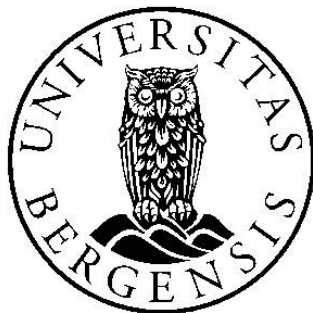


Understanding the Power of Framing: The Role of Policy Context and Stakeholder Characteristics in the EU Feedback Mechanism

Maren Søvre Haukeland



Master's thesis

Spring 2022

Department of Comparative Politics
University of Bergen

ABSTRACT

Framing plays an essential role in EU lobbying as stakeholders selectively stress some aspects of policy proposals while disregarding others to sway a policy debate in their favour and draw policy outcomes closer to their preferred policy solutions. Despite this, the literature says surprisingly little about how different stakeholders choose their frames and what factors potentially affect their frame choice. By focusing on the policy formulation stage in the European Commission (EC), this thesis seeks to fill this void in the literature that only a few previous researchers, rooted in different schools of thought, have tried to explain.

I propose my theoretical argument building on two branches of scholarship – EU lobbying strategies and framing studies – and argue that the policy context in which lobbying takes place and the characteristics of the lobbying actor affect frame choice. More specifically, I hypothesise that the interest type represented and the organisational format of an interest group affect frame choice, whereas, for the policy context, I argue that the level of issue salience for stakeholders also affects frame choice. To answer the research question and theoretical expectations, I collected data and assembled an original dataset consisting of feedback texts from 1143 stakeholders discussing ten legislative proposals. Furthermore, I applied a multi-methodological approach and combined quantitative text analysis (QTA) as an empirical strategy to identify the frames in feedback texts associated with the legislative proposals and a large-N multilevel logistic regression analysis to explain stakeholders' frame choice.

The findings show that 57% of the participating stakeholders employed an economic frame, 35% employed a public frame, 7% used both an economic and a public frame, and 1% had no clear frame match. Furthermore, the regression results support the hypothesised effect of interest type represented on the frame choice, indicating that cause groups and citizens are more likely to employ a public frame, and firms and sectional groups are more likely to employ an economic frame. Additionally, contrary to the theoretical expectations, the results yield no effects of organisational format and the level of issue salience for stakeholders on economic and public frame choice. Finally, the thesis helps to understand a previously under-researched field within the literature on EU lobbying strategies and interest groups participation in supranational policymaking.

ACKNOWLEDGEMENTS

For noen år!

Fem år ved Universitetet i Bergen avsluttes med denne masteroppgaven og jeg kan se tilbake på en studietid fylt med gode minner og opplevelser. På veien har jeg møtt mange spennende mennesker og muligheter jeg aldri ville vært foruten. Årene ved UiB har vært enormt lærerike og jeg tar med meg verdifulle erfaringer for resten av livet.

Mange fortjener en takk, men den største går til min fantastiske og kunnskapsrike veileder Adriana Bunea. Tusen takk for all hjelp og gode tilbakemeldinger, og ikke minst for at du har vært så fleksibel. Uten dine engasjerende møter, veiledning og konstruktive kritikk hadde ikke denne masteroppgaven blitt ferdig. Igjen - tusen takk!

Takk til alle mine medstudenter, og spesielt til min trofaste kollokviepartner Rebekka, for all faglig og ikke-faglig påfyll, uten dere hadde hverdagen på Sofie Lindstrøms hus vært mye tyngre. En stor takk rettes også til jentene og guttene på tunet, det har vært en sann ære å dele lesepass og lange digresjoner med dere.

Takk til familien, Olaf, venner og kjære. Takk for tålmodigheten og for at dere har holdt ut med meg de siste par årene. Nå gleder jeg meg til å være mer sosial og til stede.

Bergen, 30. juni 2022

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
1. INTRODUCTION	1
1.1 Relevance of the research topic	2
1.2 Structure of the thesis	4
2. THEORETICAL FRAMEWORK	5
2.1 Conceptual framework	5
2.1.1 Conceptualising the dependent variable: policy framing	5
2.1.2 Categories of policy frames in the literature on EU policymaking	8
2.2 Theories explaining the mobilisation of frames in the literature on EU lobbying and policymaking	12
2.2.1 Policy framing and actor characteristics	13
2.2.2 Policy framing and policy context	20
2.2.3 Policy framing and institutional characteristics	25
2.3 Theoretical argument	30
2.3.1 The expected effect of interest type on frame choice	31
2.3.2 The expected effect of organisational format on frame choice	32
2.3.3 The expected effect of issue salience for stakeholders on their frame choice	34
3. RESEARCH DESIGN	36
3.1 Case selection	38
3.2 Identifying policy frames with the Structural Topic Model	43
3.2.1 Text pre-processing	45
3.2.2 Validation and categorisation of the correct number of topics	47
3.3 Variables	54
3.3.1 Dependent variable: identifying policy frames	54
3.3.2 Explanatory variables	56

3.3.3 Control variables	58
3.4 Multilevel logistic regression analysis	61
4. ANALYSES	63
4.1 Descriptive analysis.....	63
4.1.1 Linguistic analysis: what are the stakeholders framing?.....	69
4.1.2 Topical prevalence comparisons: who frames what?.....	74
4.2 Explanatory analyses: explaining the variation in frame choice	78
4.2.1 Explaining the probability of using an economic frame	79
4.2.2 Robustness check: Explaining the probability of choosing a public frame	86
4.3 Evaluation of the hypotheses.....	92
4.3.1 Is frame choice subject to the interest type represented?	92
4.3.2 Does organisational format affect stakeholders' frame choice?.....	94
4.3.3 How does issue salience affect frame choice?	95
5. CONCLUDING REMARKS.....	97
5.1 Limitations.....	98
5.2 Implications for further research	99
BIBLIOGRAPHY	100
APPENDIX	107

LIST OF TABLES

Table 2.1 Policy act, policy stage and implications for stakeholder participation.	27
Table 3.1 Overview of the legislative proposals in the dataset.	42
Table 3.2 Thematic policy frames and the top seven FREX words.	50
Table 3.3 Thematic frames categorised into economic and public frame category.	53
Table 3.4 Overview of the variables and how they are operationalised.	60
Table 4.1 Multilevel logistic regression: explaining the probability of employing an economic frame.	80
Table 4.2 Multilevel logistic regression: explaining the probability of employing a public frame.	87
Table 5.1 Evaluation of hypotheses.	96

LIST OF FIGURES

Figure 3.1 The distribution of interest type represented by stakeholders in the dataset.	37
Figure 3.2 The distribution of countries represented by stakeholders in the dataset.	37
Figure 3.3 Latent Dirichlet allocation tuning function.	48
Figure 3.4 Model diagnostics by number of topics.	49
Figure 3.5 Distribution of how many stakeholders employed which frame.	55
Figure 4.1 Frequency distribution of interest type represented by policy area.	64
Figure 4.2 Frequency distribution of organisational format by policy area.	65
Figure 4.3 Frequency distribution of citizens versus interest groups by policy area.	66
Figure 4.4 Distribution of frame choice across interest type represented by stakeholders.	67
Figure 4.5 Differences in frame choice across the organisational format of stakeholders.	68
Figure 4.6 Highest word probabilities for each thematic frame estimated by the Beta.	70
Figure 4.7 Topic correlations estimated by a 5% cut off.	73
Figure 4.8 Top topics calculated by the topic proportions.	74
Figure 4.9 Bivariate analysis of the effect of organisational format on topic usage: membership-based versus non-membership-based stakeholders.	75
Figure 4.10 Bivariate analysis of the effect of actor type on topic usage: interest groups versus citizens.	77
Figure 4.11 Predicted probabilities for interest type on economic frame choice.	82
Figure 4.12 Predicted probabilities for organisational format on economic frame choice.	83
Figure 4.13 Predicted probabilities for the cross-level interaction effect of public salience on interest type represented for economic frame choice.	84
Figure 4.14 Predicted probabilities of the effect of individual salience on economic frame choice.	85
Figure 4.15 Predicted probabilities for the effect of interest type on public frame choice.	88
Figure 4.16 Predicted probabilities for organisational format on public frame choice.	89

Figure 4.17 Predicted probabilities for the cross-level interaction effect of public salience on interest type represented for public frame choice. 90

Figure 4.18 Predicted probabilities of individual salience on public frame choice. 91

LIST OF ABBREVIATIONS

AIC	Akaike information criterion
BIC	Bayesian information criterion
CI	Confidence intervals
DG	Directorate-General
DMA	Digital Market Act
DSA	Digital Service Act
EU	European Union
EC	European Commission
EP	European Parliament
FREX	Frequency and Exclusivity
ICC	Intraclass correlation coefficient
IDEI	Information about the Domestic Encompassing Interest
IEEI	Information about the European Encompassing Interest
LDA	Latent Dirichlet Allocation
NGO	Non-governmental organization
QTA	Quantitative text analysis
STM	Structural Topic Model
TR	Transparency Register
VIF	Variance inflation factor

1 INTRODUCTION

Stakeholder participation in designing and formulating new legislative initiatives constitutes a vital role in EU policymaking, and several scholars agree that the European Commission (EC) plays a decisive role in policymaking because of its legal right to initiate legislation and responsibility to draft legislative proposals (Bouwen 2002, 2009; Daviter 2009; Mazey and Richardson 2015). Moreover, when participating in feedback and consultation opportunities, stakeholders get the chance to influence policymaking with their information and expertise and make sure that different views and opinions get heard. This form of direct participation in policymaking creates an important lobbying venue and channel for stakeholders to get their voices heard in the legislative debate and potentially translate their policy preferences into policy outcomes. Additionally, stakeholder participation in the legislative process functions as an essential mechanism for input and output legitimacy for the EC and policymakers are dependent on stakeholder participation to improve the information and democratic quality of their decision-making (Bunea and Thomson 2015, 520).

In order to maximise its chances of influence in a legislative debate and shaping policymaking, stakeholders face a choice of strategy: how to formulate and convey their policy preferences in a convincing and impactful manner that shapes policymakers' decisions and increases the probability that their preferred policy options get translated into policy outcomes. A developing body of scholarship argues that strategic communication through framing is a powerful way to affect policymaking and that framing is a crucial component of interest groups' lobbying strategies (Baumgartner and Mahoney 2008, 436). Furthermore, according to Daviter (2007, 662), framing policies and issues by both institutional and private actors is at the core of understanding how institutions and stakeholders interact to shape and influence the political agenda. Nevertheless, interest group framing strategies are still an under-researched phenomenon across studies of EU lobbying and interest groups' participation in policymaking (exceptions are Klüver, Mahoney, and Opper 2015; Eising, Rasch, and Rozbicka 2015; Boräng and Naurin 2015; Rasch 2018), and a consequence of this is that the literature does not say much about the creation and evolution of frames in the EU context. Based on this, this thesis aims to bridge two branches of scholarship – that examining EU lobbying strategies and focusing on the study of framing as a widespread political and policy phenomenon – and tries to explain stakeholders' frame choice.

Building on Daviter's (2007) argument on the relevance of analytical approaches emphasising framing for the study of the EU polity, this thesis seeks to identify the frames different stakeholders use as part of their policy participation and lobbying activities when attempting to shape and influence the formulation of policy initiatives put forward by the EC. As part of the 2016 Better Regulation reform, the EC proposed the new "feedback mechanism", offering stakeholders to comment freely with written text on roadmaps, initial impact assessments, and legislative proposals, and delegated and implementing acts after being adopted by the EC on an open and public online platform (European Commission 2017, 437). This new form of stakeholder participation allows for the study of framing in a whole new way and under complete transparency and public review from the general public and potentially other competing stakeholders. Based on this context, this thesis investigates what role stakeholders play in formulating several legislative proposals put forward by the EC. Based on the assumption that the way different stakeholders frame a policy debate can have a decisive effect on policy outcome, two research questions guide the present study:

What frames do stakeholders employ when attempting to influence the formulation of policies as part of the European Commission's feedback opportunities? And relatedly, what explains their choice of frames used to shape policymaking?

1.1 Relevance of the research topic

Framing has long been known to serve essential contributions to understanding how a policy issue is understood and presented in a policy debate (Schattschneider 1975; Riker 1986). In more contemporary scholarship, Mahoney (2008, 81) summarises the importance of framing strategies and lobbying success by arguing that: "If a lobbyist wants to be successful in his or her lobbying campaign, it is imperative to think about the best way to frame the argument and which dimensions of the policy debate to emphasize". In line with this, through framing, actors can strategically emphasise some aspects of an issue while ignoring other issues in a policy debate. Moreover, framing is a powerful lobbying tool because the way a stakeholder frames its arguments can regulate an audience's perception of reality and their acceptance and attitudes towards a particular meaning (Klüver and Mahoney 2015, 224). In this way, framing tactics can stimulate a decision-making process and potentially shift the collective issue definition by focusing on specific aspects of an issue or simply by adding new perspectives to a policy debate.

In light of the vital position framing has in potentially influencing a legislative process Daviter (2007, 2011) argues that framing studies can improve the interpretations of the EU political processes. The EU constitutes a political system that entrusts a single institution with the duty of condensing a plethora of ideas, interests, and data into a single policy statement, raising the question of how much political decision-making occurs long before legislative proposals reach the Council and European Parliament (EP). The question of how topics appear on the EU agenda and particular aspect becomes a part of legislative proposals, whereas others do not, is just as critical as the question of which issues are addressed in the first place for understanding EU politics and policymaking (Daviter 2007, 655). At the same time, the new feedback mechanism proposed by the EC as part of the 2016 Better Regulation reform intends to listen more closely to stakeholders and allows them to express their views throughout the lifecycle of policies. This new tool for stakeholder engagement makes it possible to comment freely and provide feedback on, for example, legislative proposals. It thus creates incentives for stakeholders to frame their arguments to maximise their chances of getting their policy preferences translated into a legislative proposal. The extent to which this new mechanism of stakeholder participation can further develop the literature on EU lobbying strategies and framing remains an empirical question and further motivates the research question of this thesis.

Furthermore, political texts constitute a vital data source for political science in general and framing studies in particular, and Grimmer and Stewart (2013, 1) argue that to “understand what politics is about we need to know what political actors are saying and writing”. It is not new to recognise the importance of language and text in the study of politics, but scholars have for a long time struggled to make inferences using political texts as data (Grimmer and Stewart 2013, 1-2). Until recently, most framing studies in political science and EU studies have been conducted through qualitative case studies centred on interviews and document analysis (for example, Daviter 2009). However, the empirical examination of interest group framing in the EU context should be supplemented by large-N designs that allow for the study of framing across a more significant number of interest groups and policy issues.

Despite the key role framing plays in policymaking, only a handful of scholars have systematically investigated what factors potentially can affect framing strategies in the case of the EU political system using large-N studies (Boräng and Naurin 2015; Eising, Rasch, and Rozbicka 2015; Klüver, Mahoney, and Opper 2015). The lack of quantitative framing studies is, to a large extent, due to methodological challenges in measuring stakeholder framing.

However, recent developments in QTA and machine learning methods have created new opportunities to treat considerable amounts of texts as data and made it possible to generalise statistically (Benoit 2020). I make use of these methodological advances in QTA to address the existing gap in the literature on large-N framing studies and apply them to the EC's public feedback opportunities to analyse stakeholders' use of framing.

1.2 Structure of the thesis

The structure of the thesis is divided into five chapters. *Chapter 1* is the present one containing the introduction. *Chapter 2* presents the theoretical framework and begins by conceptualising the dependent variable, policy framing, and the categories of policy frames in the literature that investigates framing in EU policymaking and beyond. Next, I present and discuss the theories explaining the mobilisation of frames in the literature on EU lobbying and policymaking. Then, to answer the research question, this thesis takes stock and bridges the current scholarship in two key pieces of literature: the research on lobbying strategies and framing studies. Finally, building on the theoretical approaches presented in the theory section, I build my theoretical argument and hypotheses presented at the end of the section.

The research design is presented in *Chapter 3*. I start the chapter by presenting and justifying the case selection and describing the data selection. Then, I present the methodological approach and operationalisation of variables; I apply a multi-methodological approach, combining QTA as an empirical strategy to identify the frames in the feedback texts associated with ten legislative proposals and large-N multilevel logistic regression analyses to explain stakeholders' frame choice. Furthermore, *Chapter 4* presents the analyses and a discussion of the results, divided into three main parts. First, I present descriptive analyses of the text data and map the frames used by different stakeholders. Second, I present an explanatory analysis describing stakeholder frame choice. Third, I discuss and evaluate the hypotheses proposed in the theoretical argument. Finally, in *Chapter 5*, I briefly summarise the analyses' main findings and propose recommendations for future research on framing and lobbying strategies.

2 THEORETICAL FRAMEWORK

Chapter Two begins by laying out the conceptual dimensions of the existing literature on policy framing and a review of the categorisations and variations of policy frames in the EC's public consultations conducted as feedback opportunities. The remaining part of the chapter proceeds by reviewing the central literature on theories explaining the mobilisation of frames. Lastly, I end this chapter by presenting the theoretical argument and hypotheses.

2.1 Conceptual framework

This thesis aims to identify and explain the policy frames stakeholders employ attempting to influence policymaking in the EC's feedback mechanism. In order to identify the presence and deployment of different frames by policy actors, it is essential, as in any research paper, to have a clear sense of what concept is being defined (conceptualised) and measured (operationalised) (Kellstedt and Whitten 2018, 111). Different stakeholders employ different types of frames, and consequently, research on policy framing has been challenging due to methodological complications and conceptual ambiguity in the existing literature (Baumgartner and Mahoney 2008, 437; Klüver 2013, 222). Nevertheless, the current literature on policy framing in the EU is growing, and the need for a good understanding of the concept is prominent. The following section of the thesis describes the conceptual foundation for the analysis of policy framing.

2.1.1 Conceptualising the dependent variable: policy framing

Policy framing is often used to refer to the way a particular issue is understood and presented in a policy debate. Early work on the concept of framing in the social sciences is often traced back to Goffman (1974), who argues that meaning formation develops in processes of interaction, interpretation and contextualisation. According to Goffman's interpretation, frames are understood as "schemata of interpretation", which help people organise what they perceive and highlight some aspects of this perceived reality while moderating other aspects (Goffman 1974, 21-23). Building on Goffman's (1974) work that describes the outcome of framing as processes that determines what is relevant and suggests what is appropriate behaviour, Entman (1993, 51) calls for conceptual preciseness and argues that "framing consistently offers a way to describe the power of a communicating text". According to the conventional definition provided by Entman, the act of framing is defined as follows:

To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation (Entman 1993, 52).

In contemporary scholarship, Entman's definition has become a standard reference for frame research (Vliegenthart and van Zoonen 2011, 105). It differs from earlier studies that argue that frames were dependent on a range of social and individual variables to have an effect and other studies that emphasise that frames arise as a result of conflicts and interactions between both collective and individual actors (Vliegenthart and van Zoonen 2011, 107). Instead, Entman's (1993, 53) definition considers framing as a tool that promotes a particular version of reality and argues that actors can frame an issue in a specific direction by simply selecting and emphasising certain features of reality while omitting others.

Moreover, building on Entman's conceptualisation of framing, Daviter (2009) highlights an essential differentiation between a policy issue and a policy frame. While policy issues indicate the explicit disagreement in a policy debate, frames instead identify what is at stake in the policy debate, which means that what an actor understands as at stake depends on what facet governs the actor's perception at that point in time (Daviter 2009, 1118). Consequently, the choice of frames can be considered a strategic decision because actors strategically highlight an issue, or a division of issues, in a policy debate while restraining others. Additionally, according to de Bruycker (2017, 780), frames used by interest groups are seen as strategic tools that actors rely on to achieve their preferred political goals. Therefore, framing is considered a key lobbying strategy used by interest groups as part of their organisational activities aimed at shaping policy and influencing decision-makers. In line with this conceptualisation of framing, the terms policy framing and framing strategies will be referred to and used interchangeably in this thesis.

In order to exercise successful framing and framing strategies, it is easy to believe that actors are dependent on seeing their preferred frames succeed on a general and collective level of a policy debate. However, Baumgartner and Mahoney (2008, 437) distinguish between what they call the 'two faces of framing' and argue that policy frames and the process of framing will not look the same under different conditions and contexts or amongst different actors. The first face of framing describes individual actors' framing efforts to gain support in a policy debate, while the second face of framing refers to the collective and general understanding of an issue, namely

the collective issue-definition. Unlike the first face of framings' focus on individual policy advocates lobbying efforts, the collective understanding is more about the overall combination of frames used in a policy debate or the general understanding of an issue (Baumgartner and Mahoney 2008, 437, 442). In practice, this means that even though individual actors' efforts might exercise successful framing, it does not mean that the framing efforts by individual actors are thriving on the collective level of a policy debate. This suggests that it is essential to have a clear sense of what concept is being measured and on what level framing is studied. In line with that, this thesis does not focus on the framing success of stakeholders between the first and second face of framing but instead explains their choice of actual frames used to shape policymaking according to what Baumgartner and Mahoney (2008) identify as the first face of framing, i.e. individual efforts to frame policy arguments.

While this thesis focuses on the individual level, the collective level is relevant because the way a policy debate is framed on the collective level may constrain actors on an individual level (Baumgartner and Mahoney 2008, 441). The dichotomous divide between the two faces of framing is developed further by Jensen and Seeberg (2020), and accordingly, they distinguish between the degree of engagement with a macro-frame (the second face of framing) and the degree to which an interest group promotes its preferred micro-frame (the first face of framing). Combining the dimensions creates a fourfold typology of framing strategies: *exit*, *acceptance*, *avoidance* and *rejection* (Jensen and Seeberg 2020, 1058). The first two strategies, *exit* and *avoidance*, highlight that stakeholders can ignore the macro-frame by holding on to its preferred micro-frame, whereas the latter promotes the micro-frame more actively than the former. Furthermore, the *rejection* strategy engages with the macro-frame to advocate the merits of the micro-frame while downplaying the validity of the macro-frame. In contrast, the *acceptance* strategy fully surrenders to the dominant macro-frame without promoting an alternative micro-frame (Jensen and Seeberg 2020, 1059). In light of this, the typology serves as a helpful point of departure for systematic analysis of micro-framing strategies that stakeholders can use to influence or shape macro-frame changes. Hence, this thesis focuses on the individual micro-level frames deployed by individual stakeholders. Based on the initial review of the dependent variable, I now turn to the second part of the conceptual section and review the different categories of policy frames identified in the existing literature on EU policy framing and beyond.

2.1.2 Categories of policy frames in the literature on EU policymaking

Previous scholarship focusing on policy frames is characterised by various methodological and operational features and has, according to de Vreese (2005, 60), made the research field heterogeneous. Therefore, when conducting a frame analysis, it is important to synthesise previous research on the subject and identify what frames and categories have previously been identified. Still, it is essential to be open to identifying new policy frames when conducting a frame analysis but finding some of the same frames as previous research on a similar topic is considered a validation of the previous findings (Rasch 2018, 41). Hence, existing scholarship that has investigated framing in EU policymaking and beyond has distinguished between a range of categories of frames: (1) *generic* and *issue-specific* frames (de Vreese 2005); (2) *institutional* and *policy* frames (Eising, Rasch, and Rozbicka 2015); (3) *equivalency* and *issue* frames (Druckman 2004); (4) *public*, *economic* and *other* frames (Klüver, Mahoney, and Opper 2015); (5) *self-regarding*, *other-regarding* and *ideal-regarding* frames (Boräng and Naurin 2015); and (6) *member-regarding*, *other-regarding*, *economy-regarding* and *public-regarding* frames (Binderkrantz 2020).

Starting with de Vreese's (2005) perception of frames, issue-specific frames refer to the pertinent political issue at hand. In contrast, generic frames can be applied across policy issues and potentially across time and cultural contexts (de Vreese 2005, 54). An example of generic frames is the general coverage of politics in the news or an election campaign covering several political issues. On the other hand, issue-specific frames relate to the particular frames linked to, for example, an election and can include anything from an election campaign scandal to labour rights or the national budget (de Vreese 2005, 55).

Second, Eising, Rasch, and Rozbicka (2015) apply de Vreese's dichotomous divide of generic and issue-specific frames to the case of the EU political system and build a fourfold classification of (1) *generic institutional* frames, (2) *specific institutional* frames, (3) *generic policy* frames, and (4) *specific policy* frames. The reasoning behind further dividing into institutional frames is that it is essential to consider the EU political system's rules and procedures because it defines who the actors are and what type of actions they take and what actions are possible to take (Stone Sweet, Sandholtz, and Fligstein 2001, 12). Then, generic institutional frames relate to the general rule system of the EU political system. In contrast, specific institutional policy frames instead refer to a specified set of rules, such as, for example, regulatory or distributive policies (Eising, Rasch, and Rozbicka 2015, 519). However, studying

policy frames used by interest groups in a policy context relates to concrete policy goals, norms, and instruments in a policy debate (Eising, Rasch, and Rozbicka 2015, 518). For example, market integration is a policy frame that can be both generic and specific. Market integration can relate to a more detailed policy, such as a specific financial market policy (specific policy frames), or refer to market integration in general and across policy areas (generic policy frames) (Eising, Rasch, and Rozbicka 2015, 520).

Third, having defined what generic and specific institutional and frames mean, Druckman (2004) terms two additional categories of frames, namely *equivalency* and *issue* frames. First, the equivalency type of frames emphasises that different but logically equivalent phrases cause individuals to change their preferences (Druckman 2004, 672). An example of equivalency frames is when the same word or information is cast both positively and negatively but, in practice, means the same thing, such as “10% unemployment” and “90% employment” (Chong and Druckman 2007, 114). Second, issue frames are used when an individual leads others to focus on specific concerns while building their opinions (Druckman 2004, 672). Similarly to equivalency frames, issue frames focus on specific considerations (i.e. employment or unemployment). However, they differ because issue frames focus on qualitatively different yet potentially relevant respects to employment, e.g. public safety (Chong and Druckman 2007, 114).

Fourth, based on the latter type of frame, Klüver, Mahoney, and Opper (2015) identify three broad groups of policy frames, i.e. *public*, *economic* and a *general* frame category for issues not receptive to a specific frame. Public frames emphasise issues related to implications of a proposal that typically fight for the public good, such as human rights, environmental protection, public health or similar policy areas. In contrast, economic frames tend to relate to interests that propose implications of a proposed legislative initiative to the economy, such as taxation levels and typically regulatory policies (Klüver, Mahoney, and Opper 2015, 485-486).

Having outlined four categorisations of policy frames, I will now turn to the remaining two policy frame categorisations developed in the literature on EU policymaking. The fifth category is introduced by Boräng and Naurin (2015) and argues that the scope of conflict and media publicity explains whether business interests dominate a policy debate and utilise a threefold categorisation of policy frames – self-regarding, other-regarding and ideal-regarding frames – to demonstrate how frame congruence is distributed between different types of stakeholders. The threefold categorisation explains self-regarding frames as frames that refer to the

preferences and interests of the actor itself or the group it represents. In contrast, other-regarding frames refer to the preferences and interests of individuals belonging to other groups than the actor or group itself. Finally, ideal-regarding frames do not refer to a specific group or individual but an ideal, e.g. environmental protection or fundamental human rights (Böräng and Naurin 2015, 507).

Fifth and finally, Binderkrantz (2020) draws upon the work done by Böräng and Naurin (2015) and builds a frame categorisation that distinguishes between four dimensions: member-regarding, other-regarding, economy-regarding and public-regarding frames. The two former categories distinguish between the benefits and costs of interest groups' membership and the effects on other societal groups, whereas the latter distinguishes between the broad economic and the general societal consequences of a policy. The central distinction between the economic and public categories is that they relate to the public good but differ in their reference to the economy (Binderkrantz 2020, 572).

Deciding on the economic and public frame category

This section of the chapter has so far reviewed and discussed the literature attempting to define policy frames and identifying categories of frames. However, in order to capture the variation in which stakeholders in general and business actors in particular use policy framing to influence and shape policymaking in the EU, this thesis relies on the categorisation put forward by Klüver, Mahoney, and Opper (2015) and Binderkrantz (2020) and distinguish between economy-regarding and public-regarding policy frames. Existing scholarship on EU policymaking and framing strategies finds that there is variation between economic and public interest actors concerning their usage of framing. For example, previous scholarship finds that, not surprisingly, business groups rely more on economic frames, whereas public interest groups more often rely on public frames (Böräng and Naurin 2015; Klüver, Mahoney, and Opper 2015; Binderkrantz 2020). However, this scholarship tested stakeholder frame choice by analysing interest groups' position papers, policy documents and interview data not publicly available during the legislative debate; therefore, the analyses in the preceding scholarship do not capture stakeholders framing strategies during direct public oversight as this thesis seeks to conduct.

Hence, it will be interesting to see if the same pattern applies to the new mechanism for engagement in EU policymaking presented by the 2016 "Better Regulation" reform, namely the stakeholder feedback mechanism. The stakeholder feedback mechanism differs from

previous consultative mechanisms in two main ways. First, it allows stakeholders to express general views on a document related to legislative proposals that are not based on specific questions formulated by the EC, allowing all interested stakeholders to comment freely on any aspect of the proposal (European Commission 2017, 437). Second, the feedback mechanisms ensure complete transparency and direct public oversight regarding the interest groups' feedback texts, where the EC simultaneously exerts a minimum of agenda-setting power over the content in the feedback text. Usually, and in previous framing studies in the EU context, stakeholders target their frames to address policymakers and decision-makers. However, in this case, stakeholders target their frames under full display for other (competing) stakeholders and for the members of interest groups to see. Studying policy framing under these circumstances made possible by the new feedback mechanism raises important new questions about unexplored patterns of stakeholder engagement, affecting whether or not a stakeholder employs an economic or public frame and can potentially further develop the literature on EU lobbying strategies and policy framing.

Furthermore, the categorisation is well-suited because it provides the analyses with a good foundation for analysing how stakeholder framing across policy context, stakeholder type, and interest type vary. The divide between economic and public policy frame categories may seem overly general and simplistic. However, it also makes empirical research more straightforward to implement and creates a good foundation for a comparative analysis of different interest groups' use of policy frames. For example, the public and economic frame category directly correspond to the nature of the interest most stakeholders represent, and the categorisation makes it easier to test if interest groups strategically seek to boost their legitimacy by pointing at the benefits and frames of other interest groups (Weiler and Brändli 2015, 748; Binderkrantz 2020, 572). This essential condition makes the categorisation reasonable because it allows for an analytical focus on whether stakeholders mainly point to the consequences of their own interest or try to generalise their considerations to other actors or the wider public.

Finally, deciding on a general categorisation of frames is advantageous because the researcher is not too locked into overly specific and predetermined categorisations. While conducting a frame analysis, the researcher must be open to identifying potential new frames not yet discovered in the literature. Deciding upon very specific categorisations in advance can limit and control the exploratory approach frame analyses often require. For example, a first advantage is that the general categorisation opens up the possibility of inductively adding new empirical categories or subcategories as the analyses go along. A second advantage is that the

categorisation makes it feasible to carry out an explanatory analysis because the two categories are appropriate to analyse as two distinct dependent variables. In the following section of the thesis, I review the theories explaining the mobilisation of frames in the existing literature on EU lobbying and policymaking and bridge the current scholarship in the two most important branches of literature for this thesis, namely lobbying strategies and framing studies.

2.2 Theories explaining the mobilisation of frames in the literature on EU lobbying and policymaking

In order to maximise its chances of influence in a legislative debate and potentially shaping policymaking, stakeholders face a choice of strategy. According to Binderkrantz (2005, 694), lobbying strategies can be understood as the strategies actors employ while attempting to influence policymaking. The literature on EU lobbying strategies briefly identifies two main and commonly accepted paths: insider and outsider strategies (Binderkrantz 2005; Weiler and Brändli 2015). Insider strategies involve direct participation in consultations and feedback opportunities or direct contact with decision-makers, while outsider strategies comprise lobbying through open communication channels, like news media (Binderkrantz 2005, 694). Furthermore, Bunea (2014, 3) points out that participation and preference articulation in open consultations is considered an insider strategy, and consequently, participation in the new feedback mechanism can also be considered an insider strategy. Thus, the creation of lobbying coalitions can be deployed as part of both insider and outsider strategies. Coordinated participation in consultations and feedback opportunities is an example of insider strategies, while, for example, joint press conferences or demonstrations are examples of outsider strategies, but both strategies can equally be implemented in coalitions (Bunea 2014, 5).

Furthermore, a growing body of literature argues that strategic communication through framing is a potentially powerful way to affect policymaking and argues that framing is considered a key component of interest groups' lobbying strategies (Baumgartner and Mahoney 2008, 436). In the following section of the thesis, I review the factors that may affect stakeholders' choice of framing strategies. As indicated in the conceptual framework, policy framing is a lobbying strategy. Therefore, it is necessary to build on two distinct pieces of literature, namely the literature on lobbying strategies and policy framing in the EU and beyond. The existing literature on interest groups lobbying strategies and policy framing has revealed three groups

of explanatory variables. The first set of explanatory factors concerns actor characteristics and the importance of resources, while the second and third set concerns characteristics of the issue and characteristics of the political institutions in which lobbying and policymaking take place (Rhinard 2010; Bunea 2014; Dür and Mateo 2016; Rasch 2018; Binderkrantz 2020). In light of the following discussion of factors discussed in the literature as relevant for understanding interest groups' choice of lobbying strategies and policy frames, I justify the theoretical argument and build the hypotheses presented at the end of this chapter.

2.2.1 Policy framing and actor characteristics

The literature discusses several factors that may explain why interest groups, in general, choose specific lobbying strategies over others. The first school of thought in the literature emphasises the importance of interest group characteristics such as interest group type, organisational form, resources and the level of professionalisation as key determinants of interest groups' choice of lobbying strategies and, I argue, by extension, of frame choice (Dür and Mateo 2016, 7).

2.2.1.1 Interest group characteristics matter: type of interest and organisational form

Starting with the type of interest represented by an organisation, a developed body of literature argues that interest group type matters for the choice of lobbying strategies and that there are significant differences between different interest group types (Binderkrantz 2005; Beyers and Kerremans 2007; Dür and Mateo 2016). Although categorising interest groups into sub-groups and dividing them by the type of interest is problematic, and various studies have proposed different classification schemes (Binderkrantz 2008; Weiler and Brändli 2015), there is an agreement in the literature over the main types of interests that organisations can represent. As such, the literature distinguishes between (1) cause groups, (2) business groups, (3) trade unions, (4) public groups, (5) firms, (6) professional associations, and (7) other interest groups (Greenwood and Dreger 2013, 149; Baroni et al. 2014, 150; Klüver, Mahoney, and Opper 2015, 490).

Furthermore, focusing on the nature of the interest, Klüver, Mahoney, and Opper (2015, 485) argue that the central distinction is made between sectional and cause groups. Sectional groups represent particular economic interests, where their primary mission is to describe the explicit interests of a particular segment of society. Also, members of sectional groups are often relatively straightforward to identify, organise and extract resources from because the group

primarily represent material and specific interests (Binderkrantz 2020, 574). Cause groups, on the other hand, typically represent the interests of the public good or the interest of, for example, disadvantaged groups that cannot organise themselves (Weiler and Brändli 2015, 748).

In addition to the type of interest represented, the organisational form of an interest group plays an important role in the lobbying strategies chosen and, thus, by extension, in the policy frames employed. Beyers (2008) argues that the organisational form says something about how an interest group deals with the political environment and points out that lobbying strategies are shaped by two factors: membership and sponsors. First, if the interest group is a membership-based organisation, it can be constrained by its dependence on membership dues or the group's ability to deliver on the general will of the members (Beyers 2008, 1200). Second, if the interest group is dependent on sponsorship, such as government subsidies, it may be constrained by a political budget (Beyers 2008, 1201). Membership-based organisations include national or European associations, such as the American Chamber of Commerce or the European Association for International Education.

In line with the importance of organisational form, understanding interest group performance requires balancing the 'logic of influence' and the 'logic of membership' (also referred to as 'logic of support' in the literature) (Berkhout 2013, 227). The logic of influence requires that interest groups select frames that aim to exercise influence over policymaking. In contrast, the logic of membership emphasises that interest groups act by their agreed internal structures to guarantee satisfaction with their member's demands and consequently maintain a flow of resources (Berkhout 2013, 232). According to the latter logic, group types can be divided into membership and non-membership groups. Firms, for example, are business actors that do not require membership, whereas associations are membership organisations that may include both business actors, individuals, public institutions or others. However, since firms are non-membership organisations, their logic of influence depends on the market and their potential profitability and not on the logic of membership as for business associations (Klüver, Mahoney, and Opper 2015, 485). Accordingly, different organisational structures influence business associations and firms' ability to shape political outcomes. Since the will of members does not constrain firms, Klüver, Mahoney, and Opper (2015, 484) argue that firms enjoy more flexibility in frame choice and, therefore, more likely to vary between, for example, public and economic frames than associations that are dependent on reflecting the will of members.

Working from the two logics mentioned above, interest groups choose their framing strategies to agree on whether they can maximise their political impact and simultaneously survive as organisations. The most elementary need of an interest group is to survive as an organisation (Lowery 2007, 30), and hence, the choice of frame in a policy debate can be seen as a function of how the two logics work alone or in combination for the different types of interest groups (Binderkrantz 2020, 574). Different interest groups can have the same overall goal, but the inter-organisational structures may restrict or enable them. In sum, organisational form matter for the choice of policy frames and lobbying strategy because the different group types offer a varying degree of flexibility in frame choice and in their pursuit of influence.

Furthermore, the interest stakeholders represent often distinguish between interests of ‘diffuse’ (public) or ‘specific’ (concentrated) character (Berkhout 2013, 236). Specific interests represent a smaller subsection of society and usually relate to business groups’ interests (Eising, Rasch, and Rozbicka 2017, 940). Diffuse interest groups are groups that pursue goals that they perceive as the public or common interest, meaning that they are interested in policies that are not necessarily benefitting their members (Weiler and Brändli 2015, 748). Contrary to specific interests, groups that represent diffuse interests usually have fewer resources, and the general argument is that specific interests tend to win over diffuse interests in EU policymaking (Lowery et al. 2015).

Moreover, membership in cause groups is often not restricted and more difficult to organise due to their more diffuse and public interests. Whereas the economic needs of a sectional group are often related to the financial and material needs of a minor, homogeneous group, cause groups link to the needs of a larger, more heterogeneous group (Klüver, Mahoney, and Opper 2015, 485). In consequence, cause groups undergo a collective action problem because they are dependent on gaining new members while at the same time ensuring a flow of resources (Beyers 2008, 1201; Bunea 2014, 15; Klüver, Mahoney, and Opper 2015, 485). However, sectional groups enjoy more flexibility when determining framing strategies than cause groups. Klüver, Mahoney, and Opper (2015) argue that since sectional groups have more flexibility than cause groups, they also have the opportunity to use a broader set of policy frames, and therefore, it should be more variation in frame choice amongst sectional groups. Also, sectional groups often use economic frames that respond to their member’s interests, whereas cause groups use public frames because that is what corresponds to their members’ interests, but at the same time, they are more constrained by the logic of membership. Furthermore, as briefly mentioned already,

firms stand out as a particular type of interest group that is not constrained by the logic of membership and is, therefore, the type of group with the most flexibility to choose from a more comprehensive set of frames (Klüver, Mahoney, and Opper 2015, 486). Previous studies also demonstrate that business actors primarily practice frames according to their membership, whereas civil society groups use other-regarding frames more extensively (Boräng and Naurin 2015; Binderkrantz 2020).

However, recent scholarship finds that diffuse interests do not always lose over specific interests in EU policymaking. For example, business groups with specific economic interests often defend the status quo when the EC proposes a new regulatory policy. In contrast, citizen groups with diffuse interests want to challenge it, and, hence, policy outcomes often come closer to citizen groups with diffuse interests than the specific interests of firms and business associations (Dür, Bernhagen, and Marshall 2015). Likewise, in a US context, Eising, Rasch, and Rozbicka (2017, 941) highlight that studies taking interest groups' resource endowment into account suggest that resources do not necessarily mean notable lobbying success or influence. Hence, the next part of this section describes in greater detail the scope and functions of the resources-based perspective and what it contains.

Finally, it is important to note that frame choice is not just a choice of strategy, but it is also a choice of representing the explicit interest of the group. de Bruycker (2017) highlights this and indicates that, for example, farmers do not use an agricultural frame to be strategic but because it is the actual interest of the farmers. However, farmers may strategically use an environmental frame to deepen a political message or use a member-regarding frame to appeal to economic groups' business opportunities (Bruycker 2017, 783-784). It is important to note that there is room for variation in framing, even though the literature points in a direction where public interest groups use member-regarding policy frames less frequently (Binderkrantz 2020, 575).

2.2.1.2 The power of lobbying resources: financial and informational resources

The type of interest group cannot explain the choice of framing strategies alone. Dür and Mateo (2012) argue that the effect of group type on lobbying strategies is conditioned by the resources available to the stakeholder. However, a growing body of scholarship shows mixed results for resources effect on lobbying success, but the general argument is that more resources equate to more power and influence in the policymaking process (Chalmers 2020, 392). In line with this fact, Klüver (2013, 13) argues that the unclear usage of resources meaning can partially explain

resources' contradictory effects. Consequently, since lobbying resources is a broad term that encompasses several dimensions, reviewing them carefully is all the more important.

Across group types, resource endowment becomes visible through the *amount* and the *type* of resources a group holds (Dür and Mateo 2012, 971). As for the type of resources, one can differentiate with respect to financial means, legitimacy, political support, representativeness, knowledge, and expertise and information (Coen and Richardson 2009, 4; Dür and Mateo 2012, 971; Klüver 2013, 13). Controlling for resources is important for three main reasons. First, interest groups need resources to stay informed on decision-making processes. Second, having resources available make it easier to organise lobbying activities, such as press conferences or demonstrations. Finally, interest groups can, for example, use informational resources as currency to gain access to the EU political institutions and influence policymakers (Dür and Mateo 2016, 972).

Starting with financial means as a resource, the literature indicates that the higher the spending power of an interest group, the more able they are to invest in extensive lobbying strategies and choose from a diverse pool of strategies (Weiler and Brändli 2015, 750). Additionally, having more financial resources implies that interest groups can establish Brussels offices, hire qualified staff, gather more and better information and maintain a higher activity level than resource-poor groups (Dür and Mateo 2013, 672). Hence, according to the resource-based perspective, resource-rich interest groups are more powerful, influential and active than resource-poor groups in the process of EU policymaking (Weiler and Brändli 2015, 750). Therefore, business associations and firms should benefit from the financial argument because their typical organisation as sectional groups with specific interests make it easier for them to extract financial resources from members or the firms they represent. Resource-rich interest groups have better prospects for establishing, for example, Brussels offices, making them closer to decision-making. Furthermore, having a Brussels office makes both inside and outside lobbying strategies easier (Bunea 2014, 1229).

Concerning framing strategies and resources specifically, Boräng and Naurin (2015) highlight an important argument that resource-rich interest groups have better access to media attention. Media publicity is essential because it creates an arena where it is likely to influence what frames are visible to the wider public and policymakers. Besides, it is likely to affect whether lobbying efforts are successful in the second face of framing (Boräng and Naurin 2015, 503).

In light of the media's important role, developing efficient media relations is essential but takes resources in terms of competent staff (Boräng and Naurin 2015, 503). Media attention, therefore, makes it easier for an interest group to promote their preferred frame to the broader public, but the biases produced by media selection relate to resource differentials between the groups (Binderkrantz, Halphin, and Pedersen 2020, 716).

Turning to the vital role of expertise and informational resources, Dür and Mateo (2016, 24) propose to distinguish between technical and political information. In short, technical information is meant to reduce uncertainty about the consequences related to political choices, whereas political information, on the other hand, is meant to reduce uncertainty towards issue salience and attitudes (Dür and Mateo 2016, 24). Concerning the differentiation between technical and political information, business interests have an advantage in obtaining technical information and facilitating or hindering the implementation of political initiatives. In contrast, citizen groups and non-business interests are better endowed with political information and have an advantage in both legitimacy and representativeness (Dür and Mateo 2016, 24). Citizen groups have an advantage in terms of representation and legitimacy because their members and supporters are also the voters' politicians are dependent on to be re-elected, and decision-makers in the EC have to make sure that implementing a proposed policy is feasible (Dür and Mateo 2016, 25). However, it is not the case that business actors do not possess political information, but their comparative advantage lies in providing decision-makers with technical information rather than political information (Dür and Mateo 2016, 26).

In a similar vein, Eising (2007, 386) argues that the political system of the EU cannot alone achieve their political goals; the EU is dependent on interest groups information, consent and collaboration. According to Bouwen (2002, 369), information is a fundamental good and an essential resource to study for understanding what he calls 'access goods', namely informational exchanges between interest groups and the EU institutions. In other words, information-based interactions with interest groups are essential for the EU institutions and policymaking because they depend on receiving relevant information and expertise from interest groups in order to make well-informed decisions (Eising 2007, 386).

Furthermore, several scholars have indicated that firms and business actors are more likely to possess expertise and information than other interest groups (Bouwen 2002, 365; Eising 2007, 386; Dür and Mateo 2016, 972). As mentioned above, informational resources are vital, and

Bouwen (2002) further argues that it is the most critical resource to study to understand the relationship between business interests and the EU institutions. Bouwen (2002, 369) specify access goods with the help of three types of information. First, *expert knowledge (EK)* is a type of information that concerns technical information and expertise in a specific policy area. Second, *Information about the European Encompassing Interest (IEEI)* is a kind of information that is required from the private sector and relates to the interests and needs of a sector in the Internal Market. Third, *information about the Domestic Encompassing Interest (IDEI)* is required from the private sector and relates to the interests and needs of a sector in the domestic market (Bouwen 2002, 369).

By providing different types of information and expertise to the EU institutions, interest groups are granted the highest degree of access because they can provide critical access goods (Bouwen 2002, 370). Applied to the case of the EC, which holds the sole right to propose new legislative initiatives, they are responsible for drafting legislative proposals and, therefore, dependent on a considerable amount of EK (Bouwen 2002, 379). Moreover, the EC is not interested in IDEI at such an early stage of a legislative process, which creates further incentives for business interests to be active in the early stages of a policy formation process (Bouwen 2002, 380). In sum, and due to the specific and technical nature of the information firms and business associations often hold, the EC constitutes an important lobbying venue for interest groups in general and thus, constitutes an attractive opportunity to frame arguments.

On the one hand, Rasch (2018, 21) argues that information is too broad and general concept to be operationalised and used as an indicator for measuring lobbying success and behaviour. On the other hand, if one assumes that stakeholders choose the information they would like to pass on in a legislative debate, this information can be used to build frame categories and differentiate the information (Rasch 2018, 22). Following this thesis definition of framing as highlighting some parts of a perceived reality while omitting others, identifying the frames in a communicative text will also help identify what stakeholders consider as crucial in, for example, a legislative debate. Rasch (2018) argues that if stakeholders have a broad spectrum of information to choose from, they will choose the specific information from which they expect to gain a certain degree of success. In this way, one can expect that stakeholders, while lobbying EU institutions, will strategically frame their arguments and informational resources, to gain access to the institutions and maximise their chances to have their voices heard in a legislative debate (Rasch 2018, 22).

2.2.2 Policy framing and policy context

Actor characteristics alone cannot explain interest groups' choice of lobbying strategies, and Klüver, Braun, and Beyers (2015, 448) argue that the policy context in which lobbying takes place is crucial. Furthermore, Eising, Rasch, and Rozbicka (2015) argue that contextual factors affect the types of policy frames adopted by interest groups. Therefore, the second school of thought trying to explain interest groups framing and lobbying strategies highlights the importance of the policy context and, more specifically, policy issue characteristics in which lobbying occurs.

According to Dür and Mateo (2016), issue characteristics emphasise the importance of policy context and generally relate to whether the nature of the policy issue at hand is of distributive or regulatory character. In addition, policy issues can, to a varying degree, be complex or salient to the broader public (Dür and Mateo 2016, 7). In short, the policy area in question may affect framing strategies because the collective issue definitions differ across policy areas and can constrain or enable the framing of interest groups (Baumgartner and Mahoney 2008, 441). Therefore, the following section of the thesis starts by reviewing different issue characteristics established in the literature on EU policymaking, such as the type of issue, issue complexity, and the degree of salience and conflict related to the issue. Finally, I review the policy area characteristics, focusing on activity, competence, and legitimacy.

2.2.2.1 Issue characteristics

Starting with the type of issue, the seminal work of Lowi (1964, 179) distinguishes between three types of policies: regulatory, distributive and redistributive. Distributive policies are measures that distribute resources from authority to specific societal groups, whereas redistributive policies transfer resources from one societal group to another. On the other hand, regulatory policies intend to shape the behavioural practices of one or several groups (Lowi 1964, 179-180). In the context of American trade policy, Lowi (1964) exemplified that trade policy was a much bigger issue in the 1930s when trade was a question of distribution than in the 1950s when it had become a question of regulation. The critical distinction here lies in whether there is an opportunity for the interest group to shape the policy outcome (Dür and Mateo 2016, 9; Klüver, Braun, and Beyers 2015, 451). The distinction between distributive and regulatory policies is essential because it can affect the mobilisation of frames, lobbying strategies, and influence of interest groups. For example, Dür and Mateo (2016, 83-84) find that

business actors rely more on inside lobbying strategies (e.g. direct contact with policy-makers) in distributive policy debates than in regulatory policy debates. Additionally, they find that business actors and citizen groups converge in their choice of strategy when lobbying on regulatory policy but diverge on distributive policy (Dür and Mateo 2016, 87). Considering that the distinction between regulatory and distributive policies matters for the choice of lobbying strategy, it can also be expected to have an effect on framing and impact whether a stakeholder employs a strategic frame or not.

Central to the type of policy is the stakeholder's position relative to the status quo. For example, Baumgartner et al. (2009, 87) have shown that lobbying in the US often consists of two sides opposing each other, where one is trying to protect the status quo while the other is trying to challenge or change it. Depending on whether the interest group's goal is to protect or change the status quo, their position will have implications for their mobilisation of policy frames and lobbying strategies. Applied to the case of the EU political system, much of EU legislation in the last decade has focused on market regulation against status quo-defenders will, which is often represented by a majority of business interests (Dür, Bernhagen, and Marshall 2015, 952). Since citizen groups more frequently want to change the status quo, they can expect better lobbying achievements than business groups, meaning that business actors, in fact, despite their powerful lobbying resources, are less successful than citizen groups in getting their policy preferences translated into policy output (Dür, Bernhagen, and Marshall 2015, 952). However, even though business groups more frequently lose in their opposition to the status quo, they may still be able to defend their interests if a policy has low levels of controversy related to it or involves few interests. In other words, business lobbying success is conditional on the level of conflict (Dür, Bernhagen, and Marshall 2015, 953).

The scope of conflict related to a policy debate is a crucial issue characteristic and can affect interest groups' ability to influence policymaking (Klüver 2013, 11; Boräng and Naurin 2015, 502; Dür and Mateo 2016, 9). Most policy proposals are generally consensual and do not cause significant resistance, whereas others do not. If a legislative proposal does not create conflict, interest groups are expected to face less competition from other opposing political views (Klüver, Braun, and Beyers 2015, 452). Conflict enlargement can potentially affect the collective issue definition by adding new perspectives to the policy debate and potentially creating competing frames. The conflict-argument summarised by Boräng and Naurin (2015, 502) claims that "conflict expansion is likely to lead to a more hospitable environment for

lobbyists promoting other- and ideal-regarding frames, rather than self-regarding frames.” This indicates that in lobbying environments where the level of controversy and conflict is high, it is significantly more challenging to promote specific economic frames instead of frames referring to the public good.

The effect of framing and reframing a policy issue is detailed by Daviter (2011, 19), and he argues that by reframing a policy debate, potentially new actors can enter the debate and facilitate new insights and policy arenas where the policy initiatives were more favourably received. Shifting the collective issue definition in a policy debate in the second face of framing, from, for example, considering a technical issue of a social policy to considering ethical concerns of social justice, can potentially make policy initiatives more favourably received. The result is that new actors enter the political arena, and a legislative debate's outcome can be potentially affected (Daviter 2011, 18).

However, Klüver, Braun, and Beyers (2015) highlight that an important distinction lies between the scope of conflict and the level of issue salience: a policy initiative might be salient, but it does not necessarily mean that it is conflictual. Additionally, an initiative might not trigger the interest of a large set of interest groups but still produce conflict or strongly opposing views. In contrast to the characteristics of conflict, issue-salience refers to the popularity or the number of actors paying attention to an explicit political debate (Klüver, Braun, and Beyers 2015, 452).

In line with the issue salience-argument, Lecheler, de Vreese, and Slothuus (2009, 400) argue that “framing effects may depend on the “importance” of their issues”. In fact, their study finds that high issue salience has a moderating effect on framing effects. In comparison, issues of high importance yield no effects, and issues of low importance yield significant effects (Lecheler, de Vreese, and Slothuus 2009, 416). As pointed out by the authors, their findings support Kioussis (2005, 7) argument that the volume of public attention an issue gets is linked with the strength of attitudes related to the specific issue. However, the study was conducted with the help of experimental survey data from Denmark; it remains to see whether the same arguments apply to the case of the EU political system.

Moreover, salient issues are more likely to lead to coalition building and attract a diverse set of stakeholders (Eising, Rasch, and Rozbicka 2017, 942). Lobbying coalitions are defined by Klüver (2013, 12) as a group of actors that share the same political goals and collaborate on

lobbying related to the shared goal. Issues with high salience need broad public support and often involve costly lobbying strategies, which incentivise organisations to join forces and pool resources. Hence, the size of the lobbying coalition matters and interest groups belonging to a large coalition is more likely to be successful in shaping policymaking (Klüver, Braun, and Beyers 2015, 452-453). Few scholars have empirically tested the effect of lobbying in coalitions on framing, but Daviter (2007, 659) argues that coalition-building depends on the framing of the issue at stake in politically complex policy environments.

All political issues differ extensively in terms of complexity. Whereas some policy issues are highly technical and complex, others have a relatively low degree of complexity. Hence, the complexity of a legislative proposal affects interest groups' lobbying access and the possibility of influence over the policymaking process because the EU institutions' need for informational input varies (Klüver 2013, 19). To a varying degree, some policy initiatives are relatively limited and straightforward compared to very technical matters. Consequently, the EC's demand for external expertise is higher in complex matters because interest groups are often experts in their respective policy fields and their informational input is requested (Klüver, Braun, and Beyers 2015, 451). Additionally, and as mentioned earlier, business groups often possess more technical expertise than citizen groups (Dür and Mateo 2016, 25).

2.2.2.2 Policy area characteristics

Scholars agree that lobbying activity varies across policy areas (Coen and Katsaitis 2013, 1113; Dür and Mateo 2016, 127). For example, Dür and Mateo (2016, 58) argue that the majority of groups find the same clusters of policy areas to be most important across different group types. Especially energy and environmental policy stands out as popular policy areas but are closely followed by agricultural and trade policy. In contrast, interest groups that find cultural policy important also find policy areas such as gender and educational policy (more or less) equally important, and vice versa for those groups who do not think cultural policy is important (Dür and Mateo 2016, 59). Overall, this finding indicates that interest groups are active across various political issues and policies regardless of their group type.

An essential factor in explaining interest group behaviour and choice of framing strategies is whether the policy area is an exclusive EU competence or not (Dür and Mateo 2016). Trade policy is one of the most typical examples of exclusive EU competence, whereas on culture policy, for example, the EU's legislative role is restricted. Furthermore, in policy areas where

EU competencies are low, lobbying incentives and activity are significantly lower because groups with this type of interest will instead focus their resources on lobbying at the national or subnational level (Dür and Mateo 2016, 127). However, there is empirical evidence that business groups dominate and are primarily concerned with trade, transport, and industrial policy, whereas, in policy areas such as health and migration, citizen groups are more represented than business interests (Dür and Mateo 2016, 80).

Likewise, legitimacy is an important feature related to policy area characteristics. Overall, the literature distinguishes between two types of legitimacy: input and output legitimacy (Coen and Katsaitis 2013, 1105; Bunea 2018, 2). Output legitimacy refers to the general quality of the political issue, whereas input legitimacy relates to the degree of public participation and consensus over a policy. Output and input legitimacy further differs in their demand for expertise. While the latter demand technical expertise, the former requires political expertise related to public opinion (Coen and Katsaitis 2013, 1105). The distinction between the two types of legitimacy expresses that the less directly accountable a policy domain is to the public, the higher the need for output legitimacy. Conversely, the more directly accountable the policy is to the public, the greater the need for input legitimacy (Coen and Katsaitis 2013, 1106). In sum, the balancing of input and output legitimacy matters for the choice of framing strategies because it can say something about the characteristics of the different policy areas.

Furthermore, Klüver, Mahoney, and Opper (2015) examine determinants of interest groups' frame choice in EU policy debates and show that frame selection varies across Directorate-Generals (DG) in charge of drafting the policy proposal. Concerning policy area characteristics, variation across DGs captures policy area variation because each DG more or less corresponds to different policy areas (Klüver, Mahoney, and Opper 2015, 482). Additionally, each DG possesses significant influence over the content of a draft legislative proposal. Therefore, stakeholders who can provide important information in line with the prevailing policy area and DG are more likely to translate their policy preferences into the policy proposal (Klüver, Mahoney, and Opper 2015, 487). Likewise, this indicates that interest groups choice of policy frames may depend on which DGs are in charge of a legislative initiative. For instance, if an interest group intend to lobby the DG for Climate Action, it is more reasonable for the interest group to employ an environmental frame than a consumer or public health frame in order to get their policy preferences translated into the legislative proposal (Klüver, Mahoney, and Opper 2015, 482).

Referring back to Lowi's (1964) distinction between regulatory and distributive policy areas and additionally controlling for the Commission's organisation into different DGs responsible for different policy areas, Coen and Katsaitis (2013, 1108) argue that the need for technical expertise is higher for DGs dealing with regulatory policy than distributive policy. Specifically, to make new policies, the DGs propose policy options and ask for technical expertise to ensure they have all the information they need available. Moreover, since regulatory policy areas often are less politicised than distributive policy, input legitimacy is less critical than output legitimacy. As a result, since the distributive policy is more politicised but less complex, the demand for technical information is, in total, higher than the demand for political information (Coen and Katsaitis 2013, 1109).

To summarise the past section on characteristics of the policy area in question, Binderkrantz (2020) highlights some important distinctions between three policy areas when studying policy framing: business regulation, general regulation and public service production. First, *business regulation* focuses on regulating the business sector and is likely to attract policies related to the costs for businesses associated with regulation. Second, *general attention* policies focus on more significant societal issues where the costs and benefits are often diffuse, such as taxes, climate change, or immigration. Last, *public sector production* accumulates benefits to specific societal groups while the more prominent public carries the costs to varying degrees, and frames are consequently aimed at the benefits of other groups (Binderkrantz 2020, 576).

2.2.3 Policy framing and institutional characteristics

The literature review has shown that contextual and actor characteristics affect the types of frames adopted by interest groups. However, the third and last school of thought prominent in the literature on lobbying and framing strategies concerns characteristics related to political institutions and country context. Generally, the institutional perspective concerns the system of interest representation. It accommodates (1) the institution's openness to lobbying, (2) the extent to which institutions are dependent on the information provided by stakeholders, and (3) the distinction between corporatism and pluralism (Dür and Mateo 2016, 7). However, this thesis studies policy framing within the context of interest group communication to one EU institution, namely the EC, and therefore the institutional characteristics of the different lobbying venues are not of significant importance for this thesis. Therefore, the following

section first reviews the institutional characteristics and rules of the EC and then turns to the institutional characteristics of the system of interest representation on the national level.

2.2.3.1 The institutional setting

The institutional setting in which interest groups operate is vital because it sets the access points for their lobbying efforts. The three main lobbying venues stakeholders must decide whether to direct their lobbying and framing efforts towards are the EC, the EP and the Council. There is broad agreement amongst scholars that the EC plays a decisive role in policymaking because it holds the legal right to initiate legislation and the responsibility to draft legislative proposals (Bouwen 2002, 2009; Daviter 2009; Mazey and Richardson 2015). According to Bouwen (2009, 20), the EC holds three crucial responsibilities and roles: (1) a legislative role, (2) an executive role, and (3) the role as a guardian of the legal framework. However, it is the role as an agenda-setter and legislator which is most important for this thesis, and the literature points out that lobbying efforts are most effective at the initial stages of the policymaking process because it provides interest groups with better opportunities to influence policymaking (Bouwen 2004, 346).

In line with the fact that lobbying efforts are most effective at the initial stages of policymaking, Bunea (2021) argues that the stage in policymaking at the Commission level and act type characteristics (i.e. roadmaps, inception impact assessments, legislative proposals, delegated and implementing acts) contribute to shaping stakeholder participation in policymaking. The logic behind the argument is that during the early formulation and policy preparation, the incentives to participate are higher given the general scope and lower levels of technicality of the policy proposal (Bunea 2021, 10). In sum, this means that the level of technicality and scope of feedback differs according to a policy act placement in the political process and that the institutional rules of the lobbying venue matter for the scope of lobbying efforts. Table 2.1 below summarises the policy act type, the stage in policymaking at the Commission level and the implications it proposes for stakeholder participation.

Table 2.1 Policy act, policy stage and implications for stakeholder participation.

Act type	Policy stage	Technicality level	Scope of feedback: Procedural vs. substantive	How stakeholder feedback is taken into account
Roadmaps	Early formulation: policy preparation	Low	Mainly procedural, with some substantive	Synopsis report accompanying the initiative throughout policy formulation
Inception impact assessments	Early formulation: policy preparation	Low	Mainly substantive, with some procedural	Synopsis report accompanying the initiative throughout policy formulation
Legislative proposals	Post-EC formulation and adaptation	Medium	Substantive	Summary sent in the format of a letter by EC DG to EP and Council to inform the legislative debate

Adapted and partially reproduced from Bunea (2021, 11).

Early lobbying efforts at the initial stages of policymaking are, as mentioned, considered the most effective and attractive timing and venue for successful lobbying. Moreover, it is widely known amongst stakeholders involved in EU lobbying that it is beneficial to get their demands heard early in the process and preferably before the formal document of the legislative proposal is written (Bouwen 2009, 20; Mazey and Richardson 2015). Therefore, early lobbying efforts can be seen as a strategic choice, and stakeholder incentives and the plurality of inputs are expected to be at their highest for feedback on roadmaps and inception impact assessments and more moderate for the legislative proposal. However, feedback post-EC formulation and adaptation is still an attractive lobbying opportunity because the arguments and frames employed at this stage in policymaking do not feed into the preparatory work of a policy initiative but rather aimed at feeding into the legislative debate summarised and presented to the EP and the Council (European Commission 2017, 438-439). In consequence, the placement in the policy process and institutional rules will have consequences for stakeholder participation in feedback opportunities and the strategic use of policy framing.

2.2.3.2 The country context and interest group system

An additional explanation for the choice of lobbying and framing strategies is the system of interest representation at the national level. Findings from the strand of literature focusing on

the national institutional setting find that interest groups adopt the “lobbying styles” from the interest mediation system they originate from, i.e. their national institutional system, and that it affects their choice of lobbying strategies (Binderkrantz 2003, 288; Eising, Rasch, and Rozbicka 2017, 941-942). Moreover, since different stakeholders come from different EU member states, their lobbying strategies at the supranational level will be informed by their lobbying experience and practices at the national level. Hence, the way stakeholders construct their argumentation and build frames will be affected by their previous lobbying experiences.

Since there is variation in the national system of interest representation across European countries, scholars that focus on the national institutions commonly distinguish between corporatist and pluralist systems (Dür and Mateo 2016; Eising, Rasch, and Rozbicka 2017; Binderkrantz 2020). The pluralistic and corporatist systems differ in their relationship with the state and society (Eising 2008, 1167). In pluralist systems of interest representation, the competition between the different interest groups and state institutions are essential. The political institutions regulate the access to policymaking, and the relationship between interest groups and decision-makers is often characterised by various actors competing for political influence (Eising 2008, 1169). In countries with a corporatist system, on the other hand, the interaction between interest groups and the state is much more institutionalised and provides specific groups with access to the decision-making process (Eising 2008, 1170). Moreover, unlike the pluralistic system, the countries with a corporatist system do not have to compete for access to public decision-making processes. Instead, corporatism facilitates negotiations between interest groups and the state (Eising 2008, 1169).

In line with the fact that variation in the national institutional system can affect lobbying behaviour, Binderkrantz (2020) argues that the political system’s characteristics can affect whether an interest group uses member- or other-regarding frames or whether or not an interest group uses an economic or public frame. Since the different interest groups in pluralist systems have to compete and use extensive argumentation to have their viewpoints heard, Binderkrantz (2020, 574) argues that interest groups operating in a pluralistic institutional setting are expected to appeal to a more general and public audience using other-regarding frames rather than to a more narrow audience with self-regarding frames. However, interest groups in corporatist systems are more structured and represent specific societal groups and are therefore expected to frame their policy demands concerning their membership. The reason behind corporatist systems' use of self-regarding frames is their opportunity to be closely incorporated

into public policymaking and the opportunity to dialogue and co-decision with the state level on policy (Binderkrantz 2020, 573). However, it is important to note that Binderkrantz (2020) finding is based on news framing of the Danish and British media systems and not in the context of EU lobbying.

On the other hand, Dür and Mateo (2016) test if there are considerable differences in corporatist and pluralist systems and their choice of either insider or outsider lobbying strategies in the context of EU lobbying. Their findings show that in the context of two pluralist countries (Latvia and Spain) and three corporatist countries (Austria, Germany and Ireland), there is no consistent evidence for whether the corporatist or the pluralist context affects the choice of lobbying strategies on EU legislation (Dür and Mateo 2016, 92). Furthermore, Dür and Mateo (2016) controlled for the interaction effect of business groups to see if the effect of actor type is conditional on the institutional context but found no conditional effect. The finding indicates that interest groups' choice of lobbying strategies is not dependent on the national institutional setting alone. Similarly to Binderkrantz (2020) finding, it is essential to note that the data selection of Dür and Mateo (2016) is limited, and the finding should not be overemphasised or generalised across European countries in general.

However, it is not a far leap to expect that the national experience of stakeholders can affect the use and choice of framing at the EU level. For example, Eising, Rasch, and Rozbicka (2015, 520) argue that national-level stakeholders have more substantial incentives to employ more specific policy frames than generic frames because, over time, states develop their own rationality criteria and lobby to defend a more specific national political setting. In contrast, EU-level actors are expected to employ relatively more generic frames because their lobbying goal is to achieve consensus among the involved actors (Eising, Rasch, and Rozbicka 2015, 520). In line with this finding, some degree of variation in frame usage should be expected across national systems of interest representation and country context.

Finally, as briefly indicated at the beginning of this section, this thesis studies stakeholder communication and framing in the context of one key EU institution, the EC, and focuses on the new opportunity for stakeholder involvement in policymaking proposed by the feedback mechanism. Therefore, I treat the EC as a unitary actor and assume that the institutions' interest is to present policy initiatives that successfully pass the legislative process, whereas I theorise that the goals and objectives of the EP and the Council is re-election. In the following section

of the thesis, I present the theoretical argument based on the past literature review and present the hypotheses deriving from it.

2.3 Theoretical argument

The following section presents the theoretical argument and the hypothesis based on the initial literature review. The main objective of this thesis is to investigate and explain the policy frames stakeholders employ while attempting to influence the formulation of policies using the new stakeholder feedback mechanism introduced by the EC in 2016. Furthermore, the theory chapter has reviewed three sets of explanatory variables that can explain the mobilisation of policy frames – actor characteristics, policy context and institutional characteristics – and reviewed several categories of policy frames developed in the literature on EU policymaking and beyond.

I build the theoretical argument using the categorisation put forward by Binderkrantz (2020) and Klüver, Mahoney, and Opper (2015) and distinguish between public and economic frame categories. I further construct the theoretical argument by building on the first and second set of explanatory variables presented in the literature review: the characteristics of the actor and the policy context. First, I expect that policy frame choice varies across stakeholder characteristics concerning the type of interest it represents and the organisational format of the participating stakeholders. Second, concerning contextual characteristics, I expect that the degree of public issue salience affects the stakeholder's frame choice. Finally, the resource-based perspective also constitutes a vital factor in EU lobbying and policymaking, and the literature review has shown that financial resources matter for the choice of lobbying strategies and policy frames. Therefore, I control for lobbying resources as an alternative explanation of framing strategies and apply financial resources as control variables to my models.

Furthermore, the key innovation of this thesis is testing the causal mechanism and theoretical linkage between established explanatory variables in the literature on EU lobbying strategies to an original text data set using recent developments in QTA and treating political texts as data. Additionally, I test for the cross-level interaction effect of stakeholder type lobbying on legislative proposals with high levels of public salience. In light of this, this thesis offers both theoretical and empirical contributions to the literature on EU lobbying and policy framing.

2.3.1 The expected effect of interest type on frame choice

Different types of stakeholders perform differently, and several scholars have shown that interest group characteristics affect stakeholders' choice of framing and lobbying strategies (Croteau and Hicks 2003; Dür 2008; Eising 2009; Bunea 2013; Klüver, Mahoney, and Opper 2015). Dür and Bièvre (2008, 32) argue that the type of interest is important because it can say something about the interest stakeholders represent. For example, the literature review showed that stakeholders representing business interests stand out as a distinct group of actors in EU policymaking regarding their specific economic interests, access to the EC, level of financial resources, and possession of technical information. Whereas cause groups, on the other hand, that typically fight for the public good are characterised by having more diffuse interests and are considered slightly more disadvantaged in terms of access to expertise and financial resources (Dür and Bièvre 2008, 32).

In line with the interest type represented, Berkhout (2013) showed that sectional groups primarily represent specific economic interests and membership is usually limited to a specific section of society. In contrast, cause groups refer to diffuse public interest, and membership is open to anyone favouring the interest group's principle. Furthermore, Baumgartner et al. (2009) have shown that lobbying efforts often are characterised by two sides opposing each other and that actors promoting business interests are commonly described as defenders of the status quo and citizen groups as challengers. Therefore, in the light of stakeholders' different interests, I expect interest groups' frame choice to reflect their constituency structure and distinguish between interest groups characterised by diffuse public interests and specific economic interests.

In order to test whether there is consistency between the theoretical expectations and the empirical data, I chose a categorisation of interest groups that directly correspond to the nature of the interest the groups represent and the economic and public frame categories. In sum, and to differentiate between the interest types stakeholders are promoting, I distinguish between economic interest organisations (sectional groups), public interest organisations (cause groups) and stakeholders promoting individual interests (firms). I argue that the type of interest group affects the frame choice of interest groups and expect that interest groups organised as cause groups with diffuse interests and sectional groups together with firms with specific interests

differ in their frame choice. Building on the theoretical expectations laid out in the theoretical argument and theory chapter, I propose the following hypothesis:

H1: *Interest groups representing business interests (firms and sectional groups) are more likely to employ an economic frame, whereas cause groups are more likely to employ a public frame.*

2.3.2 The expected effect of organisational format on frame choice

Another implication for the choice of lobbying strategies proposed in the literature on EU lobbying and policymaking, and, I argue, by extension, the potential frames stakeholders might employ in their feedback texts, is the organisational format of the interest group submitting feedback (Bouwen 2002; Beyers 2008; Bunea 2013). The stakeholders participating in the feedback mechanism are diverse: NGOs, trade unions and local authorities organised as European federations, national associations or individual level organisations, or citizens. Beyers (2008, 1200) argues that the organisational form says something about how an interest group deals with the political environment and points out that the organisational format of an interest group indicates whether or not a group is membership-based and the group's level of representation. For example, the organisational format can say something about whether a stakeholder is an individual-, national- or European level organisation. The latter two are membership-based organisations but differ in their level of representation, and the former is a non-membership organisation.

However, the organisational format of an interest group is important because different interest groups can have the same lobbying goal, but the inter-organisational structures may restrict or enable them to pursuing their lobbying goal. This matters for policy frames because different organisational formats offer varying degrees of flexibility in their pursuit of influence. For example, a membership-based organisation can be constrained by its dependence on membership dues, and therefore the interest groups have to act on and choose frames that agree with the organisation's internal structures to guarantee satisfaction with their member's demands (Berkhout 2013, 232). Similarly, an European level organisation is a membership-based organisation that often enjoys access to better resources, for example, in terms of financial resources, expert knowledge and qualified staff, than national, regional or individual

organisations but face other constraints due to their more complex organisational structures (Beyers 2008, 376; Bunea 2013, 554-555).

Furthermore, focusing on the level of representation for interest groups, the literature indicates that with a more encompassing membership, such as European level organisations, the interest group has a broader representational mandate and is specialised in achieving consensus among members within the broad European encompassing interest. However, the multi-layered and complex structure of European level organisations places greater demands on the internal organisation of the association and can consequently hamper the efficiency and provision of access goods (Bouwen 2002, 377). On the other hand, national and regional organisations often enjoy good relations with their national and regional political institutions and are specialists in information about the regional and domestic encompassing interests. Moreover, similar to European level organisations, regional and national organisations are often more generalists than specialists on many policy issues and face some of the same inter-organisational constraints as European level organisations (Bouwen 2002, 377). Finally, individual level organisations differ from the previous types of organisations in their organisation as non-membership organisations and their professional expertise in specific policy areas (Bouwen 2002, 376). Additionally, an individual level organisation can be both firms and NGOs; the only criteria is that they lobby independently and are not constrained by the logic of membership.

In light of the discussion of organisational format importance for lobbying behaviour, I argue that since European, national and regional level actors are dependent on achieving consensus among the involved actors in a feedback opportunity, they are more likely to employ a diffuse public frame to achieve consensus among members. In contrast, individual level organisations are not constrained by membership and are more likely to show more diversity in frame usage than organisations on the European, national and regional level. Accordingly, the following two hypotheses is proposed:

H2.1: *Membership-based interest organisations (such as European, national and regional level actors) are more likely to employ a public frame than an economic frame.*

H2.2: *Individual level actors are equally likely to employ economic and public frames because they are not constrained by membership.*

2.3.3 The expected effect of issue salience for stakeholders on their frame choice

The literature review showed that a common explanatory factor in the scholarship on EU lobbying strategies and policymaking is that on policy issues with high levels of issue salience, interest groups, especially those promoting business interests, is more likely to be less influential (Mahoney 2007, 40; Rasmussen, Carroll, and Lowery 2014, 251). The assumption is that it is easier to carry out influential lobbying when competition is low. Furthermore, Beyers, Dür, and Wonka (2015, 1) underline that it is important to distinguish between different conceptualisations of issue salience, that is, whether it is individual and collective salience or if it is salience for stakeholders or policymakers that is being analysed.

Previous studies on issue salience in EU lobbying and policy framing, for example, used media attention as a measure of public salience by counting the number of news articles or length of the news articles reporting on a specific issue (Mahoney 2007, 43; Boräng and Naurin 2015). Media publicity is a powerful lobbying tool because it can influence the broader public and policymakers' visible frame choices and potentially shift the collective issue definition in a legislative debate. In addition, Boräng and Naurin (2015) argue that business interests have better access to media attention because targeted media efforts take time and resources in terms of competent staff. However, Beyers, Dür, and Wonka (2015, 6-7) argue that media publicity is a problematic measure because media outlets choose what news they consider newsworthy and argue that such measures should instead be considered for what they are: a measure of media attention. Additionally, using media attention could lead to a biased data selection.

Therefore, to capture the public issue salience of the legislative proposals analysed in this thesis for the stakeholders, I rely on the number of stakeholders participating in each feedback opportunity related to a legislative proposal. The feedback mechanism analysed in this thesis offers a form of lobbying under maximum transparency and public review that allows stakeholders to see and read through the content in the feedback text of other stakeholders immediately after submitting the feedback text. I expect that this form of lobbying shapes stakeholders framing strategies in the feedback opportunity and argue that the likelihood of strategic framing tactics of business interests increases in legislative debates with high levels of public salience. When the popularity and the number of actors submitting feedback to a legislative proposal rises, the more difficult it is for business interests to promote narrow and specific economic policy frames. Because the new feedback mechanism promotes full public

review so that other stakeholders can see who and what feedback has been submitted relative to a legislative proposal, I expect firms to strategically employ a public frame because narrow economic frames do not improve their opportunity for influence. Additionally, firms' organisation as non-membership organisations also makes it easier to shift frames because the logic of membership does not constrain them. Consequently, a narrow and specific economic frame is more difficult to justify when a policy debate involves many stakeholders' interests. Therefore, I expect that:

H3: *Firms are more likely to employ a public frame when the issue salience for stakeholders is high and more likely to employ an economic frame when the issue salience for stakeholders is low.*

3 RESEARCH DESIGN

Chapter Three presents the case selection, data and methodological approach used to answer the research question and test the hypotheses presented in the theoretical section. I apply a multi-methodological approach, combining QTA as an empirical strategy to identify the policy frames and large-N multi-level regression analysis to explain stakeholders' frame choice across actors' characteristics and policy context. The unit of analysis in this thesis is a legislative proposal, whereas the unit of observation is an individual stakeholder and the frame it uses. Furthermore, the research question is examined by focusing analytically on the feedback provided by stakeholders on the legislative proposals drafted by the EC and sent for adoption and discussion to the EP and the Council.

For this purpose, I have built a unique dataset that gathers information about 1143 stakeholders that have submitted written feedback on ten drafted legislative proposals from ten different policy areas. The written texts and information about stakeholders authoring them were web-scraped from the EC 'Have your say portal'. In the portal, stakeholders can publicly share their views on EU policy initiatives by submitting a short text in a box similar to a comments section and attaching an additional PDF document by the length of choice. In 670 of the cases, the PDF attachment was included in the QTA because the stakeholder made reference to it, and in 473 of the cases, only the comments section text was included because the stakeholder did (1) not attach an additional document or (2) the attached document was an exact retelling of the comments section text. In five cases, a stakeholder submitted an empty feedback text and was deleted from the selection.

In addition to providing open access to the stakeholder feedback text and attachments, the 'Have your say portal' provides some information about the different stakeholders, i.e. stakeholder type (e.g. whether the stakeholder is an academic/research institution, trade union, business association, EU citizen or other), their Transparency Register number if they are an organisation, the submission date of the feedback text, the stakeholders country of origin and the organisation's name and size.

Furthermore, the stakeholders included in my dataset represent a wide variety of interests from 38 EU and non-EU countries, ranging from business interests and trade unions to non-governmental organisations (NGOs) and individual citizen interests. The distribution of

interests and countries is illustrated in Figures 3.1 and 3.2 below. The analysed feedback texts included 831 written in English, whereas 312 were written in other EU languages, meaning that 73% of the texts were written in English and the remaining 27% were written in another. The legislative proposals were adopted from 2020 to 2021, with the first feedback period starting 15th of January 2020 and the latest feedback period ending 18th of November 2021. In total, the dataset includes 1143 observations from 1012 unique stakeholder submissions because some interest groups participated several times across policy initiatives.

Figure 3.1 The distribution of interest type represented by stakeholders in the dataset.

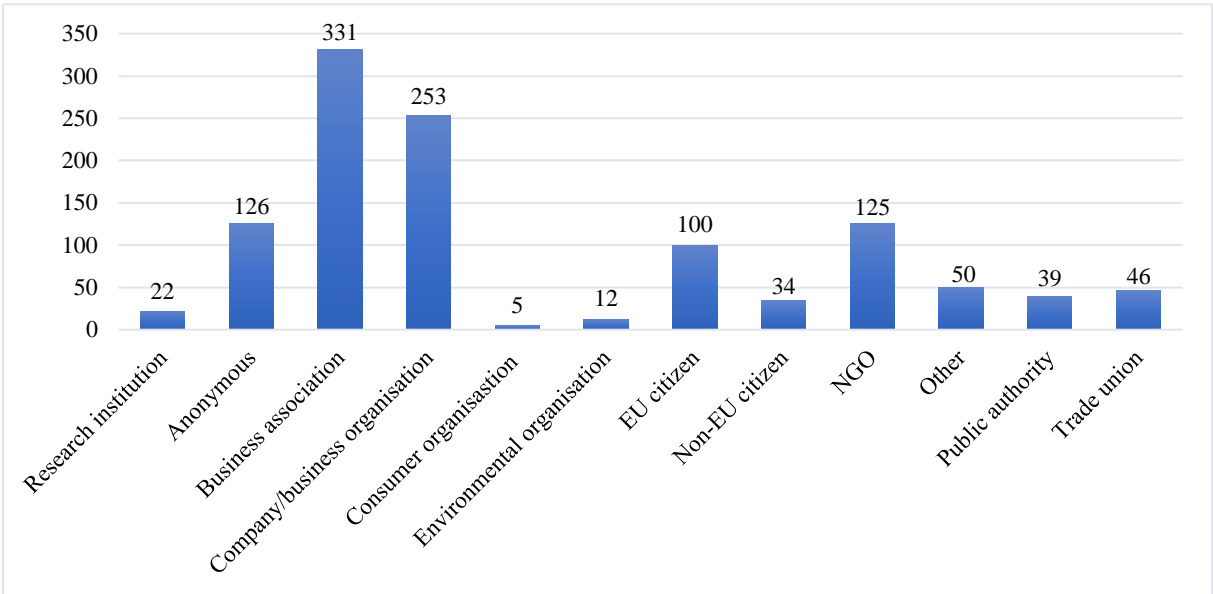
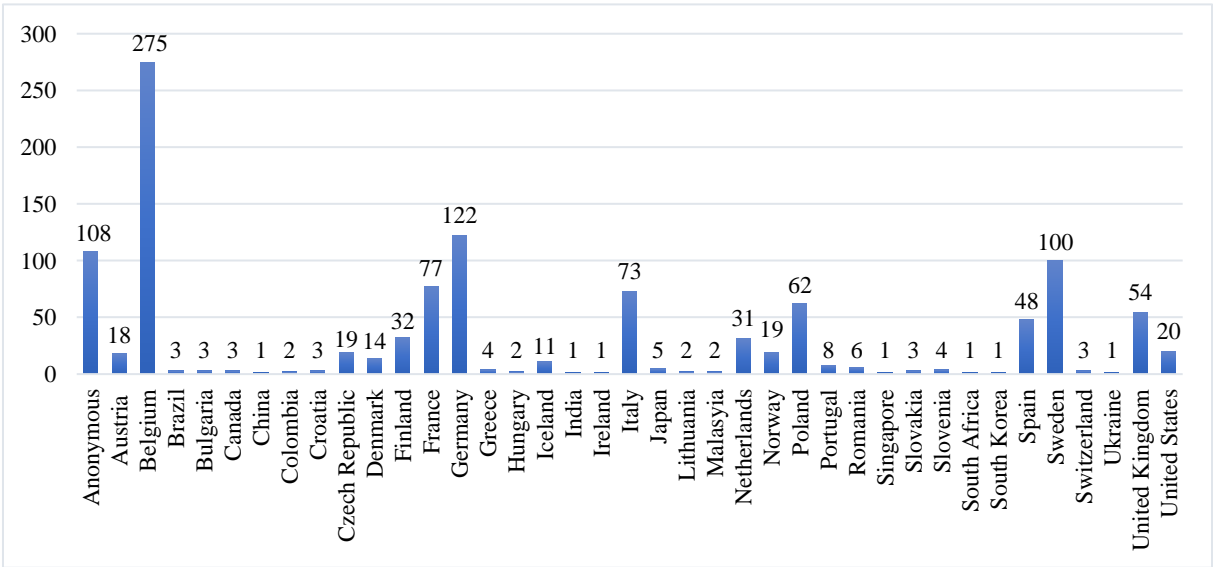


Figure 3.2 The distribution of countries represented by stakeholders in the dataset.



To the dataset containing information about the feedback texts and stakeholders' actor characteristics, I collected and coded additional key information about the stakeholders in the dataset from three online sources: the EU Transparency Register, the Lobbyfacts database and stakeholder webpages. The variables include information about stakeholder type (i.e. whether it is a firm, sectional group, cause group or individual), resources (i.e. whether or not it has a Brussels office, size of the staff and financial resources) and the organisational form indicating whether the stakeholder is an individual organisation, regional-level organisation, national-level organisation or a European-level organisation. Also, I collected information about the legislative proposals, i.e. if they belong to a policy area that is regulatory or distributive, the number of stakeholders providing feedback that belong to a different and opposing stakeholder interest group, the length of the feedback texts in the number of words indicating the level of individual salience for the stakeholders submitting feedback. In the following sections, I present the case selection and methodological approach, detail how I constructed and coded the dependent variable based on QTA and how I coded and operationalised the explanatory and control variables.

3.1 Case selection

As part of the 2016 Better Regulation Reform, the EC uttered an aspiration to listen more closely to citizens and stakeholders and allow them to express their views throughout the lifecycle of policies. As a result, the EC proposed the new “feedback mechanism”, offering stakeholders to comment freely with written text on roadmaps, initial impact assessments, and legislative proposals after being adopted by the EC on an online platform available on the EC webpage (European Commission 2017, 437). This new tool for engagement has some unique characteristics that distinguish it from prior EC consultative processes, making the mechanism an interesting analytical focus to which not much research has been devoted. However, the extent to which this new mechanism of stakeholder participation can further develop the literature on EU lobbying strategies and policy framing remains an empirical question and further motivates the research question of this thesis. In the following section of the thesis, I go through the new characteristics of the feedback mechanism, justify the case selection and explain its relevance for the study of policy framing.

The overall purpose of the feedback mechanism is to collect the general views of citizens and stakeholders on a specific document, i.e. roadmaps, inception impact assessments, legislative

proposals, and delegated and implementing acts (European Commission 2017, 437). However, I chose to focus on feedback related to legislative proposals instead of roadmaps and inception impact assessments because the legislative proposals are more elaborate and invite feedback on policy substantive and procedural matters (Bunea 2021, 9). Furthermore, and different from the feedback opportunities in earlier stages of policymaking, the views in the feedback comments do not feed into the preparatory work of a policy initiative but rather aimed at feeding into the legislative debate summarised and presented to the EP and the Council (European Commission 2017, 438-439). This is an essential factor because the information obtained here can potentially affect and shape the legislative debate and the views of the EP and Council members. Hence, the stakeholders' choice of policy frames is even more critical at this stage in policymaking because it creates incentives to strategically highlight some aspects of the stakeholders' perceived reality while moderating other aspects to maximise its chances of influencing the legislative debate and potentially shaping policymaking. Finally, the feedback period is twice as long for legislative proposals with eight weeks compared to roadmaps and inception impact assessments which have four weeks (European Commission 2017, 438, 440). With a more extended feedback period, it can thus be argued and expected that stakeholders have better time to polish and frame their arguments and orient themselves on other stakeholders' views, compared to the feedback on roadmaps and inception impact assessments.

Furthermore, the new feedback mechanism differs from previous consultative processes in two key aspects that make the study of policy framing fruitful. First, unlike targeted public consultations that often precede legislative proposals posing explicit questions to which stakeholders can respond, the EC's new feedback tool was designed with far lower levels of agenda-setting power in mind (European Commission 2017, 438). When the EC publishes a document and invites stakeholders to provide written feedback, the EC does not specify what the stakeholders should submit feedback on by asking specific questions. This means that citizens and stakeholders can comment freely on exactly what they want to illuminate without being limited to or guided by concrete questions. In addition to this minimum of agenda-setting power from the EC and the freedom to provide feedback on whatever the stakeholder want to comment on, the threshold to participate is also lower because the feedback mechanism does not require a formal registration; the lobbyist just needs to upload the feedback text (Bunea 2021, 5). Because the agenda-setting power and the threshold for submitting feedback are low, the feedback mechanism implies that it places fewer constraints on stakeholder participation, resulting in relatively high levels of participation and a diverse range of contributions in

supranational policymaking (Bunea 2021, 6). Similarly, because the open online platform facilitated by the feedback mechanism attracts a plurality of stakeholders and opens up to freely submit the feedback a stakeholder want, it creates a new and unique environment for the study of policy framing and could potentially lead to the uncovering of new and yet uncovered patterns of EU lobbying behaviour.

Second, the new feedback mechanism promotes complete transparency and public scrutiny over the content in the feedback texts immediately after being published by the stakeholder and, in most cases, also the stakeholder's identity (European Commission 2017, 437). In this way, the public and possible counter-lobbyists not only know who is participating in the feedback opportunity, but they also know the lobbyist's positions relative to the legislative proposal. This form of lobbying under maximum transparency and public review is a vital aspect that can shape the lobbyists' overall incentives to participate in the feedback opportunity, the content in the feedback text, and, I argue, by extension, the potential frames the stakeholder might employ in the feedback text (Bunea 2021, 6). For example, it could be expected that some interest groups strategically employ a similar frame to other participating actors to maximise their chances of influencing policymaking. Likewise, however, the transparency over the content in the feedback texts not only allows for strategically employing specific frames but also as a mechanism for checking whether an organisation complies with its agreed internal arrangements. For example, some interest groups are not inclined strategically employ a frame not consistent with the agreed internal structures of their organisation to maximise their chances for influence but are instead consistent with their frame choice to guarantee satisfaction with their member's demands. What is expected, however, regardless of which strategies a stakeholder may choose when submitting feedback, is that the positions in these texts provide an assessment of the legislative proposals on an open online platform that other EU institutional actors in the EP and Council can see. This is an essential factor for the justification for the framing study because the frames employed at this stage in policymaking allow stakeholders to provide policy input into the decision-making stage and creates incentives to frame their arguments strategically.

Moreover, the argument of the thesis is tested in a comparative study of ten recent legislative proposals belonging to ten policy areas with varying issue salience for both the public and the participating stakeholders and importance for the EU polity. The selection of legislative proposals is summarised in table 3.1 below and was selected based on the following

criteria: *first*, the legislative proposals in the selection had to be proposals with a publicly available feedback opportunity carried out by the EC. Not all legislative proposals are possible to submit written feedback on, so the fact that there existed a feedback opportunity at all was the most basic and fundamental criterion for the case selection.

Second, the legislative proposals had to come from different policy areas, allowing the study to capture and examine an essential aspect of EU policymaking, namely the fact that there may be essential differences between policy areas in terms of frames used by stakeholders. Also, it was essential to select proposals from all different policy areas to avoid overrepresenting some policy areas and because there might be significant differences between policy areas in levels of integration, regulation and EU competencies which, in turn, may shape and affect the type of frames stakeholders use when providing their feedback. In addition to ensuring that there are proposals from different policy areas, it was also essential to ensure some variance in policy area type. Therefore, the policy areas in the case selection are both regulatory and distributive. The implication is that for regulatory policies, the need for technical expertise and information is higher than for distributive policies (Coen and Katsaitis 2013, 1108), which in turn, I argue, can affect the frames used by stakeholders. Also, it is important to note that there are slightly more regulatory policies than distributive ones in the selection due to data collection constraints and because, on a general basis, the EC proposes more policy initiatives in the regulatory area than in the distributive ones.

Third, there had to be some variance in issue salience for the legislative proposals in the selection, meaning that it had to be a varying degree of the number of actors involved in submitting feedback. In this thesis, I distinguish between individual and public salience but select the legislative proposals based on the level of public salience, namely the number of actors submitting feedback in the feedback opportunity following the legislative proposals. The implication is that when public salience expands, it generates a demand for broad support from the general public and when the public salience decreases, the environment for promoting narrow economic interests, or frames, is better (Boräng and Naurin 2015, 502).

Fourth, the legislative proposals had to be dated as recent and not too distant from each other in terms of feedback period and Commission adoption. I focus on recent legislative proposals adopted from 2020 to 2021 to ensure actuality and relevance to the current political landscape and societal importance and ensure that the proposals in the selection are comparable. An

important implication of choosing recent proposals is that it makes the empirical findings relevant and up-to-date and makes it possible to uncover yet undiscovered framing patterns.

Finally, the legislative proposals in the selection had to have some importance for the EU polity. Therefore, I chose to study vital legislative proposals in key policy areas covering issues high on the public and political agenda of the EU. By choosing legislative proposals according to the preceding criteria, it resulted in a natural distribution of proposals from policy areas where the supranational competencies are strong, e.g. for trade policy and competition rules, and in policy areas where the supranational competencies are slightly weaker, e.g. for migration, transport and energy. Table 3.1 below summarises the legislative proposals with the policy areas they cover, the number of stakeholders submitting feedback for each proposal and the duration of the feedback period¹.

Table 3.1 Overview of the legislative proposals in the dataset.

Legislative proposal	Policy area	Type of policy area	Feedback period	Number of actors giving feedback
EU renewable energy rules – review	Energy	Regulatory	11/17/20 – 2/9/2021	298
European climate law – achieving climate neutrality by 2050	Climate action	Regulatory	3/6/2020 – 5/1/2020	181
European Green Deal – Just Transition Fund	Regional policy	Distributive	1/15/2020 – 3/12/2020	155
Batteries – modernising EU rules	Environment	Regulatory	12/10/2020 – 3/1/2021	135
Adequate minimum wages in the EU	Employment and social affairs	Regulatory	11/5/2020 – 12/31/2020	107
Digital Services Act package – ex ante regulatory instrument of very large online platforms acting as gatekeepers	Digital economy and society	Regulatory	12/16/2020 – 5/5/2021	90
Towards more sustainable fishing in the EU – state of play and orientations for 2020	Maritime affairs and fisheries	Regulatory	6/9/2021 – 8/31/2021	61
Asylum & migration – unified approach to implementing EU policies	Migration and asylum, Home affairs	Distributive	10/2/2020 – 10/5/2021	58
Trade & investment – addressing distortions caused by foreign subsidies	Competition, Single market	Regulatory	5/7/2021 – 7/22/2021	47
A European Year of Rail 2021 – proposal	Transport	Distributive	3/4/2020 – 5/4/2020	28

¹ An overview of the official names of the legislative proposals is provided in Appendix A.

3.2 Identifying policy frames with the Structural Topic Model

In recent years, machine-assisted text analysis methods have become a popular methodological approach for the study of framing in the social sciences and media studies (Farrell 2016; Chandelier et al. 2018; Stelmach and Boudet 2021). The most apparent advantage of machine-assisted methods for text analysis is that it promotes an alternative to human manual coding and enable analysis in large quantities of text data. Hence, machine-assisted methods can identify statistical trends and sort the documents in a text corpus into estimated categories (Grimmer 2010, 2). Besides, the current breakthroughs in machine learning on textual data allow for an inductive search for unique topics in a text corpus. As a result, QTA approaches to enable the researcher to identify topics from the data as opposed to assuming them (Roberts et al. 2014, 1066).

Moreover, topic modelling is a machine-assisted methodological approach that constitutes a broad group of Bayesian generative models that estimate sets of words that commonly occur together within and across specific documents. These sets of words are assumed to be the underlying topic of documents, and in this way, the topic model can discover the thematic structures and frames of a text corpus (Roberts, Stewart, and Tingley 2019, 2). For example, in the political and social sciences, previous scholarship has used topic modelling to model open-ended survey responses about public opinion related to climate change (Tvinnereim et al. 2017), analyse the thematic structures of lobbying reports (Milner and Tingley 2015), cluster social media data and Twitter users sympathetic to Ukraine versus Russia (Mishler et al. 2015), study framing in media debates using newspaper data (Ylä-Anttila, Eranti, and Kukkonen 2021) or to measure the expressed agenda, and attention senators allocate to press releases (Grimmer 2010).

In this thesis, topic modelling is a suitable methodological approach for identifying frames employed by stakeholders for two main reasons. First, topic models define a topic as “a probability mass function over words” (Grimmer and Stewart 2013, 17), meaning that all topics are considered distinct concepts relative to other topics in the same corpus. This is an essential feature because it aligns with this thesis’s conceptualisation of frames as specific issues in a policy proposal emphasised in a policy debate. Second, most topic models are mixed membership models, which means that each unique document in the text corpus can contain a combination of topics. Unlike single membership models that cluster documents into mutually exclusive sets, the topic model calculates the topic proportions for each document and the sum

of word probabilities for a given topic (Grimmer and Stewart 2013, 18). Mixed membership models are also a vital feature for the study of policy framing because it cannot be assumed that stakeholders only refer to one frame in their feedback but also because it facilitates a study of the correlations among topics more easily.

Furthermore, to assess the research question, this thesis adopts the unsupervised machine learning method known as the Structural Topic Model (STM) to identify the policy frames employed by interest groups. The STM differs from other types of topic models such as the Correlated Topic Model (Blei and Lafferty 2007) and the Latent Dirichlet Allocation (LDA) (Blei, Ng, and Jordan 2003) because of its ability to incorporate document-level metadata (e.g. type of stakeholder, type of legislative proposal or policy area) into the model estimation. In STM, metadata covariates can be included through topical prevalence, content, or both. In short, the difference between topical prevalence and content is that topical content covariates refer to the words expressed within a document and affect how a specific topic is discussed. In contrast, the topical prevalence covariates refer to how much of a document is linked with a topic and rather affect the frequency the topic is discussed (Roberts, Stewart, and Tingley 2019, 9).

By adding topical covariates into the model, the researcher establishes the assumption that there is a relationship between external factors and the document's content (Roberts, Stewart, and Tingley 2019, 18). Previous studies analysing text data have, for example, used metadata covariates such as the stance of a speaker, type of comment and document date (Stelmach and Boudet 2021), ideological rating and dates (Roberts, Stewart, and Tingley 2019), or whether or not an institution has been lobbied (Milner and Tingley 2015) to inform the model with central information about the documents. However, since the corpus in this thesis consists of written feedback from over a thousand stakeholders in ten distinct policy debates over different policy areas, a wide variety of policy frames is expected due to the complexity and variety of themes present in the corpus. Therefore, document-level metadata, or topical prevalence covariates, is a helpful tool for this thesis because by indicating (1) the type of stakeholder and (2) which documents belong to which policy area, the covariates help guide and inform the model to build the correct categorisation of topics by capturing how much each topic contributes to a document. However, even though covariates help discover frames in texts, unsupervised methods such as the STM require extensive validation of the topic output. The following sections explain how the STM was performed regarding text pre-processing and validating the correct number of topics.

3.2.1 Text pre-processing

Before starting the topic modelling, the feedback texts in the dataset were converted into a format that makes more advanced analyses possible later. The pre-processing and data cleaning step is equally important as choosing the correct number of topics. However, it is an iterative testing process that requires one to return to earlier stages of treatment even after performing the topic models (Banks et al. 2018, 453). One first challenge with analysing feedback data submitted by stakeholders from various countries is that, in the EU, many stakeholders submit feedback in their native language. However, topic modelling analyses only work in one language, which simplifies means that all submissions in languages other than English should be discarded. Nevertheless, excluding potentially relevant observations is problematic and leads to a biased data selection (Bunea and Ibenskas 2015, 436). For example, there is a clear predominance of Swedish feedback in the legislative proposal on adequate minimum wages. If I were to exclude all Swedish contributions because of language constraints, the analyses would lose vital information about the adverse side effects of a statutory minimum wage, and consequently, the results would appear significantly biased and, in the worst case, even exclude a potential frame from the dataset.

Based on the validity challenges of rejecting documents that are not in English, I choose to translate all text submitted in other languages into English using Google Translate. However, it is essential to note that using Google Translate might affect the distribution of topics, and documents could consequently be assigned to other topics because a machine-translated corpus contains other words than a human-translated corpus would. Nevertheless, recent scholarship compares topic model results from a gold standard human-translated corpus with a machine-translated corpus and finds both topical prevalence and content to be highly similar (de Vries, Schoonvelde, and Schumacher 2018, 417). Therefore, well aware that minor differences across languages might occur, I use the R package *TranslateR* suggested by Lucas et al. (2015) to access Google Translate machine-assisted translation of the feedback texts.

After having translated the necessary documents into English for better comparability, I follow Banks et al. (2018, 450) six steps of best practices for pre-processing text corpus' aimed explicitly at topic modelling, which includes (1) removing invalid records, (2) tokenising, (3) text cleaning, (4) removing stop words, (5) lemmatising or stemming the root of words, and (6)

removing sparse or prevalent terms. The pre-processing step aims to remove and clean words that do not add additional value for the later categorisation into topics (Banks et al. 2018, 453).

I start with step one and read the text data into the R package *Quanteda* for text cleaning and tokenisation. Tokenisation means reducing sentences to individual words and removing uninformative symbols, such as webpage addresses, punctuations, symbols, numbers and splitting hyphens. Furthermore, I changed all letters into lowercase letters and removed common stop-words from a standard list in *Quanteda*. Typical stop-words are words like “we”, “and”, “of” and “a”, which are words that typically occur often but do not inform the analyses. However, it is not unproblematic to remove stop-words uncritically. For example, in the legislative proposal on the Digital Services Act package, it is reasonable to expect that the common stop word “it” could be mistaken for the abbreviation “IT”, short for information technology, which can be an important word for the later categorisation into topics. Based on knowledge and familiarity with the dataset and following Banks et al. (2018, 453) advice on caution and keeping words in the analyses when in doubt, I choose to remove all stop-words except for “it”.

Moreover, following Zipf’s law² suggests removing both very sparse and frequent terms to reduce the amount of noise in the results (Banks et al. 2018, 453). Therefore, I removed *sparse terms* that occur in less than 1% of all documents and *frequent terms* that occur in more than 99% of all documents. In my dataset, the 1% threshold means that a word has to appear in a minimum of 11 documents to be included in the corpus. For the 99%, the threshold for the word appearance is a maximum of 1033 documents. The logic behind removing the (in)frequent words is that it will help reduce the risk of having words that are not informative to drive the results.

Next, the penultimate step is to lemmatise or stem necessary words. I choose to use lemmatisation which means that the root of a word is the best replacement, instead of applying a stemmer to the words (Banks et al. 2018, 450). For example, in the corpus, the words “battery” and “batteries” occurred as two of the top ten most frequent words after completing the steps mentioned above. These two words refer to the same thing, so I choose to lemmatise the two

² Zipf’s law argues that, given a corpus of natural language utterances, the frequency of any word is inversely proportional to its rank in the frequency table. If t_1 is the most common term in the collection, t_2 is the next most common, etc., then the collection frequency cf_i of the i th most common term is proportional to $1/i$ or $cf_i \propto 1/i$ (Banks et al. 2018).

words to the root, namely battery. The lemmatisation process requires one to return to earlier stages of treatment because it is often after the corpus has been processed that it becomes clear which words need lemmatisation. Similarly, in the last step of pre-processing the corpus, I remove a collection of words that I know out of knowledge with the data that is not very helpful for the analyses. Some examples of these words are “dear”, “sir”, “madame”, “e.g.” and “i.e.”. However, some of the words were also added to the list after performing the topic model once it was clear which words were considered to have the highest frequency and exclusivity (FREX) and which words had the highest probability scores within each topic. For example, the words “eu”, “european”, and “union” turned out to have very high probability scores within several topics which is natural because, regardless of policy area, it addresses the institution while articulating its position to a legislative proposal. The problem, however, is that the words affect the topic proportions and potentially make them artificial high across topics, so I chose to remove them from the corpus.

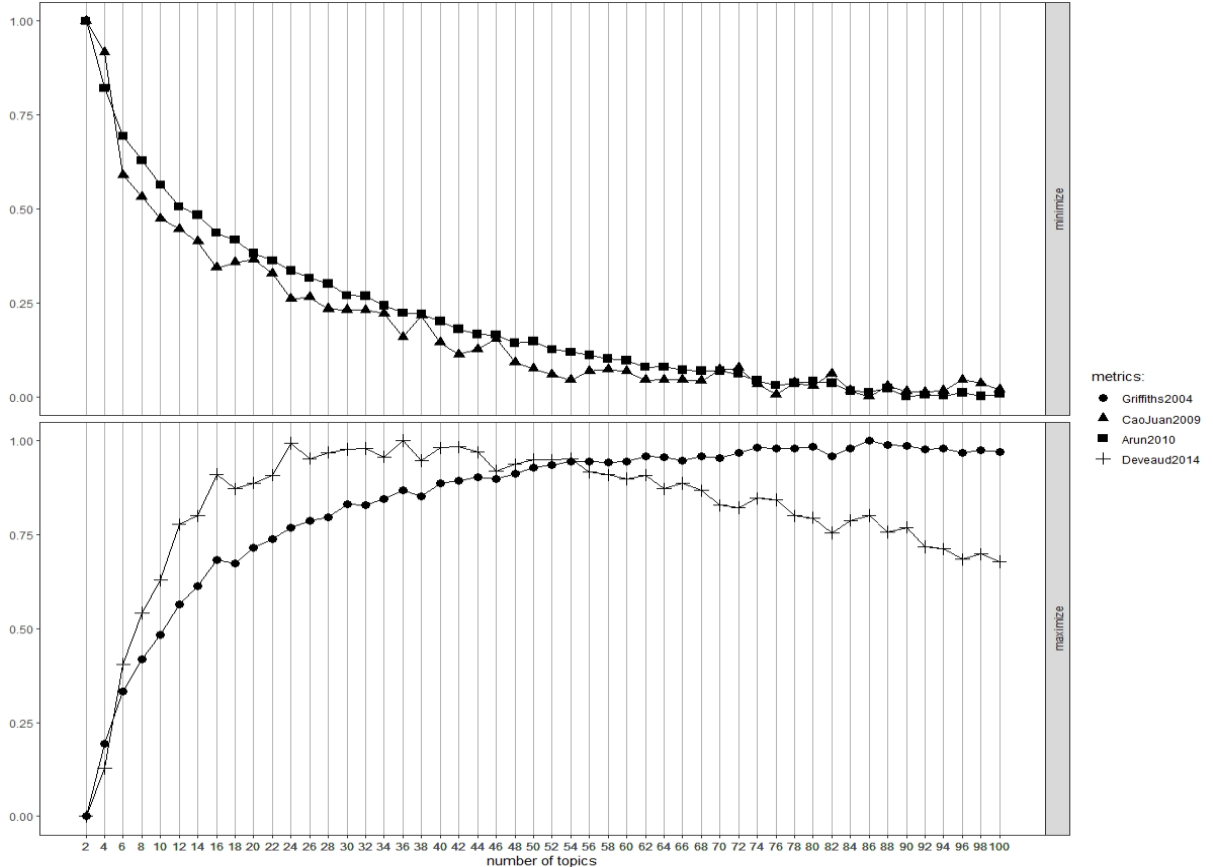
3.2.2 Validation and categorisation of the correct number of topics

Selecting the correct number of topics is the first step of validating the model because it affects the model fit. Grimmer and Stewart (2013, 5) argue that the validation process of unsupervised machine learning methods requires a combination of experimental, substantive, and statistical evidence to prove that the measures are valid. This involves checking that the word clusters represent what the researcher thinks they do and justify the choice on a well-founded statistical basis. Furthermore, previous studies using topic modelling for frame analysis point out that choosing too many topics can result in too specific frames while choosing too few topics risks mixing several frames within one frame (Ylä-Anttila, Eranti, and Kukkonen 2021, 96; Stelmach and Boudet 2021, 11). Therefore, I follow the validation strategy suggested by Grimmer and Stewart (2013) and apply an exploratory and statistical approach for validating and identifying the optimal number of topics for frame analysis.

I start by statistically finding the correct number of topics and calculating four different topic model indices using R’s *ldatuning* package. The LDA tuning function calculates four metrics that implement a scoring algorithm: two metrics that measure if the number of topics should be minimised (Arun2010 and CaoJuan2009), and two metrics that measures if the number of topics should be maximised (Deveaud2014 and Griffiths2004). However, this procedure does not provide any guarantees or decide on the correct amount of topics but instead indicates within

which range the correct topic number is located. Banks et al. (2018, 455) suggest considering a topic number between 1 and 100 topics. I, therefore, run the LDA-tuning function within this range. In Figure 3.1 below, the four metrics are visualised, and as one can see, the graphs start to flatten out around 20 to 50 topics, meaning that adding more topics does not improve the model and the ideal number of topics is probably > 50.

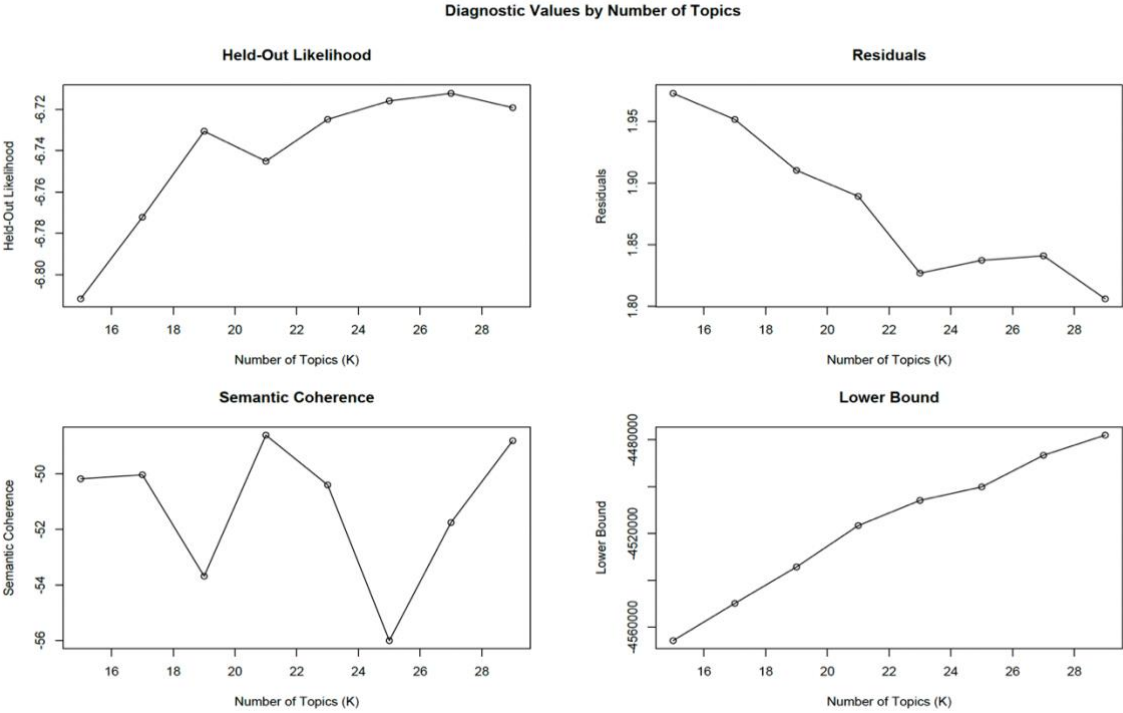
Figure 3.3 Latent Dirichlet allocation tuning function.



Based on the indication of having an ideal topic number below 50, I run models of 10, 20, 30, 40 and 50 topics and examine the model output by looking for word clusters that could signify potential frames. Thus, as mentioned in the previous section, the essential and frequent words become visible during this step, and existing scholarship indicates that the researcher should be open to moving back and forth between previous steps if irrelevant words appear among the “important” words (Banks et al. 2018, 454). For example, the words “indeed”, “therefore”, “thus”, and “also” frequently appeared together among the FREX words while running different models, and since these words do not inform the topics, I chose to remove them and rerun the

models to see if it affected the model. After several rounds of validation and adjustments, I ended up indicating the correct topic number between 20 and 30 topics.

Figure 3.4 Model diagnostics by number of topics.



Having indicated the correct topic number between 20 and 30 topics, I use the *SearchK* function available through the STM package in R to estimate the diagnostic values by the number of topics between 15 and 30. The *SearchK* function calculates the held-out log-likelihood, the average exclusivity, semantic coherence and performs a residual analysis (Roberts, Stewart, and Tingley 2019, 11). Figure 3.2 above summarises the automated tests to help choose the optimal number of topics. The held-out log-likelihood is highest between 23 and 27, and the residuals are lowest between 23 and 30, indicating that a good number of topics perhaps would be around there. Semantic coherence is maximised when the most liable words frequently co-occur within a topic, and usually is at its highest when models have few topics. Therefore, reading the results of the semantic coherence requires a trade-off between semantic coherence and the exclusivity of the words within the topic, and the semantic coherence is highest between 19-24 topics and 27-30 topics, indicating that the correct topic number is within these intervals.

The last and equally important validation step is to read through a representative amount of documents within each topic and validate that the topics contain what the FREX words indicate.

I start by running all models ranging from 20 to 30 topics and examine the model output by reading through 5-10 documents per topic. Banks et al. (2018) recommend starting with a small number of topics and further exploring the corpus by adding more topics. This exploratory approach to finding the optimal number of topics helps the researcher become more acquainted with the data set and identify which (or if) topics are dominant across models. This process of trial and error resulted in a 23 topic model where each topic represents a thematic policy frame. For each topic, I provide a label based on essential keywords exclusive to the topic and that discriminate between the different topics identified by the STM and careful reading of a representative subset of stakeholder's submission texts. Table 3.2 below summarises each topic's most frequent and exclusive words and the topic labels. The frequency words (FREX words) are determined by calculating the harmonic mean of rank by probability within the topic (frequency) and rank by the topic's distribution given the word (exclusivity).

Table 3.2 Thematic policy frames and the top seven FREX words.

MW: collective agreement model	Fishing stocks	Circular economy and innovation	Climate governance and legal framework
swedish lo court justice subsidiarity employee collective	fishing bass fish cfp msy fisheries stock	circular innovation actor economy traction smes research	paris trajectory derive progress anthropogenic sink science
DSA: Accountability for online platforms and user rights	Green technological solutions	Asylum seekers and migration pact	Renewable energy and guarantees of origin for industry
concept service providers data provider platform portability	nuclear aluminium import ccs oil figure co2	migration asylum migrant expressly refugee pact seeker	gos additionality steel hydrogen grid permitting guarantees
Statutory minimum wages and in-work poverty	Responsibility sharing and border management	Recycling and remanufacturing of batteries	Energy infrastructures
wage minimum bargaining partner worker formation poverty	return child family applicant solidarity procedure ms	battery portable recycle collection lithium nickel durability	cooling heat building district cold renewables res

Fair green transition funds and aid	Fundamental and human rights	Green transition and social exclusion	Transportation systems and mobility
jtf fund explicitly transition just cohesion coal	rail disability dsa railway accessibility passenger illegal	poviat zgorzelec subregion góra jelenia inhabitant commune	public city transport urban mobility air local
Sustainable wood energy market	Decarbonising the transport sector	DMA: Access to the digital market	Green growth and competitiveness
forest wood biomass cascading decide bioenergy residue	biofuel advanced aviation biomethane maritime rfnbos feedstocks	dma gatekeeper google software app advertising user	neutrality climate leakage neutral competitiveness trajectory ambition
Renewable energy and guarantees of origin for states	Foreign subsidies and unfair competition in the global market	–	
hydrogen origin electricity expansion rfnbo guarantee decarbonization	foreign subsidy undertaking concentration distortive redressive distortion	immediately policy strictly finally prove consistently absorb	

The validation process of the correct number of topics also lays the ground for categorising the identified topics into public or economic frame categories, which constitute the two main substantive categories of frames that this thesis is interested in examining. The coding of the frames into categories is first evaluated based on the FREX words in the 23 topics model, as well as a careful reading of a selection of representative documents from each cluster of documents. A topic was coded as belonging to the economic frame category if five documents highlighted a legislative initiative's impact on economic performance. As indicated in the theory section, economic frames refer to the distribution of costs and benefits or the impact of the legislative proposal on economic welfare (Eising 2007). Therefore, the criteria for a topic to be part of an economic frame category is whether the feedback emphasises (1) the economic consequences of the legislative proposal or (2) the economic benefits of the legislative proposal. For example, an economic frame in this thesis is about access to the digital market, and it is considered an economic frame because it problematises that gatekeeper platforms limits users' options and access to the digital market. Within this topic, both positive and negative economic consequences of the digital service act were expressed by different stakeholders.

Likewise, a topic was coded as belonging to the public frame category if five representative documents highlighted implications of a proposal that fights for the public good, such as law enforcement, public health policy or similar policy areas intended to gain the broader public. However, as mentioned in the theoretical section, public interests are often diffuse and, therefore, slightly more challenging to identify because what is considered to be the common interest often is subjective. In this thesis, on the other hand, the criteria for a topic to be part of a public frame category is that the feedback text emphasises (1) the common interest of the general public (e.g., environmental protection) or (2) the interests of disadvantaged groups that are unable to organise themselves (e.g., asylum seekers or people with disabilities). For example, in this thesis, one of the topics characterised as a public frame is the one about fundamental and human rights. The human rights topic includes both issues meant to benefit the general public (e.g., consumer and user rights) and issues aimed at disadvantaged groups (e.g., universal design for people with disability).

Similarly, another topic characterised as a public frame is the one about minimum wages and in-work poverty. Because the topic is about the minimum wages, it may, at first glance, seem like it is an economic frame. However, after reading a representative number of documents, this topic focuses on labour rights and guarantees adequate working and living conditions for EU workers more than narrow and specific economic interests. In contrast, the other topic on minimum wages focuses on the Swedish collective agreement and the adverse side effects of introducing a statutory minimum wage. This topic is coded as an economic frame because it focuses on the economic consequences of the legislative proposals for Sweden rather than the benefits to the general European public.

In some cases, however, it was not clear if the topic should be coded economic or public after reading five documents, and in these cases, up to 10 documents were reviewed. However, after reviewing several documents, there was no precise frame match for one of these cases. For example, a lot of migration and climate scepticism was uttered on one topic, and the feedback texts contained both public and economic performance consequences. In the documents where that was the case, the topics were categorised in a third category named “No clear frame match”. Also, after estimating the semantic coherence of each of the 23 topics, it turned out that the semantic coherence for topic 3 was significantly lower than for the other topics, indicating that

the topic quality is significantly lower for this topic than the other³. Therefore, I exclude the topic from the analysis because it does not inform the model or the subsequent analysis. Table 3.3 summarises the identified topics and the frame category each topic belongs to.

Table 3.3 Thematic frames categorised into economic and public frame category.

Frame type	Topic no	Labelled thematic frames
Economic	Topic 1	Minimum wages and the collective agreement model
	Topic 6	Green technological solutions
	Topic 8	Renewable energy sources for industry
	Topic 11	Recycling and remanufacturing of batteries
	Topic 12	Energy infrastructures
	Topic 17	Sustainable wood energy market
	Topic 18	Decarbonising the transport sector
	Topic 19	Access to the digital market
	Topic 20	Green growth and competitiveness
	Topic 21	Renewable energy sources for states
	Topic 22	Foreign subsidies and unfair market competition
	Topic 23	Circular economy and innovation
Public	Topic 2	Fishing stocks
	Topic 4	Climate governance and legal framework
	Topic 5	Accountability for online platforms and user rights
	Topic 7	Asylum seekers and migration pact
	Topic 9	Minimum wages and in-work poverty
	Topic 10	Responsibility sharing and border management
	Topic 13	Fair green transition funds and aid
	Topic 14	Human rights
	Topic 15	Green transition and social exclusion
Topic 16	Transportation systems and mobility	
No clear frame	Topic 3	–

Finally, as briefly indicated in the introduction of the STM, each unique feedback text can contain a combination of topics which means that the cluster of documents is not mutually exclusive, and topic proportions are calculated by the sum of word probabilities for a topic. This is an essential feature because it can uncover if stakeholder refers to several thematic frames and potentially provides the thesis with new and innovative information about stakeholder framing strategies. However, this could also mean that some stakeholders refer to

³ Semantic coherence plot for each of the 23 topics is provided in Appendix B.

both economic and public frames. The implication of this for the empirical analyses is that the sum of actors employing a public and/or economic frame can be higher than the number of stakeholders submitting feedback in the overall data selection. However, I argue that this is one of the strengths of the method because it can help to reveal that different types of stakeholders can appeal to both economic and public arguments within the same lobbying effort. For example, an interest group may have a public frame as its dominant policy frame but at the same time also recognise the economic consequences of a policy. Nevertheless, it remains to see if this is the case. In the next section, I operationalise the dependent variable based on the findings of the STM and present the explanatory and control variables.

3.3 Variables

This thesis section presents the operationalisations for the variables included in the analyses. An overview of the variables and how they are operationalised is summarised in table 3.4 at the end of the section.

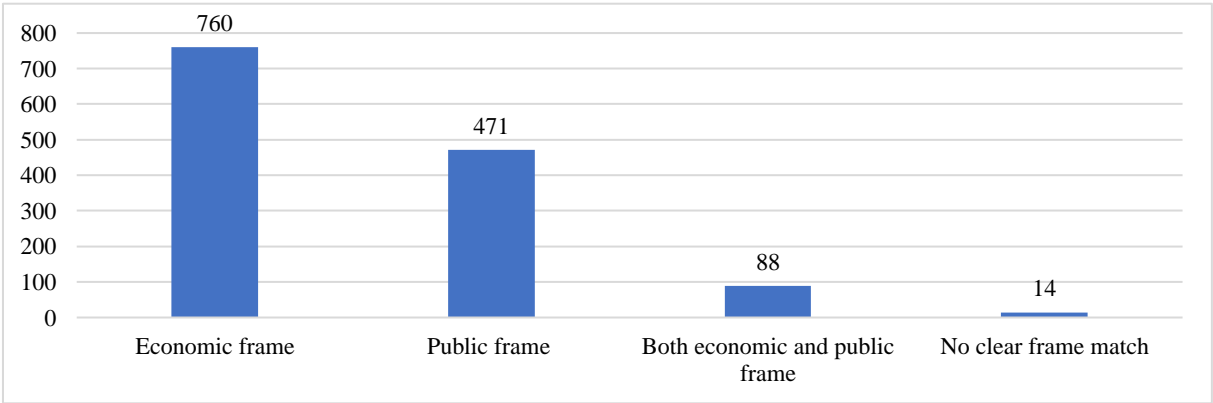
3.3.1 Dependent variable: identifying policy frames

This thesis uses STM as an empirical strategy to identify the policy frames employed by stakeholders in their written feedback texts related to legislative proposals. Following the thesis definition of frames as a specific issue of a policy initiative emphasised in a policy debate, I distinguish between *thematic frames*, which are the topics identified by the STM, and *frame categories* that group the thematic frames into analytical frame categories. However, the primary dependent variable used in the explanatory analysis and regression models is whether a stakeholder employed an economic or a public frame. Whereas for the descriptive analysis, the detailed thematic frames are more thoroughly discussed and look into what the different IGs and stakeholders are saying within the different thematic frames. A typical characteristic of a descriptive analysis is that it answers *what*-questions (Gerring 2012, 107). In this case, examples of these questions could be how many used a public frame and how many used an economic frame? Or what type of actors employed a human rights frame, and how diverse is this group of stakeholders employing the human rights frame? Therefore, in the descriptive analysis, I focus on the thematic frames, map what the different stakeholders are saying, and discuss the most critical frames and which frames are correlated.

In short, this thesis has identified 22 policy frames grouped into primarily two analytical frame categories used as the dependent variable to explain stakeholder frame choice: the public frame and the economic frame. To identify which stakeholders used which policy frame, I first create dummy variables for all 22 *thematic frames* using the topic proportions calculated by the sum of word probabilities for each topic. Then, to capture that some stakeholder refers to several frames, I use a baseline, meaning that if a feedback document refers to, for example, a human rights frame in 25% or more of the document, the stakeholder document is coded 1 for the variable capturing the human rights frame and if the topic proportion is below 25% the human rights frame this variable is coded 0. The underlying logic behind the 25% threshold for the topic proportions is that for the frame to be notable, it needs to be above a specific limit. The same logic applies to all 22 thematic frames and thus results in some stakeholders coded as referring to more than one frame.

Furthermore, *the economic frame* variable captures whether the stakeholder employed a thematic frame categorised as an economic frame (see table 3.3) and is coded as a dummy variable where: 1 indicates that the stakeholder employed an economic frame and 0 indicates otherwise. *The public frame* variable similarly captures if the stakeholder employed a thematic frame belonging to the public frame category. This variable is also coded as a dummy variable where 1 indicates a stakeholder text that employed a public frame and 0 one that it did not employ a public frame. In the sample, a total of 471 stakeholders employed a public frame, and 760 stakeholders employed an economic frame. Respectively, 41% of the sample used a public frame, and 66% used an economic frame. Furthermore, 14 stakeholders did not employ any frame above the 25% threshold, whereas 88 stakeholders employed both an economic and public frame. Figure 3.5 below illustrates the distribution over how many employ either frame.

Figure 3.5 Distribution of how many stakeholders employed which frame.



3.3.2 Explanatory variables

To test the theoretical argument and see whether there is a systematic relationship between frame choice and the explanatory variables, I constructed an original, built-for-purpose dataset containing information about the legislative proposals and the stakeholders' feedback. I used (1) the type of interest the stakeholder represents, (2) the length of the feedback texts indicating the level of issue salience for each individual stakeholder, and (3) the stakeholder's organisational format to capture information about key stakeholder characteristics. Similarly, I used (4) the number of actors providing feedback on each legislative proposal capturing the levels of issue salience for the community of stakeholders, and (5) the type of policy area (i.e. regulatory or distributive policy area type) to gather information about the legislative proposals.

I assembled the original dataset and the collected data on stakeholder level from the EC's Transparency Register (TR), the LobbyFacts database and the interest groups webpages. For the legislative proposals, the data is collected based on the EC official website and through a careful reading of the drafted legislative proposals the stakeholders is providing feedback on, information which is publicly available on the EC webpage. In the following two sections, I operationalise the explanatory and control variables used for the explanatory analysis and regression models. The operationalisations of all the variables is summarised in an overview at the end of this section.

First, several scholars have identified interest group type as an essential determinant for lobbying behaviour and argued that stakeholders could be categorised into different group types based on their organisational format and the nature of their interest (Binderkrantz 2008; Dür and Mateo 2013; Weiler and Brandli 2015). I distinguish between primarily three different types, namely economic interest organisations (sectional groups), public interest organisations (cause groups) and stakeholders promoting individual interests (firms), in order to differentiate between the interest types the stakeholder is promoting. The *interest type represented* variable is coded categorically based on information retrieved from the TR, interest group websites and what the stakeholders reported when submitting their feedback texts. For example, the British NGO called 5Rights Foundation is coded as a cause group because the organisation have reported in the TR that they work to promote children's rights in the digital world. Similarly, the American Chamber of Commerce is coded as a sectional group because it works to promote members' economic business interests, whereas the Norwegian oil company Equinor is coded

as a firm because it primarily works to promote individual business interests. The variable is treated as a nominal categorical variable and is coded accordingly: 1 (firms), 2 (sectional groups), 3 (cause groups) and 4 (citizens).

Second, building on a classic study in the literature on EU lobbying and interest groups, I use the *organisational format* of the stakeholder as a key explanatory variable (Bouwen 2002; Bunea 2013). The variable is included in the analysis because it indicates the stakeholder's level of representation and whether or not an organisational stakeholder is membership-based. The variable is collected and coded based on information available in the TR, and by reading through the organisation's reported remit and combining the information with the levels, the organisation reported to be active on in the register. If the information reported in the TR was ambiguous and did not allow a clear identification of the organisational format, I looked up the organisation in the LobbyFacts database or checked out the groups' websites. The variable is coded categorically and includes (1) individual organisations, e.g. Microsoft Corporation, (2) regional organisations, e.g. the German Land of Brandenburg, (3) national associations, e.g. Danish Energy, (4) European associations/federations, e.g. the European Chemical Industry Council, and (5) others. The citizens in the dataset are not organisations, and therefore they are categorised into the last category labelled as 'others'.

Third, the existing scholarship on EU lobbying strategies has identified *issue salience*, which can be understood as the importance stakeholders attribute to political matters, as an essential contextual factor in explaining stakeholder behaviour in policymaking processes (Klüver, Braun, and Beyers 2015, 450). However, the concept of salience is dynamic, implying that an issue might be very salient for a small set of actors and hardly salient for another set of actors. Beyers, Dür, and Wonka (2015, 15-16) argue that when discussing and measuring salience, it is essential to be analytically clear about the concept and stress that it is vital to disentangle between individual and collective salience or if it is salience for actors or policymakers that is being analysed. In this thesis, I distinguish between salience on two levels: *public issue salience* (indicating the level of issue salience on the collective level for the community of stakeholders) and *individual issue salience* (indicating the degree of issue salience for an individual stakeholder). The former is added to the analysis as an explanatory variable, whereas the latter is used as a control variable. Therefore, the *public issue salience* variable is coded as an ordinal categorical variable and is operationalised based on the number of stakeholders involved in the feedback opportunity per legislative proposal. The variable is coded on a scale ranging from 1

to 3, where 1 is high public salience (150 and more stakeholders submitting feedback), 2 medium public salience (75-150 stakeholders submitting feedback) and 3 low public salience (less than 75 stakeholders submitting feedback).

3.3.3 Control variables

Based on the definition mentioned above of issue salience, the *individual salience* variable is added to the analyses as a control variable and is coded as an ordinal categorical variable and ranks the feedback texts by the number of words in each document on a scale of 1 to 5. The assumption behind the indicator is that with increasing salience for each individual, the number of words in the feedback text increase accordingly (Klüver, Mahoney and Opper 2015, 490). Hence, the variable ranges from 1 (number of words less than 1,000), 2 (number of words between 1,000-5,000), 3 (number of words between 5,000-10,000), 4 (number of words between 10,000-20,000), and 5 (number of words more than 20,000).

Furthermore, I add the *policy area* as a dichotomous control variable indicating whether the legislative proposals are of *regulatory* or *distributive* character. This is an important control variable because the nature of the policy initiative can shape the behavioural practices of the stakeholder. As discussed in the literature review, business actors rely more on inside lobbying strategies in distributive policy debates than in regulatory policy debates, and that business actors and citizen groups converge in their choice of strategy when lobbying on regulatory policy but diverge on distributive policy (Dür and Mateo 2016, 87; Lowi 1964). Since the distinction between regulatory and distributive policies matters for the choice of lobbying strategy, I expect it to affect framing and increase the likelihood for business interests to employ, for example, a public frame strategically. The information used in the variable is collected from the EC official webpage by reading through each of the drafted legislative proposals, and is coded: 1 the legislative proposal is regulatory and 0 the legislative proposal is distributive.

Finally, in the literature on EU lobbying and interest groups' participation in supranational policymaking, it is widely accepted that lobbying resources and high financial spending power make it easier to organise lobbying activities and invest in extensive lobbying strategies targeting both national and supranational decision-makers (Dür and Mateo 2013). Having more resources such as money, qualified staff, and a Brussels office makes it easier to engage in a

variety of lobbying strategies (Bouwen 2002, 373). In line with this, Klüver, Mahoney, and Opper (2015, 482) argue that argumentation and framing strategies might be the only available lobbying tool for resource-poor interest groups because they cannot afford to invest in more extensive lobbying strategies. In consequence, this means that resourceful interest groups have better opportunities to use other means in addition to submitting feedback under complete transparency, such as, for example, direct meetings with supranational policymakers. For resourceful interest groups, it could therefore be expected that it is easier to employ a public frame strategically while lobbying under public review because they have an opportunity to promote more narrow and specific policy frames using other lobbying strategies.

In the empirical analyses, I control for lobbying resources as an alternative explanation for frame choice and include data on the stakeholder level about whether or not a stakeholder has a Brussels office, the size of staff working on EU affairs and the financial resources spent on lobbying. I chose these three established measures for resources in the literature on EU lobbying strategies because they can say something about the informational and spending power of the interest group. For example, the financial resources are an exact measure of the lobbying budget; however, it also costs a lot to have a Brussels office and a qualified staff, but these measures also include informational resources (Mahoney 2008; Rasch 2018, 16). However, since costs increase simultaneously with the size of the staff, previous studies show that financial resources correlate with staff size, so this will be controlled for in the analysis (Mahoney 2008; Rasch 2018, 16).

The *Brussels office* variable is dichotomous, indicating whether the stakeholder has an office in Brussels (1) or does not have an office in Brussels (0). The information is primarily collected from the TR under the “Office in charge of EU relations”, and in some cases, the information was collected by a thorough examination of the stakeholder web pages. The *staff size* variable is collected from the TR and is measured by the number of full-time equivalents, meaning that in some cases, the value of the variable can be below 1 because the interest group only have declared one lobbyist, for example, a 50% position. The *financial resources* variable is collected from the TR and based on the estimated annual costs attributable to lobbying activities. The variable is measured as an ordinal categorical scale ranging from 1 (lobbying costs less than 100,000 euros), 2 (lobbying costs between 100,000-500,000 euros), 3 (lobbying costs between 500,000-1 mill euros), 4 (lobbying costs between 1 mill and 2 mill euros) and 5 (lobbying costs over 2 million euros).

Table 3.4 Overview of the variables and how they are operationalised.

Variable	Description	Measurement level	Coding details	Descriptive statistics
Dependent variables				
<i>Public frame</i>	Dichotomous variable indicating whether or not a stakeholder employed a public frame	Stakeholder level	0: not employed 1: employed	Mean: 0,41 Std. dev: 0,58 N: 1143
<i>Economic frame</i>	Dichotomous variable indicating whether or not a stakeholder employed an economic frame	Stakeholder level	0: not employed 1: employed	Mean: 0,66 Std. dev: 0,35 N: 1143
Explanatory variables				
<i>Interest type represented (H1)</i>	Nominal categorical variable distinguishing between stakeholder type	Stakeholder level	1: firm 2: sectional group 3: cause group 4: citizens	Mean: 2,41 Std. dev: 1 N: 1143
<i>Organisational format (H2)</i>	Categorical variable indicating the level of representation and membership for the stakeholders	Stakeholder level	1: individual level 2: regional level 3: national level 4: European level 5: other	Mean: 3,2 Std. dev: 1,43 N: 1143
<i>Public salience (H3)</i>	Ordinal categorical variable drawing on the number of stakeholders participating in each feedback opportunity	Legislative proposal level	1: high, actors 150< 2: medium, actors 75-150 3: low, actors >75	Mean: 1,74 Std. dev: 0,72 N: 1143
Control variables				
<i>Individual salience</i>	Ordinal categorical variable ranking the feedback text length indicated by the number of words in the feedback text	Stakeholder level	1: > 1000 words 2: 1000 – 5000 words 3: 5000 – 10,000 4: 10,000 – 20,000 5: 20,000 <	Mean: 2,74 Std. dev: 1,25 N: 1143
<i>Policy area type</i>	Whether the legislative proposals is of (re)distributive or regulatory character	Proposal level	0: distributive 1: regulatory	Mean: 0,8 Std. dev: 0,4 N: 1143
<i>Brussels office</i>	Dummy variable indicating whether or not the stakeholder submitting feedback have a Brussels office	Stakeholder level	0: no Brussels office 1: Brussels office	Mean: 0,48 Std. dev: 0,5 N: 1143
<i>Staff size</i>	Number of full-time equivalents (FTE) lobbyists	Stakeholder level	–	Min.: 0,1 Max: 43,2 Mean: 4,2 Std. dev: 5,93 N: 1012
<i>Financial resources</i>	Ordinal categorical variable estimating annual costs attributable to lobbying activities in euro	Stakeholder level	1: > 100,000 € 2: 100,000 - 500,000 € 3: 500,000 - 1 mill € 4: 1 mill - 2 mill € 5: 2 mill €<	Mean: 1,67 Std. dev: 1,42 N: 996

3.4 Multilevel logistic regression analysis

Logistic regression is used when the dependent variable, Y , is categorical or dichotomous. In this case, the two main dependent variables, the public and economic frame, are dichotomous, meaning that they can take the value of 0 or 1. Unlike linear regression models, where the dependent variable is continuous, a linear function can predict all the possible values; logistic regression, however, models the probability of a response, namely the probability of a stakeholder employing either an economic or public frame or none (Dougherty 2016, 370-372).

Furthermore, for logistic regression, the relationship between a predictor variable and the probability of an outcome variable is non-linear, and instead, the outcome is curvilinear and S-shaped. This is because probabilities must always be within the limited range of 0 and 1. However, logistic regression does not predict the probability directly but uses a probability transformation called log-odds, which is on a linear scale. The odds for two outcomes describe how likely it is to find one outcome relative to another (Mehmetoglu and Mittner 2020, 275). In practice, when the predictor variable has values below 0.5, the probability of observing 1s in the dependent variable is closer to 0 than 1. Moreover, when the predictor variable has values above 0.5, the probability of observing 1s in the dependent variable is closer to 1 than 0. (Mehmetoglu and Mittner 2020, 274).

Before running the regression models, the variables were tested for collinearity using variance inflation factors (VIF) tests. Collinearity describes the extent to which the explanatory variables correlate with each other. If the explanatory variables correlate, a high degree of collinearity is obtained. High collinearity makes it difficult to distinguish the effects of the various variables from each other, and thus small changes in a model will have significant consequences for the model (Midtbø 2016, 112).

Additionally, conducting a multilevel analysis makes it possible to examine how higher-level variables affect lower-level variables (Finch, Bolin, and Kelley 2019, 23). To ensure a robust and rigorous analysis, one should test if factors at higher levels affect the analysis. In this thesis, multilevel analysis is helpful because the stakeholders in the data selection are nested into ten legislative proposals creating a multilevel data structure. Therefore, I control for the potential effects of stakeholders belonging to a specific legislative proposal and conduct a multilevel logistic regression to see if there is variance between groups and correlations within groups.

The intraclass correlation coefficient (ICC) measures the variance between groups compared to the variance within groups (Finch, Boleyn and Kelly 2019, 24). ICC is a measure from 0 to 1; the higher the ICC, the greater the variation between groups concerning the variation within groups. It is necessary to test for intraclass correlation because it says something about how the variation between groups affects the dependent variable. If the dependent variable is not affected by the variation between groups, there is no point in using multilevel analysis. Therefore, the higher ICC, the more necessary it is to use multilevel analysis (Finch, Boleyn and Kelley 2019, 28).

4 ANALYSES

Chapter Four presents the analyses and discussion of the results. The quantitative data and text corpus collected for this research purpose is presented in a descriptive and explanatory analysis. The first part is descriptive and maps the participating stakeholders and the thematic policy frames used by the different stakeholders and gives a deeper look into what the stakeholders are saying and framing. This part of the analysis provides an impression of how frame choice may vary with the interest group type and organisational format. Furthermore, in the second part of the analysis, I control for potential confounding factors and estimate regression models to predict what affects the frame choice of stakeholders with a particular focus on the public versus economic frame categories.

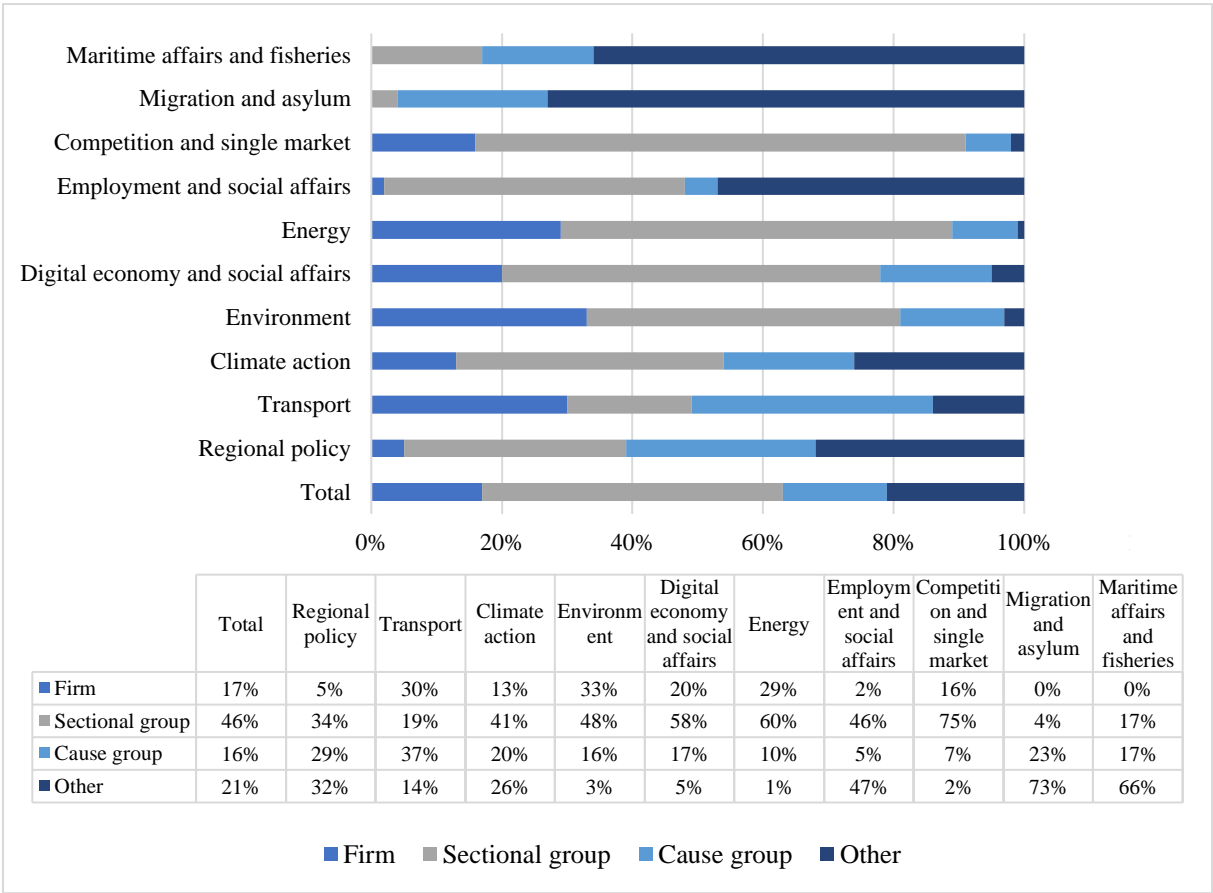
4.1 Descriptive analysis

This thesis examines framing in the context of the new form of stakeholder engagement introduced by the EC's Better Regulation reform, namely the stakeholder feedback mechanism. The purpose of the feedback mechanism is to collect the general views of citizens and interest groups related to a policy document, and in this case, on ten different legislative proposals. Hence, the mechanism aims to collect feedback from all corners of the European Union and is open to anyone who wants to comment on the proposal, regardless of whether you are a citizen, interest group or a big firm. Consequently, the dataset in this thesis contains texts from a diverse pool of interests that differ considerably in terms of organisational structure, financial budget and the type of interest represented. Due to the expected high levels of heterogeneity among the stakeholders in the data sample, I start by mapping which stakeholders participate across policy areas to get a sense of who might be dominating the various feedback opportunities.

In figure 4.1 below, the frequency distribution for the type of interest represented across the ten policy areas in the case selection is summarised. From a total of 1143 feedback texts, one can see that sectional groups dominate the total distribution of interests. Across policy areas, sectional groups also seem to dominate, with the exception of two policy areas: (1) maritime affairs and fisheries (2) and migration and asylum. Similarly, in the same two policy areas, firms are not represented at all, indicating that business interests are represented as part of European and national associations and not through individual firms lobbying on their own in the two policy areas. As mentioned in the theory chapter, sectional groups represent business based on a collective and membership-based basis while firms represent business interests on

an individual basis. Furthermore, business interests are most clearly present in policy areas such as competition and the single market, energy and digital economy, and environment. However, this is as expected because a common denominator for these policy areas is that they are all of regulatory character, and the literature review showed that the need for technical expertise and feedback, which business actors often possess, is higher when the legislative proposals are dealing with regulatory policy than distributive policy.

Figure 4.1 Frequency distribution of interest type represented by policy area.

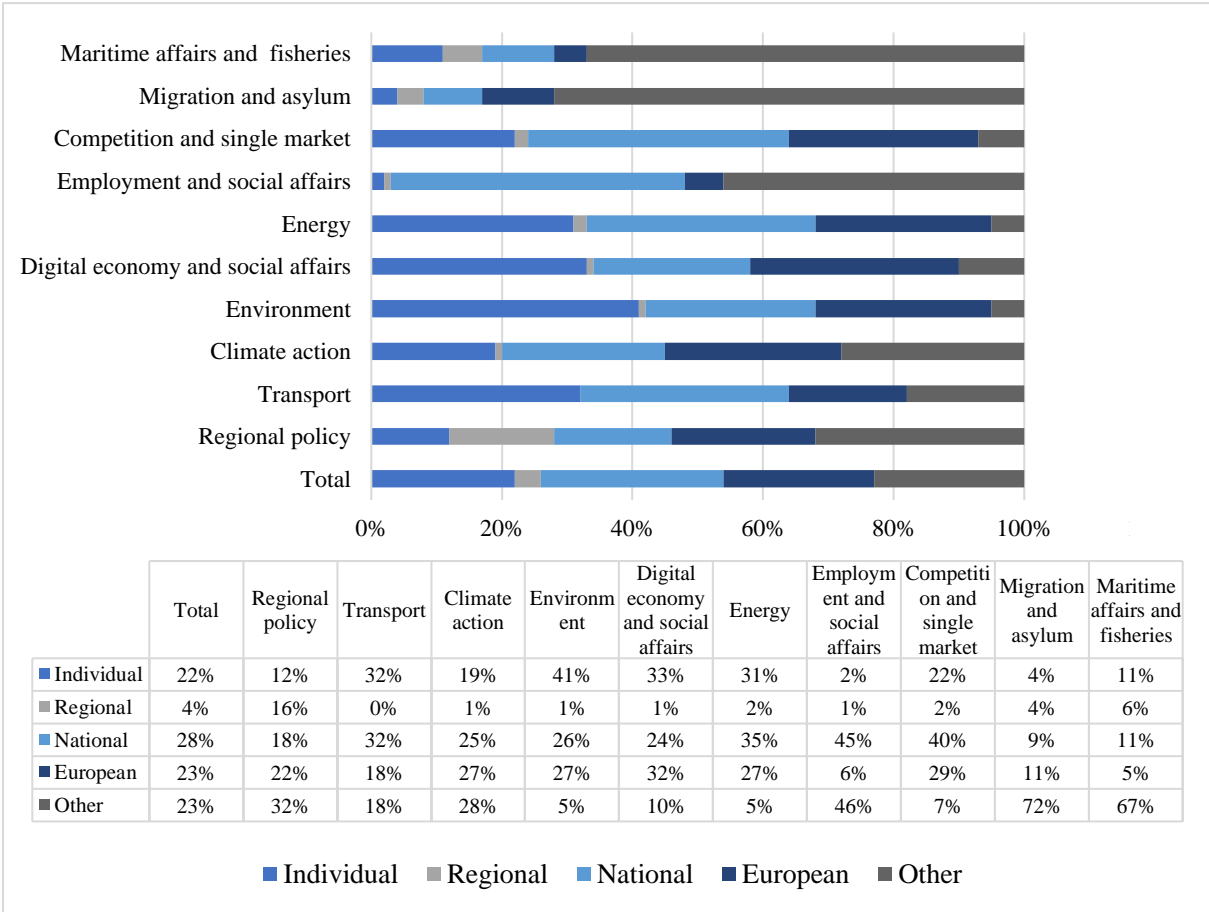


When it comes to cause groups, it appears from the above table that they make up a minor proportion of the total distribution of interest type represented with its 16%. Unlike firms and sectional groups, the policy areas cause groups are most heavily present are those of distributive characters: transport, regional policy, and migration and asylum. Nonetheless, cause groups also submit feedback in regulatory policy areas such as energy, digital economy and climate action, so they provide a certain degree of counter-lobbying to business interests. The category labelled ‘Other’ primarily contains citizen interests. However, that it is mainly citizens’ interest

in the other category explains the predominance of the category in especially migration policy because this is a policy area often dominated by domestic politics and strong political cleavages.

Similar patterns appear in the frequency distribution for organisational format across the policy area in question. Those coded as ‘Others’ in figure 4.2 below are mostly the same ones that were coded as others for the interest type variable, that is, citizens. However, since the organisational format and interest type represented differ in their coding criteria, a handful of interest groups were coded as others because it was either impossible to distinguish what level the group was active on or because the group in question identified itself as a global actor and not limited to any of the levels in this scale. Similarly, as for the interest type represented, the ‘others’ category dominates the data sample in the policy areas on maritime affairs, migration and employment and social affairs.

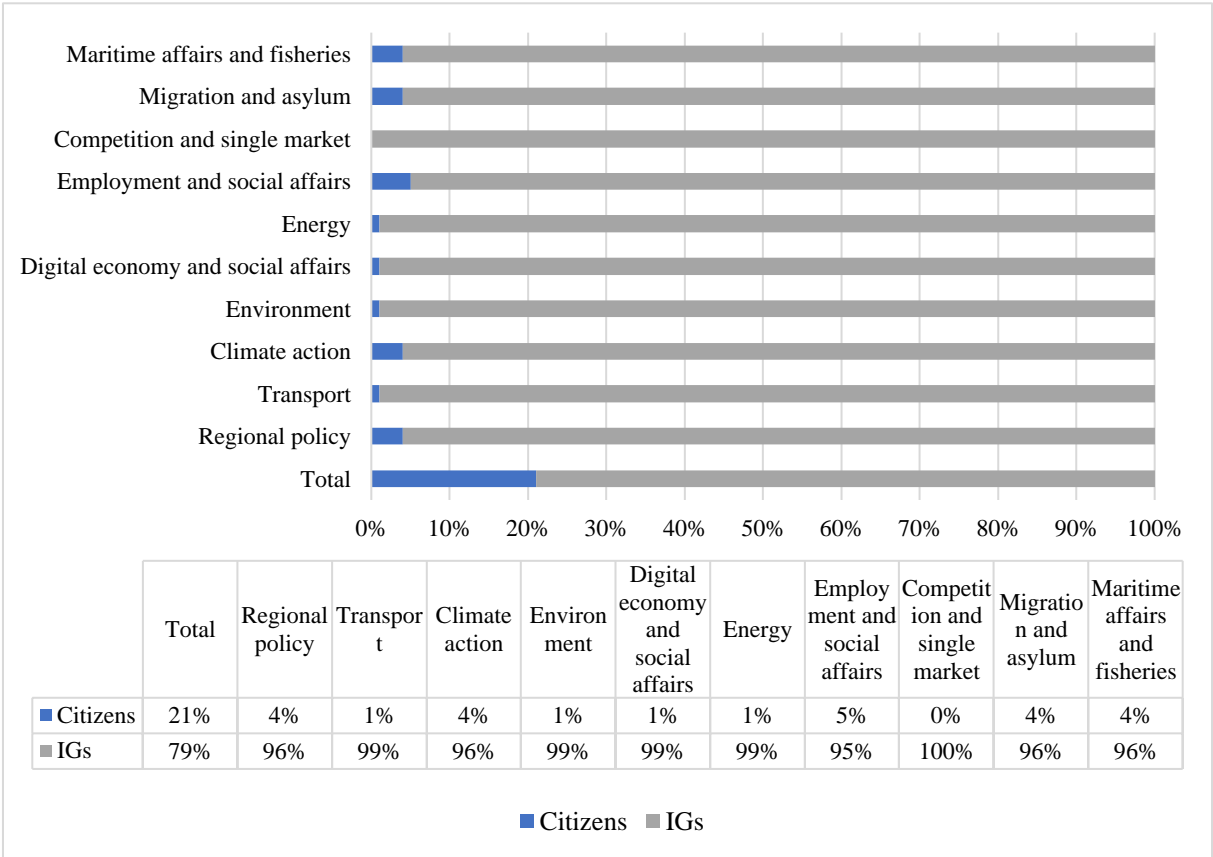
Figure 4.2 Frequency distribution of organisational format by policy area.



Moreover, as one can see from the table above, the regional level stands out as a clear minority among the other organisational levels in the data sample, representing only 4% of the total

distribution. However, it was necessary to control for the regional level because the policy areas in the data selection are known to attract relatively high levels of regional representation, such as regional policy, transport, environmental policy and fisheries (Tatham 2012, 436). This pattern is also partly visible in this data selection because the policy areas most regional level actors are active in are precisely regional policy and fisheries and migration and asylum policy. Furthermore, for individual, national and European level actors, the total distribution is relatively similar and balanced, with national actors somewhat more dominating than individual and European level actors in total. However, in this data selection, the individual level actors dominate the environmental policy area and national level actors dominate especially the policy area on competition and the single market, whereas European-level associations have relatively stable participation levels across policy areas they show the highest frequency of participation on digital economy and social affairs.

Figure 4.3 Frequency distribution of citizens versus interest groups by policy area.



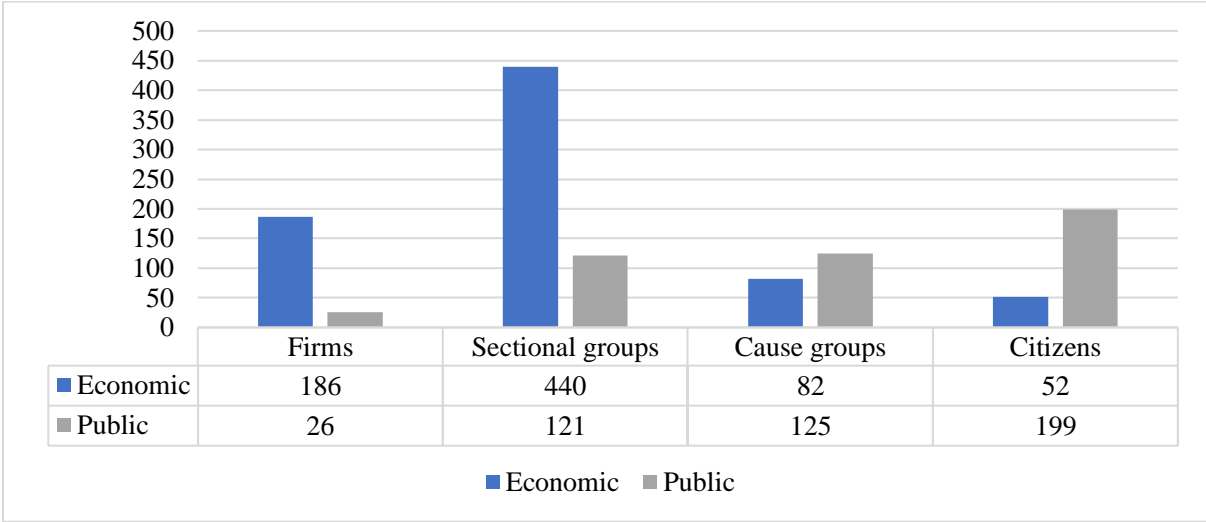
Another group of stakeholders that frequently submit feedback texts is citizens. Compared with interest groups, they constitute a minority, but their presence is more than significant enough to be reported on in the analysis. In the complete sample, citizens constitute 21%, and interest groups constitute 79% of the total. Interest groups have, not surprisingly, very high levels of

participation across all policy areas, but for citizens, participation levels are highest for employment and social affairs, closely followed by fisheries, migration, climate action and regional policy. For the policy area on competition and the single market, no citizens submitted feedback texts, which should not come as a surprise and is in line with previous findings in the literature. Business interests are primarily concerned with trade, transport, and industrial policy, whereas citizens and citizen groups care more about policy areas such as health and migration (Dür and Mateo 2016, 80).

As mentioned in the introduction of the analyses, a high degree of heterogeneity was expected among the participating stakeholders, and as the descriptive statistics have proved so far, this is also the case in this data sample. With such a high degree of variation in organisational and interest characteristics in the data selection, it is even more important to be cautious and consider the heterogeneity of interests when analysing and discussing the thematic frames employed by the various stakeholders.

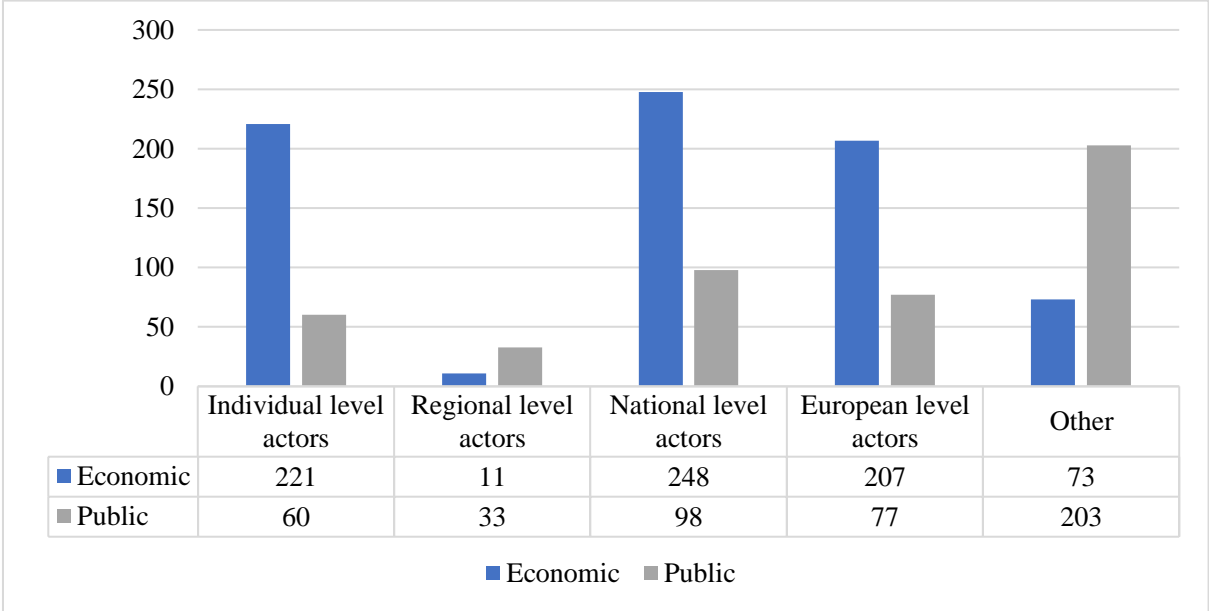
Furthermore, and as mentioned in the research design, this thesis uses STM as an empirical strategy to identify the 22 thematic frames employed by stakeholders in their written feedback texts. To explain stakeholders’ frame choice across actors’ characteristics and policy context, the 22 thematic frames were grouped into two analytical frame categories used as the dependent variable to explain stakeholder frame choice: the public frame and the economic frame. An overview of the distribution of economic and public frames across interest type represented and organisational format is presented below.

Figure 4.4 Distribution of frame choice across interest type represented by stakeholders.



From figure 4.4 above, one can see that the interest groups representing business interests (firms and sectional groups) favour economic arguments when submitting feedback texts. As expected and hypothesised in hypothesis 1, interest groups representing business interests are more likely to employ an economic frame, whereas cause groups are more likely to employ a public frame. However, it is worth noting that business groups also employ public frames, and that cause groups use economic arguments in their feedback texts. This variation of business groups employing both economic and public frames is hypothesised in hypothesis 3, where I argued that firms are more likely to employ public frames when public issue salience is high. The results and whether this is the case will be discussed later in the explanatory analysis. In addition, it is also important to report that citizens, not surprisingly, are the type of interest that most frequently use arguments categorised as a public frame. What makes the new EU feedback mechanism differ substantially from previous consultative processes in EU policymaking is that it allows stakeholders to comment freely on what aspect they want of the legislative proposal, and that could mean that it is easier for citizens to articulate their preferences when they are not responding to a set of prefixed questions in a survey.

Figure 4.5 Differences in frame choice across the organisational format of stakeholders.



Furthermore, figure 4.5 above illustrates the different organisational forms and how economic and public frames are distributed across these levels of organisation. As one can see, individual, national and European level actors use economic frames more frequently than public frames but considering that there are more economic than public thematic frames in the data, this should not come as a surprise. However, the distribution of public versus economic frames is

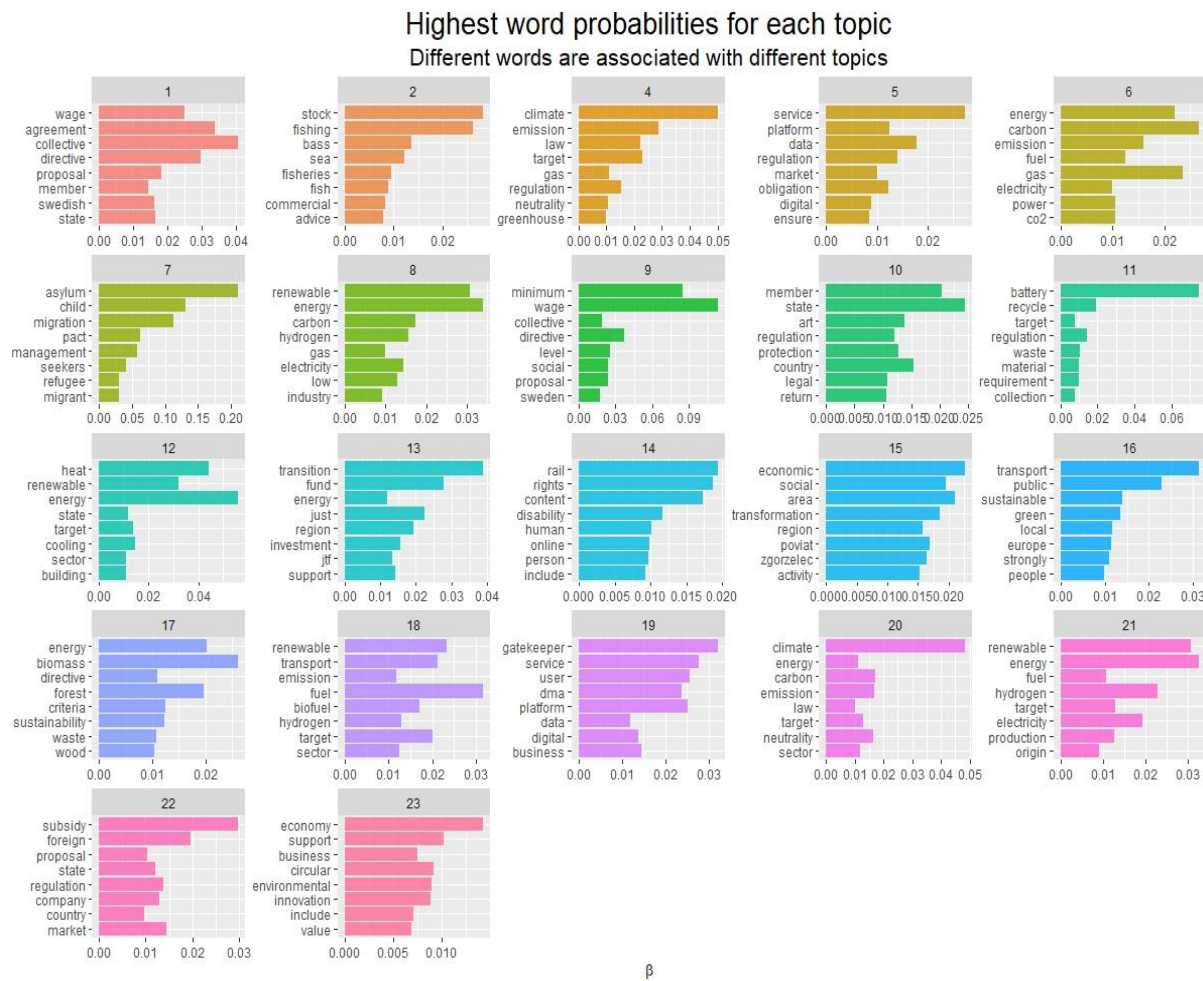
slightly more even for the organisational format variable than for the variable capturing the interest type represented. The others category has a significantly higher frequency of public frame usage; however, this is explained by the coding decision to include citizen interests in this category. As shown in figure 4.4, citizens are the type of actors that are predominant amongst those stakeholders employing public frames.

4.1.1 Linguistic analysis: what are the stakeholders framing?

The descriptive analysis has so far shown a partly balanced distribution of actors on the different organisational levels, except for the regional-level actors, and a significantly more unbalanced distribution for the interest types represented. One observable implication of the unbalanced distribution of interest types is that it affects the number of topics visible in the topic model. For example, I expect cause groups to lobby to promote the public good and business interests to promote business and economic interests; the topic model output should therefore consist of more economic thematic frames than public ones because more business actors submitted feedback than cause groups. In this part of the analysis, I discuss the 22 thematic frames identified by the structural topic model and take a closer and more in-depth look at the argumentation of some of the stakeholders.

Figure 4.6 below presents the final set of thematic frames after running the topic modelling algorithm in R. My final model consisted of 22 topics after excluding topic 3 because the topic quality and semantic coherence were too low to inform the model. As operationalised in the research design, each of the identified topics in the model is considered a thematic frame, and I will therefore refer to both topics and thematic frames interchangeably in this analysis. Unlike table 3.2 in the research design part of the thesis, the figure below displays the top 8 highest probability words, not the FREX words, and which words contribute the most to each topic.

Figure 4.6 Highest word probabilities for each thematic frame estimated by the Beta.



There are no surprising findings in this figure in terms of words associated with different topics; however, one can see that, for example, topic 5 and 19 consist of similar words like “data”, “platform”, and “digital” recur. This indicates that the two topics are strongly associated with each other, but after analysing the FREX words and looking into the documents associated with the topics, one can see that topic 5 is about accountability for big online platforms and user rights. In contrast, topic 19 is about access to the digital market and has a more economic focus than the former. For example, the cause group 5Rights Foundation submitted the following text excerpt to the legislative proposal on the Digital Service Act (DSA) package:

“Children make up one in five users of digital services in the EU. Their rights are set out in the UN Convention on the Rights of the Child (1989) and elaborated in UNCRC General comment No. 25 in relation to the digital environment (...). According to this international and EU law, the best interests of the child should be a primary

consideration in all actions and decisions that impact upon them, and State parties have the obligation to ensure children’s rights and interests are upheld, including by businesses.”

The 5Rights Foundation’s feedback is part of topic 5 and identified as part of the public frame category with its focus on the rights of the user associated with the public good. In contrast to this, the French business association Cigref also submitted feedback related to the same legislative proposal but clearly holds a different focus:

“Digital service providers are the essential backbone of many business users. However, small and medium-sized public and private organisations, as well as international groups, which use these services, are confronted with unfair practices and unbalanced commercial relationships. This is why our members have high expectations of the proposed Digital Markets Act. Indeed, ambitious rules within the single market are needed to foster innovation, growth and competitiveness, and to protect business users.”

The excerpt of Cigref’s feedback text above is associated with topic 19 but the same legislative proposal on the DSA package. The differences in the framing efforts concerning the different organisational formats and interests they represent are not surprising, but it illustrates how the topics differentiate between the thematic frames used. Furthermore, a handful of stakeholders had topic proportions above 25% for both topic 5 and 19. Among these stakeholders, there are actors characterised by varying interest types and organisational formats, with a slight predominance of firms. For example, the American firm International Business Machines Corporation (IBM) submitted a feedback text employing both topics:

“We believe that the Digital Markets Act contains the right mechanisms to restore both fairness and contestability in those digital markets. (...) its scope should be clarified and be better aligned with the types of digital services it seeks to regulate. This will not only improve the DMA’s efficiency but also create the necessary legal certainty for all stakeholders.”

“(...) the precise nature of what constitutes “an important gateway to reach end users” should be further detailed to reflect that a Gatekeeper acts an essential go-to-market channel, enabling businesses to access markets where they connect with end users. For

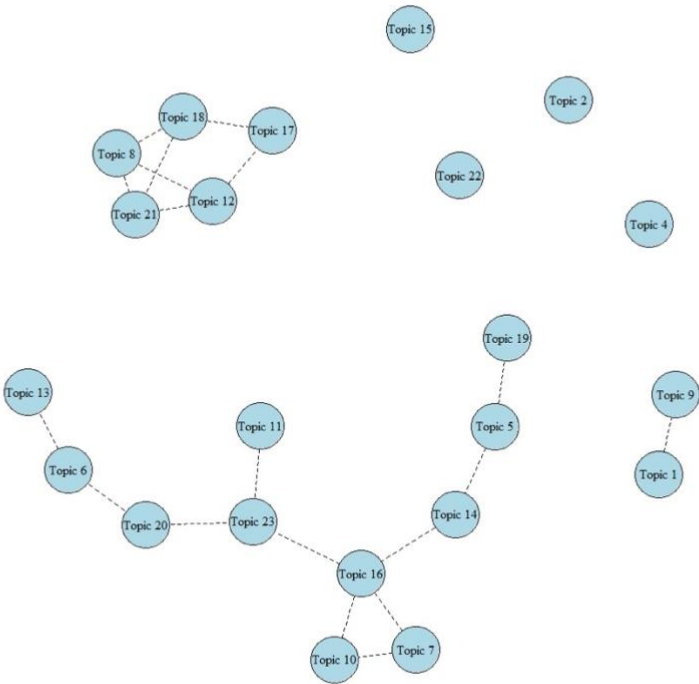
example, some of the proposed Core Platform Services include services which do not constitute such a go-to-market-channel.”

In the two text excerpts above, IBM first refers to the fairness and contestability in the digital market and argues that it will improve the legal certainty for all stakeholders, which is in line with topic 5 and user rights. Then, IBM addresses access to the digital market by discussing the definition of a gatekeeper and what enables businesses to access markets where the businesses connect with consumers, which is more in line with topic 19. This finding is interesting and is in line with hypothesis 3, which expects individual level actors, such as firms, to be more flexible in frame choice because they are not constrained by the logic of membership.

Furthermore, as one can see from figure 4.7 below, it is not only topic 5 and 19 that are strongly associated with each other. I estimated the topic correlations for all 22 topics using a 5% threshold, which means that if two topics are correlated above that threshold, there is a positive relationship between the topics, and they have a likelihood of being discussed within the same document (Roberts, Stewart, and Tingley 2019, 24). For example, there is a correlation between topic 11 and 23 on circular economy and remanufacturing of batteries, topic 23 also correlates with topic 20 on green growth and competitiveness, and topic 1 and 9 on minimum wages and in-work poverty are also strongly associated with each other⁴. In this case, most topics seem to be correlated with other topics within the same policy area, which indicates that the identified thematic frames in the model are unique across policy areas. Nonetheless, some exceptions apply. For example, topic 5 and 16 dealing with the DSA and transport correlate with topic 14 about human rights, which may seem wrong at first sight. However, after validating and reading through a representative amount of documents within each of the three topics, it becomes visible that the documents that create this correlation are the ones on consumer and user rights for the Digital Service Act and for the policy area on transport some documents referred to the rights of people with disabilities while using transportation systems. This explains why these topics still correlate at a threshold of over 5%.

⁴ Please turn to page 53 or 75 for an overview of the labelled topics.

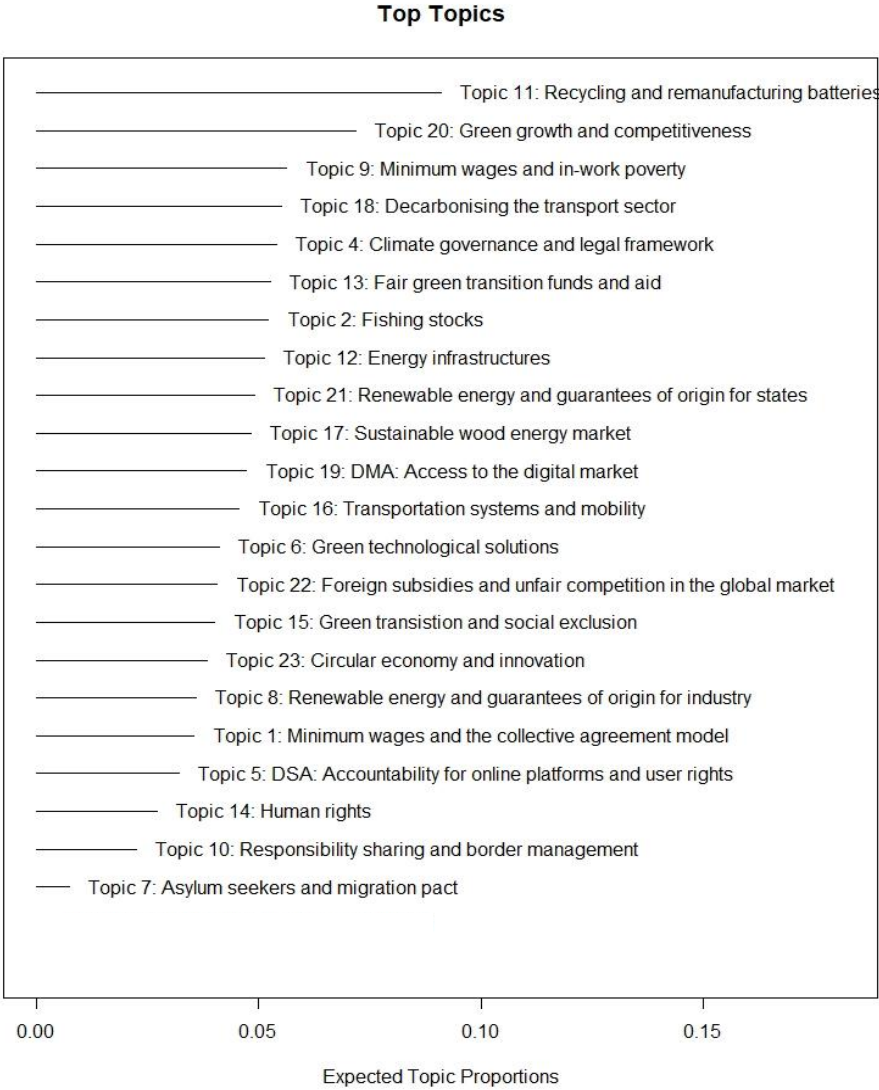
Figure 4.7 Topic correlations estimated by a 5% cut-off.



Finally, figure 4.8 below ranks the topics based on their relative importance in the text corpus. The x-axis counts the expected topic proportions of each topic and measures the proportions on a scale of minimum 0 and maximum 1. As one can see, especially two topics stand out with notably higher topic proportions than the rest of the topics in the model: topic 11 about the costs of remanufacturing batteries and topic 20 on green growth and competitiveness. This indicates that these are the topics that have been most discussed compared to the other topics in the data. Topic 11 is undoubtedly strongly associated with the legislative proposal on modernising battery rules in the EU, whereas topic 20 is a more general topic relevant across legislative proposals but most clearly present in the legislative proposal on EU renewable energy rules. That topics from the policy areas on energy and environment have the highest topic proportions across topics in the model is natural because they are also two of the four topics where most actors have submitted feedback. Furthermore, the rest of the topics are more or less equally distributed among the feedback texts in the corpus, indicating that these topics are discussed about the same amount across documents. However, one can also see a drop in the expected

topic proportions for topic 5, 7, 10 and 14, indicating that these are the least essential topics and the ones that have been least discussed in the text corpus.

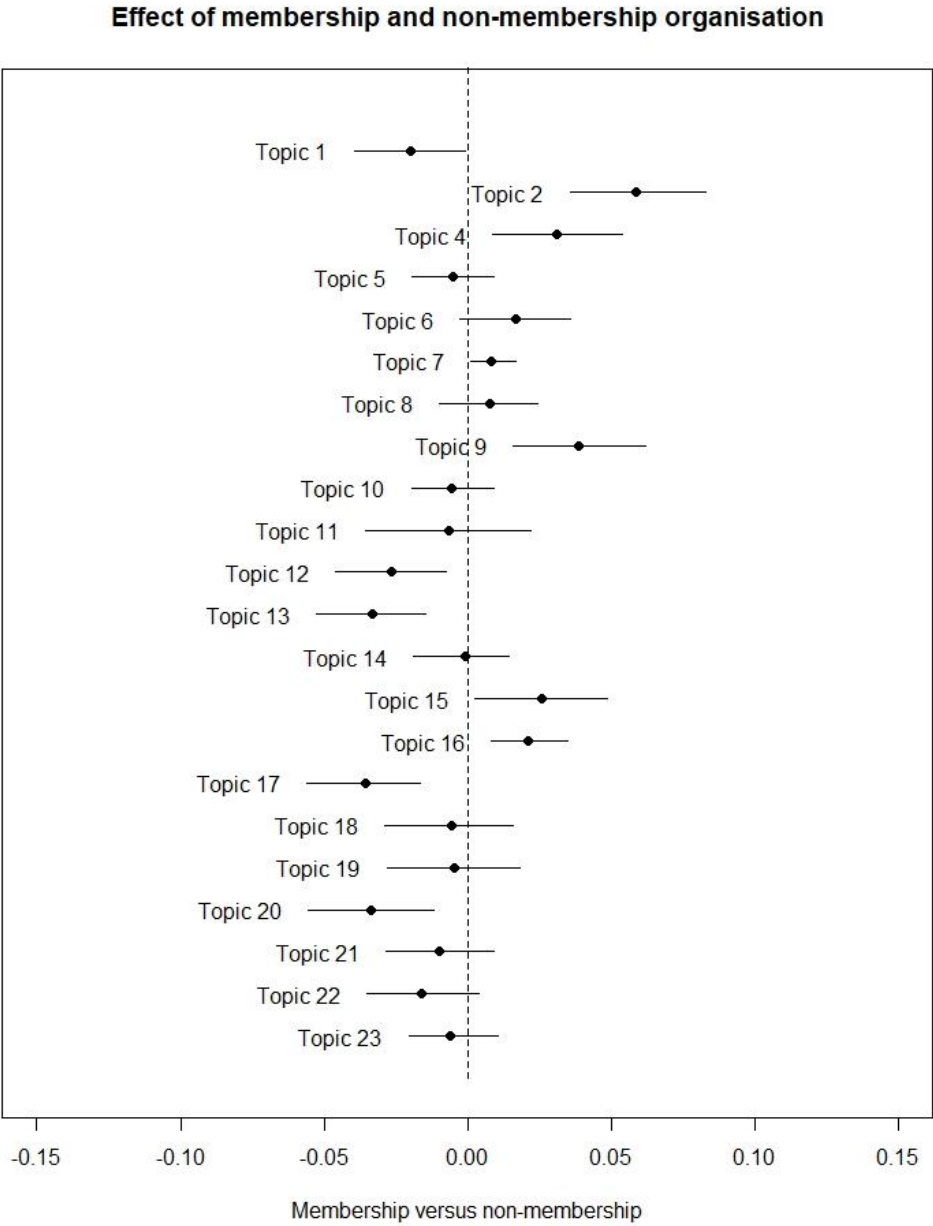
Figure 4.8 Top topics calculated by the topic proportions.



4.1.2 Topical prevalence comparisons: who frames what?

One of the biggest strengths of STM is the ability to incorporate document-level metadata into the model estimation. In the following section, I examine the occurrence of the identified thematic frames across two comparisons of document metadata and plot the influence of a topical content covariate. First, I examine the effect of belonging to a membership or non-membership organisation. Second, I examine the effect of promoting citizen interests vs those of interest groups and discuss the differences between them.

Figure 4.9 Bivariate analysis of the effect of organisational format on topic usage: membership-based versus non-membership-based stakeholders.



Note: The figure shows point estimates and confidence intervals of the effect of a background variable on topic prevalence, holding the other variables constant. The figure shows the effect of a binary variable capturing organisational form (1 = membership-based organisation; 0 = non-membership-organisation).

In figure 4.9 above, all 22 topics are plotted in a bivariate analysis of a binary covariate that plots the change in topic proportion shifting from membership-based (1) to non-membership-based (0) actors. The topics on the left-hand side of the line are most likely to be discussed by membership actors, whereas those on the right-hand side are most likely to be discussed by non-membership actors. Topics very close to the null that is the centre line are topics that are not particularly more likely to be discussed by either membership or non-membership actors.

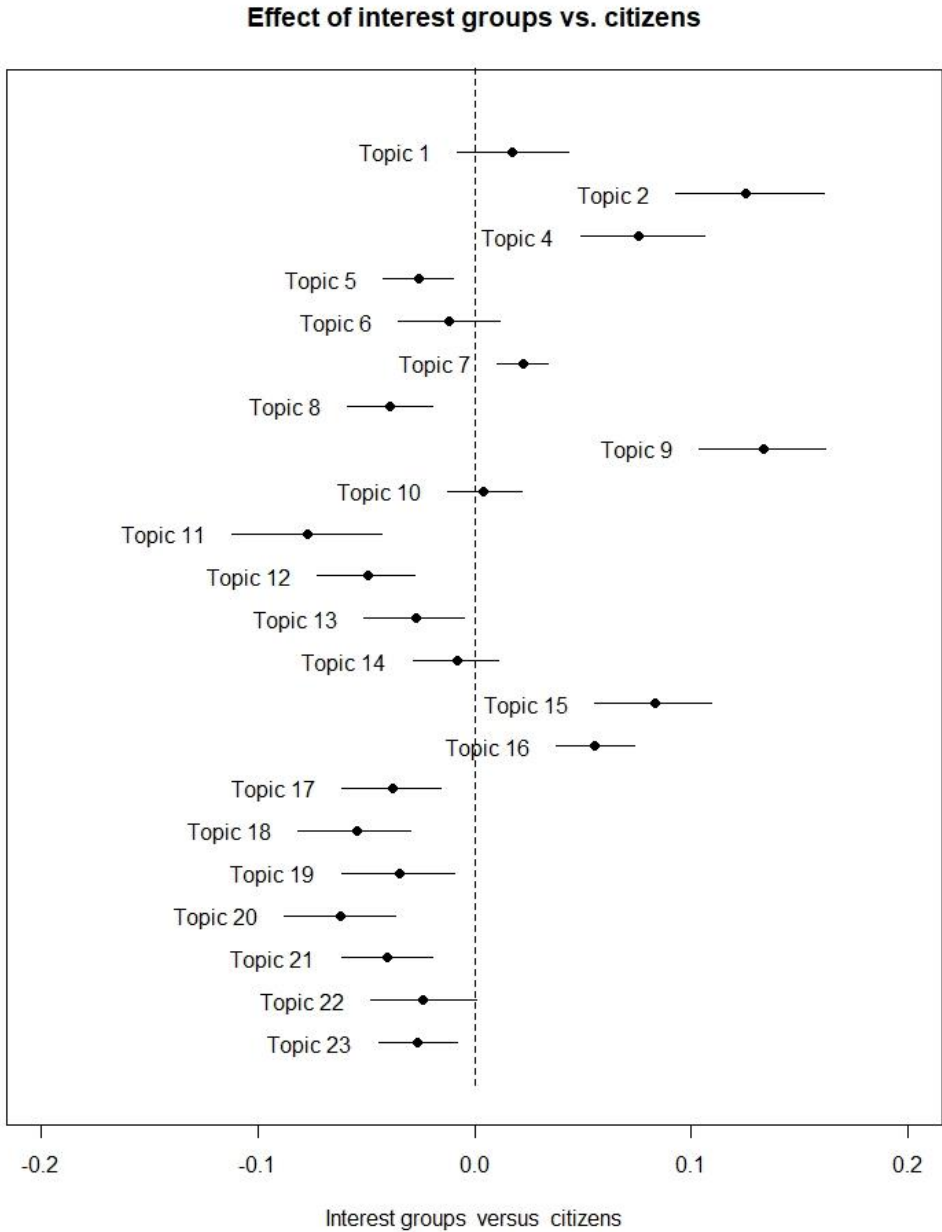
One can see from the figure that none of the topics stands out as particularly characteristic for membership-based or non-membership-based actors. This is expected because stakeholders organised as non-membership organisations are not constrained by the logic of membership and are therefore expected to have more flexibility in frame choice than membership organisations. For example, a big oil company or an environmental NGO are both types of non-membership organisations that have incentives to submit feedback on environmental policy, but their views and opinions might differ substantially. Similarly, a network organisation promoting business interests may, for example, be inclined to use the same thematic frames as, for example, firms which can cause the gap between the membership and non-membership actors to narrow.

For the actors not constrained by the logic of membership, topics 2, 4 and 9 about fishing stocks, climate governance and minimum wages and in-work poverty stand out as those most likely to be discussed by this type of actor. Furthermore, several of the topics in the model are barely on either side of the null. For example, topic 5, 10, 14, 18, 19 and 23 are all slightly more discussed by actors representing membership-based organisations, but it is still so close to null that it indicates that these are thematic frames that are just as much discussed by actors that are membership-based as for non-membership actors. Finally, topics 13, 17 and 20 about the Just Transition Fund, the wood energy market, and green growth and competitiveness indicate that actors promoting membership interests are slightly more inclined to discuss these thematic frames than non-membership actors.

Next, for the comparison of citizen interests and organised stakeholders, however, clearer differences emerge. In figure 4.10 below, one can see citizens more frequently discuss topic 2, 4, 9, 15 and 16 than interest groups. These thematic frames have in common that they are all categorised as public frames, which is as expected based on the findings presented earlier in the descriptive analysis showing that citizens promote significantly more public than economic frames. Topic 6, 7, 10 and 14, and to some degree also topic 1, are all topics that are equally likely to be discussed by both citizens and interest groups. Common for topic 7, 10 and 14 is that they also are categorised as public frames, which indicates that these are the thematic frames that interest groups are most inclined to use within the public frame category. Topic 1 and 6, which are also close to the null but categorised as economic frames, are about green technological solutions, minimum wages, and the collective agreement model. This indicates that when citizens employ economic frames, these are the two thematic frames they are most

likely to use. However, these findings are also in line with the participation patterns discussed earlier in the descriptive analysis because climate action and employment and social affairs are the policy areas where citizen participation levels were highest.

Figure 4.10 Bivariate analysis of the effect of actor type on topic usage: interest groups versus citizens.



Note: The figure shows point estimates and confidence intervals of the effect of a background variable on topic prevalence, holding the other variables constant. The figure shows the effect of a binary variable distinguishing interest type (1 = interest groups; 0 = citizens).

4.2 Explanatory analyses: explaining the variation in frame choice

The descriptive analysis provided an overview of how thematic frames may or may not be associated with the interest group type and organisational format and presented the distribution of economic and public frames across interest type and organisational format. As presented in the research design, logistic regression is necessary to test the hypotheses presented in the theoretical argument because the two dependent variables of this thesis, the economic and public frame, are coded as two dummy variables. Furthermore, the 1143 units of observation (individual stakeholders) in the dataset are nested into ten legislative proposals with variables on both stakeholder level and proposal level creating a multilevel data structure.

First, since I have a multilevel data structure and the extent to which a stakeholder uses an economic or public frame may vary across the ten legislative proposals, I start by testing if multilevel logistic regression is necessary. The random intercept for all the legislative proposals was tested for both dependent variables, the economic and public frame, and the results show that clearly, there is variation between the legislative proposals⁵.

Large variation between the legislative proposals gives an indication that multilevel analysis is necessary, and a natural next step will therefore be to test for intraclass correlation. The higher the intraclass correlation, the greater the variation between groups in relation to the variation within the group. The ICC value for the empty model for the economic frame was 0.775, whereas, for the public frame, the ICC value was 0.797, which means that the extent to which a stakeholder uses an economic or public frame varies with 77.5% and 79.7% between the legislative proposals. Ignoring the clustering of the data within the legislative proposals may result in deflated standard errors and predictors that seem to have a significant effect when they do not (Finch, Bolin, and Kelley 2019, 18). Hence, the dependent variables violate the assumption of independent errors and multilevel logistic regression is preferred.

Additionally, after running the regression models, I tested for collinearity by running VIF tests on all variables in the regression models. Staff size turned out to be highly associated with financial resources, and because I had more observations for the staff variable in my dataset, I chose to only rely on staff as a measure for resources in the models. However, that financial resources correlate with staff size is in line with previous findings in the literature (Mahoney

⁵ See Appendix D and E for the random intercept plots for the dependent variables.

2008; Rasch 2018, 16). Furthermore, none of the other variables had VIF values greater than 1.71, which indicates low levels of multicollinearity between the variables. When including the interaction effect between the interest type represented and the level of public issue salience, the VIF values raise for the variables included in the interaction effect. However, the highest value is 3.62, which is still below the minimum tolerance level of 5 (Finch, Bolin, and Kelley 2019, 9). Hence, multicollinearity should not be a problem for any of the variables in the analysis⁶.

The results from the multilevel logistic regression models are presented in the following two sections. What is shared for both models, each with its own dependent variable, the public and the economic frame, is that the logit coefficients in the regression models present the change in the log odds of the outcome for one unit increase in one or more predictor variables (Mehmetoglu and Mittner 2020, 279). The logit coefficients are helpful for quickly forming a picture of what direction it is on the effect of a predictor variable and whether the coefficient is statistically significant, but apart from that, the coefficients cannot say much else. However, calculating the predicted probabilities makes the effects of the variables easier and more intuitive to understand. Therefore, I start by commenting on the significance levels and the direction of the effects and continue by presenting the predicted probabilities for the significant variables. The regression results for the economic and public frames are first presented separately and then discussed together with the hypotheses in the final section of the analyses.

4.2.1 Explaining the probability of using an economic frame

The regression results for the dependent variable ‘economic frame’ are presented in table 4.1 on the next page. Model 0 presents the empty model used to test if there are intraclass correlations and variation between groups. I concluded that it was, and hence, multilevel logistic regression is applied. Model 1 and 2 present the bivariate relationship between the economic frame variable and two of the key explanatory variables of this thesis: the interest type represented and organisational form. These explanatory variables are categorical variables, which means that the model will be interpreted with reference categories. In model 1 firm is set as the reference category, while in model 2, the individual level actors constitute the reference.

⁶ See Appendix F for the estimated VIF values.

Table 4.1 Multilevel logistic regression: explaining the probability of employing an economic frame.

		Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
Interest type represented	<i>Firm</i>		Ref.		Ref.	Ref.	Ref.
	<i>Sectional group</i>		-1.189** (0.489)		-1.113* (0.675)	-1.2 (1.773)	-1.31 (1.79)
	<i>Cause group</i>		-2.929*** (0.52)		-2.825*** (0.656)	-4.573*** (1.75)	-4.539** (1.764)
	<i>Citizens</i>		-3.311*** (0.511)		-2.568** (0.959)	-6.314*** (1.88)	-5.998*** (1.913)
Organisational format	<i>Individual level</i>			Ref.	Ref.	Ref.	Ref.
	<i>Regional level</i>			-3.025*** (0.829)	-1.235 (0.893)	-1.207 (0.875)	-1.325 (0.897)
	<i>National level</i>			-0.78** (0.354)	-0.265 (0.518)	-0.29 (0.53)	-0.262 (0.545)
	<i>European level</i>			-0.643* (0.353)	0.168 (0.504)	0.07 (0.514)	-0.071 (0.547)
	<i>Other</i>			-2.393*** (0.355)	-0.765 (0.811)	-0.802 (0.79)	-0.706 (0.832)
Public salience				-1.847* (1.082)	-2.853** (1.45)	-2.105* (1.368)	
Public salience x interest type	<i>Firm x salience</i>					Ref.	Ref.
	<i>Sectional group x salience</i>					0.053 (0.869)	0.125 (0.879)
	<i>Cause group x salience</i>					1.035 (0.881)	1.038 (0.887)
	<i>Citizens x salience</i>					2.187** (0.868)	2.231** (0.879)
Individual salience						0.334*** (0.111)	
Policy area	<i>Distributive</i>						Ref.
	<i>Regulatory</i>						2.793 (1.848)
Resources	<i>Brussels office</i>						0.352 (0.339)
	<i>Staff size</i>						-0.014 (0.02)
Constant		0.381** (1.09)	2.347** (1.043)	1.486 (1.034)	6.33** (2.516)	8.066** (3.234)	3.404* (3.679)
N		1012	1012	1012	1012	1012	1012
Log likelihood		-364.7	-307.2	-325.6	-303.5	-294.4	-288.4
AIC		733.5	624.3	663.2	627.0	614.9	610.8
BIC		743.3	648.9	692.7	676.2	678.8	694.4

*p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Note: Results are shown with log odds. Standard errors in parentheses. Clustered by legislative proposal. Dependent variable is binary indicating whether the stakeholders employed an economic frame.

Model 1 has a constant and coefficients significant at either a 5% level or higher, indicating that the interested type variable has explanatory power. The values of the coefficients are negative, but when read in conjunction with the constant, the coefficients for sectional groups and firms have positive signs, whereas citizens and cause groups have negative signs. For model 2, the constant is not significant, and the coefficients have both positive and negative signs. Interpreting the coefficients in conjunction with the constant regional level actors and the others category have a negative effect on the dependent variable, whereas the individual, national and European level actors have a positive effect on the dependent variable. All values are also significant for the bivariate relationship between organisational format and economic frame choice; however, it is essential to note that AIC and BIC levels jump in model 2 compared to model 1. This indicates that model 1 is more precise than model 2.

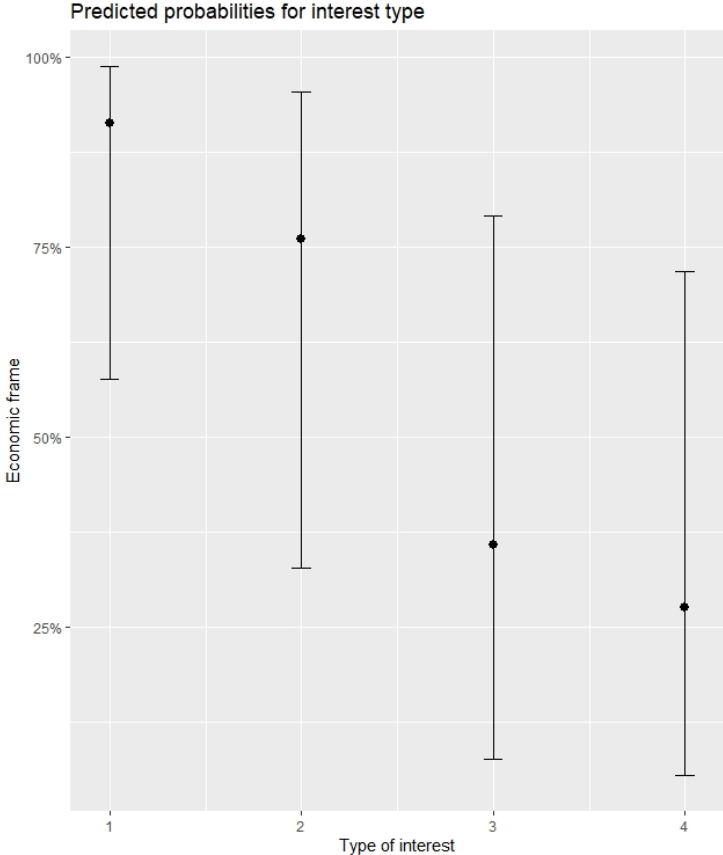
Model 3, both interest type and organisational format are tested together with the second-level variable, public salience, in the same model. Model 3 only finds statistically significant results for the interest type variable and public salience, whereas the organisational format variable loses all its significance when controlling for the additional explanatory variables. Additionally, AIC and BIC values drop in model 3 compared to model 2, indicating that the interest type represented has more substantial explanatory power than the organisational format variable.

Model 4 includes the cross-level interaction effect of public salience on the interest type represented, and model 5 includes all the control variables. In model 4, the constant and values for citizens and cause groups are still significant, and the model still indicates positive signs for the interest type represented. In addition, the public salience variable becomes significant at the 5% level. For the cross-level interaction effect, only the citizen category is significant. In model 5, all control variables are added, but it does not change the values of the coefficients remarkably; thus, AIC and BIC levels drop slightly. The key difference between model 4 and 5 is that the individual salience variable is highly significant, with a positive sign indicating that individual salience has a positive effect on economic frame choice. Next, I discuss the predicted probabilities, indicating the size of the effects based on model 5.

Figure 4.11 below shows the predicted probabilities for the type of interest represented. The figure shows that firms and sectional groups presenting business interests are more likely to employ an economic frame than cause groups and citizens, where the effect goes the opposite way. The values of the predicted probabilities for firms and sectional groups are 92% and 76%,

compared with cause groups and citizens who count 36% and 27% probability of using an economic frame. Since the other dependent variable, the public frame, is in opposition to the economic frame, similar and opposite findings to this should indicate further robustness. However, the size of the confidence intervals (CI) is worth noting, which indicates that the spread of the values in the data set is large and that the sample size and the number of actors falling in each category are small.

Figure 4.11 Predicted probabilities for interest type on economic frame choice.

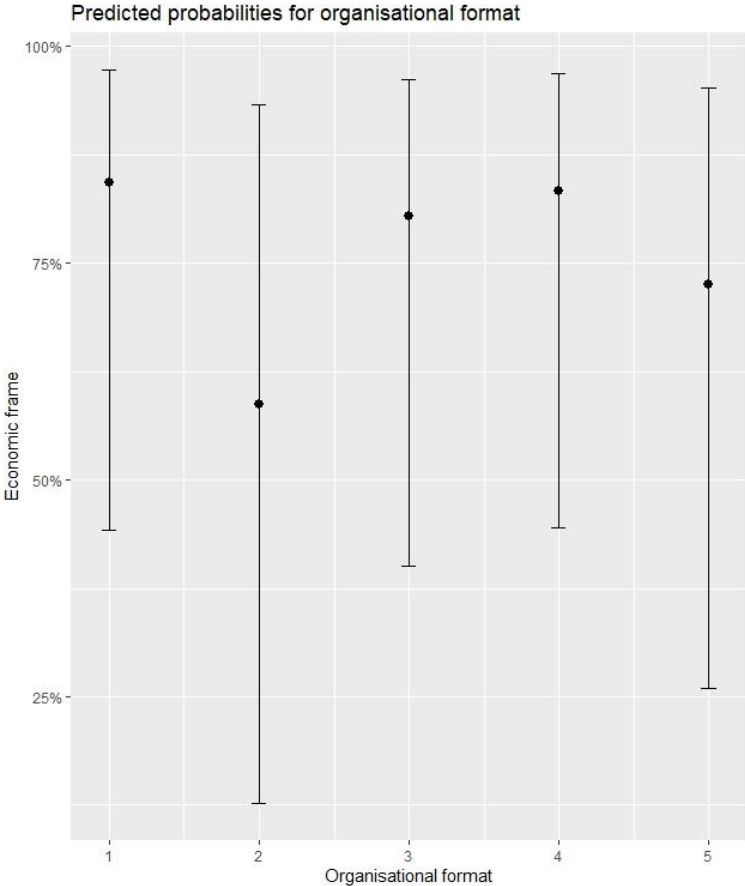


Note: firms (1), sectional groups (2), cause groups, (3) and citizens (4).

Figure 4.12 below plots the predicted probabilities for organisational format and shows that individual, national and European level actors are more likely to employ an economic frame than regional level actors. The values of the predicted probabilities for individual, national and European level actors count 72%, 67% and 69%, whereas regional level actors count slightly lower with a 59% probability of using an economic frame. However, the dimension of the CIs illustrates much variance in the results and indicates that all results, and especially regional

level actors, are affected by the uneven distribution of stakeholders across interest types and organisational format. Thus, the results are not statistically significant.

Figure 4.12 Predicted probabilities for organisational format on economic frame choice.

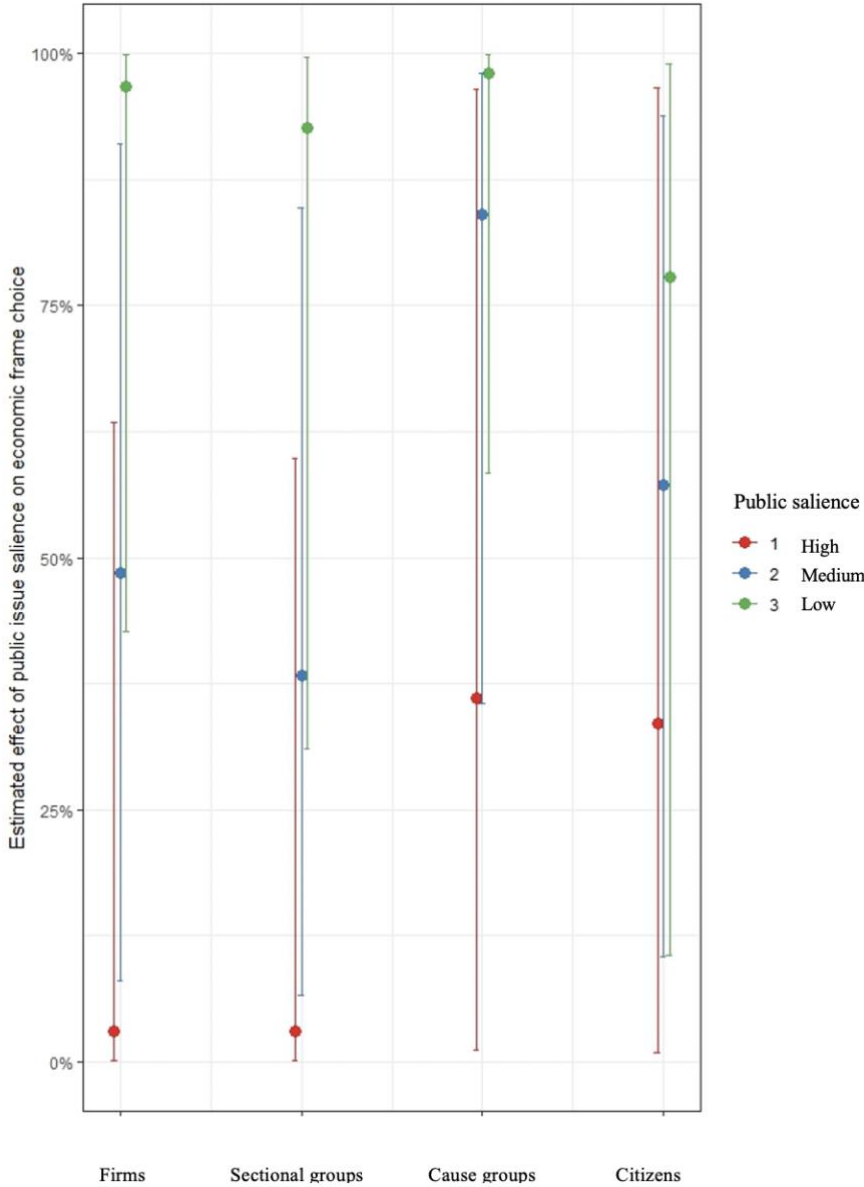


Note: individual level (1), regional level (2), national level (3), European level (4), and others (5).

Next, I report the predicted probabilities of the individual salience variable and the cross-level interaction effect, between public issue salience and interest type, for the economic frame category. Starting with the interaction effect, the ‘firm’ and ‘citizens’ categories are the only significant ones plotted in figure 4.13 below. The figure shows that when the number of stakeholders participating in the feedback opportunity increases (i.e., increasing issue salience for the community of stakeholders), firms are more likely to use an economic frame. When the number of actors participating decreases, firms are less likely to employ an economic frame. Additionally, the same patterns are visible for sectional groups, which are less inclined to use an economic frame when public salience is low and more inclined when public salience is high. However, the coefficients for sectional groups are not statistically significant. Finally, the opposite is true of citizens and cause groups, but the results are only statistically significant for

citizens. The results indicate that citizens do not use an economic frame, independent of the total number of stakeholders providing feedback. Regardless, the size of the CIs for all results is still considerable, which cannot be ignored and indicates that the spread of the values in the data set is large and that the sample size and the number of actors falling in each category is small.

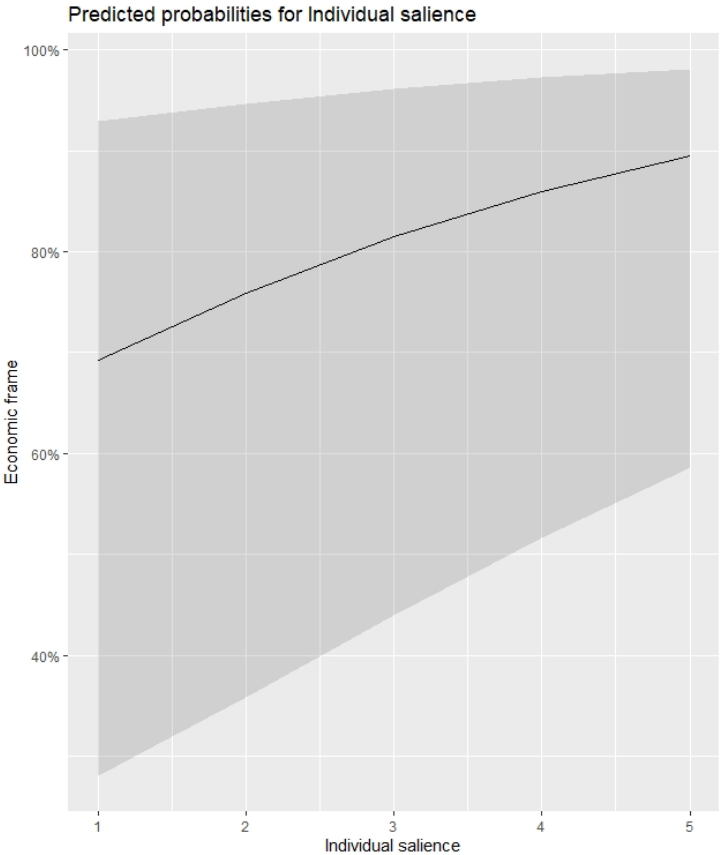
Figure 4.13 Predicted probabilities for the cross-level interaction effect of public salience on interest type represented for economic frame choice.



Finally, moving to the interpretation of the only significant control variable, individual salience, in figure 4.14 below, the predicted probabilities for individual salience are plotted. The effect is statistically significant at a 1% level and illustrates that when individual issue salience

increases, that is, the number of words in the feedback text increases, stakeholders are more likely to use economic frames. The value of the predicted probability of individual issue salience starts at 69% and steadily increases to 90% as the individual issue salience increases. This indicates that when there is a lot at stake for the individual stakeholder, the stakeholder is more inclined to use economic arguments. The grey areas display the standard error and indicate variation in the data. However, the standard error follows the line of the variable, indicating that even though the size of the effect may vary, the effect is still positive on the dependent variable when individual salience increases. The findings illustrated below may also explain why there was so much variation in the results for the public salience variable illustrated in figure 4.13 and could indicate that individual salience trumps public salience. It is nevertheless worth noting that sectional groups make up the most significant part of the total stakeholders, and this can therefore influence the results. As mentioned in the theory section, sectional groups may be constrained by the logic of membership and more forced into using economic arguments to stimulate their members.

Figure 4.14 Predicted probabilities of the effect of individual salience on economic frame choice.



Note: Grey areas are standard errors.

4.2.2 Robustness check: Explaining the probability of choosing a public frame

The regression results for the dependent variable capturing whether the stakeholder employed a 'public frame' are presented in table 4.2 below. The results are briefly discussed as they should be considered robustness checks for the findings in the previous regression models explaining the probability that a stakeholder employed an economic frame. Furthermore, since the dependent variables are in opposition to each other, similar findings to this should indicate further robustness. Thus, as reported in the descriptive analysis, some stakeholders employed both an economic and a public frame, making it necessary to test if there are significant differences between the output for the regression models. Before reporting the predicted probabilities, I start by briefly presenting the regression table and models.

Models 1 and 2 present the bivariate relationship between interest type and organisational format, and the results show similar trends as for the economic frame regression. For the interest type represented, cause groups and citizens have a positive sign, whereas firms and sectional groups have a negative sign indicating the direction of the effect on public frame choice. All coefficients are significant, apart from the sectional groups. For organisational form, individual, national and European level actors have a negative sign, whereas the regional level and other categories are positive and the only statistically significant values. Thus, AIC and BIC levels also jump for the bivariate model on organisational form, indicating that model 1 fits better than model 2. In sum, the models indicate similar patterns as for the economic frame.

The best model fit and AIC and BIC values are for models 4 and 5, which have relatively similar values after checking for the effect of adding control variables into the model. Firms, cause groups and citizens are still highly significant at 5% and 1% levels. However, instead of having a negative effect on the dependent variable as in the previous regression models for the economic frame, cause groups and citizens have a positive effect in this model, indicating that indeed, in line with the theoretical expectations, these stakeholders are more likely to employ public frames. Furthermore, the individual salience variable and the interaction effect of public salience and citizens are also significant in this model, and the results indicate the opposite effect, namely that when issue salience increases, stakeholders are less likely to use a public frame. Finally, for models 4 and 5, the public salience variable enjoys significant results and indicates a negative effect of public frame choice when public salience increases. Next, I discuss the predicted probabilities, indicating the size of the effects based on model 5.

Table 4.2 Multilevel logistic regression: explaining the probability of employing a public frame

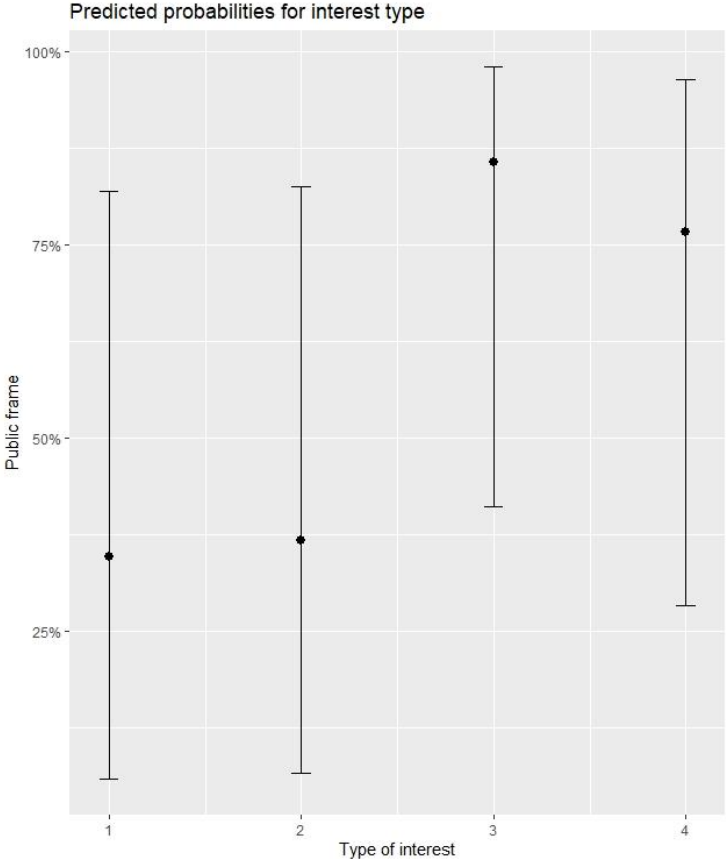
		Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
Interest type represented	<i>Firm</i>		Ref.		Ref.	Ref.	Ref.
	<i>Sectional group</i>		0.094 (0.331)		-0.176 (0.585)	0.428 (1.397)	0.451 (1.401)
	<i>Cause group</i>		2.425*** (0.405)		2.16*** (0.564)	4.148*** (1.474)	4.126*** (1.479)
	<i>Citizen</i>		1.823*** (0.378)		1.337** (0.944)	5.257*** (1.603)	5.281*** (1.628)
Organisational format	<i>Individual level</i>			Ref.	Ref.	Ref.	Ref.
	<i>Regional level</i>			3.223*** (1.059)	1.735 (1.133)	1.647 (1.114)	1.65 (1.117)
	<i>National level</i>			0.1509 (0.301)	0.41 (0.534)	0.36 (0.544)	0.3543 (0.553)
	<i>European level</i>			0.189 (0.295)	0.124 (0.521)	0.187 (0.531)	0.045 (0.556)
	<i>Other</i>			1.355*** (0.315)	0.497 (0.859)	0.524 (0.838)	0.468 (0.869)
Public salience				2.018 (1.263)	3.463** (1.57)	3.439** (1.558)	
Public salience x interest type	<i>Firm x salience</i>					Ref.	Ref.
	<i>Sectional group x salience</i>					-0.418 (0.713)	-0.435 (0.712)
	<i>Cause group x salience</i>					-1.259 (0.811)	-1.201 (0.808)
	<i>Citizens x salience</i>					-2.436*** (0.776)	-2.467*** (0.773)
Individual salience						-0.193** (0.101)	
Policy area	<i>Distributive</i>						Ref.
	<i>Regulatory</i>						-2.892 (1.994)
Resources	<i>Brussels office</i>						0.2589 (0.306)
	<i>Staff size</i>						0.004 (0.022)
Constant		0.312* (1.167)	-0.637* (1.098)	-0.2243 1.1189	-4.992* (2.88)	-7.272** (3.453)	-6.792** (3.442)
N		1012	1012	1012	1012	1012	1012
Log likelihood		-371	-325.7	-352.8	-323.0	-314.1	-311.9
AIC		746	661.4	717.6	666	654.2	655.9
BIC		755.8	686	747.1	715.2	718.2	734.6

*p-value < 0.1, ** p-value < 0.05, *** p-value < 0.01

Note: Results are shown with log odds. Standard errors in parentheses. Clustered by legislative proposal. Dependent variable is public frame.

In figure 4.15 below, one can see the predicted probabilities for the interest type represented and that the results show similar patterns as the results shown for the economic frame. Again, cause groups and citizens are more likely to employ a public frame, whereas the effect of firms and sectional groups goes the opposite way. The values of the predicted probabilities for firms and sectional groups are 35% and 37%, compared with cause groups and citizens who count 86% and 77% probability of using a public frame. However, the CIs extend a proper distance, indicating that there is much variance in the data, but compared to the results from the economic frame category, the results from the public frame category indicate slightly more uncertainty. Regardless, the results are statistically significant for all interest types represented apart from sectional groups.

Figure 4.15 Predicted probabilities for the effect of interest type on public frame choice.

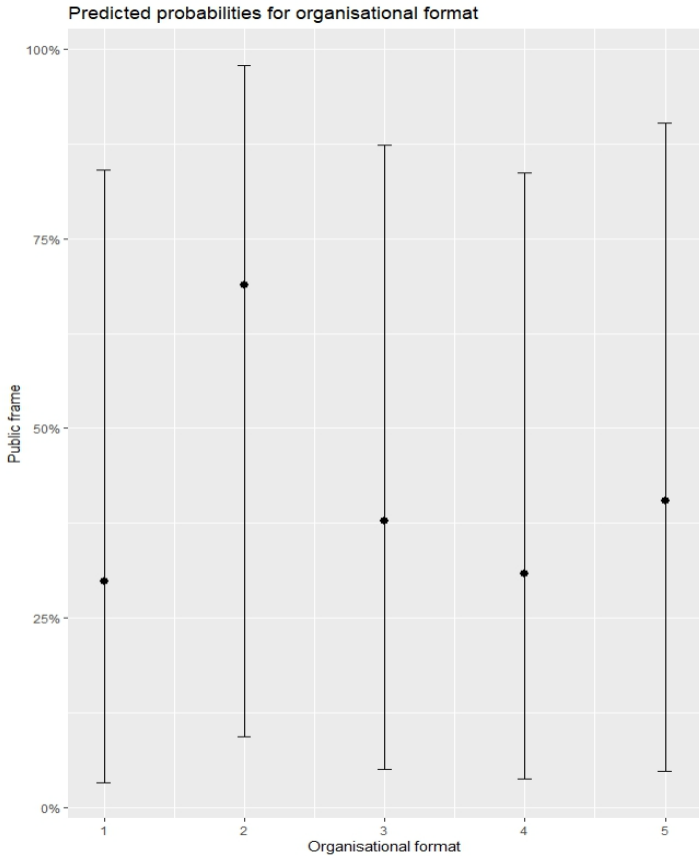


Note: firms (1), sectional groups (2), cause groups, (3) and citizens (4).

Furthermore, Figure 4.16 below plots the predicted probabilities for the organisational format of the stakeholders and shows that regional level actors are the ones that are most likely to employ a public frame. Similar to the regression results from the economic frame, individual, national and European level actors are slightly less inclined to employ a public frame than the

results for the economic showed. The values of the predicted probabilities for individual, national and European level actors count 30%, 38% and 31%, whereas regional level actors count higher with a 69% probability of using an economic frame. However, similar to the results of the regression examining the use of economic frames, the results are not statistically significant, and the CIs dimension illustrates that there is much variance in the results, which further indicates they are not very solid.

Figure 4.16 Predicted probabilities for organisational format on public frame choice.

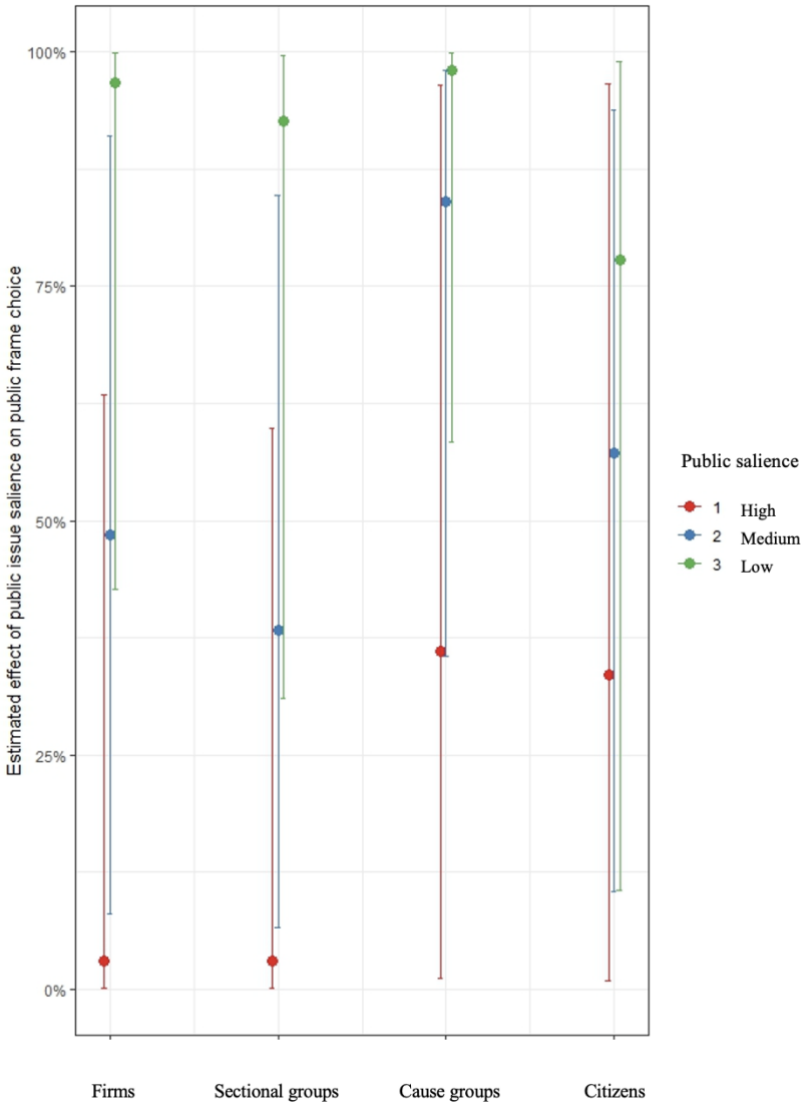


Note: individual level (1), regional level (2), national level (3), European level (4), and others (5).

Figure 4.17 below shows the cross-level interaction effect of public issue salience on interest type represented for public frame choice. The interaction effect of public issue salience for firms and citizens is the only statistically significant category and shows that when public issue salience decreases, citizens are most likely to employ a public frame and when issue salience increases, citizens are less likely to employ a public frame. The results of cause groups show that they employ the public frame when issue salience decreases, and when issue salience is high, they are less likely to employ a public frame. However, the size of the CIs indicates that

there is a lot of variance in the results, especially for the results of high public issue salience, and should therefore not be emphasised too much. Finally, the results show that firms and sectional groups are least likely to employ a public frame when issue salience is high and considerably more likely to employ a public frame when public issue salience is high. This is an opposite finding from what is established in the literature, and the results indicate that the hypothesised effect of public issue salience is rejected. This finding is discussed in more detail in the last section of the analysis.

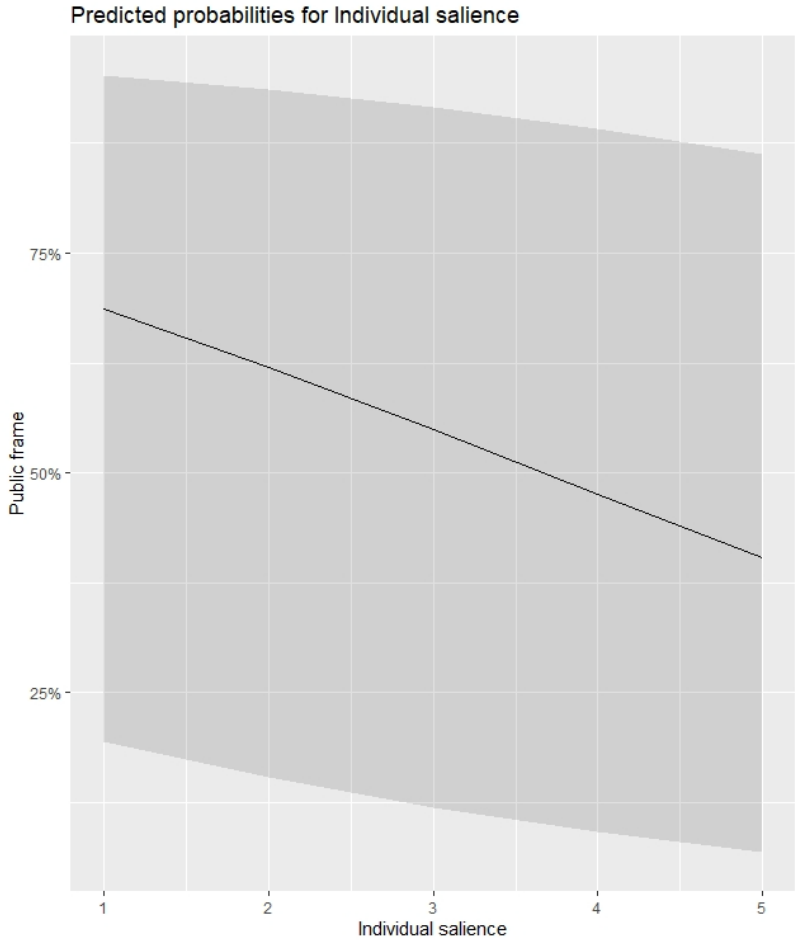
Figure 4.17 Predicted probabilities for the cross-level interaction effect of public salience on interest type represented for public frame choice.



Finally, in Figure 4.18 below, the predicted probabilities for the individual salience on public frame choice are plotted. The effect is statistically significant at a 5% level and illustrates that

stakeholders are less likely to use a public frame when individual issue salience increases, that is, the number of words in the feedback text increases. Similar to the dependent variable economic frame, the value of the predicted probability of individual issue salience starts at 69% and instead of increasing as for the economic frame, it steadily decreases to 40% as the individual issue salience decreases. This underlines an identical finding from the economic frame regression, which showed that stakeholders are more inclined to use an economic frame when the level of individual issue salience increases. The grey areas display the standard error and indicate variation in the data. Similarly to the economic frame results, the standard errors follow the line of the variable, indicating that even though the size of the effect may vary, the effect is still negative on the dependent variable when the individual salience for stakeholders increases. This finding illustrates further robustness to the finding reported for the economic frame. In the next part of the thesis, I discuss the reported results and their significance in light of the existing scholarship and the thesis' hypotheses.

Figure 4.18 Predicted probabilities of individual salience on public frame choice.



Note: Grey areas are standard errors.

4.3 Evaluation of the hypotheses

The research question of this thesis asked what frames stakeholders employ when attempting to influence the formulation of policies in the EU's new feedback mechanism and what explains their choice of policy frames. For the first part of the research question, the analyses and general overview of the legislative proposals identified 22 thematic frames, which were categorised into public and economic frame categories. The analyses showed that from a total of 1143 participating stakeholders, 57% employed an economic frame, 35% employed a public frame, 7% used both frames, and 1% had no clear frame match.

The second part of the research question sought to understand and explain the frame choice of the participating stakeholders building on two branches of literature: EU lobbying strategies and framing studies. Building on existing research from these two pieces of literature, I expected that the interest type represented, organisational format, and the level of public salience to matter for stakeholder's frame choice. I identified the dependent variable using recent developments in QTA – the unsupervised machine learning method called STM – and presented the results using multilevel logistic regression and presented the predicted probabilities. In the following section, I discuss the results and evaluate the hypotheses.

4.3.1 Is frame choice subject to the interest type represented?

Three hypotheses were developed in the theoretical argument and tested in the explanatory analysis. The evaluation of the hypotheses is summarised in table 5.1 at the end of the second section. First, the literature review showed that lobbying efforts often are characterised by two opposing sides and that stakeholders promoting business interests are often described as defenders of the status quo and citizen groups as challengers. The theoretical argument expected stakeholders' frame choice to reflect their constituency structure and distinguish between stakeholders with diffuse public and specific economic interests. Hypothesis 1 focused on this and expected that stakeholders representing business interests, i.e. firms and sectional groups, are more likely to employ an economic frame, whereas cause groups and citizens are more likely to employ a public frame.

The logistic regression results laid out in the analyses showed a relationship between the type of interests represented and frame choice. For example, the predicted probabilities plotted in Figures 4.11 and 4.15 showed that firms and sectional groups are more likely to employ an economic than a public frame, whereas cause groups are more likely to use a public frame than

an economic frame in line with the theoretical expectations. Additionally, and not surprisingly, the analyses also identified citizen interests as more likely to use a public frame than an economic one. Regardless, only the results for firms, cause groups and citizens are statistically significant, and, therefore, the hypothesis is only partially supported by empirical evidence.

The existing literature argues that different types of stakeholders perform differently, and several scholars have shown that interest group characteristics affect stakeholders' choice of framing and lobbying strategies (Croteau and Hicks 2003; Dür 2008; Eising 2009; Bunea 2013; Klüver, Mahoney, and Opper 2015). In addition, Berkhout (2013) argued that sectional groups primarily represent specific economic interests, whereas cause groups represent diffuse public interests. To my knowledge, only one study exclusively tests the effect of actor type on public versus economic argumentation in the context of EU lobbying. Klüver, Mahoney and Opper (2015) tested this relationship using interest group position papers and EU documents. The regression results presented in my study provide additional empirical evidence and insights for this relationship using a different data source: the stakeholder feedback texts submitted under full public review. Therefore, my finding is consistent and further confirms the findings of previous research concerning the relationship between frame choice and interest type represented, even though not all interest type categories were statistically significant in the present statistical analyses.

Finally, this finding implies that interest groups act as they are expected to, also in the context of the new feedback mechanism. The feedback mechanism offers a new and very transparent lobbying venue, and the results show that stakeholders seem to stick to their arguments when other stakeholders can see the feedback they have submitted. Initially, it was expected that having full public transparency over the content in the feedback texts created incentives to strategically employ certain frames to maximise its chances of influencing the legislative debate or as a mechanism for checking whether a membership organisation complies with its agreed internal structures. However, the results support the latter expectation, and on a general basis, stakeholders do not strategically employ a different frame than the type of interest they represent when lobbying under complete transparency.

4.3.2 Does organisational format affect stakeholders' frame choice?

Hypothesis 2.1 expected that membership-based actors organised as European, national and regional level actors are more likely to employ a public frame than an economic frame. In contrast, hypothesis 2.2 expected that individual level actors are equally likely to employ economic and public frames because they are not constrained by the membership. Moreover, the existing literature on organisational format proposes that the inter-organisational structures of an interest group are essential because they may restrict or enable them to pursue their preferred lobbying goal (Bouwen 2002; Beyers 2008; Bunea 2013). I argued, by extension, that the potential frames stakeholders employ in their feedback texts matter for the choice of frames because different organisational formats offer a varying degree of flexibility in their pursuit of influence. To my knowledge, this actor characteristic has not previously been tested as a determinant for frame choice in the literature on EU lobbying strategies.

The regression results for the dependent variable 'economic frame' showed that for model 2, national and European level actors had a statistically significant and positive effect on economic frame choice and the opposite effect for regional level actors. However, model 5 turned out to have a significantly better fit and AIC measures than model 2, and the results in this model proved to be insignificant. Therefore, it is important to stress that the predicted probabilities plotted in Figures 4.12 and 4.16 are not statistically significant but show that individual, national and European level actors are equally likely to employ an economic and public frame but are significantly more likely to favour an economic frame. This finding suggests that the hypotheses are rejected; however, the regression models with the best fit and AIC measures indicated that the explanatory variable for the hypotheses is not sufficiently significant. Hence, the hypothesis is not supported.

The existing scholarship on organisational features suggests that the more layered and complex structure of a membership organisation, the more demand is placed on the internal organisation of the association, which hampers the efficiency and provision of access goods (Bouwen 2002, 377). However, individual-level organisations are organised as non-membership organisations making it easier for them to adjust their arguments and framing strategies (Bouwen 2002, 376). Since the findings in this thesis are not statistically significant, it is not possible to draw final judgements that can confirm if the findings match the existing research or not. However, the results imply that, contrary to the theoretical expectations, the findings yield no effects on the

organisational format for frame choice. However, this thesis offered a necessary first step in testing organisational format on frame choice. Future research on framing strategies would benefit from more empirical, systematic, large-N research that focuses on additional policy areas and other stages of EU policymaking before drawing any firm conclusions about organisational features' importance of frame choice.

4.3.3 How does issue salience affect frame choice?

Finally, hypothesis 3 posited that firms are more likely to employ a public frame when public salience is high and more likely to employ an economic frame when public salience is low. Previous scholarship on framing and EU lobbying has tested the effect of salience using media attention as a measure of public salience by counting the number of news articles or length of the news articles reporting on a specific issue (Mahoney 2007, 43; Boräng and Naurin 2015). However, I argued that media publicity was not the best measure to capture the public issue salience of the legislative proposals analysed in this thesis, and instead, I relied on the number of stakeholders participating in each feedback opportunity related to the legislative proposals.

The predicted probabilities plotted in Figures 4.13 and 4.17 showed an opposite effect of the hypothesised expectation and showed that when public issue salience is high, firms are more likely to employ an economic frame, and when public salience is low, firms are more likely to employ a public frame. This is a surprising finding that goes against previous findings in the literature and indicates that even though the public issue salience is high, firms still prefer economic arguments. Furthermore, it could also indicate that for the legislative proposals with high public issue salience, the participating stakeholders agree with each other and that the level of conflict is not very high. However, even though the effect is statistically significant at a 5% level for the public frame and a 10% level for the economic frame, the plotted results of the predicted probability indicate with the size of the CIs that there is a lot of variance in the results. Hence, the hypothesis is not fully supported.

Existing scholarship argues that on policy issues with high levels of public salience, interest groups, especially those promoting business interests, are more likely to be less influential. The assumption is that when the popularity and the number of actors submitting feedback to a legislative proposal rises, it is more difficult for business interests to promote narrow and specific economic interests (Mahoney 2007, 40; Rasmussen, Carroll, and Lowery 2014, 251).

However, my findings do not match that of the literature and show that when public salience increases, firms indeed employ economic frames, and when public salience decreases, firms are more likely to employ a public frame. An important and additional finding was also that when *individual* issue salience increases, the likelihood of employing an economic frame increases, indicating that individual salience could trump *public* issue salience. This result is the most surprising and noteworthy finding of this thesis, and more research should be devoted to the relationship between individual and public issue salience in future studies on framing and issue salience. Finally, the findings also imply that firms do not strategically employ a public frame instead of narrow economic frames to improve their opportunity for influence.

Table 4.3 Evaluation of hypotheses.

Hypothesis	Evaluation
H1: Interest groups representing business interests (firms and sectional groups) are more likely to employ an economic frame, whereas cause groups are more likely to employ a public frame.	Partially supported. Note: no significant coefficients for sectional groups.
H2.1: Membership-based interest organisations (such as European, national and regional level actors) are more likely to employ a public frame than an economic frame. H2.2: Individual level actors are equally likely to employ economic and public frames because they are not constrained by membership.	Not supported.
H3: Firms are more likely to employ a public frame when the issue salience for stakeholders is high and more likely to employ an economic frame when the issue salience for stakeholders is low.	Not supported.

5 CONCLUDING REMARKS

Motivated by the lack of scholarship on policy framing as an EU lobbying strategy, this thesis aimed to investigate and understand the frames stakeholders employ while attempting to influence the formulation of policies using the new feedback mechanism introduced by the EC in 2016 as part of an ambitious reform of the EU Better Regulation policy. I built the theoretical argument bridging two branches of scholarship – EU lobbying strategies and framing studies – and focused on two of the most prominent schools of thought in the literature on EU lobbying and policymaking: one that emphasises the role of actor characteristics in shaping lobbying strategies and by consequence the choice of framing and the other highlighting the importance of policy context. I tested the argument using a multi-methodological approach, combining STM as an empirical strategy to identify the policy frames in the feedback texts associated with ten legislative proposals and multilevel logistic regression analysis to explain stakeholders’ frame choice and test for the cross-level interaction effect of public salience. The feedback texts associated with the ten legislative proposals were collected from the ‘Have your say’ portal at the EC webpage and gathered together with data on stakeholder and proposal level for each of the participating stakeholders in the original dataset. The data sources for the stakeholder level data were the EU Transparency Register, Lobbyfacts database and stakeholders’ webpages.

The descriptive analyses showed that overall, there was a clear majority of sectional groups submitting feedback, whereas cause groups and firms submitted almost the same amount of feedback. Similarly, the dataset’s frequency distribution across the different organisational formats showed a more balanced distribution with a slight dominance of national actors and the fewest for regional level actors. Furthermore, the analyses showed that most firms and sectional groups employed economic frames and citizens and cause groups employed public frames. However, across all actor types, a proportion of the opposite frame existed. For the differences in frame choice across the organisational format, primarily individual, national and European level actors used economic frames, whereas regional level actors and the ‘Others’ category, which to a great extent consisted of citizens, used more public than economic frames.

The explanatory analysis and evaluation of the hypotheses found further evidence that cause groups and, in extension to previous findings in the literature on framing, citizens are more likely to employ a public frame. Opposite findings became visible for sectional groups and firms, which were more inclined to use an economic frame than a public one, and I concluded

that stakeholders act as they are expected to when submitting feedback under public review. However, the effect was only statistically significant for cause groups, firms and citizens, and not for sectional groups. Furthermore, the analyses did not find significant results for the relationship between interest groups' organisational format and frame choice, indicating that membership constraints and the multi-layered structure of interest groups do not determine whether a stakeholder employs an economic or a public frame. Finally, the analyses did not find the expected and hypothesised cross-level relationship between the level of public salience and firms' public frame choice to be supported. In contrast, the predicted probabilities and regression results showed that firms are less likely to employ a public frame when public salience is high.

5.1 Limitations

The findings of this thesis have to be seen in light of some limitations. First, the results presented in this analysis are limited to the universe that has been tested, that is, the ten legislative proposals and the stakeholders that have submitted feedback associated with the proposals. A common challenge when performing statistical methods is an insufficient sample size. This thesis had a sample size of 1143 stakeholders, which is not very low but not very high either. A common rule of thumb when conducting statistical methods is that the larger the sample size, the more representative the data is, and consequently, the more precise the results will be. However, based on available time and resources, ten legislative proposals were determined as a feasible sample to collect data for at the stakeholder level. In continuation of this, it is also important to mention that the dataset in this thesis, by a large, rests upon my own human-coding of legislative proposal-level and stakeholder-level variables.

Secondly, the methodological choices were constrained by time and resources. Most of the methodological limitations of the thesis have been discussed in the research design. However, a few considerations are essential to stress for the topic modelling algorithm. Prior to running the STM, specific pre-processing steps must be taken, which involve the removal of words from the text corpus. Stop words are typical words removed from a text corpus but are also not unproblematic to remove from the corpus uncritically. Some steps were taken to prevent critical words was taken out of the corpus. For example, the common stop word 'it' was not removed because it easily could be confused with the abbreviation 'IT'. However, what could be more problematic is the general removal of topic-specific words that could guide the number of topics

visible in the STM output. Removing specific words relies upon human interaction, which can be a challenge because humans do not necessarily have the complete picture, and the risk of removing words that should not have been removed increases. Because the coding of the dependent variables was decided based on the STM model output and topic proportions, consequential errors could occur and affect the results in the analyses.

5.2 Implications for further research

This thesis studied stakeholders' framing strategies in the context of one key EU institution, the European Commission, and treated it as a unitary actor by focusing on the new opportunity for stakeholder involvement in policymaking proposed by the feedback mechanism. However, the finding in this thesis is a result of the policy issues at hand and methodological and theoretical decisions. Based on this, I have two general recommendations for future research in the field of framing in EU lobbying and policymaking. First, for the methodological and data decisions, future studies of framing in the EU context could benefit from increasing the sample size and including more policy initiatives. This thesis included ten legislative proposals and collected original data at the stakeholder level, which is a very time-consuming effort. However, future studies could benefit from a larger data sample and include more variables on the proposal level which instead could lead to generalisations across the legislative process and potentially identify new patterns of stakeholder engagement across policy areas.

Finally, focusing on the theoretical framework, future framing studies in the EU context could benefit from making more use of the school of thought emphasising institutional characteristics. I decided to focus on the feedback related to legislative proposals instead of roadmaps and inception impact assessments because the legislative proposals are more elaborate than earlier stages in policymaking. The feedback at this stage in policymaking is meant to feed into the legislative debate summarised and presented to the EP and the Council. In line with this, future research could benefit from comparing framing efforts across different stages in policymaking. As the literature review showed, early lobbying efforts at the initial stages of policymaking are considered the most effective and attractive timing and venue for successful lobbying, which could mean that they attract a more diverse set of actors in submitting feedback. Therefore, future framing studies in the EU context could benefit from comparing framing efforts across earlier and different stages in EU policymaking.

BIBLIOGRAPHY

- Banks, George C., Haley M. Woznyj, Ryan S. Wesslen, and Roxanne L. Ross. 2018. "A Review of Best Practice Recommendations for Text Analysis in R (and a User-Friendly App)." *Journal of Business and Psychology* 33 (4): 445-459. <https://doi.org/10.1007/s10869-017-9528-3>.
- Baroni, Laura, Brendan J. Carroll, Adam William Chalmers, Luz Maria Muñoz Marquez, and Anne Rasmussen. 2014. "Defining and classifying interest groups." *Interest Groups & Advocacy* 3 (2): 141-159. <https://doi.org/10.1057/iga.2014.9>.
- Baumgartner, Frank R., Jeffrey M Berry, Marie Hojnacki, Beth L Leech, and David C Kimball. 2009. *Lobbying and policy change*. Chicago: University of Chicago Press.
- Baumgartner, Frank R., and Christine Mahoney. 2008. "Forum Section: The Two Faces of Framing." *European Union Politics* 9 (3): 435-449. <https://doi.org/10.1177/1465116508093492>.
- Benoit, Kenneth. 2020. "Text as Data: An Overview." In *Handbook of Research Methods in Political Science and International Relations.*, edited by Luigi Curini and Robert Franzese, 461-497. Thousand Oaks: Sage.
- Berkhout, Joost. 2013. "Why interest organizations do what they do: Assessing the explanatory potential of 'exchange' approaches." *Interest Groups & Advocacy* 2 (2): 227-250. <https://doi.org/10.1057/iga.2013.6>.
- Beyers, Jan. 2008. "Policy Issues, Organisational Format and the Political Strategies of Interest Organisations." *West European Politics* 31 (6): 1188-1211. <https://doi.org/10.1080/01402380802372654>.
- Beyers, Jan, Andreas Dür, and Arndt Wonka. 2015. "Conceptualizing and measuring the political salience of EU legislative processes."
- Beyers, Jan, and Bart Kerremans. 2007. "Critical resource dependencies and the Europeanization of domestic interest groups." *Journal of European Public Policy* 14 (3): 460-481. <https://doi.org/10.1080/13501760701243822>.
- Binderkrantz, Anne Skorkjær. 2003. "Strategies of Influence: How Interest Organizations React to Changes in Parliamentary Influence and Activity1." 287-305. <https://doi.org/10.1111/j.1467-9477.2003.00090.x>.
- . 2005. "Interest Group Strategies: Navigating Between Privileged Access and Strategies of Pressure." *Political Studies* 53 (4): 694-715. <https://doi.org/10.1111/j.1467-9248.2005.00552.x>.
- . 2008. "Different Groups, Different Strategies: How Interest Groups Pursue Their Political Ambitions." *Scandinavian Political Studies* 31 (2): 173-200. <https://doi.org/10.1111/j.1467-9477.2008.00201.x>.

- . 2020. "Interest group framing in Denmark and the UK: membership representation or public appeal?" *Journal of European Public Policy* 27 (4): 569-589. <https://doi.org/10.1080/13501763.2019.1599041>.
- Binderkrantz, Anne Skorkjær, Darren R. Halphin, and Helene Helboe Pedersen. 2020. "From Policy Interest to Media Appearance: Interest Group Activity and Media Bias." *The International Journal of Press/Politics* 25 (4): 712-731. <https://doi.org/10.1177/1940161220916710>.
- Blei, David M., and John D. Lafferty. 2007. "A correlated topic model of Science." *The Annals of Applied Statistics* 1 (1). <https://doi.org/10.1214/07-aos114>.
- Blei, David M., Andrew Y. Ng, and Michael I. Jordan. 2003. "Latent Dirichlet Allocation." *Journal of Machine Learning Research* 3: 993-1022.
- Boräng, Frida, and Daniel Naurin. 2015. "'Try to see it my way!' Frame congruence between lobbyists and European Commission officials." *Journal of European Public Policy* 22 (4): 499-515. <https://doi.org/10.1080/13501763.2015.1008555>.
- Bouwen, Pieter. 2002. "Corporate lobbying in the European Union: the logic of access." *Journal of European Public Policy* 9 (3): 365-390. <https://doi.org/10.1080/13501760210138796>.
- . 2004. "Exchanging access goods for access: A comparative study of business lobbying in the European Union institutions." *European Journal of Political Research* 43: 337-369. <https://doi.org/10.1111/j.1475-6765.2004.00157.x>.
- . 2009. "The European Commission." In *Lobbying the European Union: Institutions, Actors, and Issues*, edited by David Coen and Jeremy Richardson, 19-38. Oxford: Oxford University Press.
- Bruycker, Iskander De. 2017. "Framing and advocacy: a research agenda for interest group studies." *Journal of European Public Policy* 24 (5): 775-787. <https://doi.org/10.1080/13501763.2016.1149208>.
- Bunea, Adriana. 2013. "Issues, preferences and ties: determinants of interest groups' preference attainment in the EU environmental policy." *Journal of European Public Policy* 20 (4): 552-570. <https://doi.org/10.1080/13501763.2012.726467>.
- . 2014. "Explaining Interest Groups' Articulation of Policy Preferences in the European Commission's Open Consultations: An Analysis of the Environmental Policy Area." *JCMS: Journal of Common Market Studies* 52 (6): 1224-1241. <https://doi.org/10.1111/jcms.12151>.
- . 2018. "Regulating European Union lobbying: in whose interest?" *Journal of European Public Policy* 26 (11): 1579-1599. <https://doi.org/10.1080/13501763.2018.1539115>.
- . 2021. *Stakeholder participation and plurality of inputs in the EU feedback mechanisms: the role of policy stages and policy domains*. Paper presented at ECPR General Conference, August 30th – September 3rd.

- Bunea, Adriana, and Raimondas Ibenskas. 2015. "Quantitative text analysis and the study of EU lobbying and interest groups." *European Union Politics* 16 (3): 429-455. <https://doi.org/10.1177/1465116515577821>.
- Bunea, Adriana, and Robert Thomson. 2015. "Consultations with Interest Groups and the Empowerment of Executives: Evidence from the European Union." *Governance* 28 (4): 517-531.
- Chalmers, Adam W. 2020. "Unity and conflict: Explaining financial industry lobbying success in European Union public consultations." *Regulation & Governance* 14 (3): 391-408. <https://doi.org/10.1111/rego.12231>.
- Chandelier, Marie, Agnès Steuckardt, Raphaël Mathevet, Sascha Diwersy, and Olivier Gimenez. 2018. "Content analysis of newspaper coverage of wolf recolonization in France using structural topic modeling." *Biological Conservation* 220: 254-261. <https://doi.org/10.1016/j.biocon.2018.01.029>.
- Chong, Dennis, and James N. Druckman. 2007. "Framing Theory." *Annual Review of Political Science* 10 (1): 103-126. <https://doi.org/10.1146/annurev.polisci.10.072805.103054>.
- Coen, David, and Alexander Katsaitis. 2013. "Chameleon pluralism in the EU: an empirical study of the European Commission interest group density and diversity across policy domains." *Journal of European Public Policy* 20 (8): 1104-1119. <https://doi.org/10.1080/13501763.2013.781785>.
- Coen, David, and Jeremy Richardson. 2009. "Learning to Lobby the European Union: 20 Years of Change." In *Lobbying the European Union: Institutions, Actors, and Issues*, edited by David Coen and Jeremy Richardson, 3-15. Oxford: Oxford University Press.
- Croteau, David, and Lyndsi Hicks. 2003. "Coalition framing and the challenge of a consonant frame pyramid: The case of a collaborative response to homelessness." *Social problems* 50 (2): 251-272.
- Daviter, Falk. 2007. "Policy Framing in the European Union." *Journal of European Public Policy* 14 (4): 654-666. <https://doi.org/10.1080/13501760701314474>.
- . 2009. "Schattschneider in Brussels: How Policy Conflict Reshaped the Biotechnology Agenda in the European Union." *West European Politics* 32 (6): 1118-1139. <https://doi.org/10.1080/01402380903230595>.
- . 2011. *Policy Framing in the European Union*. Hampshire: Palgrave Macmillan.
- de Vreese, Claes H. 2005. "News framing." *Information Design Journal* 13 (1): 51-62. <https://doi.org/10.1075/idjdd.13.1.06vre>.
- de Vries, Erik, Martijn Schoonvelde, and Gijs Schumacher. 2018. "No Longer Lost in Translation: Evidence that Google Translate Works for Comparative Bag-of-Words Text Applications." *Political Analysis* 26 (4): 417-430. <https://doi.org/10.1017/pan.2018.26>.

- Druckman, James N. 2004. "Political Preference Formation: Competition, Deliberation, and the (Ir)relevance of Framing Effects." *American Political Science Review* 98 (4): 671-686.
- Dür, Andreas. 2008. "Measuring Interest Group Influence in the EU." *European Union Politics* 9 (4): 559-576. <https://doi.org/10.1177/1465116508095151>.
- Dür, Andreas, Patrick Bernhagen, and David Marshall. 2015. "Interest Group Success in the European Union." *Comparative Political Studies* 48 (8): 951-983. <https://doi.org/10.1177/0010414014565890>.
- Dür, Andreas, and Dirk de Bièvre. 2008. "The question of interest group influence." *Journal of Public Policy* 27 (1): 1-12. <https://doi.org/10.1017/S0143814X07000591>.
- Dür, Andreas, and Gemma Mateo. 2012. "Who lobbies the European Union? National interest groups in a multilevel polity." *Journal of European Public Policy* 19 (7): 969-987. <https://doi.org/10.1080/13501763.2012.672103>.
- . 2013. "Gaining access or going public? Interest group strategies in five European countries." *European Journal of Political Research* 52 (5): 660-686. <https://doi.org/10.1111/1475-6765.12012>.
- . 2016. *Insiders versus Outsiders: Interest Group Politics in Multilevel Europe*. Oxford University Press.
- Eising, Rainer. 2007. "The access of business interests to EU institutions: towards élite pluralism?" *Journal of European Public Policy* 14 (3): 384-403. <https://doi.org/10.1080/13501760701243772>.
- . 2008. "Clientelism, Committees, Pluralism and Protests in the European Union: Matching Patterns?" *West European Politics* 31 (6): 1166-1187. <https://doi.org/10.1080/01402380802372647>.
- . 2009. *The political economy of state-business relations in Europe: Interest mediation, capitalism and EU policy making*. London: Routledge.
- Eising, Rainer, Daniel Rasch, and Patrycja Rozbicka. 2015. "Institutions, policies, and arguments: context and strategy in EU policy framing." *Journal of European Public Policy* 22 (4): 516-533. <https://doi.org/10.1080/13501763.2015.1008552>.
- . 2017. "National interest organisations in EU policy-making." *West European Politics* 40 (5): 939-956. <https://doi.org/10.1080/01402382.2017.1320174>.
- Entman, Robert M. 1993. "Framing: Toward Clarification of a Fractured Paradigm." *Journal of Communications* 43 (4): 51-58. <https://doi.org/https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>.
- European Commission. 2017. "Better Regulation «Toolbox»." <https://ec.europa.eu/info/sites/default/files/better-regulation-toolbox.pdf>.
- Farrell, J. 2016. "Corporate funding and ideological polarization about climate change." *Proc Natl Acad Sci U S A* 113 (1): 92-7.

- <https://doi.org/10.1073/pnas.1509433112>.
- <https://www.ncbi.nlm.nih.gov/pubmed/26598653>.
- Finch, W. Holmes, Jocelyn E. Bolin, and Ken Kelley. 2019. *Multilevel modeling using R*. New York: CRC Press.
- Gerring, John. 2012. *Social science methodology: A unified framework*. Cambridge University Press.
- Goffman, E. . 1974. *Frame Analysis: An Essay of the Organization of Experience*. New York: Harper and Row.
- Greenwood, Justin, and Joanna Dreger. 2013. "The Transparency Register: A European vanguard of strong lobby regulation?" *Interest Groups & Advocacy* 2 (2): 139-162. <https://doi.org/10.1057/iga.2013.3>.
- Grimmer, Justin. 2010. "A Bayesian Hierarchical Topic Model for Political Texts: Measuring Expressed Agendas in Senate Press Releases." *Political Analysis* 18 (1): 1-35. <https://doi.org/https://doi.org/10.1093/pan/mpp034>.
- Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21 (3): 267-297. <https://doi.org/10.1093/pan/mps028>.
- Jensen, Carsten, and Henrik Bech Seeberg. 2020. "On the enemy's turf: exploring the link between macro- and micro-framing in interest group communication." *Journal of European Public Policy* 27 (7): 1054-1073. <https://doi.org/10.1080/13501763.2019.1659845>.
- Kellstedt, Paul M., and Guy D. Whitten. 2018. *The Fundamentals of Political Science Research*. Cambridge: Cambridge University Press.
- Kiousis, Spiro. 2005. "Compelling arguments and attitude strength: Exploring the impact of second-level agenda setting on public opinion of presidential candidate images." *Harvard International Journal of Press/Politics* 10 (2): 3-27.
- Klüver, Heike. 2013. *Lobbying in the European Union Interest Groups, Lobbying Coalitions, and Policy Change*. Oxford: Oxford University Press.
- Klüver, Heike, Caelesta Braun, and Jan Beyers. 2015. "Legislative lobbying in context: towards a conceptual framework of interest group lobbying in the European Union." *Journal of European Public Policy* 22 (4): 447-461. <https://doi.org/10.1080/13501763.2015.1008792>.
- Klüver, Heike, and Christine Mahoney. 2015. "Measuring interest group framing strategies in public policy debates." *Journal of Public Policy* 35 (2): 223-244. <https://doi.org/10.1017/s0143814x14000294>.
- Klüver, Heike, Christine Mahoney, and Marc Opper. 2015. "Framing in context: how interest groups employ framing to lobby the European Commission." *Journal of European Public Policy* 22 (4): 481-498. <https://doi.org/10.1080/13501763.2015.1008550>.

- Lecheler, Sophie, Claes de Vreese, and Rune Slothuus. 2009. "Issue Importance as a Moderator of Framing Effects." *Communication Research* 36 (3): 400-425. <https://doi.org/10.1177/0093650209333028>.
- Lowery, David. 2007. "Why Do Organized Interests Lobby? A Multi-Goal, Multi-Context Theory of Lobbying." *Polity* 39 (1): 29-54. <https://doi.org/https://doi.org/10.1057/palgrave.polity.2300077>.
- Lowery, David, Frank R. Baumgartner, Joost Berkhout, Jeffrey M. Berry, Darren Halpin, Marie Hojnacki, Heike Klüver, Beate Kohler-Koch, Jeremy Richardson, and Kay Lehman Schlozman. 2015. "Images of an Unbiased Interest System." *Journal of European Public Policy* 22 (8): 1212-1231. <https://doi.org/10.1080/13501763.2015.1049197>.
- Lowi, Theodore J. 1964. "American Business, Public Policy, Case Studies, and Political Theory." *World Politics* 16 (4): 177-181.
- Lucas, Christopher, Richard A. Nielsen, Margaret E. Roberts, Brandon M. Stewart, Alex Storer, and Dustin Tingley. 2015. "Computer-Assisted Text Analysis for Comparative Politics." *Political Analysis* 23 (2): 254-277. <https://doi.org/10.1093/pan/mpu019>.
- Mahoney, Christine. 2007. "Lobbying success in the United States and the European Union." *Journal of Public Policy* 27 (1): 35-56.
- . 2008. *Brussels versus the beltway: Advocacy in the United States and the European Union*. Washington DC: Georgetown University Press.
- Mazey, Sonia, and Jeremy Richardson. 2015. "Shooting where the ducks are: EU lobbying and institutionalized promiscuity." In *European Union*, 419-444. Routledge.
- Mehmetoglu, Mehmet, and Matthias Mittner. 2020. *Innføring i R for statistiske dataanalyser*. Oslo: Universitetsforlaget.
- Milner, Helen V. , and Dustin Tingley. 2015. *Sailing the Water's Edge: The Domestic Politics of American Foreign Policy* New Jersey: Princeton University Press.
- Mishler, Alan, Erin Smith Crabb, Susannah Paletz, Brook Hefright, and Ewa Golonka. 2015. "Using Structural Topic Modeling to Detect Events and Cluster Twitter Users in the Ukrainian Crisis." In *Communications in Computer and Information Science*, edited by Phoebe Chen Simone Diniz Junqueira Barbosa, Alfredo Cuzzocrea, Xiaoyong Du, Joaquim Filipe, Orhun Kara, Igor Kotenko, Krishna M. Sivalingam, Dominik Ślęzak, Takashi Washio and Xiaokang Yang. Switzerland: Springer.
- Rasch, Daniel. 2018. *Lobbying Success in the European Union: The Role of Information and Frames* New York: Routledge.
- Rasmussen, Anne, Brendan J. Carroll, and David Lowery. 2014. "Representatives of the public? Public opinion and interest group activity." *European Journal of Political Research* 53 (2): 250-268. <https://doi.org/10.1111/1475-6765.12036>.

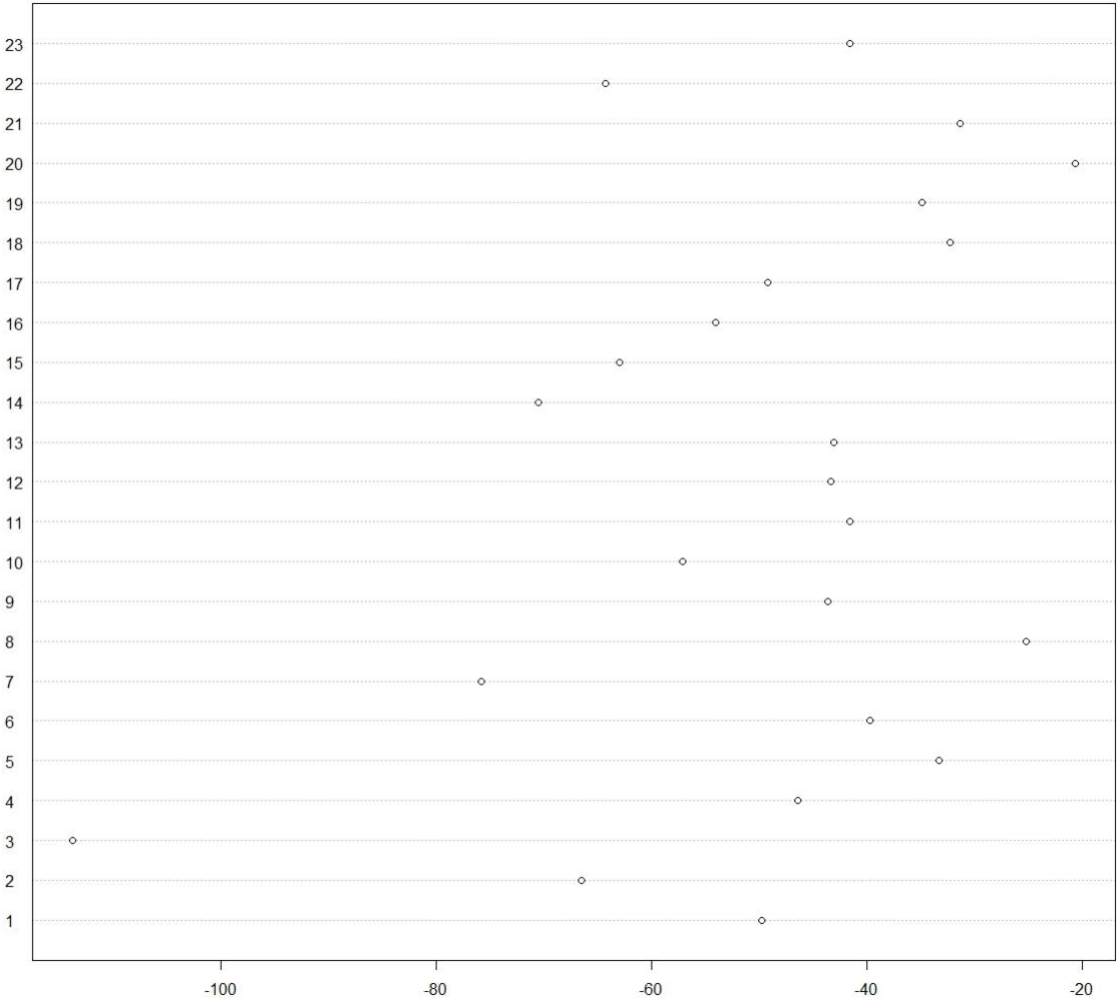
- Rhinard, Mark. 2010. *Framing Europe: The Policy Shaping Strategies of the European Commission*. Vol. 3. Dordrecht: Martinus Nijhoff Publishers.
- Riker, William H. 1986. *The art of political manipulation*. Vol. 587. Yale University Press.
- Roberts, Margaret E., Brandon M. Stewart, and Dustin Tingley. 2019. "stm: R Package for Structural Topic Models." *Journal of Statistical Software* 91 (2): 1-40. <https://doi.org/10.18637/jss.v091.i02>.
- Roberts, Margaret E., Brandon M. Stewart, Dustin Tingley, Christopher Lucas, Jetson Leder-Luis, Shana Kushner Gadarian, Bethany Albertson, and David G. Rand. 2014. "Structural Topic Models for Open-Ended Survey Responses." *American Journal of Political Science* 58 (4): 1064-1082. <https://doi.org/10.1111/ajps.12103>.
- Schattschneider, Elmer Eric. 1975. *The semisovereign people: A realist's view of democracy in America*. Wadsworth Publishing Company.
- Stelmach, Greg, and Hilary Boudet. 2021. "Using Structural Topic Modeling to Explore the Role of Framing in Shaping the Debate on Liquefied Natural Gas Terminals in Oregon." *American Behavioral Scientist*. <https://doi.org/10.1177/00027642211056268>.
- Stone Sweet, Alec, Wayne Sandholtz, and Neil Fligstein, eds. 2001. *The Institutionalization of Europe*. Oxford: Oxford University Press.
- Tatham, Michaël. 2012. "You do what you have to do? Salience and territorial interest representation in EU environmental affairs." *European Union Politics* 13 (3): 434-450.
- Tvinnereim, Endre, Kjersti Fløttum, Øyvind Gjerstad, Mikael Poul Johannesson, and Åsta Dyrnes Nordø. 2017. "Citizens' preferences for tackling climate change. Quantitative and qualitative analyses of their freely formulated solutions." *Global Environmental Change* 46: 34-41. <https://doi.org/10.1016/j.gloenvcha.2017.06.005>.
- Vliegthart, Rens, and Liesbet van Zoonen. 2011. "Power to the frame: Bringing sociology back to frame analysis." *European Journal of Communication* 26 (2): 101-115. <https://doi.org/10.1177/0267323111404838>. <https://journals.sagepub.com/doi/abs/10.1177/0267323111404838>.
- Weiler, Florian, and Matthias Brändli. 2015. "Inside versus outside lobbying: How the institutional framework shapes the lobbying behaviour of interest groups." *European Journal of Political Research* 54 (4): 745-766. <https://doi.org/10.1111/1475-6765.12106>.
- Ylä-Anttila, Tuukka, Veikko Eranti, and Anna Kukkonen. 2021. "Topic modeling for frame analysis: A study of media debates on climate change in India and USA." *Global Media and Communication* 18 (1): 91-112. <https://doi.org/10.1177/17427665211023984>.

6 APPENDIX

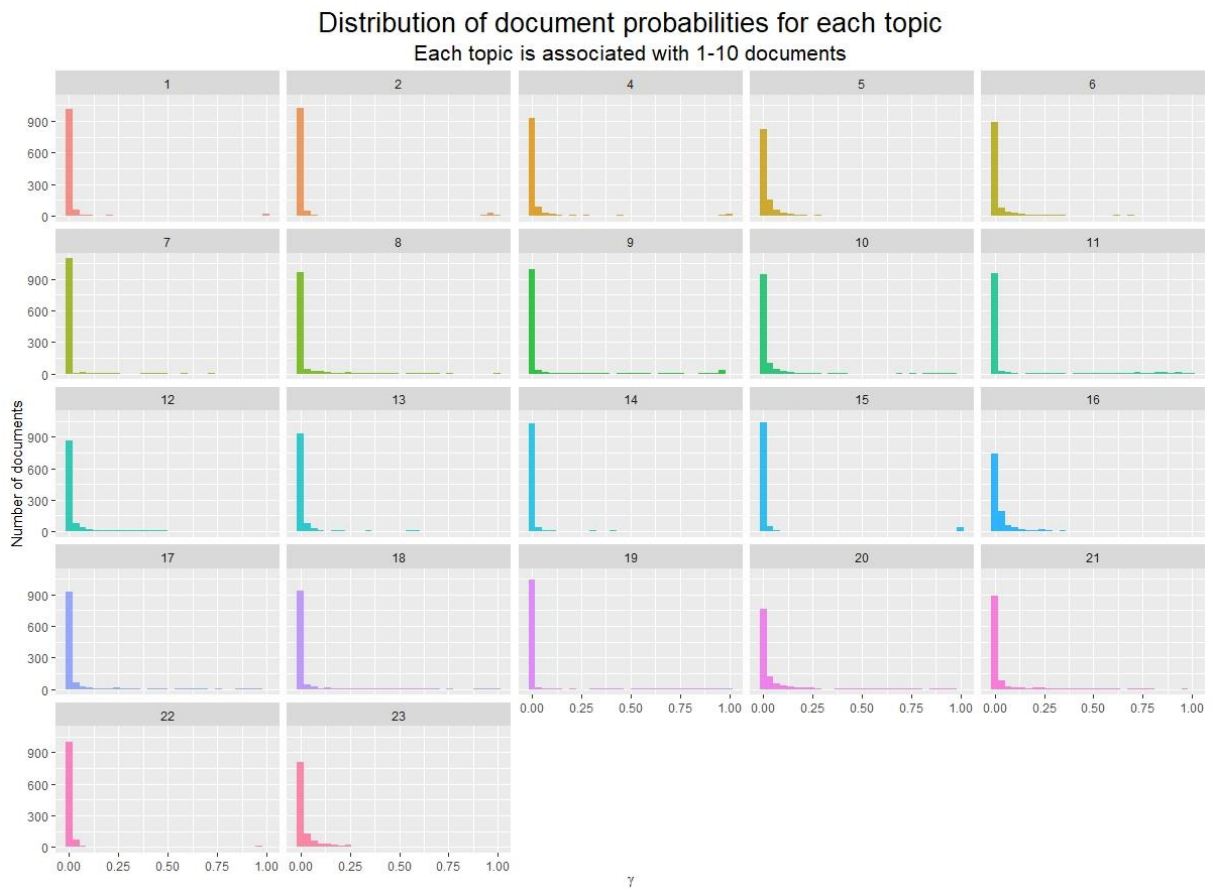
Appendix A. Overview of the official names of the legislative proposals.

Abbreviated name of the legislative proposal	Official name of the legislative proposal
EU renewable energy rules – review	Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652
European climate law – achieving climate neutrality by 2050	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law)
European Green Deal – Just Transition Fund	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the Just Transition Fund
Batteries – modernising EU rules	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020
Adequate minimum wages in the EU	Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on adequate minimum wages in the European Union
Digital Services Act package – ex ante regulatory instrument of very large online platforms acting as gatekeepers	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on contestable and fair markets in the digital sector (Digital Markets Act)
Towards more sustainable fishing in the EU – state of play and orientations for 2020	COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Towards more sustainable fishing in the EU: state of play and orientations for 2022
Asylum & migration – unified approach to implementing EU policies	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on asylum and migration management and amending Council Directive (EC) 2003/109 and the proposed Regulation (EU) XXX/XXX [Asylum and Migration Fund]
Trade & investment – addressing distortions caused by foreign subsidies	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on foreign subsidies distorting the internal market
A European Year of Rail 2021 – proposal	Proposal for a DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a European Year of Rail (2021)

Appendix B. Semantic coherence for 23 topic model. Note: The numbers on the y axis are the id assigned to the different topics.

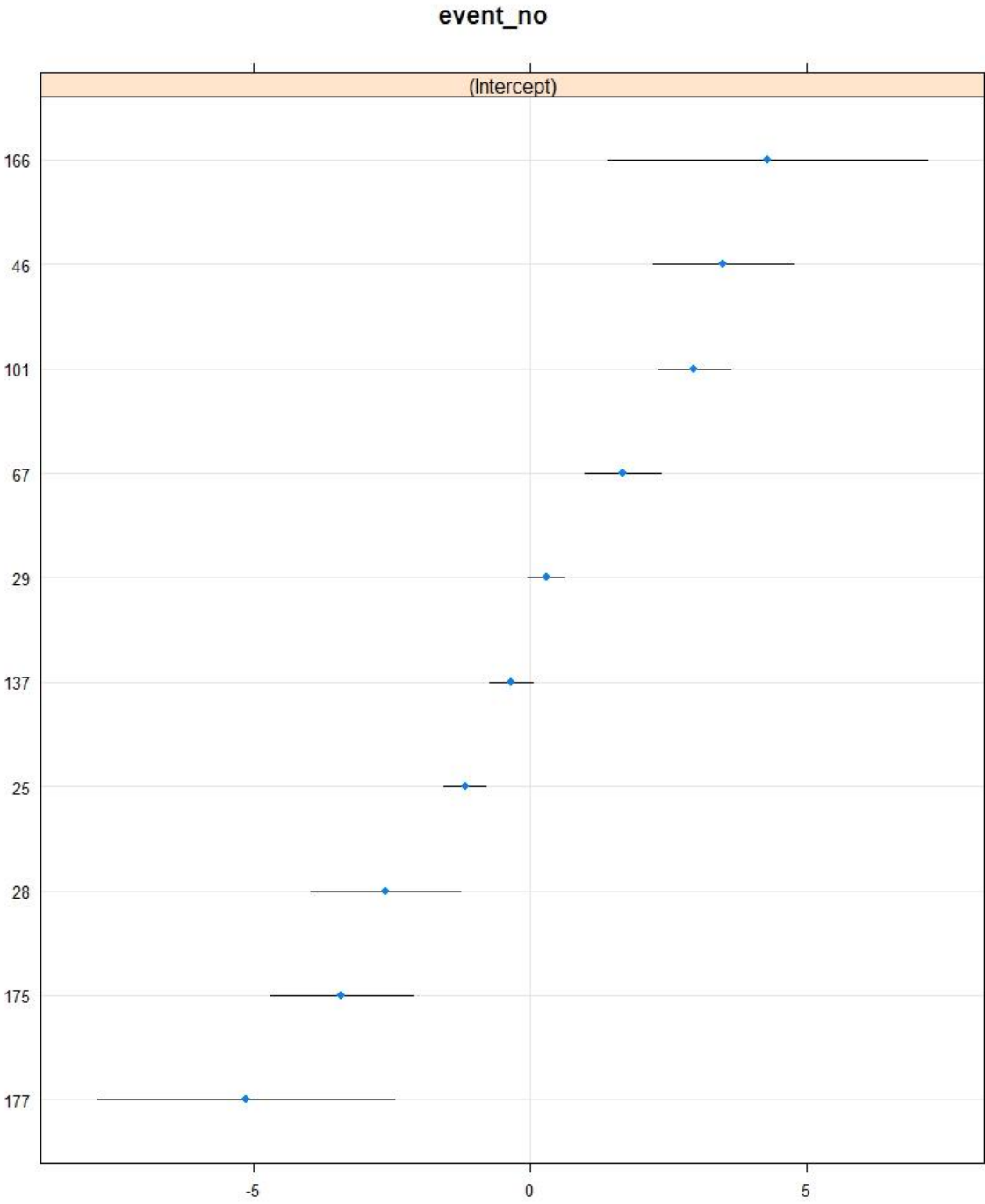


Appendix C. Distribution of document probabilities for each thematic frame estimated by the gamma.



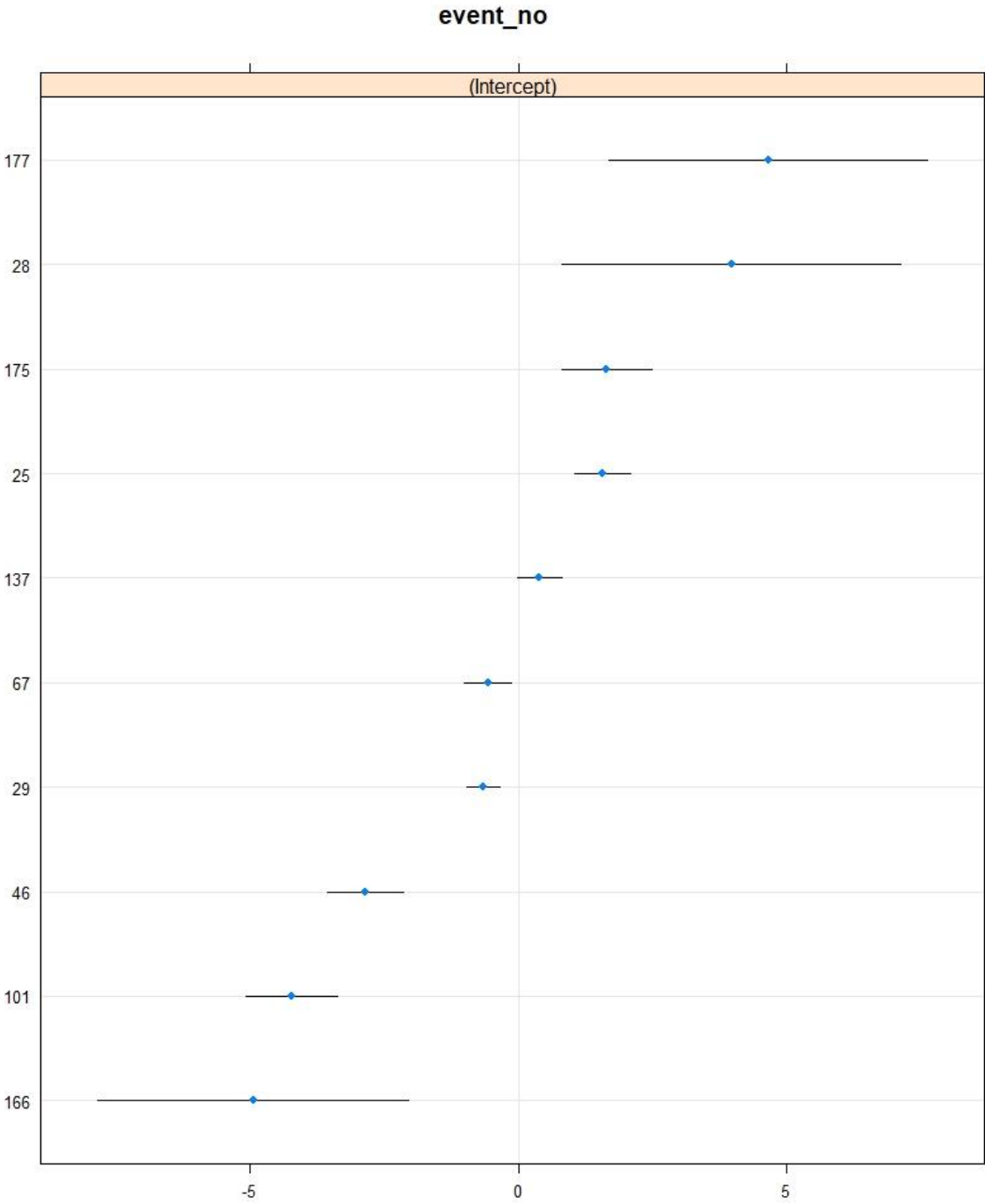
Appendix D. Random effects with error bars on legislative proposal level for economic frame.

Note: The numbers on the y axis are the id assigned to the different legislative proposals.



Appendix E. Random effects with error bars on legislative proposal level for public frame.

Note: the numbers on the y axis are the id assigned to the different legislative proposals.



Appendix F. VIF tests

Variable	VIF values			
	Economic frame	Economic frame	Public frame	Public frame
<i>Interest type represented</i>	3.312508	1.602460	3.619921	1.711538
<i>Organisational format</i>	1.431950	1.470237	1.473884	1.513953
<i>Public salience</i>	1.230938	1.115125	1.170999	1.099725
<i>Individual salience</i>	1.109423	1.155369	1.104613	1.144672
<i>Policy area</i>	1.113651	1.116016	1.092019	1.099744
<i>Brussels office</i>	1.533364	1.503458	1.407132	1.394719
<i>Staff size</i>	1.161902	1.153501	1.144411	1.135436
<i>Public salience x interest type</i>	3.015742		3.266078	