the EU Commissioner for Agriculture leads to increases in a country's budget receipts.

This finding cannot necessarily be extrapolated to all other Commissioners and political actors in the EU. Nevertheless, it presents clear and quantitatively relevant evidence that national background continues to matter in the EU. This does not rule out that Commissioners also take common European values and targets into account and are motivated by other motives or a European spirit. The evidence we provide is for the one case where the existing data make it possible to identify a clear link to a precisely measurable outcome variable. Scientific caution guides us to avoid premature conclusions. However, finding this robust and highly significant relationship here changes the *a priori* assumptions about whether similar relationships also exists for other Commissioners, where a lack of data and transparency does not allow us to quantify them. To validate this finding with regard to other Commissioners, future research should, for example, aim to systematically collect new qualitative data.

Our findings should by no means be interpreted and used as evidence against the advancement of the EU, which is one of the most impressive and important political and economic projects in the realm of international cooperation of the last half-century. Instead, we hope to bring awareness to the need to modify and adapt the political structures and the relationship between member states and central authorities. This is upon the most pressing issues of the

EU, but unfortunately does not receive the widespread public attention it deserves given the influence the Commission already has on the life of every European citizen.

The further development of the European Union should not repeat mistakes of the past and ignore economic and social realities for the sake of avoiding political controversies and difficult but much needed debates. One important direct policy implication is to take a realistic and cautious approach to international integration. There is now an impressive amount of evidence that the national or regional background of politicians and bureaucratic actors still shapes their decision-making when working at an international level. This should be taken into account by designing mechanisms that minimize common pool problems and the ability of individual actors and countries to over-proportionally exert their influence. The current system that allocates one Commissioner per member state implicitly institutionalizes a system of promoting national interests. Instead, the number of Commissioners should be based on efficiency concerns and selection should be decoupled from national origin, but rather be based on the quality of the candidates. A renewed focus on the EU founding principle of subsidiarity would further help in alleviating concerns of citizens who perceive the EU as excessively interfering in their lives. Finally, to regain lost confidence, the EU should ensure more transparency about voting patterns and internal decisions, so that the public, media and science can provide the checks and balances necessary in a democratic system.

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6 Appendix

6.1 Appendix A

Table 1: List of Agricultural Commissioners

| Name | Nation | from | to |
|------------------------------------|-------------|-------------------|-------------------|
| Finn Olav Gundelach ¹⁾ | Denmark | January 6, 1977 | January 13, 1981 |
| Poul Dalsager ²⁾ | Denmark | January 20, 1981 | January 6, 1985 |
| Frans Andriessen ³⁾ | Netherlands | January 7, 1985 | January 5, 1989 |
| Ray MacSharry ⁴⁾ | Ireland | January 6, 1989 | January 5, 1993 |
| René Steichen ⁵⁾ | Luxembourg | January 6, 1993 | January 24, 1995 |
| Franz Fischler ⁶⁾ | Austria | January 25, 1995 | November 21, 2004 |
| Sandra Kalniete ⁷⁾ | Latvia | May 1, 2004 | November 21, 2004 |
| Mariann Fischer Boel ⁸⁾ | Denmark | November 22, 2004 | February 9, 2009 |

The exact dates were cross-verified using the following sources:

- 1) <http://www.spiegel.de/spiegel/print/d-14319885.html>,
<https://www.munzinger.de/search/document?index=mol-00&id=00000013522&type=text/html&query.key=szUldQFW&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 2) http://www.denstoredanske.dk/Dansk_Biografisk_Leksikon/Samfund,_jura_og_politik/Myndigheder_og_politisk_styre/Landbrugsminister/Poul_Dalsager,
<https://www.munzinger.de/search/document?index=mol-00&id=00000016216&type=text/html&query.key=rjym3Qji&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 3) <http://www.vieus.eu/food-agriculture/frans-andriessen-former-commissioner-\penalty\z{}for-agriculture-on-the-common-agricultural-policy-of-the-1980s/>,
<https://www.munzinger.de/search/document?index=mol-00&id=00000017522&type=text/html&query.key=mQRbHaNY&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 4) <https://www.munzinger.de/search/document?index=mol-00&id=00000019420&type=text/html&query.key=5qx1jVv4&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 5) <https://www.munzinger.de/search/document?index=mol-00&id=00000020594&type=text/html&query.key=i6NxSrlK&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 6) <https://www.munzinger.de/search/document?index=mol-00&id=00000019235&type=text/html&query.key=KJFjpiKp&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 7) <https://www.munzinger.de/search/document?index=mol-00&id=00000024374&type=text/html&query.key=NF9rcUOk&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 8) <https://www.munzinger.de/search/document?index=mol-00&id=00000024988&type=text/html&query.key=LJmscBcr&template=/publikationen/personen/document.jsp&preview=>

Table 2: List of Regional Commissioners

| Name | Nation | from | to |
|-----------------------------------|----------------|--------------------|--------------------|
| Antonio Giolitti ¹⁾ | Italy | January 6, 1977 | January 6, 1985 |
| Grigoris Varfis ²⁾ | Greece | January 7, 1985 | December 31, 1985 |
| Alois Pfeiffer ³⁾ | Germany | January 1, 1986 | August 1, 1987 |
| Peter Schmidhuber ⁴⁾ | Germany | September 22, 1987 | January 5, 1989 |
| Bruce Millan ⁵⁾ | United Kingdom | January 6, 1989 | January 24, 1995 |
| Monika Wulf-Mathies ⁶⁾ | Germany | January 25, 1995 | September 17, 1999 |
| Michel Barnier ⁷⁾ | France | September 17, 1999 | April 1, 2004 |
| Jacques Barrot ⁸⁾ | France | April 26, 2004 | November 21, 2004 |
| Péter Balázs ⁹⁾ | Hungary | May 1, 2004 | November 21, 2004 |
| Danuta Hübner ¹⁰⁾ | Poland | November 22, 2004 | July 4, 2009 |

The exact dates were cross-verified using the following sources:

- 1) <https://www.munzinger.de/search/document?index=mol-00&id=00000010572&type=text/html&query.key=AXXBQgGY&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 2) <http://aei.pitt.edu/1535/>
- 3) <https://www.munzinger.de/search/document?index=mol-00&id=00000017405&type=text/html&query.key=IFSCDeRs&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 4) <https://www.munzinger.de/search/document?index=mol-00&id=00000015616&type=text/html&query.key=icfj3I1o&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 5) <http://aei.pitt.edu/1535/>
- 6) <https://www.munzinger.de/search/document?index=mol-00&id=00000016843&type=text/html&query.key=eBQGuQmx&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 7) <https://www.munzinger.de/search/document?index=mol-00&id=00000023033&type=text/html&query.key=BL9HJPas&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 8) <https://www.munzinger.de/search/document?index=mol-00&id=00000014939&type=text/html&query.key=QDYGnRi0&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 9) <https://www.munzinger.de/search/document?index=mol-00&id=00000024894&type=text/html&query.key=2yKNVSDn&template=/publikationen/personen/document.jsp&preview=>,
<http://aei.pitt.edu/1535/>
- 10) <https://www.munzinger.de/search/document?index=mol-00&id=00000024792&type=text/html&query.key=o09MaerS&template=/publikationen/personen/document.jsp&preview=>

Table 3: List of Budget Commissioners

| Name | Nation | from | to |
|--------------------------------------|----------------|--------------------|--------------------|
| Christopher Tugendhat ¹⁾ | United Kingdom | January 6, 1977 | January 6, 1985 |
| Henning Christophersen ²⁾ | Denmark | January 7, 1985 | January 5, 1989 |
| Peter Schmidhuber ³⁾ | Germany | January 6, 1989 | January 24, 1995 |
| Erkki Liikanen ⁴⁾ | Finland | January 25, 1995 | September 17, 1999 |
| Michael Schreyer ⁵⁾ | Germany | September 17, 1999 | November 22, 2004 |
| Marcos Kyprianou ⁶⁾ | Cyprus | May 1, 2004 | November 22, 2004 |
| Dalia Grybauskaitė ⁷⁾ | Lithuania | November 22, 2004 | July 1, 2009 |

The exact dates were cross-verified using the following sources:

- 1) <https://www.munzinger.de/search/document?index=mol-00&id=00000014946&type=text/html&query.key=WGH1rUUZ&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>
- 2) <https://www.munzinger.de/search/document?index=mol-00&id=00000015397&type=text/html&query.key=6jbFAztz&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>
- 3) <https://www.munzinger.de/search/document?index=mol-00&id=00000015616&type=text/html&query.key=eNQY73fw&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>
- 4) <https://www.munzinger.de/search/document?index=mol-00&id=00000022864&type=text/html&query.key=V157hKR4&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>
- 5) <https://www.munzinger.de/search/document?index=mol-00&id=00000019158&type=text/html&query.key=1J9aTjbF&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>
- 6) <https://www.munzinger.de/search/document?index=mol-00&id=00000024888&type=text/html&query.key=mopXdm6j&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>
- 7) <https://www.munzinger.de/search/document?index=mol-00&id=00000024892&type=text/html&query.key=WwKYz4qa&template=/publikationen/personen/document.jsp&preview=,http://aei.pitt.edu/1535/>

EC collectively resigned on March 15, 1999 and remained in office executively until September 1999. All weblinks last accessed on May 1, 2015.

6.2 Appendix B

Description of Variables used:

| | |
|---|---|
| <i>Agricultural Fund Share</i> ¹⁾ | Each member state's annual agricultural fund (EAGGF) receipts as a share of the overall annual EU budget (in %). |
| <i>Overall Funds Share</i> ¹⁾ | Each member state's annual budget receipts as a share of the overall annual EU budget (in %). |
| <i>Regional/Social Funds Share</i> ¹⁾ | Each member state's regional and social fund (ERDF/ESF) receipts as a share of the overall annual EU budget (in %). |
| <i>Commissioner</i> | Proportion of the year in which a country appointed the Agricultural Commissioner (0 if country <i>i</i> did not appoint the Agricultural Commissioner in year <i>t</i> , 1 if the country appointed the Agricultural Commissioner during the whole year). A month is counted, if the respective Commissioner was in office for the major part of this month. |
| <i>Commissioner (Binary)</i> | Dummy for appointing the Agricultural Commissioner (1 if country <i>i</i> appoint the Agricultural Commissioner in in year <i>t</i> and if <i>Commissioner</i> is not 0, 0 otherwise). |
| <i>Commissioner (B)</i> | Proportion of the year in which a country appointed the Budget Commissioner (0 if country <i>i</i> did not appoint the Budget Commissioner in year <i>t</i> , 1 if the country appointed the Budget Commissioner during the whole year). A month is counted, if the respective Commissioner was in office for the major part of this month. |
| <i>Commissioner (R)</i> | Proportion of the year in which a country appointed the Regional Commissioner (0 if country <i>i</i> did not appoint the Regional Commissioner in year <i>t</i> , 1 if the country appointed the Regional Commissioner during the whole year). A month is counted, if the respective Commissioner was in office for the major part of this month. |
| <i>Time in Office</i> | Cumulated years in office as Agricultural Commissioner (1 in the first year, 2 in the second year,...). |
| <i>Commissioner (Binary)</i> × <i>Time in Office</i> | Interaction of <i>Commissioner (Binary)</i> and <i>Time in Office</i> . |

Description of Variables used (continued):

| | |
|---|--|
| <i>Election Year (Binary)</i> | Dummy for election years (1 in years with a national election in country i , 0 otherwise). |
| <i>Preelection Year (Binary)</i> | Dummy for preelection years (1 in the year before the national election in country i , 0 otherwise). |
| <i>Employment Agriculture (ln)²⁾</i> | Logarithmized number (in millions) of employees in the agricultural sector. |
| <i>Number of EU Members</i> | Number of EU Member States. |
| <i>Unemployment Rate²⁾</i> | Unemployment Rate (in %). |
| <i>Per Capita GDP (EU=100)²⁾</i> | Normalized per capita gross domestic product (EU average = 100). |
| <i>New Member State (Binary)</i> | Dummy for the newest member states (1 for all new members until the next enlargement, 0 otherwise). |
| <i>Voting Power Council (%)³⁾</i> | Shapley-Shubik index of country i in the Council in year t (in %). |
| <i>Domestic EU Support (%)⁴⁾</i> | The percentage of citizens who think that “EC/EU membership is a good thing” minus the percentage of those who think that “EC/EU membership is a bad thing.” |

Original Sources:

- 1) All budget data are from the annual reports of the European Court of Auditors.
- 2) Eurostat
- 3) Data from Indices of Power IOP 2.0. Available at <http://www.tbraeuninger.de/download/>
- 4) Eurobarometer

All remaining variables are adapted from Schneider (2013).

6.3 Appendix C

Table 4: **EU Accession**

| Year | New Member States | Σ |
|------|---|----------|
| 1957 | Belgium, France, Germany, Italy, Luxembourg, Netherlands | 6 |
| 1973 | Denmark, Ireland, United Kingdom | 9 |
| 1981 | Greece | 10 |
| 1986 | Portugal, Spain | 12 |
| 1995 | Austria, Finland, Sweden | 15 |
| 2004 | Estonia, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Czech Republic, Hungary, Cyprus | 25 |
| 2007 | Bulgaria, Romania | 27 |
| 2012 | Croatia | 28 |

The table lists the enlargement rounds of the EU. Column 3 shows the cumulative number of member states after the respective enlargement.

Source: http://ec.europa.eu/enlargement/pdf/publication/factsheet_en.pdf

6.4 Appendix D

Table 5: **Robustness – Placebo Tests**

| | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> |
|-------------------------|------------------------------------|------------------------------------|
| <i>Commissioner (R)</i> | 0.020 [0.245] | - |
| <i>Commissioner (B)</i> | - | -0.422 [0.268] |
| Controls | <i>yes</i> | <i>yes</i> |
| Adj. R-Squared | 0.78 | 0.78 |
| Number of Observations | 383 | 383 |

The table displays regression coefficients with standard errors in brackets. All columns use the fixed-effects within estimator. Standard errors are multiway-clustered and allow for arbitrary correlation at the country and year level using the `xtivreg2` command in Stata. ‘Controls’ includes all control variables in Table 2, column 5. This includes country and year fixed-effects, as well as country-specific time trends. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Individual Pre- and Post-Treatment Trends

| | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| <i>Comm/Agric (t-2)</i> | -0.254 [0.200] | - | - | - | - | - | - |
| <i>Comm/Agric (t-1)</i> | - | -0.158 [0.410] | - | - | - | - | - |
| <i>Comm/Agric</i> | - | - | 0.553*** [0.149] | - | - | - | - |
| <i>Comm/Agric (t+1)</i> | - | - | - | 0.426 [0.519] | - | - | - |
| <i>Comm/Agric (t+2)</i> | - | - | - | - | 0.177 [0.175] | - | - |
| <i>Comm/Agric (t+3)</i> | - | - | - | - | - | -0.178 [0.195] | - |
| <i>Comm/Agric (t+4)</i> | - | - | - | - | - | - | -0.118 [0.157] |
| Controls | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Adj. R-Squared | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Number of Observations | 383 | 383 | 383 | 383 | 383 | 383 | 383 |

The table displays regression coefficients with standard errors in brackets. All columns use the fixed-effects within estimator. Standard errors are multiway-clustered and allow for arbitrary correlation at the country and year level using the xtivreg2 command in Stata. ‘Controls’ includes all control variables in Table 2, column 5. This includes country and year fixed-effects, as well as country-specific time trends. * p<0.10, ** p<0.05, *** p<0.01.

Table 7: **Robustness – Higher Order Time Trends and Conditioning on Differences**

| Dependent Variable | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> | <i>Agricultural Fund Share</i> |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| <i>Comm/Agric</i> | 0.548*** [0.151] | 0.411** [0.194] | 0.313** [0.151] | 0.381** [0.178] | 0.316** [0.159] |
| <i>Preelection Year (Dummy)</i> | -0.239 [0.235] | 0.046 [0.088] | 0.051 [0.094] | 0.045 [0.098] | -0.308 [0.254] |
| <i>Election Year (Dummy)</i> | 0.377 [0.309] | 0.066 [0.113] | 0.045 [0.108] | 0.089 [0.098] | 0.563** [0.222] |
| <i>Employment Agriculture (ln)</i> | -0.131 [0.644] | 0.575 [0.464] | 0.685* [0.354] | 0.806* [0.412] | 1.315 [0.952] |
| <i>Per Capita GDP (EU=100)</i> | 0.017 [0.011] | 0.022 [0.015] | 0.027** [0.012] | 0.027* [0.014] | 0.037** [0.018] |
| <i>Unemployment Rate</i> | 0.029 [0.043] | -0.042 [0.034] | 0.019 [0.047] | 0.075 [0.062] | 0.073 [0.083] |
| <i>Voting Power Council (%)</i> | 0.364*** [0.111] | 0.225* [0.123] | 0.208* [0.123] | 0.11 [0.113] | 0.047 [0.141] |
| <i>Domestic EU Support (%)</i> | -0.010 [0.009] | -0.014* [0.008] | -0.005 [0.008] | -0.011 [0.008] | -0.012 [0.011] |
| <i>New Member State (Dummy)</i> | -0.504* [0.287] | 0.171 [0.312] | -0.204 [0.320] | -0.169 [0.296] | -0.003 [0.449] |
| <i>D.Preelection Year (Dummy)</i> | 0.281 [0.211] | - | - | - | 0.416** [0.202] |
| <i>D.Election Year (Dummy)</i> | 0.001 [0.111] | - | - | - | -0.024 [0.111] |
| <i>D.Employment Agriculture (ln)</i> | 0.235 [0.416] | - | - | - | -0.421 [0.509] |
| <i>D.Per Capita GDP (EU=100)</i> | -0.003 [0.007] | - | - | - | -0.020* [0.012] |
| <i>D.Unemployment Rate</i> | 0.034 [0.100] | - | - | - | -0.038 [0.075] |
| <i>D.Voting Power Council (%)</i> | -0.119 [0.095] | - | - | - | 0.025 [0.111] |
| <i>D.Domestic EU Support (%)</i> | 0.001 [0.004] | - | - | - | 0.000 [0.006] |
| <i>D.New Member State (Dummy)</i> | -0.028 [0.166] | - | - | - | -0.373 [0.236] |
| Country-specific Time Trends | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Country-specific Time Trends ² | <i>no</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Country-specific Time Trends ³ | <i>no</i> | <i>no</i> | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Country-specific Time Trends ⁴ | <i>no</i> | <i>no</i> | <i>no</i> | <i>yes</i> | <i>yes</i> |
| Adj. R-Squared | 0.79 | 0.82 | 0.84 | 0.84 | 0.85 |
| Number of Observations | 364 | 383 | 383 | 383 | 364 |

The table displays regression coefficients with standard errors in brackets. All columns use the fixed-effects within estimator. Standard errors are multiway-clustered and allow for arbitrary correlation at the country and year level using the `xtivreg2` command in Stata. All regression include country and year fixed-effects, as well as country-specific time trends. *Country-specific Time Trendsⁱ* denotes linear, squared, cubic, and quartic time trends for each country. * p<0.1, ** p<0.05, *** p<0.01.

6.5 Appendix E

As we argue, selection among the smaller states seems to be largely random and unpredictable. To further remedy concerns about selection-on-unobservables that could bias our results up- or downwards, we further approach potential selection issues by using so-called endogenous binary variable models (treatment effect models). There is no convincing instrument for acquiring a specific Commissioner that is excludable to our dependent variable. Instead, the approach of these Heckit-models is similar to Heckman selection models: The selection problem is solved by explicitly modeling selection instead of only proposing a supposedly exogenous instrument. Treatment effect regressions differ from sample selection models as the binary treatment variable is directly entered in the regression equation and the outcome variable is observed for both the treated and the untreated subjects. The advantage of this potential outcome model is that it provides information about the effects of non-linear selection-bias.

Specifically, we model two equations. Our simplified regression equation is $Y_{i,t} = \alpha + \beta C_{i,t} + X'_{i,t}\gamma + \vartheta_i + \tau_t + \epsilon_{i,t}$, where $X_{i,t}$ contains the controls and country-specific time trends and $C_{i,t}$ is the binary treatment indicator. Our probit selection-equation estimates the latent variable $C_{i,t}^* = Z'_{i,t}\psi + u_{i,t}$ with

$$C_{i,t} = \left\{ \begin{array}{ll} 1 & \text{if } C_{i,t}^* > 0, \\ 0 & \text{if } C_{i,t}^* \leq 0 \end{array} \right\} \text{ and } Prob(C_{i,t} = 1 | Z_{i,t}) = \Phi(Z'_{i,t}\psi), \text{ respectively,}$$

$Prob(C_{i,t} = 0 | Z_{i,t}) = 1 - \Phi(Z'_{i,t}\psi)$. $Z_{i,t}$ is a vector of variables determining the selection process. $\epsilon_{i,t}$ and $u_{i,t}$ are assumed to be bivariate normal with zero mean and covariance matrix $\begin{pmatrix} \sigma_\epsilon & \rho \\ \rho & 1 \end{pmatrix}$, $\rho \neq 0$ reflects the assumed endogeneity of the treatment, and $\sigma_u^2 = 1$ for identification.

This is a switching regression depending on whether $C^* > 0$ or $C^* < 0$, with separate forms for the outcome under treatment ($Y_{i,t} = \beta(Z'_{i,t}\psi + u_{i,t}) + X'_{i,t}\gamma + \epsilon_{i,t}$) or non-treatment ($Y_{i,t} = X'_{i,t}\gamma + \epsilon_{i,t}$) regime. For a more detailed description see for example [Cameron & Trivedi \(2005, sec. 16.7 and 25.3.4\)](#) and [Maddala \(1983\)](#). We conduct the estimation using full maximum likelihood under a normal distribution assumption.³³

We do not claim that this approach resolves all potential selection-bias concerns, as it relies on assumptions about the correlation structure. Rather, we regard it as a further useful robustness check to assess the sensitivity of our results to changes in the econometric specification and the direction of selection-bias. λ is the inverse Mills-ratio or non-selection hazard, and the

³³ Alternatively we can regard this model as a non-standard maximum-likelihood estimator. The likelihood function $L_N(\Theta) = f(y, X|\Theta) = f(y|X, \Theta)f(x|\Theta)$ would generally require specifying the conditional density of Y given X as well as the marginal density of X. It is standard to use only the conditional density $f(y|X, \Theta)$, and ignore $f(X|\Theta)$. This in essence assumes exogenous sampling and conditional independence. Treatment effect models drop this assumption, but instead assume a specific correlation structure of the error terms of the two equations to be estimated.

parameter ρ indicates the correlation between the error terms $\epsilon_{i,t}$ and $u_{i,t}$. We test the model assumption with a likelihood ratio test of an independent probit and regression model versus the treatment-effect likelihood, a test of $\rho = 0$ that is χ^2 distributed. The Wald test-statistic rejects that ρ equals zero with a p-value of 0.004.

Table 8: **Endogenous Selection Model**

| Dependent Variable | Selection Equation | | Treatment Equation | |
|------------------------------------|------------------------------|---------------------------------|--------------------------------|---------|
| | <i>Commissioner (Binary)</i> | | <i>Agricultural Fund Share</i> | |
| <i>Pre-election Year (Binary)</i> | 1.994*** | [0.350] | 0.024 | [0.101] |
| <i>Election Year (Binary)</i> | 1.138*** | [0.270] | 0.038 | [0.103] |
| <i>Employment Agriculture (ln)</i> | 1.100 | [1.135] | -0.020 | [0.493] |
| <i>Per Capita GDP (EU=100)</i> | 0.020 | [0.013] | 0.016* | [0.009] |
| <i>Unemployment Rate</i> | 0.326*** | [0.123] | 0.007 | [0.031] |
| <i>Voting Power Council (%)</i> | -1.775*** | [0.601] | 0.344*** | [0.108] |
| <i>Domestic EU Support (%)</i> | 0.069** | [0.034] | -0.014 | [0.010] |
| <i>New Member State (Binary)</i> | 13.366*** | [1.810] | -0.684*** | [0.234] |
| <i>Number of EU Members</i> | 2.059*** | [0.512] | -0.053 | [0.044] |
| <i>Commissioner (Binary)</i> | - | | 1.334*** | [0.352] |
| Number of Cases | 383 | Rho | -0.880 | |
| Lamda | -0.610 | Prob > chi ² (Rho=0) | 0.004 | |

The table displays regression coefficients with standard errors in brackets. The model defines a treated and untreated group based on *Commissioner (Binary)*. Selection variables include all control variables in Table 2, column 5. * p<0.10, ** p<0.05, *** p<0.01.

The left part of Table 6 shows the results from the probit estimation of the likelihood to provide the EU Commissioner for Agriculture for a certain year and country. We do not put too much weight on this equation, as it allows no clear causal interpretation, but give a brief summary. Factors significantly positively related to providing this Commissioner are *Pre-election Year (Binary)* and *Election Year (Binary)*, *Unemployment Rate*, *Domestic EU Support (%)*, and being a *New Member State (Binary)*.³⁴ *Voting Power Council (%)* is negatively related to *Commissioner*. Most interestingly for us is that *Employment Agriculture (ln)*, i.e., a proxy for the importance of agriculture in the respective country, is not significantly related to providing the Commissioner. Turning to the second-stage regression on *Agricultural Fund Share* in the right half of Table 6, the coefficient for *Commissioner* becomes larger at 1.334 and remains significant at the 1%-level. Hence, taking selection into account with a full maximum-likelihood suggests that if there was selection bias before, it seems to have biased *Commissioner* downwards rather than upwards. The larger effect would amount to about 1,229 million EUR per year (based on the 2006 EU budget).

³⁴ The *Number of EU Members* is also positively related but has no meaningful interpretation here.