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Anticipation in Legislative Politics: The Case of EU Enlargement

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Abstract

This paper analyzes anticipation in legislative politics. Anticipation is a central component of political behavior. In many situations, the "look into the future" impacts on actors' choices. Actors anticipate the behavior of other actors as well as changes in the state of the world. After theoretically delineating different objects and consequences of anticipation we derive a set of hypotheses about anticipatory behavior in EU decision-making. In particular, we ask whether the EU Council anticipates the arrival of new member states and how this impacts on legislative output. We test our theory by estimating count and survival models on a dataset that contains information on EU legislation from 1976 to 2007. Covering five enlargement rounds we are able to present evidence for anticipatory behavior in EU legislative politics.

1. Introduction

"We can all see into the future," whispered the elevator in what sounded like terror, "it's part of our programming."
(Douglas Adams, The Restaurant at the End of the Universe, 1980)

In line with Douglas Adam's elevators most rational theories of political action assume that actors look into the future. Although anticipation is generally accepted as a central feature of politics, there is surprisingly little work on how precisely it impacts on policy-making. It is against this backdrop that we address the issue of anticipation in this paper. After grasping anticipatory behavior in theoretical terms we derive a set of hypotheses about anticipation in EU legislative politics. In particular, we claim that enlargement impacts on the old member states' behavior. We expect that the anticipation of enlargement should impact on legislative output before and after the accession of new member states. We test this theory as well as some observable implications – for instance, we expect different strength of effects for different enlargement rounds as well as policy areas – by estimating count models. In particular, we estimate a negative binomial regression. In addition, survival models test whether we can observe a speeding-up of decisions before the accession of new member states. We run these models on a new

dataset containing the entire EU legislation from 1976 to 2007. We are thus able to cover five enlargement rounds in our research.

Our results underline that anticipation is, indeed, an issue in EU policy-making. We find evidence for anticipatory effects before all enlargement rounds that we analyze (the first enlargement round is, of course, missed). There is more legislation passed especially before controversial enlargement rounds. In addition, we find declining legislative output in the wake of the accession of new member states. In general, anticipation leads to a faster decision-making process before enlargement. These findings clearly illustrate that anticipation substantively adds to our understanding of the EU's legislative output over time. Anticipation matters in policy-making.

2. A Theory of Anticipation

Forward looking actors are common in the social sciences. In rational theories, utility-maximizing actors look ahead before deciding how to act. The look into the future thus is part of the ontological setup of such theories. While the clarity with which actors forecast the future can vary according to the information that they possess, in general, they are interested in the behavior of other actors and in the way institutions translate their preferences into outcomes. For us, anticipation means that actors forecast the behavior of other actors as well as changes in the state of the world and then adjust their own behavior in a utility-maximizing manner. In the first case anticipation occurs when an individual or collective actor forecasts another actor's behavior before choosing her own behavior. In a sequential game-theoretic setting an actor A anticipates actor B's behavior at time *t1* and acts accordingly at time *t0*. She will choose the move that maximizes her utility given the anticipated reaction of actor B. Such anticipation is assumed when solving dynamic games of perfect information through backward induction (cf. Morrow 1994, 124; McCarty and Meirowitz 2007, 175). In reality, actors cannot be sure how other actors will ultimately behave since they lack information about the other actors' preferences and their understanding of the choice situation. This does not, however, mean that anticipation is absent in such a context. Instead anticipation takes place under uncertainty. A political science example for such anticipation is presidential vetoes of

US-Congress legislation (cf. Cameron 2000; Krehbiel 1998). A policy-oriented President will not veto legislation when he expects Congress to override his veto with a two-thirds majority.[1] Thus, in anticipation of Congress' reaction the President will abstain from submitting a veto. This does not, however, mean that the President appreciates the piece of legislation enacted by Congress. Simply, the risk of being overridden imposes costs in form of an image loss on the President. But Cameron (2000, 19) also shows that the threat of a presidential veto can affect the content of policies that Congress enacts. In order to prevent a successful veto Congress anticipates the positions the President is just willing to accept. Although no action can be directly observed, the President's veto threat imposes constraints on Congress. Those are two examples for what has been called the "second face of power" (Bacharach and Baratz 1962). From a theoretical perspective, the anticipation of other players' behaviour can be compared to a game of chess. When playing chess each player anticipates the moves of her opponent within the fixed framework given by the rules of the game. Of course, each player takes into account that the other player is itself anticipating her own behavior.

In the second case, actors anticipate future changes in the "state of the world" or "nature". In politics this usually refers to a change of institutions. For instance, changes in the institutional setup of a game can incite actors to choose different strategies from the one's that would have been rational under the initial conditions. Thus the preferences of the actors remain stable but exogenous events lead to different choices (cf. Morrow 1994: 19). For example, future changes in voting rules can incite an actor to accept policy outcomes that she would have rejected otherwise. The inclusion of new actors into a game can also change the strategic situation of the players. For example, the formation of new alliances or coalitions becomes possible with new players entering the stage. To provide an application from political science, the two examples of institutional change and inclusion of new players remind of the European Union. The institutional rules of the European legislative process have been modified many times since the 1980s, changing

[1] Of course, the President might nevertheless veto a legislative act in order to signal his policy-positions to his voters.

for instance Council voting rules. In addition, different enlargement rounds have increased the number of member states in the EU.[2]

We expect such changes to impact on the behavior of strategic actors. Anticipation is an important feature of choice theory. Humans look ahead when making strategic decisions. They incorporate their expectation of other actors' behavior but also of future changes of the state of the world into their choices. Future events can affect today's actions. In the context of social choice, anticipation can, for example, impact on the timing of decisions. Anticipating an event that occurs in time *t1* can lead to a change of behavior in time *t0*. This, in turn, might affect what we observe in time *t2*, as is illustrated by Figure 1.

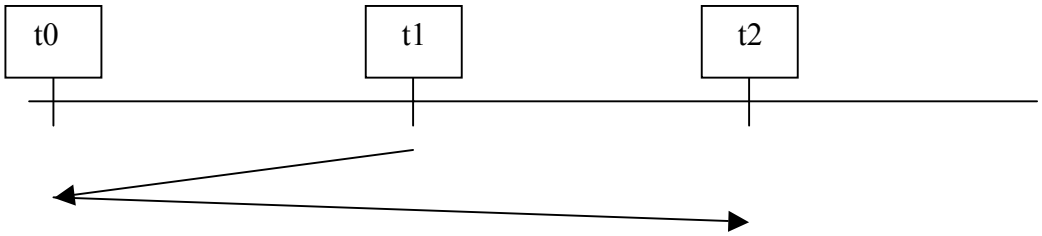


Figure 1: anticipation effects on time t0 and time t2

For example, imagine a collective decision to be scheduled for *t2*. An event that is taking place in time *t1*, however, changes the decision-makers' expectations. In game theoretic terminology, the future event modifies the players' expected utilities. Therefore they decide to take a decision already at time *t0*. The result is that we record one more decision in time *t0* than we would have expected when not taking the anticipation of the event in *t1* into account. In addition, because this decision is already taken in *t0*, we should not observe that same decision to be taken in time *t2*. In this example, anticipation thus reduces the number of decisions that we observe in *t2*. Of course, we can also imagine situations in which actors can postpone decisions that they normally would have taken at an earlier point in time. For example, some actors might hope to benefit from the support of new members that will join the group in *t1*. They would thus try to form a blocking minority. If successful, this yields the opposite result: in time *t0* we would

[2] Note that enlargement and institutional reforms are also related to one another. In particular, enlargement is often said to trigger institutional reforms.

expect a decline of legislation whereas in time *t2* we would expect an increase of legislation.

For us, these examples underline three things: first, anticipation has a substantive effect on political outcomes. Second, the strategic anticipation of an event can have effects at two different points in time, *t0* as well as *t2*. Third, the effects of anticipation depend on specific conditions as, for instance, preference constellations and coalitional patterns. Theory should generally provide an idea of what anticipation mechanisms and effect we should expect. So far most research on anticipatory behavior has been conducted by economists (cf., for instance Dornbusch 1976; Wilson 1976; Liviathan 1984; Drazen 2003). Political science has been more reluctant to empirically address this issue. However, there is a growing interest in timing and temporality and our paper contributes to that literature. Both cases of anticipation – the anticipation of a change in preferences and the anticipation of an institutional change – are important for the analysis of politics, as illustrated by our substantive examples from legislative decision-making in the US and the EU. In terms of actor motivation the two cases, ultimately, are very similar and this holds for their analysis, too. In the remains of this paper, we will analyze EU legislative decision-making in the context of enlargement. Given the complexities of the EU's political system we find that this can be considered a rather hard case for the analysis of anticipation.

3. Analyzing Anticipation: the case of EU Enlargement

After having defined anticipation and discussed its impact on political decision-making in general, we now test whether we can find anticipatory behavior in EU legislative politics. Our expectation is that anticipation should occur before the accession of new member states. The EC so far has experienced six enlargement rounds; it has grown from six to 27 member states (cf. table 1).

Date of Accession	Accession Countries
01-01-1958	Belgium, France, Germany, Italy, Luxembourg, NL
01-01-1973	Denmark, Ireland, UK
01-01-1981	Greece
01-01-1986	Portugal, Spain
01-01-1995	Austria, Finland, Sweden
05-01-2004	Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia
01-01-2007	Bulgaria, Romania

Table 1: enlargement rounds

It is generally assumed, that the accession of new member states changes the political game in the EU. Most decision-making theories predict that a growth of group-size increases the heterogeneity of preferences and thereby fosters policy-stability (cf. Tsebelis 2002; Tsebelis and Yataganas 2002; Bilbao et al. 2002; König and Bräuninger 2004). In the EU, legislation is proposed by the European Commission and then in different ways – depending on the various legislative procedures – passes through the European Parliament and the Council in order to be enacted and then to be transposed and implemented by the member states. To keep things simple, we here assume that the Council is still the major hurdle for new legislation. Since the old member states in the Council know when an enlargement is scheduled they are in a position to anticipate possible effects.[3]

In our setup, *t0* is the period preceding an enlargement in *t1*. *t2* is the period that follows. We assume that legislation has a life cycle during which it normally stays in the EU decision-making apparatus. This cycle is determined by the demand for legislation. Each legislative act thus has a specific probability of being enacted at a given point in

[3] In a future step, a closer cooperation between the different EU institutions could be modeled in order to derive a more complete picture of anticipation in the EU.

time. The time of final decision is a question of choice. Given that enlargement should make decision-making more cumbersome we expect member states to enact legislation that has already been submitted into the decision-making apparatus earlier than would have been the case without an enlargement up in front. In such a case, the costs of waiting are higher than the additional costs of deciding an issue earlier than initially scheduled. We thus expect enlargement to impact on the Council's behavior already at time *t0*. Our first hypothesis accordingly claims an increased legislative output before an accession of new member states.

H1: Since enlargement is likely to make decision-making more cumbersome, legislative output should rise before the accession of new member states.

Assuming a steady demand for legislation for a particular period, the increasing amount of legislation passed at *t0* should have repercussions at time *t2*. In particular, a decline in legislation should follow the anticipatory peaks.

H2: At time t2 less legislation is passed than would have been the case without enlargement.

However, two conditions might constrain the effects claimed by hypotheses 1 and 2. First, if the accession of new member states does not increase the heterogeneity in the group – i.e. that the new member states fall into the win-set of the old member states – we should not observe such anticipatory effects.[4] Secondly, if group members think their preferences will be better served after enlargement we should find evidence for a postponement of legislation. Instead of an increase we should observe less legislation being passed before the accession of new members.

Without an increase of group heterogeneity we thus expect continuity. This should be observable in different enlargement rounds. For instance, we should find stronger anticipatory effects before the Eastern enlargement as compared to the Northern enlargement given the great economic, political and cultural differences between the EU

[4] For reasons of simplicity we do not introduce different EU voting procedures.

15 and the Eastern European countries. Hypothesis 3 accordingly introduces variation between the different enlargement rounds.

H3: Anticipatory effects depend on the preference heterogeneity between the old and new member states. We therefore expect a smaller increase of legislation preceding, for instance, Northern enlargement as compared to Eastern enlargement.

Hypothesis 4 captures the impact of blocking minorities that expect to profit from enlargement.

H4: If a blocking minority profits from an enlargement we should observe a reduction of the amount of legislation passed before and an increase passed after the accession of new member states.

Another observable implication of our anticipation theory is that we should observe different effects in different policy areas (cf. König and Bräuninger 2004). For instance, there should be stronger effects in agricultural or internal market questions than, for example, in external relations issues (cf., e.g., Zimmer et al. 2005; Dobbins et al. 2004; Daugbjerg and Swinbank 2004: 100). König and Bräuninger (2004: 432), for instance, point out that "the increased heterogeneity of member state positions will threaten the effective functioning of agricultural decision-making". These expectations are based on the fundamental differences between the incumbent and the new member states. The "new members have a higher share of agriculture in GDP, a much higher proportion of agricultural labour in the workforce, and household expenditures on food that are considerably above EU levels" (Herok and Lotze 2000: 662). Therefore we expect to find a rise of agricultural legislation preceding Eastern enlargement. This is captured more generally by hypothesis 5.

H5: The effects of anticipation should differ between policy areas. The more divergent the preferences of the old and new member states, the more anticipation should occur at time t0.

A final observable implication of our anticipation theory concerns the duration of legislative acts (cf. Box-Steffensmeier and Jones 2004, 2). In particular, the duration of acts that are passed at *t0* should decline. The reason is that we expect legislative acts to be passed that normally would have been decided at a later moment. This leads to a reduction of decision-making time before enlargement.

H6: The duration of legislative acts decreases in the periods preceding the accession of new member states.

Guided by these hypotheses we should get a better understanding of the anticipation effects of EU enlargement. After introducing our data-set and methods we will then present and discuss our findings.

4. Data and Methods

Our analysis is based on the Prelex dataset provided by the European Commission. This dataset monitors the decision-making process between the EU institutions and lists all official documents transmitted by the Commission to the legislator from the 1970s onwards. For assembling our dataset we used a technique called "deparsing". A computer program downloads and orders the information from the official page. We opted for assembling our own dataset because the publicly available datasets provided, for instance, by König (2007) do not cover Eastern enlargement. In addition, starting our analysis in 1976 allows us to take the Greek accession into account. Our dataset spans over three decades and five enlargement rounds. Namely the Greek enlargement in 1981, the accession of Spain and Portugal in 1986, the accession of Austria, Sweden, and Finland in 1995, the Eastern enlargement in 2004, and finally the accession of Bulgaria and Romania in 2007 are taken into account. All in all, we have identified 13001 regulations, decisions, and directives that were successfully adopted by the legislator from the first of January 1976 to the 31st of May 2007.

We are interested in possible anticipatory effects prior to an enlargement round. Since enlargement itself necessitates the adoption of specific preparatory legislative acts, one should observe an increase in legislative acts prior to an enlargement round simply due to such administrative acts alone. This, however, is not the type of anticipation that we are interested in. Therefore we decided to exclude such preparatory legislative acts from our analysis. We implement two criteria in order to filter out these kinds of acts. The first relates to the name of a legislative act. Whenever a name of a legislative act contained 'enlargement', 'new member state(s)', or 'accession' it was dropped from the list of assessed legislative acts. A total of 257 legislative acts were identified by this method, after reintroducing such acts that explicitly treated other types of enlargement, as, for instance, the accession of the EU to a UN committee. Secondly, we excluded all legislative acts that were issued by the Directorate-General (DG) 'Enlargement'. Another 179 acts were filtered out applying this criterion. Finally, 12565 legislative acts remain as the basis of our analysis.

In the following, we will test our hypotheses estimating count and survival models. These models address different dependent variables and therefore demand slightly different datasets. We turn to both separately below.

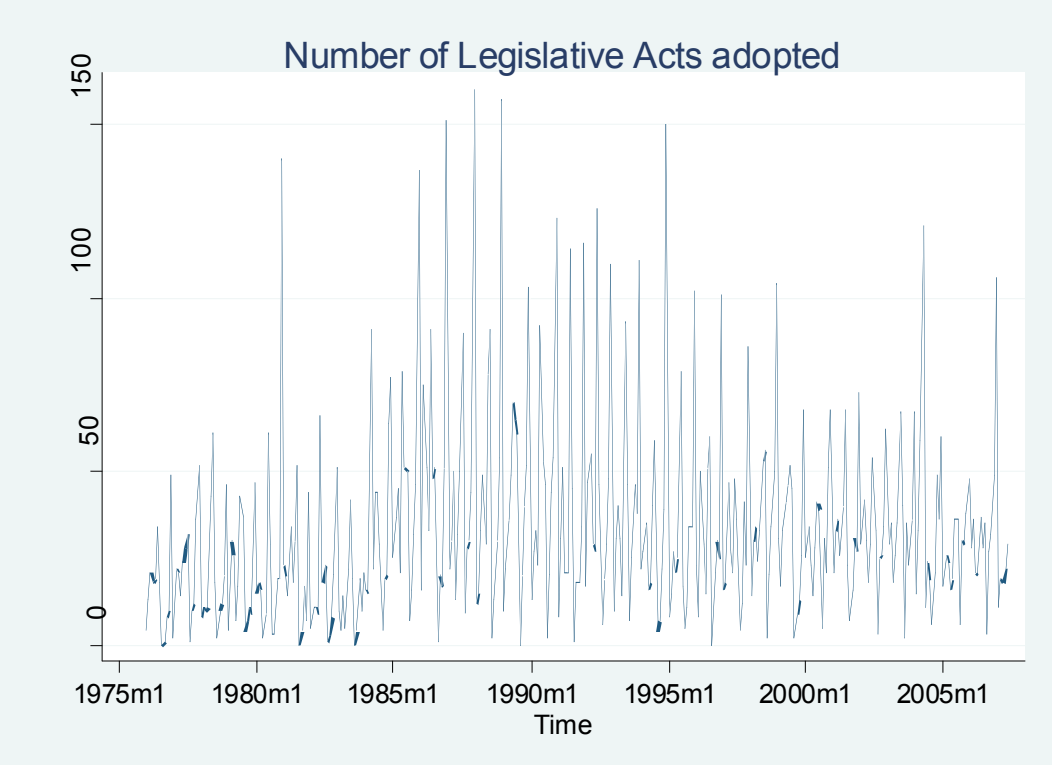
A Count Model: The Negative Binomial Regression

Does legislative output increase before enlargement? Our unit of analysis is the number of legislative acts adopted per month. This allows us to take the monthly fluctuations in legislative output – mainly determined by summer holidays and Council Presidency terms – into account. From January 1976 to May 2007 we therefore have 377 observations. The minimum number of acts adopted in a single month is zero the maximum is 160 legislative acts enacted in December 1987.

Since OLS estimators are biased and inefficient if one deals with count data (cf. King 1988; Long 1997), we estimate a count model to address our hypotheses one to four. After testing for overdispersion we opted for a negative binomial regression model (cf. Long and Freeze 2006). Our model is specified as follows:

$$ADOPT_i = \exp(\beta_0 + \beta_1 * L6ADOPT_i + \beta_2 * L4COMSUB_i + \beta_3 * Members_i + \beta_4 * Delors_i + B_5 * ANT + \beta_{6\text{-}16} * MONTHDUM_{iFEB\text{-}DEC} + \varepsilon_i)$$

Here β_0 equals the constant of the estimated model, $\beta_{1\text{-}17}$ are the coefficients of the explanatory variables, ε is the error term, and i is the observation month. Our dependent variable ADOPT is a count variable, summarizing the number of directives, decisions, and regulations adopted per month. Graph 1 illustrates the legislative output of the European Union over time. The importance of the Council Presidency cycle is evident with peaks in June and December and drops in acts adopted in January and August. As the dependent variable covers several decades of EU decision-making we need to take time dependencies into account. We therefore include a lagged dependent variable. As the cycle of the Council Presidency strongly influences the number of legislative acts adopted each month we include a six months lagged dependent variable.



Graph 1

As to the explanatory variables, 'ANT' should capture anticipatory effects prior to the five enlargement rounds. Since 'ANT' is our central explanatory variable we tested various specifications of this variable. Amongst other things, we included anticipatory

effects that set in various months before an enlargement and that grow over time until the accession occurs. Comparing the different model specifications with the Akaike Information Criterion (AIC) supported a specification of 'ANT' that focused precisely on the month preceding an enlargement. This is in line with the stickiness that is often attributed to collective political decision-making – if a rise in legislation due to anticipation occurs at all, it should happen at the last possible moment. 'ANT' is a dummy variable equalling zero for all months except those directly preceding an enlargement round (i.e. December 1980, December 1985, December 1995, May 2004, December 2007). In those months the variable is coded one.

In a second model specification we allow for different effects prior to each enlargement round by replacing the 'ANT' variable with anticipation variables for each of these rounds. These variables are zero for all months except the month prior to the specific enlargement round, where they equal one.

Our dataset ranges over three decades in which EU decision-making has changed drastically. We account for these changes by including a variety of control variables. The first relates to the number of legislative acts the Commission submitted to the legislator. We assume that when the Commission submits more legislative acts to the Council, the Council will increase its output of legislative acts. It should be noted that as we have restricted our dataset to all legislative acts that have been adopted between the 1st of January 1976 and the 31st of May 2007, all Commission proposals that were submitted to the legislator but were not adopted in this time period are not included in the variable 'COMSUB'. The variable 'COMSUB' contains the number of legislative acts that were submitted by the Commission and that were adopted by the Council between the 01.01.1976 and the 31.05.2007. The minimum number of acts submitted by the Commission in one month is zero, the maximum is 121. On average, a legislative act remains within the EU decision-making procedure for 265 days. As this average is heavily influenced by a few outliers we attach greater informative value to the median, which is 102 days or around 3.5 months. Taking this into account we lag the 'COMSUB' variable by four months. Like the member states, we can expect that the Commission will submit more legislative acts prior to an enlargement round. Including the 'COMSUB'

variable therefore accounts for fluctuations within the Commission behavior and allows us to only capture the anticipatory behavior of the member states[5].

In order to take treaty changes like the Single European Act, the Maastricht, the Amsterdam and the Nice treaty into account we include the variables 'postSEA', 'postTEU', 'postAMS', and 'postNICE'. These variables are zero prior to the coming into force of the respective treaty, one thereafter, and zero once the treaty is replaced by a more recent one. Additionally, we include a 'Delors' dummy which accounts for the period in which Jacques Delors was president of the European Commission. During his terms in office the single market project was finalized. We can therefore expect that more legislative acts were adopted while Delors was President of the European Commission. The dummy is one from January 1985 to December 1994 and zero otherwise.

An Event History Analysis: The Cox-Model

Hypothesis five claims that the threat of enlargement should speed up decision-making. In order to test whether legislative acts adopted directly before an enlargement remain within the EU legislative process for a shorter period of time than is usually the case we conduct an event history analysis (cf. Box-Steffensmeier and Jones 2004). As we are interested in the passing of legislation our focus is on what Golub (1999) calls the backward lag time. The backward lag time records the decision-making duration of legislation that is being passed at a specific point in time. This information can then be aggregated over months.

If actors are more willing to compromise in the wake of enlargement the backward lag time should drop in the month prior to the accession of new member states. This is what we test with our event history analyses. When conducting an event history analysis, the question arises which kind of model is most appropriate for the underlying data. Several event-history analyses have been conducted in the context of EU decision-making (Schulz and König 2000, König 2007, Golub 1999, 2002, 2007, Golub and Steunenberg 2007, Zorn 2007). In an important contribution, Golub (2007) points out the

[5] As analyzing the role of the European Commission exceeds the scope of this paper, additional research could focus on the Commission's behavior prior to important changes within the structures of the European Union.

risk of miss-specifying the shape of the baseline hazard. In addition, he finds that in most research time varying covariates are only inadequately taken into account. Since the shape of the baseline hazard is clouded in mist Golub (2007: 162) pleads in favor of the Cox-Model when analyzing the EU decision-making process. We follow his suggestion and implement a Cox-Model. We also introduce time-varying covariates concerning the procedural changes, the number of member states, the Thatcher era, and the Treaty variables. Basically, this operation accounts for changes of the independent variables within the lifespan of a legislative act. This has substantive effects on its hazard. By including the time varying covariates our dataset grows by 2618 observations. As we drop 57 acts where the Commission submission date is equal to the adoption date, in other words, the time at risk is zero (if measured in days) we have a total of 15126 observations for our event history analysis.

As a baseline model we implement a slightly adapted version of Golub's (2007) model. Note that his analysis covered only directives adopted in the period from 1968 to 1998. We include the following variables into our analysis: 'EU10-EU27', 'CODECISION', 'COOPERATION', 'THATCHER', and 'BACKLOG'. Additionally we include variables that account for Treaty changes ('postSEA', 'postTEU', 'postAMS', 'postNICE') and the type of legislative acts adopted ('Decision', 'Regulation'). Finally, the anticipation variables 'ANT1981', 'ANT1986', 'ANT1995', 'ANT2004', 'ANT2007' are added to the baseline model. Table 2 illustrates the coding of these variables.

Variable	**Coding**
CODECISION	1 = adopted by the codecision procedure 0 = not adopted by the codecision procedure
COOPERATION	1 = adopted by the cooperation procedure 0 = not adopted by the cooperation procedure
THATCHER	1 = Thatcher is Prime Minister 0 = Thatcher is not Prime Minister
BACKLOG	Number of acts proposed before submission minus the number of acts adopted before submission
EU9-EU27	1 = adopted when members as stated in variable 0 = otherwise
postSEA-postNICE	1 = adopted when Treaty in force 0 = otherwise
Decision	1 = act is a decision 0 = otherwise
Regulation	1 = act is a regulation 0 = otherwise
ANT1981-2007	1 = adopted in month prior to an enlargement round

	0 = otherwise

Table 2: Coding of Variables

Our analysis does not contain the 'QMV' and 'Agenda' variables used by Golub (2007). As a matter of fact, both variables are not included in the PreLex Dataset and are therefore not available for our analysis. As the 'Agenda' variable is insignificant in Golub's (2007: 171) findings, dropping this variable from the analysis should be unproblematic. On the other hand, dropping the variable on qualified majority voting certainly is more delicate. Given the enormous difficulties of appropriately coding this variable in our dataset we justify leaving this variable aside on theoretical grounds. Previous event history analyses have shown that QMV as opposed to unanimity, indeed, positively influences the hazard of legislative acts. But in what direction should the omission of QMV bias our findings about anticipation? Since we expect anticipation to augment the hazard of legislative acts, leaving out QMV is problematic if we find an increase of QMV in the month preceding an enlargement. That is because QMV, too, has a positive impact on the hazard of a legislative act. If, however, the share of acts passed by QMV does not rise in the month preceding an enlargement, we should be on the safe side. In order to assess whether more or less QMV acts than on average have been adopted in the months of interest, we turn to the dataset provided by König (2007). König's dataset unfortunately only covers two enlargement rounds, namely the enlargements of 1986 and 1995. In both cases we find a reduction in the number of acts adopted by QMV in the month prior to the enlargement round when compared to the average of QMV acts. Table 3 illustrates these results.

König Dataset	**% of acts adopted by QMV**
Total Dataset	61.7%
Jan 1985-Dec1986	61.3%
Dec 1985	52.0%
Jan 1994-Dec1995	62.3%
Dec 1994	58.5%

Table 3: QMV Acts

Thus, while omitting the QMV variable is far from ideal, we find that this omission should not drive our anticipation results. After having outlined our dataset as well as the methods used, the following section displays our findings.

5. The Impact of Anticipation

Our findings both from the negative binomial regression model and the Cox-Model underscore the presence of anticipatory effects in EU decision-making. We turn to both models separately.

The baseline negative binomial regression model yields, with exception of the 'members' variable, the expected results. The lagged dependent variable is statistically significant with a positive coefficient. The same holds for the 'COMSUB' variable. The more legislation is proposed the more is passed. The number of members does not seem to influence the number of legislative acts adopted. This is surprising. Theoretical considerations on group-size, for instance made by the veto-player theory, would have expected a negative relationship between the number of Union members and legislative output. The positive influence of Delors is confirmed by our data. During the time period Jacques Delors was President of the European Commission 27.3%[6] more legislative acts were adopted than when Delors was not in office. After all treaty changes (i.e. the Single European Act, the Treaty on European Union, the Treaty of Amsterdam, and the Treaty of Nice) the number of adopted legislative acts increases. After the SEA 20.6% more legislative acts were adopted each month than before. 26.6% more legislative acts than prior to the SEA were adopted after the TEU came into force. In the time period after Amsterdam and Nice the number of adopted acts per months lies 44% and 69.2% higher than before the SEA period. These increases can be explained by the widened agenda of EU policy making. While for instance environmental policy making played no role in the EU of the 70s, it plays an important role in the EU of the 90s. Finally, our monthly dummy variables confirm that the European Institutions take their summer holidays in August but that they work hard before they leave in July. Also in June and December there is a high output at the end of EU Council Presidency terms.

Anticipation Model 1 shows that on average over all month preceding enlargement rounds legislative output was 135.5% higher than in months not directly preceding an enlargement round. This finding clearly supports Hypothesis 1. The

[6] Percentage changes are calculated by: %change = 100*(exp(βk *δ)-1), where β is the coefficient of the variable k and δ is the number of units variable k changes.

importance of anticipation is further stressed by anticipation model 2. This model contains information on the different enlargement rounds. We find the strongest effect prior to Eastern enlargement. In April 2004 legislative output was 419.2% higher than usual. The smallest anticipatory effect is found prior to the 2007 enlargement, where legislative output is only increased by 27.7%. In December 1980, December 1985, and December 1995, legislative output increased by 118.1%, 78.4%, and 72.2% respectively. These findings not only confirm that old member states increasingly decide upon issues before new members enter the club, but also support hypothesis three. As expected we find stronger anticipatory effects prior to Eastern enlargement in 2004 than for instance prior to Northern Enlargement in 1995. Preference heterogeneity between the incumbent

NBRM	Baseline Model	Anticipation 1	Anticipation 2
L6.Finaladoption	.0036606***	.0039744***	.0037196***
L4.COMSUB	.0060684***	.0057609***	.0055949***
Members	-.0145235	-.0025122	.0043385
Delors	.2417456***	.1967451**	.2116751**
postSEA	.1870816**	.2174049**	.1955385**
postTEU	.2362207**	.1903262**	.1642984*
postAMS	.3643159***	.3075412***	.2744032***
postNICE	.5260315**	.3241386**	.2316288
ANT	-	.8566804***	-
ANT1981[7]	-	-	.7795821***
ANT1986[2]	-	-	.5791029***
ANT1995[2]	-	-	.5432923***
ANT2004[2]	-	-	1.647162***
ANT2007[2]	-	-	.2447513**
Feb	.5654035 ***	.5866626***	.5807584***
Mar	.7844612***	.7972515***	.7941027***
Apr	.349546**	.2930635**	.2532825**
May	.7980683***	.7991375***	.7976995***
Jun	.9765539***	.965439***	.9800042***
Jul	.9528928***	.9635707***	.9601211***
Aug	-1.567358***	-1.562669***	-1.565338***
Sep	.0017281	.0071767	.0082447
Oct	.5088136***	.5114698***	.5084294***
Nov	.6977274***	.7055612***	.7074091***
Dec	1.791315***	1.655025***	1.690751***
_cons	2.355272***	2.239922***	2.182988***
Log-Likelihood	-1430.9781	-1420.226	-1416.7852
LR	467.104***	488.609***	495.490***
McFadden's Adj R2	0.128	0.134	0.133
ML R2	0.716	0.732	0.737
AIC	7.827	7.775	7.778
BIC	791.286	775.698	792.481

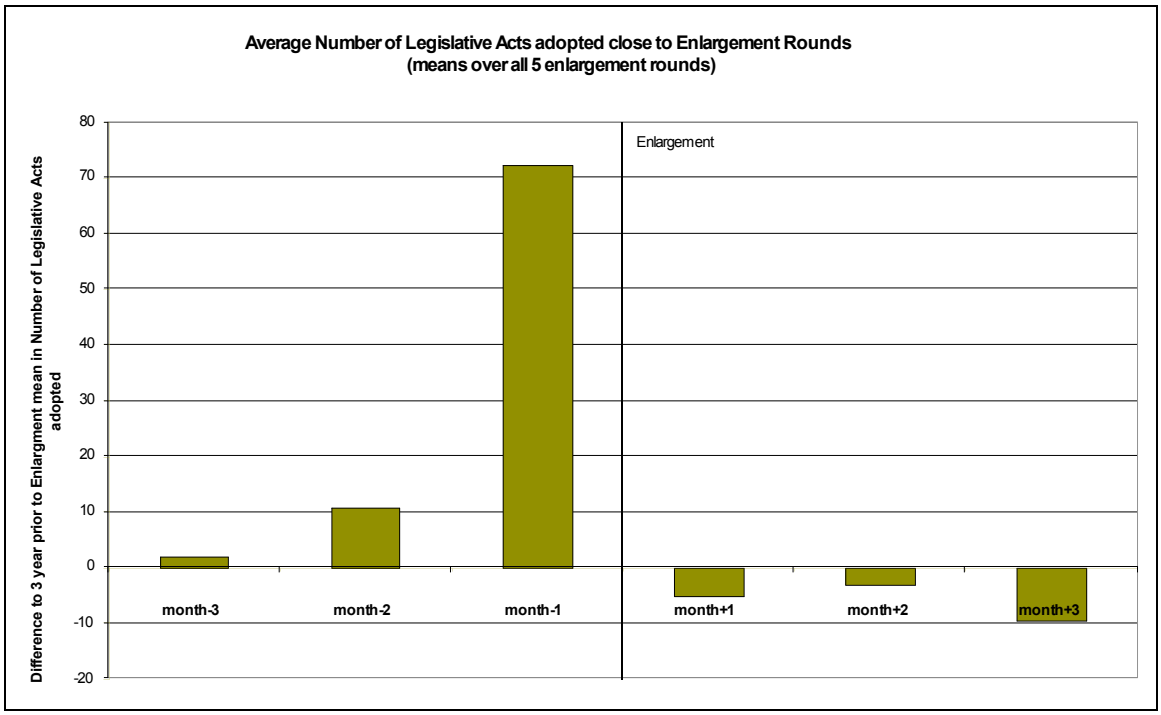
*** 0.01 significance level; ** 0.05 significance level; * 0.1 significance level (according to robust standard errors); n = 371 for all models.

Table 4: NBRM Results

[7] Test of hypothesis β[ANT1981] = β[ANT1986] = β[ANT1995] = β[ANT2004] = β[ANT2007] = 0 yields following result: LR chi2(5) = 28.39***.

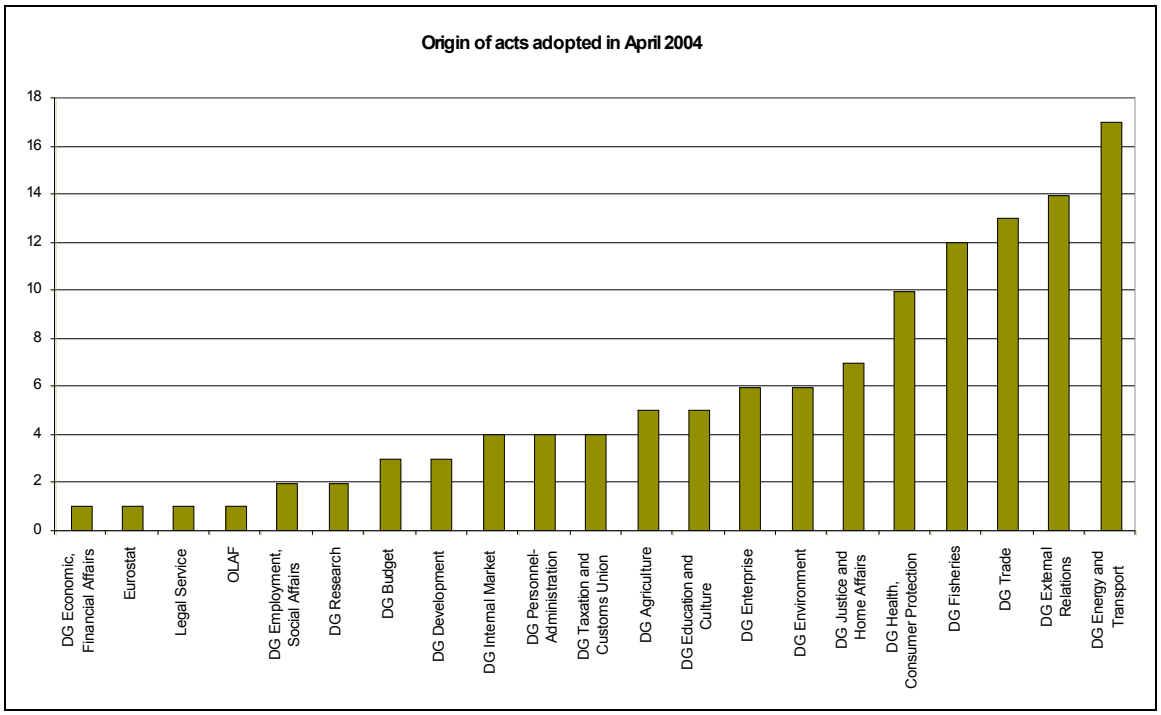
and the new member states therefore seems to play a role in determining the degree of anticipatory effects prior to enlargement rounds. The likelihood ratio test confirms that the model fit increases when adding the anticipation variables to the model. The results presented in Table 4 do not provide any indication that blocking minorities existed which believed that policy outcomes would shift in their favor after an enlargement. Hypothesis 4 is therefore rejected by the data. When assuming a given demand for legislation during a specific period this should also have a repercussion after each enlargement round. In particular, legislative output should temporarily be reduced. In order to obtain a more complete picture of the number of acts adopted before and after different enlargement rounds, we assess the acts adopted in the months around an enlargement event graphically.[8] Specifically we calculate how the number of legislative acts adopted in every one of the six month around an enlargement differs from the mean of the values of that specific month in the three years before. Graph 2 displays the mean of these values over all enlargement rounds. With the exception of the 2004 enlargement, the bars correspond to the month October to March. For 2004, February to July is covered. The graph gives some indication of "mountains" and "valleys". Whereas in the month before an enlargement more legislation than on average is being produced, with a clear peak in the last month before an enlargement, there is a decline of legislation after the enlargements. This finding clearly supports hypothesis two and stresses the substantive importance of including anticipation into the analysis of EU output over time. When assuming a specific demand for legislation at a given time the decline of legislative output after an enlargement, for instance, might not be due to the increased complexity brought about by the increase in group-size but depend on the anticipatory behavior of the old member states.

[8] Because the post-enlargement effects should be distributed wider we refrained from including such a variable into our models. We find that the descriptive statistics are better suited to test our theory.



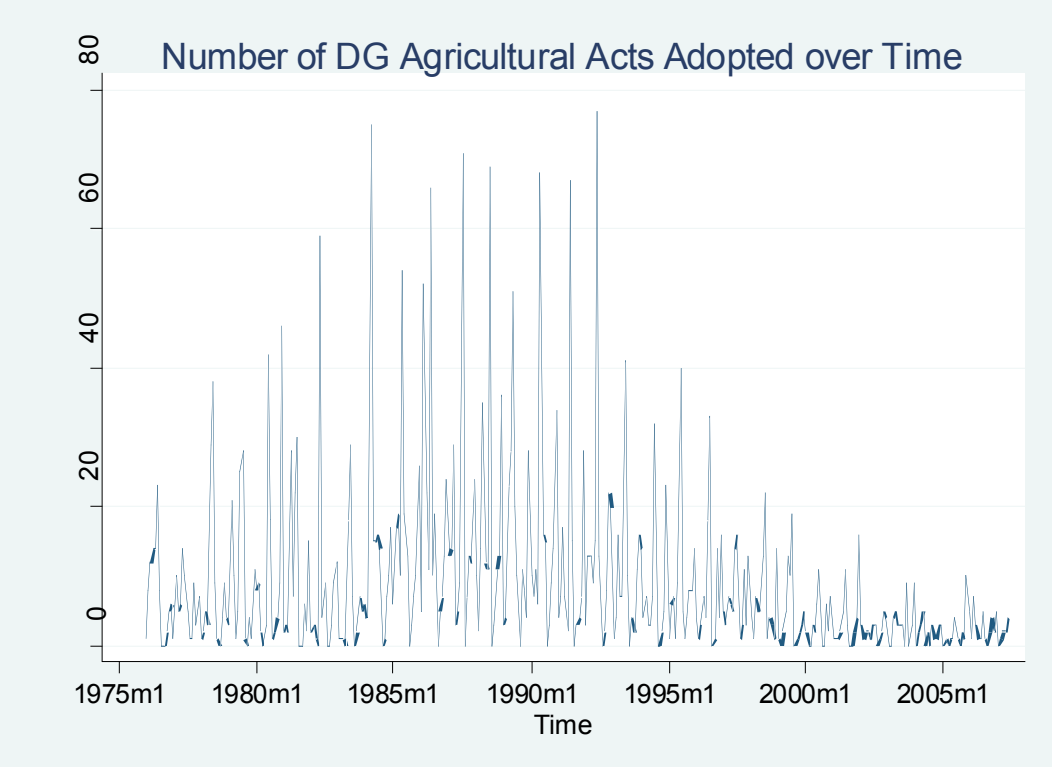
Graph 2

Hypothesis five postulates that anticipatory effects should differ in different policy areas. For instance, a policy field where large shifts in political outcomes were expected prior to the Eastern enlargement in 2004 is the Agricultural sector. In order to test this hypothesis we ran a negative binomial regression model just on those acts that were launched by specific DGs. We do not, however, find evidence for systematic effects across the different enlargement rounds (the results are reported in the annex). In order to better understand the reasons for this we analyzed the data descriptively. Whereas there is a dominance of only a few policy sectors during the first enlargement rounds, the highest peaks are washed out in later enlargement rounds. Graph 3, for instance, illustrates the distribution of acts adopted in April 2004 across the different Commission Directorate Generals. Agriculture that we before executing our analysis thought to be our safest bet is not one of the frontrunner policy fields which drive the anticipation peak prior to the 2004 enlargement.



Graph 3

Graph 4 provides one possible explanation for this finding, namely that Agricultural legislation has decreased dramatically over the past five to six years. In terms of legislative output other sectors have become more important. Interestingly, Graph 4 also indicates possible anticipatory effects within the agricultural field, not prior to enlargement rounds but prior to important reforms of the common agricultural policy. For instance, we find peaks preceding the Fontainebleau 1984 summit, the Mac Sharry reforms in 1992 as well as the agenda 2000 of 1999. A more in-depth analysis of the mechanisms at work in different policy fields would be desirable but exceeds the scope of this paper.



Graph 4

Now what can we say about the duration of legislative acts preceding the different enlargement rounds? In fact, our event history analysis supports our anticipation hypothesis six for three of the five enlargement rounds. Table 5 displays the results for our baseline model as well as our Anticipation Model. The baseline model results are very similar to the results obtained by Golub (2007). Both, the cooperation and codecision procedure slow down decision-making speed. While Golub (2007) compares his member variables to the EU6, we compare to the EU9. In the baseline model, decision-making speed increases after all but the Greek enlargement rounds. This result is supported by Golub (2007). In our baseline model, the decision-making speed of the EU25 when compared to the EU9 differs only at a 0.1 significance level. We also find that Margaret Thatcher slowed down EU decision-making while a mounting workload for the Council seems to increase its efficiency.

Cox Model	Baseline Model	Anticipation Model
Codecision	.4042518***	.411116***
Cooperation	.4745546***	.4710544***
EU10	.9887453	1.129803 **
EU12	1.611997***	1.897096 ***

EU15	1.396888 ***	1.736018 ***
EU25	1.159556 *	1.43291 ***
EU27	3.493031 ***	3.995727 ***
Regulation	2.726635 ***	2.707548 ***
Decision	1.985215***	1.96579 ***
Thatcher	.8413008***	.8188345***
Backlog	1.001434***	1.001122***
Postsea	.7636001***	.742124***
Postteu	.6367267***	.5868294***
Postams	.8235571***	.7410626***
Postnice	.9841429	.9223583
ANT1981[9]	-	3.063589***
ANT1986[3]	-	1.408085***
ANT1995[3]	-	1.325894***
ANT2004[3]	-	.7718642***
ANT2007[3]	-	.7658731***
Log-Likelihood	-103836.38	-103763.47
LR chi2(20)	3397.61***	3543.44***

*** 0.01 significance level; ** 0.05 significance level; * 0.1 significance level
Number of subjects = 12508; Number of observations = 15120; Time at risk = 2935131

Table 5: Survival Analysis Results

When compared to the period before the Single European Act, all Treaty changes but the Treaty of Nice have decreased EU decision-making speed. This result can be explained by the changing role of the European Parliament, which has successively gained power over the last decades. Finally, and in line with König (2007), regulations and decisions have a shorter survival rate than directives. Including our anticipation variables does not fundamentally alter the baseline model's results, although decision-making in the EU10 is now significantly faster than in the EU9. Since the model without anticipation does not account for the quick adoption of legislation prior to the Greek enlargement, accounting for this legislation by our ANT1981 variable reduces the 'normal' speed with which decisions are made in the EU9.

Turning to our anticipation variables, we find strong support for Hypothesis six prior to the Greek enlargement, the accession of Spain and Portugal, and the Northern enlargement of 1995. In all three cases legislative acts adopted in the month prior to the enlargements faced a higher hazard rate as usual. For the Eastern enlargement in 2004 and the accession of Romania and Bulgaria in 2007 we find a statistically significant effect in the opposite direction. In the case of these two enlargement rounds the hazard rate is below the average hazard rate faced by acts not adopted prior to an enlargement

[9] Test of hypothesis β[ANT1981] = β[ANT1986] = β[ANT1995] = β[ANT2004] = β[ANT2007] = 0 yields following result: LR chi2(5) = 145.83***.

round. This means that the acts have been in the legislative apparatus longer than is usually the case. The results in Table 4 therefore reject Hypothesis six for the last two enlargement rounds. This finding can be explained by the large number of long standing acts adopted in the months prior to both enlargement rounds. On average the legislature of the EU adopts 1.3 legislative acts per month that have survived the EU decision-making process for over 1000 days. The average for the month April is only 0.8, that for December 3.5. The number of legislative acts adopted in April 2004 and December 2006 is a multiple of these averages, namely 9 and 13[10]. In this sense April 2004 and December 2006 are outliers, as substantially more long debated acts were adopted than usual. This does, however, not mean that anticipation did not play a role in the last two enlargement rounds. On the contrary, the findings point to a reading that opposes hypothesis six, namely that old member states, anticipating enlargement, try to adopt the most complicated pending legislative acts before new member states enter and further increase the degree of complexity.

Based on the findings for the other enlargement rounds, we however believe that the shortened lifespan of legislative acts adopted in the months prior to these enlargements indicates that the Council worked more efficiently when adopting these acts. The adoption of acts prior to enlargement, which would have, under normal circumstances been adopted in following months, points to the importance of anticipation. Anticipating enlargement has therefore impacted on legislative decision-making in the European Union.

6. Discussion and Conclusion

In this paper we show that anticipation should not be considered an esoteric category but that it should play a central role in political analysis of legislative output. After theoretically delineating the concept and scope of anticipation we quantitatively test claims about anticipatory behavior in legislative politics. The case is EU legislative decision-making in the context of enlargement. Enlargement is generally said to impact

[10] Prior to the Greek enlargement in 1981, the northern enlargement in 1995 , and the enlargement in 1986 only zero, one, and five of these long-surviving legislative acts were adopted respectively.

on the decision-making capacity of the EU. The old member states act rationally and calculate whether they are better off by deciding a piece of legislation before the accession of new member states. One the one hand, deciding an issue earlier than would be the case without enlargement imposes additional costs on decision-takers. On the other hand, they might expect to gain in terms of the legislative output reached under the old conditions as compared to the alternative future scenario.

We find that enlargement, indeed, sets incentives for gearing up the legislative process. Not only does the legislative output increase before the accession of new member states, but also the legislative pace is forced before three of five enlargement rounds. In the other two rounds outliers, i.e. acts that have been in the apparatus for a very long time drive the seemingly opposing results. In line with our expectation that the effects should differ in the different enlargement round we find the strongest anticipatory impact before Eastern enlargement. This enlargement has triggered a very pronounced rise of legislation. A high uncertainty about the future development of the EU might have incited the old member states to pass as much legislation as possible before the arrival of ten new member states. On the other hand, our data does not confirm our hypotheses on the different policy areas. We cannot, for instance, find a strong increase in agricultural lawmaking before Eastern enlargement. Whether this is due to the general decline of agricultural legislation since the late 1990s or whether this underlines that group heterogeneity already was rather high within the Agricultural policy field before Eastern enlargement cannot be answered by our data. We can, however, show that forcing the pace at *t0* has its price at *t2*. After the accession of new member states we find a reduced legislative output. Our research underlines that we should be careful when quickly attributing a reduced legislative output to the behavior of new member states. The decline after the accession of new members might not be a sign for increased gridlock but could rather be the effect of legislative tides. Further research, however, is needed to disentangle such consequences.

In this paper we have only focused on anticipation in the context of enlargement. Future research could address treaty changes or other institutional changes. For example, it seems that the EU actors have anticipated agricultural reforms. This also underlines the importance of moving from total legislation to policy area output. Future research should

in addition aim at getting a better understanding of the interactions between the different EU institutions. For example, does the Commission and the European Parliament cooperate with the member states in the Council when it comes to anticipation? Finally, the importance of uncertainty should be addressed with more precision than was possible in this paper. Uncertainty seems an important key to understanding anticipation and its scope of application.

A difficulty of analyzing anticipation is that its effects often point into different directions. For example, one actor might prefer to postpone a decision while other actors would like to gear up the pace of decision-making. Such pulls into different directions often are difficult to disentangle. Of course, such difficulties should not stop us from studying anticipation altogether. All in all, we find that anticipation clearly adds to our understanding of EU legislative output over time. It is an important variable that should be added to our models of the EU legislative process as well as legislative output more generally. To conclude, it must be mentioned that in the "Restaurant at the End of the Universe" the anticipation capacities of the elevators lead to confusion and ultimately to a standstill. This, so far, is not the case in the EU. Here anticipation is just one of these subtle things that shape the way the Union works.

Annex

NBRM	DG Agriculture	DG Fisheries	DG External Relations	DG Internal Market
L6.Finaladoption	.0014036	.0307808*	.0261724**	.0105807
L4.COMSUB	.0074926*	.0001706	.0346598***	-.0024837
Members	-.0047898	.0252526	.0490924***	-.026171
Delors	.3747143**	.4597966***	.3855043***	.0947635
postSEA	.0349953	.1595641	.4201162***	.4293788
postTEU	-.2830249	.4723219***	.7021222***	.2100434
postAMS	-.9137274***	.2306486	.1469547	-.2182372
postNICE	-1.074228**	-.0769437	-.1390725	-.4237483
ANT1981	1.007574***	-1.568766***	1.591929***	.4320572**
ANT1986	.1143722	.8874629***	.6496099***	.1589989
ANT1995	.3087097	.4114024**	.541954***	-.0621865
ANT2004	.7893772**	2.377101***	1.98427***	2.623551***
ANT2007	-.0013403	-.2024445	-.9463333***	-.3479603
Feb	.5621179**	-.2113906	.5940827***	.1516416
Mar	1.004254***	.3708416	.488571**	.7319864*
Apr	.6608658***	-.065059	.1638439	-.2741699
May	1.383146***	-.0711041	.2289853	.5797506
Jun	1.613955***	.4215273	.121459	1.378929***
Jul	1.465819***	.4579158*	.5317335***	.7945218**
Aug	-2.300571***	-2.016124***	-.6751564***	-2.392977***
Sep	-.2827563	-.2459253	.1683323	.7282547*

Oct	.5189082***	.1455224	.3348459*	.466123
Nov	.7264099***	.5771526**	.5228001**	.2995619
Dec	1.507449***	1.826055***	1.59409***	1.541016***
_cons	1.275299***	-.160785	-.3843586***	-.1467736
Log-Likelihood	-1035.9879	-702.00682	-844.92115	-527.7084
LR	333.155***	262.996***	251.762***	136.513***
AIC	5.725	3.925	4.695	2.985
BIC	30.886	-637.076	-351.247	-985.673

*** 0.01 significance level; ** 0.05 significance level; * 0.1 significance level (with robust standard errors)
n = 371 for all models.

Table 6: Different Policy Fields

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