Abstract: The European Commission holds a far-reaching monopoly of legislative initiative in the European Union. Extant analyses of whether this formal agenda-setting role translates into legislative influence vis-à-vis the Council of Ministers and the European Parliament (EP) often treat the Commission as unitary actor with perfect information. Yet, organizational research suggests that the resources needed for correctly anticipating acceptable policies vary heavily within the Commission. The individual Directorates-General (DGs) differ in their sectoral and political experience as well as in their administrative resources. They also face different coordination requirements before a legislative proposal is officially tabled. Do these internal rifts affect the Commission's ability to shape the European policy-agenda?

This paper develops corresponding expectations and tests them in a new data set on more than 2,200 proposals for regulations and directives that the Commission has tabled between 1994 and 2016. Anticipatory success is measured by an automated text analysis algorithm that retrieves the similarity between the original Commission proposal and the ultimately adopted European law. Multivariate analyses of this indicator initially confirm that more EP involvement constrains the Commission’s ability to draft readily acceptable proposals. The results also show that legislative anticipation varies systematically with the responsible Commission DG: proposals that were drafted in an experienced DG and that were coordinated more seamlessly are more readily accepted by the Commission’s co-legislators. These findings suggest that varying organizational resources and coordination mechanisms inside the Commission may affect how the legislative integration of the European Union evolves in the future.

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1. Introduction

The European Commission is a key actor fueling, fostering and shaping the process of political integration in Europe. Depicted positively as the ‘engine of European integration’ or negatively as a ‘runaway bureaucracy’, the Commission is seen to significantly influence the speed and direction by which political competences are transferred from the national to the supranational level (Hooghe and Marks 2001; Pollack 1997; Sandholtz and Zysman 1989). This influence is primarily located in day-to-day policy making where the grand bargains struck in the European Council are interpreted and transformed into binding rules for Europe’s more than 500 million citizens. In this integration through law (or ‘integration by stealth’ as some observers have it, Majone 2005), the Commission controls a precious asset: the exclusive prerogative of legislative initiative for most areas of European competence (Biesenbender 2011).

Of course, a Commission initiative only turns into European law if it finds agreement in the Council of Ministers and often also in the European Parliament (EP). But within these constraints, the Commission may still control sizable legislative agenda-setting power: being the formal first mover, it may select and propose the one policy from the set of all feasible ones that comes closest to its own preferences. This is a key insight of the literature analyzing the European legislative process with spatial models (for overviews see Crombez and Vangerven 2014; Selck 2006; Tsebelis and Garrett 2000). From this vantage point, analyses of EU legislative politics have mostly focused on how different preference constellations in the Council and the EP as well as different procedural rules constrain the Commission’s leeway.

Such external constraints are unquestionably important, but they alone do not determine how well the Commission can exploit its first mover advantage. The Commission’s legislative influence should also hinge strongly on the quality of anticipation it can muster. It will be only able to select the most preferable policy if it has correctly identified the set of all feasible policies in the first place. The better the Commission is able to predict which policy choices actually fall into the win set of the Council and the EP under a given procedure, the better it will be able to maximize its own policy preferences.

Yet, carving out this leeway is a resource-intensive business. Amongst other things it requires significant expertise on the policy area in question, the careful evaluation of legal alternatives, intense stakeholder consultations, as well as active political networking. Extant analyses, however, often treat the Commission as a unitary actor with perfect information. But these simplifying assumptions clash with the few in-depth analyses on policy formulation inside the Commission (Hartlapp et al. 2014; Cram 1994). These works emphasize that the resources needed to develop viable legislative proposals are rather unevenly distributed across the individual Directorates-General (DGs) of the Commission. Their findings imply that the varying political clout of DG leaders, scarce administrative resources, internal conflicts, and haphazard co-ordination limit the Commission’s capacity for strategic anticipation. Accordingly, this paper asks: How strongly and along which factors does the quality of legislative anticipation vary across the individual DGs of the European Commission?

To tackle these questions, the subsequent section embeds a disaggregated view on legislative drafting inside the Commission into the extant arguments on strategic agenda-setting power in the EU. Section three then proposes an observational research design to test the resulting
hypotheses. The design is based on the idea that a legislative proposal should experience little change during the inter-institutional negotiations if the responsible Commission DG has correctly anticipated which policies are acceptable to the Council and the EP. The corresponding indicator thus captures the minimum edit distance between 2,237 Commission proposals and the finally adopted EU regulations and directives during the period 1994-2016.

The descriptive analysis of these data in section four highlight that the likelihood of proposing a law that is directly acceptable for the co-legislators varies systematically with the Commission DG that has drafted it. With regard to correctly anticipating which policy choices are acceptable, in other words, Commission DGs are not created equal. The multivariate results initially show that this partially depends on the legislative procedure a DG faces: More formal involvement of the EP apparently makes it harder to table a directly acceptable policy proposal. Furthermore, DGs that control more long-standing legislative experience and that are able to engage in more seamless internal coordination appear to muster higher levels of correct legislative anticipation. Surprisingly, neither the political experience of the lead Commissioner nor the administrative size of the DG exhibit consistent effects.

In sum, these findings suggest that a disaggregated view on Europe’s central agenda setter is warranted. While further research is needed in this vein, they highlight that organizational differences and coordination mechanisms may affect how the legislative integration of the European Union evolves.

2. Theory: Legislative agenda-setting of and inside the European Commission

In the early stages of the European policy cycle the European Commission is a focal player. It may shape the policy discourse by the strategic collection of information (Haverland et al. 2018), setting up expert groups, initiating stakeholder consultations, issuing discussion papers (Quittkat and Finke 2008; Princen and Rhinard 2006), or by creating judicial precedents (Schmidt 2000). Yet, beyond these resources it is particularly its formal legislative agenda-setting prerogative that renders the Commission important. In its current version, Article 17(2) TFEU states that ‘Union legislative acts may only be adopted on the basis of a Commission proposal’. The Commission thus has to make the first formal move in most processes legislative processes in the EU.

The institutionalist literature discusses intensively whether this turns the Commission into a ‘political’ agenda setter with significant influence over the contents of European law or whether its first-mover role is boils down to a merely ‘technical’ provision of legal services (Kreppel and Oztas 2016). Indeed, the Commission’s influence through the monopoly of legislative initiative is limited in at least two respects. First, this formal prerogative does not confer gatekeeping power (Crombez et al. 2006). Both the Council and the EP and – since the treaty of Lisbon – a sufficient number of citizens from different member states may request a Commission proposal on a specific policy. In other words, the Commission is not entirely free to select the policy areas that are to be tackled by European legislation.

Second, and more important for our purposes, the Commission’s political ambitions are obviously constrained by the fact that any proposal needs to find the agreement of the representatives in the Council of Ministers and increasingly often also the EP. Especially the
spatial modelling literature has been highly influential in assessing the relative powers of these co-legislators (e.g. Crombez and Vangerven 2014; Selck 2006; Tsebelis and Garrett 2000). In these models, European legislative actors are typically assumed to have Euclidean policy preferences as well as perfect information about the ideal positions of all other actors and the status-quo (i.e. the applicable policy in the absence of a common decision). Combining these assumptions with the sequence of individual actors’ moves prescribed by the applicable legislative procedure leads to clear expectations as to which actors are able to move the outcome closest to their most preferred policy.

This literature debates the correct interpretation of formal rules, plausible preference configurations, or the dimensionality of the policy space. But it agrees on two more general propositions. First, the agenda-setting power of the Commission is curtailed to the win-set, i.e. all policies that the respectively necessary majorities in the Council and/or the EP prefer over the status-quo. Second, the Commission can still be considered influential if it is able to steer the process towards those policy outcomes in the win set that come closest to its own policy preference. So the Commission cannot override the majority preferences of its co-legislators, but once tasked with tackling a given policy it may tilt the outcome towards whatever it itself deems beneficial.

Exactly in this regard the prerogative to draw up the initial legal text offers leverage. The ‘power of the pen’ provides the Commission with some control over the specific policy choices that the Council and the EP consider during the legislative process later on. As a rational actor, the Commission should exploit this first-mover advantage by proposing the one policy option from the Council’s and the EP’s win set that comes closest to its own preferences. In other words, Commission proposals should reflect its preferences in as much as they are still acceptable to the most fitting majority in the Council and the EP under the given procedure. Picking policy choices from the win sets of its co-legislators strategically along this line can accumulate into significant political influence over the entire range of EU secondary law-making.

At face value, this rational model of agenda-setting implies very quick, one-shot legislative processes. The targeted policy choice that the Commission is expected to propose should find almost immediate agreement in the Council and the EP. In European practice, however, one easily finds often lengthy and partially highly controversial negotiations of Commission proposals with and among the Council and the EP (e.g. König 2007) (Drüner et al. 2018). What, then, keeps the Commission from proposing optimal policy choices?

To answer this question, I argue initially, the perfect information assumption driving most institutionalist models of legislative agenda setting in the EU has to be relaxed (cf. de Mesquita 2004; Rittberger 2000). The Commission is not only constrained by the size of the win sets in Council and EP, but also by its ability to identify these win sets correctly in the first place. It can only propose the policy it prefers most if it has been able to carve out the set of all acceptable choices reliably beforehand. From this perspective rational legislative agenda setting is very demanding in informational terms.

Amongst other things, the Commission first needs to understand the actual legal alternatives are for a given policy at hand (and which of these alternatives it prefers under some more general objective). This will often require very technical information on the idiosyncrasies of the specific
policy area. Second, the Commission needs to figure out what the respective status quo on the policy in question is. In many cases, if will face a myriad of different national laws, regulations, or domestic jurisprudences. And third, the Commission must distill all this information in order to learn which of the different policy options are actually acceptable to a sufficient number of the various political actors in the Council and the EP. All these informational demands suggest that the legislative influence which the Commission can gain from its formal monopoly of initiative stands and falls with the quality of legislative anticipation it can muster.

Whether the Commission can correctly anticipate acceptable policy choices should hinge on several factors. Initially, the applicable legislative procedure should determine how hard it is to collect and to digest the necessary information. The higher the majority hurdles, the larger is the set of actors about which the Commission needs to gather reliable information. Here the decision rule in the Council of Ministers is initially important. If the Council decides by unanimity on a given policy, the Commission has to correctly identify the one national government that is furthest away from its own preferences in order to see what the optimal policy proposal could be. Under qualified majority voting (QMV) which governs now about 70 per cent of all European policy competences (Biesenbender 2011), in contrast, it requires a smaller set of agreeing governments. Identifying a winning coalition under QMV should be comparatively less costly in informational terms, leading us to expect that:

**H1:** The quality of legislative anticipation by the Commission is lower under unanimity rules than under qualified majority voting in the Council.

The argument that the Commission’s anticipatory ability depends on the number of actors it needs to collect information on also points to the challenges of the various enlargement rounds of the EU in recent decades. The accession of new member states should have furthermore increased the complexity of preference configurations the Commission needs to anticipate. Analyses suggest, for example, that accession of countries from the Southern and Eastern periphery have enhanced conflict potential on the left/right as well as the redistributive dimensions (Zimmer et al. 2005). These conflict dimensions, in addition, show different inter-relations in the old and new member states (Marks et al. 2006). This should impinge negatively on the Commission’s ability to anticipate which particular policy choices in a proposal are likely to survive legislative negotiations with the Council:

**H2:** The quality of legislative anticipation by the Commission decreases with the accession of additional EU member states.

Over the consecutive treaty revisions, in addition, the EP has become an increasingly important co-legislator of the Commission. While the EP is a veto player in some very confined decisions regarding the EU polity governed by the assent (now: consent) procedure, the bulk of European law in the early integration period was decided under the consultation procedure. Here, the EP was consulted but had no formal amendment powers. Rather, governments in the Council could amend Commission proposals, but only if they were able to agree on an unanimous decision. In contrast, a qualified majority sufficed to adopt the Commission proposal right away. In this setting, correctly anticipating majorities is comparatively easy, enabling the Commission to propose a policy that was easier to adopt than to amend.
The cooperation procedure introduced by the Single European Act (SEA) in 1985 increases the informational requirements for the Commission. It confers a veto right to the EP that only an unanimous Council could override. In order to anticipate its leeway correctly, thus, the Commission must identify the most conservative Council member again – at least if it also has information that an EP majority disagrees with a suitable qualified majority in the Council. Correctly predicting the possible outcomes of a cooperation procedure should thus be systematically more demanding in informational terms than doing the same for a consultation procedure.

Correctly predicting the legislative process has been complicated further by the Treaty of Maastricht which introduced the co-decision procedure. This procedure requires a conciliation committee if the Council and the EP disagree on a Commission proposal. Any agreement reached in this committee needs to find a simple majority in the EP and a qualified majority in the Council unless both actors fall back to the original Commission proposal. The co-decision procedure was further reformed in the 1999 Treaty of Amsterdam and re-named as the ordinary legislative procedure (OLP) in the 2008 Treaty of Lisbon. This now valid version of this procedure even removes the possibility to fall back on the original Commission proposal. Furthermore, the procedure now allows for so-called early agreements where representatives from each of the three institutions can informally strike a deal that only the Council and EP majorities have to ratify in the end (Reh et al. 2013). Dissolving the sequential nature of the game and allowing for rather unconstrained bargaining in such ‘trilogue’ meetings curtails the Commission’s ability to correctly predict the range of acceptable outcomes further (cf. Cross and Hermansson 2017). In any case, the increasing legislative involvement of the EP should have also increased the strategic information demands that the Commission faces when trying to propose an optimal policy choice in the first place:

H3: The quality of legislative anticipation by the Commission decreases with more formal amendment powers of the European Parliament (Co-decision/OLP < Cooperation < Consultation).

Of course, the ability to correctly predict the preferences of the relevant co-legislators under the different procedures also hinges on how encompassing the respective policy proposals. Figuring out what the Council and the EP would accept on, say, an individual product traded in the internal market is comparatively easier than anticipating their preferences on more general trading rules. The more encompassing a legislative initiative is, the more information the Commission requires beforehand in order to propose optimal policy choices:

H4: The quality of legislative anticipation by the Commission decreases with the complexity of the policy in question.

This also highlights that experience in a given policy area is important for correctly anticipating viable options. Informational demands should be highest for policies that are covered by European rules for the very first time. In such policy areas, figuring out the status quo will be already very costly. Here the Commission needs to first chart the legal terrain in member states’ laws and jurisprudence. In addition, it has to gather policy expertise for example by establishing new stakeholder networks in order to figure out which choices would be actually acceptable for the co-legislators. In contrast, if the given policy falls into an area that the Commission has already covered before, the informational demands on anticipating the legislative process...
correctly are arguably much lower. In these cases, the legal status-quo can be more easily identified as European precedents exist. Furthermore, the Commission already has some in-house policy expertise as well as experience from extant stakeholder networks, policy-specific Council working groups, or dedicated implementation reports and reviews. In these latter cases it will be much less costly to gather the information needed for anticipating which policy choices will find agreement in the Council and the EP. We thus expect:

H5: The quality of legislative anticipation by the Commission increases with the time a policy area already falls under European legislative competence.

Referring to in-house policy expertise and experience also highlights another simplifying assumption in extant models of the Commission’s ability to shape the European legislative agenda (cf. Hörl et al. 2005). While these models tend to portray the Commission as a unitary actor, not all administrative units in Europe’s central bureaucracy are created equal when it comes to correctly anticipating feasible policy options. The original text of a Commission proposals is typically drafted primarily by only one of the Directorates-General (DGs) of the Commission. These so-called lead DGs, however, vary strongly not only in their legislative experience but also in their ability to engage in the political networking, the stakeholder consultations, or the collection of factual data and information that is needed to correctly carve out the leeway that different policy options enjoy in the Council and the EP. Rather Commission DGs differ with respect to their staff and budgetary resources, their implementation duties and legislative backlog, or the political and sectoral orientation as well as the experience and expertise of their leadership (Hartlapp et al. 2014: ch. 4; Franchino 2009; Wonka 2008; Spence 2006). We would thus expect that the individual units inside the Commission also differ regarding their opportunities to exploit the Commission’s first-mover advantages in legislative drafting:

H6.1: The quality of legislative anticipation by the Commission increases with the amount of administrative experience and resources of the responsible Directorate-General.

H6.2: The quality of legislative anticipation by the Commission increases with the political experience and resources of the leadership of the responsible Directorate-General.

What is more, all these different actors do not necessarily have the same overarching objectives. Rather the Commission is a ‘house with differing views’ (Hooghe 2000). Analyses of Commission officials’ attitudes (Kassim et al. 2013) reveal diverging preferences inside the Commission which touch upon on virtually all conflict dimensions in the wider European polity (Hooghe and Rauh 2017). Across 48 case studies, Hartlapp, Metz and Rauh (2014) highlight that sectoral, ideological and more mundane turf conflicts prevail legislative drafting inside the Commission (see also Cram 1994). Rather than treating the Commission as one strategic actor negotiating with the Council and the EP, the process of preference aggregation thus already starts way before the legislative proposal is officially tabled.

Formally, the Commission is a collegiate body and has tried to beef up its coordinative ability not the least by strengthening the Secretariat-General (SG) headed by the Commission president (Kassim et al. 2017; Wille 2010). But in the bottom-up process of policy formulation way before a given proposal reaches the level of European Commissioners (if it is explicitly reviewed at this level at all), the lead DG has various opportunities to bias a proposal towards its own preferences (Hartlapp et al. 2013). And where the Commission fails to adequately balance varying policy
preferences internally, the resulting legislative proposal should be less likely to satisfy the various interests represented in the subsequent negotiations with its co-legislators:

\[H7: \text{The quality of legislative anticipation by the Commission decreases with insufficient coordination during internal proposal preparation.}\]

In sum, these arguments suggest that relaxing the perfect information and unitary actor assumptions that have governed many analyses thus far promises additional insights into the degree to which the European Commission shapes the contents of European policies. Acknowledging that high quality anticipation is a costly pre-condition for strategic agenda setting and considering that the necessary resources are unequally distributed within the Commission may thus improve our understanding of legislative decision-making in the EU. The remainder of this article will thus inquire whether the expectations derived here find support in the empirical patterns of European legislative negotiations.

3. Research design

The empirical approach rests on the idea that the quality of legislative anticipation by the Commission can be observed in the degree to which the original proposal is changed during the negotiations in the Council and the EP. In the strategic agenda setting model, such changes should not occur if and when the Commission has correctly anticipated which policies the respective majorities in the Council and the EP would accept right away. Conversely, if the Council and the EP see the need to significantly move away from the contents of original proposal, the Commission has failed to anticipate the available leeway in the Council and the EP correctly.

Accordingly, the key dependent variable of this article rests on systematically comparing the full text of the initial legal text proposed by the Commission to the full text of the European law that the Council and the EP finally adopt. To be able to conduct such comparisons in a large-n setting, I resort to minimum edit distance algorithms which the recent literature has successfully employed to analyze change over consecutive versions of very different political texts (e.g. Alschner and Skougarevskiy 2016; Merz et al. 2016; Wilkerson et al. 2015; Spirling 2011), including European legislation (Cross and Hermansson 2017). Generally, such algorithms compare two ordered chains of symbols and retrieve the minimum number of symbols that need to be changed to convert one chain into the other. My operationalisation accordingly asks how many edits – on the level of full individual words - are needed to ‘convert’ the text of the original Commission proposal into the text of the European law that the co-legislators have ultimately adopted.\(^2\)

More specifically, I resort to the Damerau-Levenshtein minimum edit distance (Levenshtein 1966; Damerau 1964). This algorithm traverses through the matrix spanned by the ordered word list of the proposal and the law text and counts each deletion, insertion, substitution and adjacent transposition of individual words as one edit operation.\(^3\) I normalize these edit counts to the

\(^2\) Note that I resort to the actual legal text only, excluding any recitals, explanatory memoranda, or annexes.

\(^3\) Given that the matrices can become very large (the longest Commission proposal in my data features more than 40,000 words) and given that resorting to word order prohibits parallelization, the algorithm is very demanding in
varying lengths of the different laws. Finally, I invert this metric so that higher values express more similarity between proposals and adopted law, thereby indicating better anticipation in legislative agenda-setting of the European Commission. The resulting metric ranges between 0 and 1 and can be roughly interpreted as the probability that an individual word in the original Commission proposals remains unchanged during negotiations with and among the Council and the EP.

To collect the required legal text pairs, I initially scraped information on the more than 14,000 Commission proposals between 1985 and 2016 from EUR-Lex, the official online gateway to legislative documents of the European Union (the logic of the scraper is detailed in Appendix A). Unfortunately this exercise reveals that Eur-Lex provides machine-readable (html) full text pairs of the Commission proposals and the finally adopted law only from 1994 onwards. For earlier periods full texts are available – if at all – only as pdf files without or with very error prone optical character recognition. This lacking data availability censors my investigation period to the left, but it still allows covering 23 years of European legislation between 1994 and 2016.

The analysis furthermore concentrates on Commission proposals for binding secondary EU law, i.e. only proposals for directives and regulations during this period. I deliberately exclude decisions as this legal instrument usually prescribes temporarily limited measures addressing individual entities rather than resulting in generally applicable European Union law. I furthermore exclude tertiary law such as implementing and delegated acts which some scholars understand as an alternative route of Commission law-making in the light of legislative resistance (Williams and Bevan 2017; Junge et al. 2015).

Along these criteria Eur-Lex archives 3,049 Commission proposals for binding regulations or directives in the 23 years covered. The adoption rate is rather high (see also Boranbay-Akan et al. 2017). Only 13 per cent, that is 405 of the cases, did not result in a binding European law - either because the Commission has formally withdrawn the proposals, or because the process is technically still pending. In another 812 cases (27 per cent) the full text for either the Commission proposal or the finally adopted law is unfortunately missing or erroneous in Eur-Lex. An analysis of these missings shows that they cluster in the final two years of the investigation period. This suggests that the missing cases might be driven by archiving delays in Eur-Lex (personal inquiries with the Eur-Lex helpdesk on this matter were not satisfactorily answered, unfortunately). Beyond this temporal pattern, the missing cases appear not to be systematically different along any of the independent variables discussed below. In sum, 2,237 legislative processes are available for analysis, covering 60 per cent of the initiatives for binding secondary law that the Commission has proposed between 1994 and 2016.

I appreciate the assistance of Markus Konrad (WZB) who could come up with a much more efficient Python implementation in this regard. Note that the DL-distance may overestimate the amount of policy change where large parts of the text just move position. The DocuToads algorithm punishes less for such transposition of longer substrings. Yet, applying it to a set of 60 European legal initiatives, Hermansson and Cross (2016: 24-5) find only very marginal differences to the DL distance I use here.
To see whether the patterns of strategic anticipation success are consistent with the theoretical arguments above, I enriched this data set with several independent variables. Initially we need to capture variation in the complexity of the legislative processes the Commission faces. The Council majority rule (H1) cannot be readily inferred from the Eur-Lex data, as the ‘legal basis’ field contains very messy entry patterns and often refers to contradictory articles in the EU treaties. Thus I resort to the data by Biesenbender (2011) who coded all individual provisions in the constitutional EU Treaties since 1958. For each provision that foresees supranational legislative competence, the data provides the respective policy area as well as the applicable Council voting rules and parliamentary procedures. I aggregate this information to the shares of applicable procedures by policy area and treaty in force. Then I map the Commission DG signing responsible for each individual legislative proposal to the policy area it primarily operates in (Appendix B). This gives a percentage point estimate of the degree to which each DG faces unanimity or QMV Council majorities at a given point in time. The number of governments in the Council (H2) is captured by the number of member states at the time the Commission has tabled the respective proposal. The applicable parliamentary involvement (H3) can be readily inferred from the individual procedural steps provided in Eur-Lex (cf. Häge 2011).

The following hypothesis (H4) suggests that legislative anticipation is negatively related to the complexity of the policy proposals. For now I operationalize simply by the length of the proposal in the number of words it contains. Finally a Commission DG’s experience in the policy area should matter (H5). Thus I capture the duration for which the respective policy field is already a European legislative competence and rely on Biesenbender’s treaty data again. The variable stores the difference in years between proposal adoption and the entry into force of the EU treaty that provided the first legislative rules on the policy area.

Systematic data on internal organizational constraints are hardest to obtain. The Commission often retains information on its internal dynamics along the argument that this would impair its standing in inter-institutional negotiations (Hartlapp et al. 2014: Ch. 3). To the best of my knowledge, the only source that allows tracking features of Commission DGs over time is the PEU database (Hartlapp and Lorenz 2012). In particular, two items in this database are of relevance for hypothesis set six. First, to operationalize political resources of a DG I resort to the so-called ‘power index’ of the responsible Commissioner. Similar to Döring (2007) and Franchino (2009) the variable provides a score for the highest prior political office ranging from 2.27 for former Prime Ministers, over .5 for junior ministers, down to .2 for mere party activists. This is a reasonable proxy for the political networks and skills a Commissioner can invest in crafting winning coalitions for the policy proposals from her or his DG. In addition, to capture on-job experience I store the number of days for which the Commissioner is already in the Commission. Second, regarding administrative resources the number of staff working on a particular proposal would be ideal but is unfortunately not public knowledge. The closest I can get is the number of units per drafting DG. This proxies administrative resources in at least so far as a higher number of units provides more contact points and informal networks for digesting information from the political environment while also indicating higher levels of specialization.
and more efficient division of labor that should generate more sectoral expertise for crafting policy proposals.

Finally, to tap into the amount and quality of internal coordination (H6) I firstly consider the Secretariat-General of the Commission (SecGen), a service directly accountable to the Commission president. Different accounts (Hartlapp et al. 2013; Tholoniat 2009; Kassim 2006) highlight the role of this service in internal ‘upstream coordination’ through its sectoral policy coordination units, as well as its involvement in impact assessments, inter-service consultation, and political programming. Like for the drafting DGs, the corresponding variable stores the number of SecGen units at the time each individual policy proposal was tabled. More importantly, I resort to the internal decision mode by which each proposal was adopted within the Commission as indicated in Eur-Lex. More specifically the variable marks proposals that were decided by oral procedure. In contrast to the written procedure, this indicates that a proposal was an agenda item in the Tuesday’s meeting of the College of Commissioners which often involve non-recorded votes. This happens in particular when internal conflicts could not be solved ‘downstream’ through bilateral DG contacts, the formal interservice-consultations, or direct negotiations among the responsible Directors-General (Hartlapp et al. 2013). An oral procedure thus signals significant levels of internal conflict on the policy in question.

Taken together, this set of variables (descriptives in Appendix C) provides hitherto unrivalled systematic information to analyze the quality of legislative anticipation that the European Commission can muster.

4. Results

Let us start with a descriptive overview of the dependent variable: the probability that the text of a Commission proposal is turned into European law without significant change by the co-legislators. The left panel of Figure 1 shows the average inverted edit distance from the text of the Commission proposal to the text of the law that the Council and often the EP have finally adopted. The grand mean of this measure (vertical line) initially indicates a roughly 60 per cent chance that the adopted law equals what the Commission has originally proposed. From the perspective of strategic agenda setting, thus, the Commission hardly seems to control perfect information – in more than 40 per cent of the cases the Council and the EP rather alter the policy choices that the Commission has put on the table in the first place.

Most importantly for our purposes, these data highlight that the ability to draft directly acceptable policies also varies systematically across the individual DGs of the Commission. The policies drafted by four Directorates-General - external trade (TRADE), Taxations and Customs Union (TAXUD), Fisheries (MARE), as well as Agriculture and Rural Development (AGRI) – have a consistently higher chance to survive the inter-institutional negotiations without much textual change. The adopted law equals the original Commission proposal in about 70 to 80 per cent of the text that these DGs have put forward. In contrast, other DGs perform consistently below the Commission average. At the bottom end of the spectrum we find, for example, the Directorates-General for Justice Affairs (JUST), Climate Action (CLIMA), or Informatics (DIGIT) which only have a below 45% chance that the finally adopted law reflects the original text that they have proposed.
This strong descriptive variation in the ability of individual DGs to anticipate which policies are acceptable to the Council and/or the EP also hints to some of the specific theoretical expectations formulated above. The middle and right panels of Figure 1 highlight that the more successful DGs also table significantly more and significantly shorter policies than most of the less successful DGs. In addition, the more successful DGs operate in areas in which a European legislative competence was established early on, while some of the less successful ones have been created only after more recent EU treaty revisions. Against these patterns it stands to reason that both the legislative experience a DG controls (H5) and/or the complexity of policies it is responsible for (H4) affect the quality of legislative anticipation it can muster.

To see whether these patterns are also borne out when controlling for the other theorized factors, let us turn to a multivariate analysis. Since the inverted normalized Damerau-Levenshtein distance is bound between 0 and 1 and can be interpreted as a continuous probability of the text being unchanged, I employ logistic regression models. In such a non-linear setting, average marginal effects might be misleading and also provide little insights into the substantive effect sizes. Figure 2 thus presents the predicted probability for an unchanged Commission proposal when each independent variable moves across its full observed range while all other variables are held constant (full regression tables in Appendix D).

The two top left panels of this figure tap into the varying complexity that the Commission faces under different majority rules in and varying sizes of the Council of Ministers. As expected in
hypotheses H1 and H2, more qualified majority voting in the policy area a DG operates in is associated with a slightly better chance to propose a policy that is accepted right away. The enlarging number of governments in the Council decreases this chance, in contrast. However, we also see that these effects are substantially very small while being hardly robust in statistical terms. For both Council variables in the model, the marginal change in the dependent variable is less than four percentage points and only the Council size variable reaches statistical significance on the 10 percent confidence level. Clearly, caution is warranted here especially since the Council majority rule could not be measured on the level of individual proposal. But for now, the expectation that the complexity of the setup in the Council of Ministers affects the quality of legislative anticipation that the Commission can muster finds only very scant support in the data.

In contrast, formal involvement of the European Parliament seems to matter (H3). Descriptively, there is a roughly 77 per cent chance that a Commission proposal remains unchanged when the respective procedure excludes the EP (441 cases in the sample). This chance drops to 55 per cent when the EP has any kind of formal role in the procedure. This effect is substantially important and holds for the different types of formal EP involvement (panel 3-6 in top row of Figure 2). As expected, EP involvement through the consultation procedure complicates anticipation of the Commission but only to a modest degree. Controlling for all other variables we observe a drop of roughly nine percentage points in the likelihood that the Commission can push through its original proposal. It stands to reason that consultation of the EP sometimes unveils new policy issues that the Commission had not been able to anticipate when drafting the legal text. In those procedures where the EP has formal voting powers, the negative effect on the anticipation quality of the Commission is even more pronounced. For the cooperation (64 cases) and especially co-decision procedures (957 cases), the chance that a proposal survives the negotiations among the Commission’s co-legislators unchanged drops by about 24 percentage points. The negative effect of EP involvement can also be seen in the assent procedure, though it is less robust here given the rarity of these events (11 cases). Taken together, the data strongly support the expectation that formal involvement of the EP make it much harder for the Commission to anticipate and to draft policies that its co-legislators can accept right away.

The top-right panel of Figure 2 furthermore supports the notion that the Commission anticipation is hampered by the complexity of the policy it drafts. The longer the legal text, the lower are the chances that it remains unchanged during the process. Moving from the shortest proposal in the sample with only 34 words – a regulation repealing a tariff on bananas (COM/2010/96) – to the longest one with more than 40,000 words – a directive on the prudential supervision of credit institutions (COM/2011/453) – decreases the normalized success rate by 21 percentage points. Given that such very long proposals are rare, the confidence band opens up at higher levels of this variable but its average marginal effect is statistically robust at the five percent level.
Figure 2: Predicted values from the full logistic regression model (Model 5 in Appendix D)
The bottom-left panel in Figure 2 supports the expectation that legislative experience in a given policy area affects the anticipation quality of the responsible Commission DG positively. Holding all other variables constant, we see that that time that has passed since the policy area was turned into a legislative competence through an EU treaty is positively related to the probability that a Commission proposal in this area passes through the inter-institutional negotiations without textual change. Moving from areas that are covered by EU treaties for only two years at the point the Commission DG tables a proposal (e.g. a directive on consumer protection in food prices by DG SANTE in 1994) to others that fall already under European competence for more than 39 years (e.g. a regulation on trade in agricultural products by DG AGRI in 2016) increases the likelihood that the original Commission draft is not changed during the process by nine percentage points. This effect is statistically robust at the 5 per cent level. The patterns are thus consistent with the notion that accumulated policy experience of the responsible DG improves its ability to anticipate Council and EP preferences for a given proposal.

Other DG level variables, however, do not exhibit the theoretically expected effects (panels 2-4 in the bottom row of Figure 2). Neither the prior political experience of the Commissioner heading the drafting DG nor her or his time in the office appear to be linked to the degree of change a proposal experiences in inter-institutional negotiations. The slopes are positive as expected but are neither substantially relevant nor statistically robust. The same holds for our – arguably crude – proxy for the administrative resources of the drafting DG as captured in the number of units it features.

Regarding internal coordination prior to tabling a proposal, also the size of the Commission’s central coordinating service, the Secretariat-General, appears not be linked to the quality of legislative anticipation. But there is evidence that internal coordination matters for external legislative success: Those proposals that have internally escalated to the highest hierarchical level within the Commission as evidenced in the oral procedure (549 cases in the sample) have a six percentage points lower chance to pass through the Council and the EP in an unchanged manner. This association – statistically robust at the one per cent level – is consistent with hypothesis 7.

To what extent do these uncovered patterns explain the high amount of variation in the ability of individual Commission DGs to propose policies that the co-legislators can directly accept? A closer look at the regression results (Appendix D) initially suggests some caution. As judged by McFadden’s pseudo-$R^2$ which compares the log-likelihood of the null model to the full model we cover only around 13 per cent of the overall variation in our dependent variable. To assess whether the estimations discussed thus far suffer from omitted variable bias, Figure 3 thus analyses the post-estimation residuals of main model.

The overall residual distribution (left panel) is modestly skewed to the left, suggesting that the model underestimates the quality of legislative anticipation by the Commission in a couple of cases. However, the observed distribution does not deviate dramatically from the expected normal, building trust in the patterns we have captured thus far.
Regarding estimation accuracy by drafting Commission DG (right panel), we observe only very few cases that systematically deviate from the expected residual value of zero. The model seems to only consistently underestimate the legislative anticipation that the DG for regional development (REGIO) can actually muster. This DG mainly drafts proposals on the EU’s regional and structural adjustment funds. While these are usually rather long texts, they primarily propose financial, zero-sum distributions of funds. For these distributions its is possibly rather easy to predict Council and EP preferences – a nuisance that our current model cannot readily cover by a dedicated independent variable. On the other end of the spectrum there are a few DGs for which the model overestimates the legislative anticipation quality. Upon closer inspection, these are mostly DGs that operate in the same policy area but split during the investigation period. For example, DG ENER (energy) was part of DG MOVE (Transport, earlier Transport & Energy) until 2010. DG JUST (justice) split off from DG HOME (migration and home affairs) also in 2010. Likewise, DG GROW is made up of units that were part of DG MARKT (internal market) and DG ENTR (Enterprises) before 2010. These cases thus receive high values on the variable capturing policy specific experience, but are in fact younger organizations that possibly still need to find an appropriate workflow for successfully drafting legislation.

Taken together, the residual analysis points out lots of variation we cannot cover thus far and points to improvable operationalisation of some independent variables. But it does not suggest that the patterns uncovered here are systematically biased.

5. Conclusions

This article started from the observation that the European Commission is an influential actor in European law-making. It can neither freely decide which policy areas to tackle nor can it override the preferences of its co-legislators. But the Commission’s rather encompassing monopoly in initiating European legislation offers a distinct first mover advantage: within the set of all policies that the Council and the EP would accept, the Commission may propose the one policy choice it
prefers the most, thereby tilting the aggregate contents of European law. This is a key insight of existing analyses of relative legislative powers in the European Union.

Yet, the existing literature treats the Commission mostly as a unitary agenda setter with perfect information in this vein. Relaxing these assumptions, in contrast, I argue that strategically tilting the contents of European law requires that the Commission can correctly identify the set of all acceptable policies before it tables the initial legal text. To this end it has to engage in costly research on all legal options as well as the preferences of the different actors in the Council and the EP. The resources to handle these high informational demands of legislative anticipation, in addition, are unequally distributed within the Commission and should furthermore vary with policy characteristics and the applicable legislative procedure.

The expectations derived from this perspective are tested in a set of more than 2,000 Commission proposals for binding regulations and directives between 1994 and 2016. To assess the quality of legislative anticipation, I calculate the edit distances between the legal texts the Commission has proposed and the law that its co-legislators have finally adopted.

This variable initially shows that the quality of legislative anticipation varies heavily across proposals and, notably, also systematically across the different Directorates-General that make up the European Commission. While some DGs only have a 40 per cent chance that their proposal is fully reflected in the final European law, others reach up to 80 per cent. When it comes to exploiting the legislative first mover advantage strategically, in other words, we do not face one but many different agenda setters in the European polity.

Multivariate analyses show that the high amount of variation in the DGs’ ability to propose policies that the co-legislators can directly accept is primarily associated with the varying amount of EP involvement that they face, with the complexity of the policies that they propose, with the amount of legislative experience they control, and with the degree to which they are able to coordinate with other Commission DGs during early legislative drafting. In contrast, the expectation that higher majority hurdles in and an increasing size of the Council hamper the Commission’s anticipatory ability finds only very limited support in the data presented here. Moreover, the theorized effects of individual Commissioner experience and administrative size of the different DGs were not discernible in the empirical patterns. While these findings appear by and large unbiased, the included factors leave a high amount of empirical variation in the quality of legislative anticipation unexplained.

This could motivate further research and the data published with this article hopefully facilitate such endeavours. In any case, the patterns uncovered here lead to the conclusion that a disaggregated perspective on the Commission is substantially warranted and relevant for at least two reasons. First, relaxing the unitary actor and prefect information assumptions should help to better understand the political ramifications of portfolio distributions and managerial reforms that come up again and again at the beginning of each Commission term. Second and more importantly, better understanding the varying strategic capacities within the Commission should lead to better predictions on how the integration through law in the European Union will evolve in the long run.
6. References


## Appendix A: Eur-Lex Scraper

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Details &amp; Examples</th>
</tr>
</thead>
</table>
| 1    | Identify universe of document numbers | - CELEX identifiers: [SECTOR][YEAR][TYPE][DOCNUM]  
- Com proposals for binding secondary EU law: CELEX sector 5 (preparatory documents) of type 'PC' (COM – legislative proposals)  
- Manual search shows that the highest observed DOCNUM in this domain between 1985 and 2016 is 2282  
- Proposals in legislative packages might share a CELEX number separated by bracketed numbers - the scraper allows for up to five of such sub-proposals; the highest number retrieved in random manual searches  
- This defines the possible numerical range: 51985PC0001(01) to 52016PC2282(05) |
| 2    | Check whether documents exist | - If EUR-Lex contains a document with these identifiers, it can be accessed via: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:[IDENTIFIER]  
- The scraper accordingly pings the respective URLs and stores the http response  
- ‘404’ codes indicate that no such document exists in the database and corresponding identifiers are disregarded in all further steps |
| 3    | Download bibliographical information | - For existing identifiers, the scraper stores the html content of the landing URL  
- These files contain bibliographical information such as the proposal title, the adoption dates and – partially – the full legal text of the proposal  
- Execution: July 31 2017 |
| 4    | Download procedural information | - EUR-Lex provides procedural information via a dedicated URL with the structure: http://eur-lex.europa.eu/legal-content/EN/HIS/?uri=CELEX:[IDENTIFIER]  
- The html content of these URLs is separately stored  
- These files contain further document information and various details on the inter-institutional process and its outcome (such as Council and EP readings)  
- Execution: July 31 2017 |
| 5    | Parse html and extract data | - All downloaded files are then parsed to extract relevant information and store it in a combined data frame centred on the original Commission proposal  
- Besides procedural information, this also includes references to the finally adopted law, if applicable, which is also uniquely identified by a CELEX number in sector 3 (legislation) of type L (directives), R (regulations), or D (decisions) |
| 6    | Remove irrelevant cases | - Some documents have been wrongly classified as original Commission proposals by the database maintainers (as indicated in the document title)  
- First, I remove documents that are recommendations or reports only  
- Second, documents that do not initiate a new procedure but present inter-inst. steps only: ‘opinions’ and ‘modified|revised|reexamined proposals’ are removed |
| 7    | Download and parse adopted law | - Similar to steps 3 and 5, the scraper then exploits the CELEX numbers of the adopted laws to download and store bibliographical information and the full legal text (where available)  
- Execution: August 3 2017 |
|      | Data cleaning | - Infer missing procedures from legal basis, or EP involvement and Treaty in force  
- Harmonize actor and procedure names that have varied over time  
- Check and correct false entries by exploiting overlapping data points |

**Table 1: Logic of the custom EUR-Lex scraper**

20
## Appendix B: Mapping treaty policy areas to Directorates-General of the Commission

<table>
<thead>
<tr>
<th>Biesenbender policy classification</th>
<th>Reduction to capture Comm organisation over time</th>
<th>Mapped DGs (PEU nomenclature)</th>
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<tr>
<td>Administrative cooperation</td>
<td>Administrative cooperation</td>
<td>EUROSTAT, HR, OLAF</td>
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<td>Agriculture</td>
<td>AGRI</td>
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<td>Financial provisions</td>
<td>Budget</td>
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<td>Economic and Social Cohesion</td>
<td>Cohesion</td>
<td>REGIO</td>
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<td>Competition, taxation, customs</td>
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Table 2: Policy-area and DG mapping employed
Appendix C: Variable distributions

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*Table 3: Descriptive statistics of model variables*
## Appendix D: Regression models

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<td>0.011**</td>
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</table>

Notes: ***p < .01; **p < .05; *p < .1

Table 4: Logistic regression results
(Log odds; DV: inverted normalized DL distance of proposal and law text)