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The Internationalization of European Financial Networks: A Quantitative Text Analysis of EU Consultation Responses

Scott James
King's College London
scott.james@kcl.ac.uk

Stefano Pagliari
City, University of London
stefano.pagliari.1@city.ac.uk

Kevin L. Young
University of
Massachusetts Amherst
keviny@umass.edu

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Abstract: Regulatory initiatives are frequently shaped by the ability of the financial industry to build alliances across the wider business community. Yet comparative and international political economy scholarship remains divided over how to explain the resulting networks of financial lobbying. Using quantitative text analysis of 1300 responses to EU financial regulatory consultations between 2010 and 2018, we map patterns of lobbying coordination based on co-signing and text re-use in consultation responses for the first time. This unique dataset is used to analyse hitherto hidden patterns of domestic and cross-border coordination by financial organizations within and between European countries. We find that while distinctive national lobbying networks persist at the country level, the internationalization of financial actors is statistically associated with the formation of coordination ties with foreign financial actors. This suggests that European financial integration has facilitated the emergence of new cross-border alliances which complement – rather than substitute for – existing domestic financial interest coalitions. We argue that the text-as-data approach employed here makes an important new contribution to scholarship on business power and the political economy of Europe.

Keywords Finance, networks, lobbying, text analysis, internationalization, European Union

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1. Introduction

The political power of financial firms is the subject of much scholarly research (Culpepper 2015; James 2018; Young 2015; Young and Pagliari 2017). Studies have highlighted how financial resources, technical expertise and their structural position in the economy allow financial firms and their associations to exercise significant influence over the content of financial regulatory policies (Bell and Hindmoor 2015; Howarth and Quaglia 2013; Quaglia and Spendzharova 2017). Financial actors seeking to influence the content of financial regulatory policies do not operate in a vacuum, however. Recent work has detailed how the capacity of banks to influence financial regulation and other policies is often influenced by their capacity to leverage influence by building alliances with the wider business community, and by the presence of countervailing coalitions from civil society or other actors (Chalmers 2018; James and Christopoulos 2018; Pagliari and Young 2014).

Competing theoretical perspectives have emerged within the literature to explain the development of financial lobbying networks. On the one hand, a comparative political economy (CPE) approach emphasizes how the distinct characteristics of national financial systems have translated into the emergence of distinct patterns of coordination within the financial industry, and between financial and non-financial actors (Hall and Soskice 2001; Zysman 1983). On the other hand, scholarship in the field of international political economy (IPE) claims that macro-level developments – such as the increasing internationalization of business activities – have eroded national varieties of financial systems and forced a reconfiguration of interest group activity (Farrell and Newman 2016; Mügge 2006; Newman and Posner 2018). This raises an important puzzle: which of these perspectives is best placed to explain patterns of financial industry lobbying?

Although there are numerous studies examining patterns of cooperation and conflict within the financial industry, and with the wider business community, these mostly focus on specific international or EU regulations (e.g. Fioretos 2010; Quaglia 2014), and on selected countries (e.g. Howarth and Quaglia 2013; James and Christopoulos 2018). Our understanding of variation in national financial lobbying networks, and how they have been impacted by broader structural developments in the economy, therefore remains limited. The key empirical challenge is to find a way to reliably map patterns of financial industry coordination within and across different countries.

To address these theoretical and empirical puzzles, this article develops a new dataset and employs novel methods to systematically map financial lobbying networks. We analyse the content of more than 8,000 written responses to 66 financial policy consultations conducted by the European Commission between 2010 and 2018. Quantitative text analysis is applied to this dataset to capture two instances of coordination: 1) financial industry groups entering formal lobbying coalitions by co-signing a single regulatory consultation response; and 2) informal forms of financial industry cooperation where groups coordinate their response through the sharing or re-use of text in consultation responses.

We use this unique dataset to map domestic and international patterns of coordination by financial industry organisations at the country-level, and then statistically test the determinants of the propensity of groups to coordinate their advocacy with the financial industry. Our key findings are twofold. First, national patterns of coordination within the financial industry, and with the wider business community display significant cross-national variation. This points to the durability of distinct national-level institutional features which continue to structure patterns of financial industry lobbying. Second, we find that the internationalization in the activities of financial firms and associations is statistically associated with the formation of coordination ties with foreign

financial actors. The article therefore suggests that the removal of national barriers in European financial systems has led to the emergence of a new set of cross-border alliances that overlap with – but have not necessarily undermined – domestic financial networks.

The structure of the paper is as follows. Section 2 reviews the literature on European financial systems and financial lobbying, while Section 3 outlines our data and methods. Next, the paper presents the results of the mapping exercise and descriptive analysis of financial industry coordination at the country level (Section 4), and the results of our statistical regression analysis at the actor-level (Section 5). Section 6 concludes by reflecting on the contribution to the wider political economy literature on business power, and directions for future research.

2. Existing Scholarship

The field of Comparative Political Economy suggests that coordination within the financial industry, and with the wider business community and public authorities, is rooted in path dependent institutional characteristics at the national level. Famously, Zysman (1983) differentiated between three main types of financial system in Europe: government-led credit-based systems (e.g. France), bank credit-based systems (e.g. Germany), and capital market-based systems (e.g. UK). In bank credit-based systems, banks represent the primary source of both short- and long-term finance to the economy; while in capital-market based systems, banks face greater competition from other financial institutions, and the issuance of debt or equity securities remain the primary source of long-term capital (Zysman 1983). While the role of the state in directly setting prices and intervening in directing the allocation of credit has largely disappeared in Europe – at the least in the way described by Zysman – the distinction between bank-based and capital market-based systems has remained durable as a way of understanding distinct ‘varieties of capitalism’ (Allen and Gale 2001; Hall and Soskice 2001).

Although this literature focuses on economic relationships, other scholars have extended these insights to the political arena, arguing that distinct financial systems generate different institutional configurations and political relationships between the state, business and finance (Story and Walter 1997). In particular, the centrality of banks as the primary source of credit is likely to produce stronger and more durable ties between the financial industry and non-financial firms in bank-based systems, as manufacturing firms have a powerful incentive to work closely with the banks in resisting regulatory initiatives that threaten to curtail this source of funding (Howarth and Quaglia 2013; Jackson and Thelen 2015). Moreover, bank-based systems have frequently given rise to extensive patterns of cross-ownership and interlocking directorates between banks and non-financial companies, which studies suggest have impacted significantly on the supply of credit and the cost of debt in countries such as Germany and Italy (Agarwal and Elston 2001; di Donata and Tiscini 2009; Mizruchi 1996). By contrast, in capital market-based systems, the relationship between financial and corporate actors remains more arms-length (Deeg 1999), as banks, firms and governments operate “in distinct spheres from which they venture forth to meet as autonomous bargaining partners’ (Zysman 1983: 70). From this perspective, we would therefore expect a clear distinction to exist between systems centred around ‘the impersonal arm’s length dealings of capital markets’ and those based on ‘the personal institutional ties of banks or lending institutions’ (Zysman 1983: 63; see Hardie et al. 2013).

The notion of durable and systematic cross-national variation in patterns of financial industry coordination has however been questioned in recent years. Deeg and Posner (2010) note that the foundation of relatively stable postwar national financial systems in Europe has been changing at an accelerating pace. For example, studies of the German financial system since the 1990s highlight

the expansion of banks' investment activities, a partial disintegration of insider-controlled corporate networks, the decline of cross-shareholdings between banks and non-financial companies, and the rise of non-banking financial institutions (Deeg and Lütz 2000; Hackethal et al. 2006). Some have argued that the expansion and deepening of the role of finance across industrialized economies has eroded the distinctiveness of national financial lobbying networks, and led to a reconfiguration of finance-business-state relations. In particular, the growth of bond markets, equity trading, and the importance of derivatives has reshaped bank business models in ways that question the traditional dichotomy between bank-based and capital market-based models (Hardie et al. 2013; Konings 2008).

A further challenge to national interest configurations stems from the reorganization of financial markets on a transnational basis. Studies suggest that the gradual removal of capital controls within Europe has contributed to the internationalisation of financial services (Mügge 2006) and the increasing foreign ownership of EU banks (Epstein 2017). Yet these changes have impacted on some economies more than others: while foreign ownership has remained stable in large countries such as France, Germany and UK, it has increased significantly in small, open economies such as Belgium, Ireland, and the Netherlands (Engelen and Konings 2010). Different scholars have theorized how the competitive dynamics unleashed by financial integration has threatened non-liberal forms of capitalism (Höpner and Schäfer 2010), pressuring them to restructure along Anglo-American practices (Konings 2008). It is argued that these economic transformations disrupted ties among finance, business, and the state that underpinned traditional European financial networks. For instance, German universal banks and Landesbanken bypassed national institutions to tap into global markets, with different banks selling their shares in domestic firms to pursue new opportunities abroad (Lapavitsas and Powell 2013).

Scholarship on EU lobbying suggests that these structural changes have had a significant impact in re-shaping political relationships between finance, business and the state. Empirical studies have documented how increasing economic integration has encouraged firms to increasingly bypass national governments, and to organise at the international and EU levels instead (Beyers and Kerremans 2007; Mügge 2006). Besides broadening the scope of lobbying by corporate actors, we have also seen the emergence of new coalitions within the business community. For instance, studies point to the critical role of large internationally-oriented financial institutions in lobbying around key EU regulatory initiatives, and joining transnational coalitions of financial interests, business actors, and like-minded regulators in promoting greater EU regulatory harmonization (Mügge 2006, 2013; Posner 2007).

From an International Political Economy perspective, theories of 'new interdependence' (Farrell and Newman 2015, 2016; Newman and Posner 2018) and 'transnational pluralism' (Cerny 2010) suggest that transnational alliances have important transformative effects. It is claimed that over time cross-national alliances can reshape long-term political relationships among domestic groups and constituencies. For example, a cross-national coalition of public and private actors was crucial in generating support for international accounting standards and settling transatlantic regulatory disputes (Farrell and Newman 2015). By contrast, other IPE scholars would argue that globalisation has not fundamentally challenged – and in some cases, has even reinforced – national diversity and the presence of distinct patterns of policymaking (see Boyer and Drache 1996, Hirst and Thompson 1999, Ruigrok and van Tulder 1996, Weiss 2003). This is echoed in more recent studies on post-crisis EU financial regulation. For instance, in their analysis of the development of Banking Union, Howarth and Quaglia (2016) demonstrate that the interests of national financial industries and bank 'champions' continues to prevail at the EU level. Similarly, the impact of Brexit on financial services resembles a traditional 'battle of the systems' amongst competing financial centres to retain lucrative business (Howarth and Quaglia 2018).

Scholarship on how the internationalization of finance has impacted on national patterns of financial industry lobbying therefore remains highly contested. To some extent, this reflects the fact that existing studies tend to focus on providing a detailed in-depth analysis of specific regulatory case studies and/or countries. What is therefore missing is a systematic account of financial interest lobbying that maps coordination across all European countries *and* across a wide range of different policy issues. The next section outlines how we address this using a new dataset and text-as-data methods.

3. Data and Methods

3.1. Consultation responses to post-crisis EU regulation

To map patterns of lobbying coordination across different European countries, we build upon an established body of literature that explores the population of groups active in a given area by analysing the letters submitted in response to policy consultations. This approach has been widely used both to map interest group activities in different policy contexts (Yackee and Yackee 2006), including at the EU level (Beyers et al. 2014; Rasmussen and Carroll 2013). For example, existing studies have analysed consultation responses to map which issues different groups lobby on (Pagliari and Young 2016), the determinants of relative levels of mobilization across different stakeholders (Rasmussen and Carroll 2013), the policy positions of different groups (Chalmers 2018), and the conditions under which they are able to influence policies (Kluver 2009; Klüver and Mahoney 2015). By contrast, this study aims to analyse cross-national patterns of financial industry coordination across a broad swathe of EU financial regulation.

We draw on new data composed of the publicly-available written responses to all EU financial policy consultations launched by the European Commission between 2010 and 2018 (a full list can be found in the Appendix, Table A.1). This dataset consists of all the responses submitted by public and private actors to regulatory proposals listed under ‘Banking and Financial Services’. This comprises 66 distinct policy consultations over the period 2010-2018, which attracted a total of 8391 comment letters from financial industry groups and associations, business groups, NGOs, research institutes, trade unions, public authorities, and individuals.

After excluding all responses from individuals, we manually coded the identity of all organizational entities that responded. To do so we built upon the analysis of the population of interest groups conducted as part of the ‘Inter-Euro Project’ Research Project which maps the EU-level interest group population across different policy areas (Beyers et al. 2014). The respondents were matched with the demographic information already coded in the Inter-Euro dataset, while the groups not included were coded using the codebook developed by the Inter-Euro researchers. Moreover, in order to provide additional demographic information regarding the organization and activities of these respondents, this manual coding was supplemented by matching these respondents with their entry in the European Union Transparency (Greenwood and Dreger 2013), as well from Bureau van Dijk’s *Orbis* database, which contains comprehensive information over 100 million public and private companies worldwide.

Overall, we coded 6369 submitted by 1300 unique respondents. Respondents were coded based on the country in which the respondent’s headquarters are located, the type of respondent (business firms and associations, trade unions, NGOs, public authorities, etc), and the economic sector of business respondents (differentiating between financial or non-financial firms and activities). As expected, the majority of submissions come from the largest economies in Europe,

namely the UK, Belgium (headquarters of most pan-European business associations), Germany and France, followed by Italy and the Netherlands. In line with the ‘business bias’ identified in the literature (Rasmussen and Carroll 2013), business groups submitted the vast majority of consultation responses, followed (by some distance) by public authorities and NGOs¹ (a detailed breakdown of the respondents can be found in the Figures A.1-A.4 in the Appendix.).

3.2. Coordination as co-signing and text re-use

To map patterns of coordination amongst stakeholders, we analyze the content of these consultation responses. We suggest that coordination takes two main forms. The first relates to the explicit co-signing of a response letter by two or more organisations. This is a common lobbying strategy as groups can leverage their influence through formal collaboration by signalling that they have a shared policy position (Nelson and Yackee 2012). To identify these, we manually coded those instances when a response letter was co-signed by multiple groups (e.g. Box-Steffensmeier et al. 2013). In particular, co-signing could be identified in the letters sent by 326 distinct organizations (25.1 % of all respondents), for a total of 1192 cumulative ties among these groups.

This approach captures instances when groups to create a formal “lobbying coalitions” with the purpose of openly signalling to policymakers that a position has broad support among different groups (Nelson and Yackee 2012). However, not all instances of groups working together in their effort to lobby policymakers reach this level of formality and publicity. On the contrary, groups that are active in the same policy space often share information informally and form “communication networks” (Heaney 2014), without entering in a formal lobbying coalition.

In order to capture more informal types of coordination we extend our analysis beyond the list of signatories to the analysis of the content of the letters and we seek to identify instances of organisations using identical text in their responses to the same consultation (for a detailed discussion of this approach, see Pagliari and Young 2020). Text reuse may arise because groups choose to collaborate by sharing information with one another during the consultation process, but prefer to send separate letters. It may also originate from groups copying identical text from a third source, such as the language circulated by an association of which both groups are members, an earlier consultation response, research report or policy document. In both cases, organisations do not develop their responses independently, but instead are part of the same communication network through which information is shared.

To measure this form of coordination we deploy a quantitative text analysis approach known as ‘substring matching’. Similar to the software detecting plagiarism among different documents, this approach takes into account the sequencing of words in order to identify shared sequences of words across documents. In this way, the approach differ significantly from other quantitative text analysis approaches analysing the similarity of documents based on the analysis of the co-occurrence of words (so-called “bag of words” approaches), and it is better suited to identify instances when groups are actively cooperating rather than simply expressing similar policy positions.

¹ Respondent type was coded as: 1. Business organization, 2. Organizations representing the interests of workers, 3. Non-governmental organizations, indifferent of the domain in which they are active, 4. Institutions, defined as ‘semi-public organizations, which fulfil a public role and which do not have profit as their first goal, but which do not have the legal status of an NGO’, 5. Public authorities, 6. Mixed category.

To detect matching sequences of text in consultation responses from different groups, the text is analysed using the Smith-Waterman local alignment algorithm (Smith and Waterman 1981; see also Linder et al. 2018 and Wilkerson et al. 2015 for recent applications). Compared to other approaches, this algorithm is particularly appropriate for detecting instances of coordination among interest groups since it allows us to identify similar passages of text between two documents that are not perfectly overlapping (for a discussion, see Linder et al. 2018).

In applying this approach to identify coordination among interest groups, we follow the steps detailed in Pagliari and Young 2020. We divide each document into separate sentences and run the Smith-Waterman algorithm between all pairwise combination of sentences from the responses to the same consultation using the ‘textreus’ package in R (Mullen 2016).² This allows us to identify multiple instances of text re-use in different and non-contiguous parts of the same documents.

The presence of text reuse between two responses to the same consultation does not always reflect coordination between groups. The first important potential source of ‘false positives’ is represented by cases when different documents cite the same publicly-available consultation documents issued by the European Commission (e.g. responses which copy and paste the question that is being addressed). To minimise these, we re-run the algorithm between the sentences identified as potential text-reuse and all the official documents published by the EU at the time of the consultation (e.g. the consultation document, plus any available translation in other languages, the press release, and any additional background documents). For each potential match, we identify the amount of text which is overlapping with a Commission document and exclude those above a certain level.³ The second source of false positives arises from the frequent use of ‘boilerplate language’, i.e. commonly used phrases and sentences. Building upon the approach adopted by Wilkerson et al. (2015), we filter this out by removing sentences that appear repeatedly in a large number (>100) of documents.

To increase confidence that we are capturing meaningful coordination between organisations, we exclude sentences where the amount of re-used text in each sentence is limited (less than 20 consecutive words or the equivalent similarity score in the case of imperfect matches)⁴ and we only consider pairs of documents where the algorithm identifies instances of text re-use among the two responses in at least 10 separate sentences. Our data collection strategy identified 2347 cumulative ties connecting pairs of responses sharing significant amount of text, involving 499 distinct organizations (38.4 % of all respondents).

The type of coordination captured by the presence of text reuse among different responses to the same consultation differs from the type of coordination captured by different groups co-signing the same letter in important ways (see Pagliari and Young 2020). At the same time, scholars investigating coalitions among interest groups have acknowledged that both types of formal and informal alliances matter (Mahoney 2007). In the words of Nelson and Yackee (2012), "scholars generally agree that both formal coalitions and more informal groupings are necessary to capture the construct". As a result, as a final step, we combine instances of text re-use and co-signing to

² Since this analysis is computationally demanding, we first filter those pairs of sentences in the corpus that are most likely to contain text re-use by implementing a ‘Minhashing’ technique. This involves converting text strings to shortened numeric references (known as hashes), and then filtering out those pairs of sentences below a minimum level of similarity (see Wilkerson et al. (2015).

³ We excluded all sentences that shared at least 10 consecutive words with the Commission text (or an equivalent score generated by the Smith-Waterman algorithm), and excluded all sentences where the overlap with the Commission text was at least a third of the sentence.

⁴ Since the algorithm is calibrated to add three points for each additional word that two documents share in the same order, a score of 30 indicates a sentence with 10 shared words. We apply a high minimum SW score of 60, equivalent to 20 consecutive shared words per sentence. (See Table A.2 for examples.)

provide an overall picture of coordination between groups in their responses to EU financial regulatory consultations. We model this data as a social network where organisations (nodes) are connected if they have either submitted a co-authored response to a consultation; or they submit two separate responses which are characterized by significant text reuse. Ties are modelled as undirected because it is not possible to establish which group instigates coordination, or the direction of information flow between them, from the data.

Before analysing these results, it is important to recognize some of the limitations of this approach. First, our method cannot capture instances of surreptitious coordination: i.e. instances of groups communicating and coordinating their response, but deliberately trying to conceal this by agreeing to focus on different issues - thereby reducing the potential for text re-use or co-signing. Likewise, our approach cannot detect instances of text-reuse where an organisation has translated text from another organisation for its own use. While we recognize that this is possible, the literature suggests that groups often have an incentive to make similar or identical points in order to signal widespread support to policy makers (Nelson and Yackee 2012). Second, our approach is not able to detect instances where coordination leads to agreement to delegate responsibility for responding to a consultation to a single peak association, which speaks on behalf of multiple member organisations without these being co-signatories (Chalmers 2018). Third, by analyzing response letters to European Commission consultations, we can only observe patterns of coordination among those actors that choose to mobilize around these issues, rather than the entire population of interest groups (Berkhout et al. 2018). As a result, our approach does not allow us to capture the impact that existing communication and lobbying networks may have in facilitating the mobilization of groups in the first place.

4. European Financial Networks

4.1 Mapping coordination within European countries

In this section we disaggregate between two types of coordination: 1) ties that financial firms and associations develop with other financial and non-financial actors based in the same countries, and 2) cross-border ties that financial firms and associations develop with financial and non-financial actors based in a different EU country. Our empirical interest in these dynamics is first and foremost descriptive in that we want to know what some of the dynamics of coalition formation actually are, and what they look like. The descriptive research question that emerges out of this is: what does coalitional ties surrounding the financial industry look like in different countries and across countries?

We begin by visualising the domestic financial lobbying networks of the four countries that account for the greatest number of responses to the consultations in our dataset (we exclude Belgium due to the presence of large numbers of pan-European associations) (Figure 1).

Figure 1. Financial coordination networks in the four largest EU economies

Notes. Solid lines represent co-signing, dashed lines represent text reuse, while the thickness of the lines is weighted by the extent of coordination. Nodes are colour coded by respondent type (blue = financial groups; green = non-financial groups; red = public authorities; white = others) and the size is weighted by the total number of consultation responses they submitted. Only domestic connections between groups headquartered in the same country are visualized. To facilitate visual comparison, only the top fifty organizations (in terms of consultation responses submitted) are visualized.

Each graph represents the ties between organisations headquartered in that country which lobbied most frequently on any of the financial post-crisis consultations in our dataset. In order to capture domestic ties only, we have excluded from this visualization those business associations that comprise within their membership firms located in different countries (most of which are located in Brussels). The network visualizations are suggestive of how patterns of explicit coordination (co-signing) and informal coordination (text re-use) by the financial industry vary significantly across the four countries. To analyze these patterns more systematically, and across a broader range of countries, we devise a series of descriptive statistics capturing the extent to which firms and associations within the financial industry coordinate their consultation responses with other actors from the same country (see Table A.3 in the Appendix).

Figure 2 (left) measures, on the vertical axis, the intensity of lobbying by the financial industry by counting the total number of responses to any of the consultations in our dataset submitted by financial firms/associations headquartered in that country. The horizontal axis measures the percentage of these responses that have ties (i.e. demonstrate evidence of coordination through co-signing or text re-use) with other financial firms/associations based in the same country.

Figure 2. Coordination between financial actors, and with non-financial actors, from the same country

At one end of the spectrum, Britain stands out for the extent of mobilization by financial industry actors. The number of responses to the consultation from financial actors based in the UK (464) is significantly higher than in France (304) and Germany (320). At the same time, the mobilization of the British financial industry displays significantly lower levels of internal coordination compared to their counterparts in similarly-sized economies. In particular, the main association representing the British banking industry during this period (British Banking Association) is less connected with major UK banks and other financial associations than it is the case for other peak banking association in other countries.

At the opposite end of the spectrum, France displays the highest percentage of consultation responses from the financial industry that are coordinated with other financial firms and associations in the same country (31%, compared to 8% of UK financial responses, 20% of German financial responses, and 26% of Italian financial responses). This level of coordination is particularly pronounced among the main financial associations and major banks, such as BNP Paribas and Société Générale, who coordinate their responses repeatedly over different consultations. The network comprised by the main Italian financial firms and associations demonstrates a similar level of internal coordination as France, as the main Italian financial industry associations regularly co-sign their responses to EU consultations, as well as frequently coordinate with large banks, such as Unicredit and Intesa. Among the large economies, Germany represents an intermediate case in terms of the propensity of German financial firms and associations to work together. While German financial associations have in different circumstances co-authored or coordinated their responses, major German banks such as Deutsche Bank or market financial infrastructure firms such as Deutsche Börse rarely join these efforts.

The graph on the right side of Figure 2 extends the analysis to the relationship between finance and the wider business community. On the vertical axis it maps the intensity of the lobbying by non-financial actors over EU financial policies, by counting the total number of non-financial firms and associations that submitted responses to any of the consultations in our dataset. The horizontal axis measures the percentage of these responses that are coordinated with financial firms and associations from the same country. At a glance, this enables us to compare the extent

of coordination between the wider business community and the financial industry across multiple countries.

For both of these measures described above, Germany stands out as an outlier. The number of non-financial firms/associations mobilizing in Germany (59 actors sending 171 responses) is more than twice the numbers found in the UK (18 actors sending 66 responses) and in France (26 actors sending 84 responses). Not only is the mobilization of the non-financial community far more extensive in Germany than in any other European country, but it is also more highly coordinated with the domestic financial industry. In particular 18.1% of all the responses from German non-financial firms and associations over EU financial policies are coordinated with financial firms and associations. This is a significantly higher percentage than that found in France (6%), Italy (0%), and Britain (3%). Closer analysis reveals that coordination among financial and non-financial actors in Germany is particularly developed among some of the main peak business associations which have strong and durable ties to a large number of German financial associations and firms. While the level of coordination between non-financial and financial actors in France is significantly lower overall, it is noteworthy how frequently the main peak business association (MEDEF) coordinated its response with the main financial associations. This contrasts with other large economies, such as the UK or Italy, where the main peak business associations (Confederation of British Industry, Confindustria) were less engaged in EU financial policymaking, and where no coordination with the financial industry was detected.

Overall, this analysis provides support for the notion that significant differences continue to persist in the configuration of interests found around financial policies in different EU countries. These variations are broadly consistent with the expectations from the comparative political economy literature reviewed above, especially when it comes to the largest economies. In particular, the UK consistently displays lower levels of coordination within the financial industry and between finance and the rest of the business community compared to major continental economies.

4.2. Mapping coordination between European countries

The next stage is to map the extent to which financial industry groups coordinate their lobbying activity with actors based in other countries. Figure 3 visualises the extent of coordination between financial firms and associations headquartered in different EU member states, with the thickness of the line denoting the level of co-signing and text reuse across submissions from groups based in different countries.

Unlike the previous section, here we also include ties with international associations headquartered in another country. As a result, the central location of Belgium in the transnational European financial network is not surprising, given that Brussels hosts the majority of the main pan-European trade associations. The centrality of these actors in the European network is demonstrated by the fact that financial actors located in Belgium represent the most important international counterparts for financial firms and associations based in around two-thirds of the other European countries.

Figure 3. International financial coordination across Europe

The network visualization suggests that the initiatives taken by businesses headquartered in the largest European countries to lobby the European Union are highly interconnected with one another. It is also notable that important regional clusters exist. A regional coordination cluster can be found for example across Scandinavian and Baltic countries, while a second one links Central and Eastern European countries together. Geographical proximity, and enduring political, economic and cultural ties between these countries remain an important driver of cross-border coordination by financial firms and associations when responding to EU consultations.

To measure the importance of these transnational ties for financial and non-financial groups, we devised a series of descriptive statistics (results for all countries are reported in Table A.3 in the Appendix). Figure 4 plots the percentage of responses from financial actors in each country that are coordinated with those of other domestic financial groups on the horizontal axis, against the percentage of these responses that are coordinated with foreign financial groups on the vertical axis. Countries located above the line of equality can therefore be interpreted as having a financial industry that coordinates with foreign financial groups to a greater extent than with domestic financial groups. The figure reveals how it is in particular in small, open economies like Ireland,

Spain, Sweden and Portugal with only limited domestic mobilisation from the financial industry (as there are simply fewer firms and associations) where actors are more likely to seek to leverage their influence at the EU level by working closely with groups located in other member states. The finding that the vast majority of countries fall into this category highlights the highly internationalized character of financial coordination within Europe, and points to the critical role of pan-European financial associations in shaping the lobbying activities of financial firms and national associations. This certainly accords with the EU lobbying literature which points to the increasing ‘Europeanisation’ of lobbying activity over recent decades (for example, Beyers and Kerremans 2007; Mügge 2006).

Figure 4. Domestic vs international coordination among financial actors

When we focus on the largest economies in the EU, it is notable how significant differences emerge regarding the level of cross-border coordination. Significantly, financial organisations based in the UK are overall less likely to coordinate across borders (36% of financial actors) than their continental European counterparts in countries such as Italy (62.1), Spain (50%), France (49%) and Germany (44.1) (see Table A.5 in the Appendix). Overall, the figure highlights how in the four largest economies, the degree of domestic coordination within the financial industry is generally correlated with the level of coordination with foreign counterparts. These results are consistent with the notion that the same country-level characteristics that sustain different levels of domestic coordination also influence the likelihood that the same actors will coordinate internationally.

A closer look also reveals how these cross-country variations in the level of international coordination tend to become less pronounced when we focus on those actors that lobby most frequently - namely, the largest financial associations and firms. In particular all of financial groups that engage regularly in the EU policy process (>10 responses) in France (vs. 49% of all the financial groups) and in Italy (vs. 62.1% of all the financial groups), and a vast majority of these groups in Germany (76.9% vs. 44.1% of all the financial groups) and the (78.6% vs. 36% of all the financial groups) coordinated their responses with a foreign counterpart. The highly internationalised character of lobbying by the most active financial firms and associations echoes the findings of multiple studies showing that large financial groups have increasingly re-oriented their lobbying activity to the transnational level since the crisis, and seek to build durable alliances to influence international and EU regulation (see Farrell and Newman 2014; Newman and Posner 2018).

5. Internationalization of Financial Networks

The previous section has illustrated the main differences in the level of domestic and international coordination found in different countries. While this analysis has illustrated that clear national differences persist in the level of domestic and cross-border coordination found around the financial industry, a closer look has also revealed how important differences remain within these countries.

In the final part of our analysis, we seek to probe further the determinants of financial industry coordination in Europe by moving from country-level to actor-level measures. In particular, building upon the literature reviewed above, we posit two hypotheses regarding the consequences of the internationalization in the activities of financial and other actors over the formation of lobbying coordination ties. First, we posit those actors whose activities are not confined to a national context are more likely to build ties with foreign actors (H1). Second, we posit that internationalization of market activities lead these actors to abandon domestic coalitions and therefore decreases ties with domestic actors (H2).

If both H1 and H2 are supported, we could conclude that the greater cross-border integration of European markets is producing new alliances that are replacing or disrupting domestic configurations of financial interests. If H1 is supported but not H2, then the implication would be that internationalization is leading to a new layer of cross-border alliances that complements existing domestic coalitions in finance. If H2 is supported but not H1, then the implication would be that while internationalization is eroding domestic lobbying coalitions, it is not driving the formation of new international alliances.

We use statistical regression analysis, whereby the dependent variable is the number of times a given organisational actor has engaged in coordination with other financial groups in its response to a financial consultation. We include three different versions of the dependent variable: one measuring total coordination ties, and account of this for domestic-only and foreign-only ties. Because coordination is infrequent across all actors, there are a large number of zeros in the dependent variable, necessitating the use of a negative binomial regression model (rather than a normal linear regression).

We are interested in identifying what individual characteristics of the groups that engage in the EU policy process correlate with the presence of ties with finance. In order to evaluate whether the greater internationalization of financial activities has influenced the patterns of coordination, we include the variable 'International Actor', which is coded as 1 when the scope of the activities

undertaken by a respondent is coded as either ‘European Union’ or ‘Non-European Multinational’ in the INTEREURO dataset, and coded as 0 when the entity is organized at the “sub-national” or “national” level. In addition, we also devise an additional measure of the level of internationalization in the activities of financial and non-financial firms by extracting information regarding the number of subsidiaries each respondent has in a country that is different from the one of the headquarter. This information was available only for a subset of the firms in our dataset. If the internationalization of finance has generated new alliances that deviate from the national financial patterns of coordination, we should find a positive association between these variables and foreign coordination ties, but not with domestic coordination ties.

A wide range of control variables are deployed in order to appropriately condition the main association we are interested in. The variable ‘Business Association’, ‘Firm’ and ‘Professional Association’ are used because these categories may be associated with different levels of coordination by virtue of the organizational nature of the respondent. For example, associations may have more links than firms because they are more likely to be tied to other organizations. The variable ‘Financial Actor’ is included to wash out the effect of financial actors connecting with other financial actors, which is obviously much more likely than financial actors connecting with non-financial actors.

In order to explore to what extent patterns of coordination with the financial industry are driven by the geographical location where groups operate, we include a variable related to whether an organization was located in a financial center, based on the designation in the *Global Financial Center Index*. Moreover, given the importance of Brussels as a hub for lobbying and sharing of information (Sorurbakhsh 2016), we included variables related to whether they had an office in Brussels. We also include a control variable for the ‘propensity to coordinate’ with non-financial actors. This is important to include since we want to establish the propensity of coordinating with financial actors specifically, and not the propensity to coordinate with other actors in general. We also include the variable ‘Lobbying Propensity’, a measure of the number of total letters a group sent across all the EU consultations in our sample over the period of analysis.⁵

In addition to these actor-level variables, we condition on the different country-level attributes, based on a range of conditions considered important in studies of comparative political economy. For example, the literature on interest intermediation has theorized how the incentives that firms have to organise collectively varies across different types of interest intermediation (Eising 2009; Kohler-Koch and Eising 1999; Schmidt 2002). While in pluralist systems interests are more likely to be fragmented (Siaroff 1999), in neo-corporatist systems, firms are more likely to coordinate their lobbying (Hanegraaff and Pritoni 2019). The ‘Corporatism’ variable captures these country-level differences and is taken from the measures developed in Jahn (2016). We also included a variable which is intended to condition our results on the relative importance of the banking system in a national economy (Allen and Gale 2001). Our ‘Banking Credit’ variable takes the domestic credit to the private sector from the banks as a proportion of domestic credit from the entire financial system, and is thus expressed as a ratio, at the country level.⁶

A “Financialization” variable captures the structural importance of the financial industry in the economy. Financialization has been measured in a number of different ways in extant literature (see Engelen and Konings 2010; Krippner 2011; Lapavitsas and Powell 2013; Maxfield

⁵ See <https://www.longfinance.net/programmes/financial-centre-futures/global-financial-centres-index/gfci-26-explore-data/gfci-26-rank/>

⁶ Data from the World Bank website, based on data from the IMF, International Financial Statistics and data files, and World Bank and OECD GDP estimates. We took the average of both values, individually, for the 2008-2018 period.

et al. 2017). The inclusion of this variable is to control for the claim in the literature related to the fact that financialization has expanded the number of public and private actors supporting pro-finance policies and generated new coalitions (see Callaghan 2015; Young and Pagliari 2017). We elected to use data from the OECD Structural Analysis of National Economies (STAN) dataset, which provide comparable international data on the sectoral composition of OECD countries over time.⁷ More specifically we used a measure of the value-added of the financial sector as a component of value added for all sectors and industries (for a similar approach, see Witko 2016).⁸ There may be measurement error in this simple country-level financialization indicator (see Christophers 2015); at the same time there are no country-level alternatives that cover our range of countries. Our measures of production-based ratios and value-added based ratios are by no means comprehensive indicators of the phenomena in question, but they are consistent with the many interventions within the literature emphasizing that financial sector prominence is associated with monopoly profits or rent (Christophers 2018; Tomaskovic-Devey and Lin 2011; Jadayev and Epstein 2007).⁹ Summary statistics for the variables included in our analysis are presented in Table A.6 in the Appendix.

Table 1 illustrates the results of our regression analysis, which should be read in a comparative way across models, as we vary the measurement of the dependent variable in each case. Model 1 has total coordination ties as the dependent variable, and finds no statistically significant association with the international actor variable and this outcome after conditioning on the range of factors described above. The same is the case for Model 2, which includes a modified control variable for propensity to coordinate with domestic non-financial actors. In Model 3, we find a positive and statistically significant association for the international actor variable on the outcome of foreign coordination ties. These comparative results across Models 1-3, suggests support for the notion that the internationalization in the activities of a group is associated with the emergence of cross-border ties (H1), but not for the notion that more internationalized actors are less likely to cooperate with other domestic groups (H2).

We then implemented two alternative modelling choices to assess the robustness of the positive support for the internationalization hypothesis. First, we considered whether the results in Models 2 and 3 are driven by imbalance in the covariates. To assess this possibility, we used coarsened exact matching (Iacus et al 2012) to balance all covariates across treatment (international actor) and non-treatment (not international actor) groups. We then re-ran Models 2 and 3 in Models 2b and 3b, with the appropriate importance re-weightings and found we could not discount the statistical significance of the international actor variable. In fact, it increased in statistical significance and the size of the coefficient estimate increased. This suggests that that the effect may be underestimated in the original Model 3.

Second, we sought to understand whether a completely different measure of internationalization would still yield the same results. Thus, in Models 4 and 5 we repeat the analytical comparison between domestic and international ties but instead use number of subsidiaries abroad as the

⁷ STAN data is based on OECD member states' annual national accounts by activity tables, supplemented with data from other sources (e.g. national industrial surveys/censuses) to estimate missing detail. We used the ISIC Rev. 4 data to derive country-level information on value added, both measured in current prices. Data is broken down within STAN into different industry categories: we use financial and insurance activities, and divide this value by the total for all industries, to derive a country-year level observation representing the percentage contribution of the financial industry to total value-added in the economy, in a given year (see Young 2015).

⁸ We also generated a variable that evaluates country-level financialization by production measures (rather than value-added), but these were highly correlated (Pearson correlation coefficient = 0.9429).

⁹ Because of the possibility of measurement error, we replicated our analysis without the financialization indicator, and found the results to be substantively the same. For each of these variables, we took the average of all available years for the period of analysis, as yearly data was only available until 2017 for only a small number of countries.

indicator of actor-level internationalization. This reduces the number of observations significantly, and eliminates several of the actor-level variables given the fact that all observations in Models 4 and 5 are firms. We are able to use an additional variable derived from the Transparency Register to control for resources on full-time equivalent staff lobbying the European Union, which does not reduce the number of observations (but does do so in the earlier models, and dramatically so; hence we excluded it). In Models 4 and 5 we find that the Number of Subsidiaries Abroad variable is statistically significant in Model 5 (foreign ties) but not in Model 4 (domestic ties).

Table 1. Regression Results

	(1) Total Coordination Ties	(2) Domestic Coordination Ties	(3) Foreign Coordination Ties	(2b) Domestic Coordination Ties	(3b) Foreign Coordination Ties	(4) Domestic Coordination Ties	(5) Foreign Coordination Ties
International Actor	0.11 (0.15)	-0.27 (0.19)	0.33** (0.17)	0.15 (0.27)	0.91*** (0.32)		
Bank Credit Proportion	-0.96* (0.54)	-2.91*** (0.70)	0.30 (0.61)	-0.05 (1.06)	1.15 (1.21)	-0.81 (1.11)	-1.68 (1.02)
Financialization (VA)	-2.91* (1.63)	-6.04** (2.61)	-0.46 (1.94)	-8.09** (4.08)	4.14 (3.17)	-13.88 (8.82)	1.15 (3.82)
Corporatism	0.14* (0.07)	-0.00 (0.09)	0.17** (0.08)	0.21 (0.15)	0.02 (0.17)	0.15 (0.16)	0.32** (0.16)
Business Association	1.19*** (0.30)	1.42*** (0.38)	0.92** (0.37)	1.96*** (0.72)	0.04 (0.97)		
Firm	1.02*** (0.31)	0.97** (0.41)	0.95** (0.37)	1.54** (0.71)	0.51 (0.93)		
Professional Association	1.54** (0.74)	0.86 (0.96)	1.63** (0.77)	1.69 (1.06)	2.49* (1.27)		
Financial Actor	1.80*** (0.17)	1.78*** (0.23)	1.97*** (0.18)	0.90** (0.37)	2.92*** (0.40)	3.59*** (0.79)	1.57*** (0.43)
Has office in a financial center	-0.18 (0.17)	-0.13 (0.19)	-0.16 (0.18)	-0.21 (0.31)	-0.57 (0.39)	-0.60** (0.29)	-0.31 (0.23)
Has office in Brussels	0.42*** (0.15)	-0.12 (0.19)	0.68*** (0.17)	0.26 (0.69)	1.91*** (0.56)	0.03 (0.36)	-0.03 (0.30)
Lobbying Propensity	0.11*** (0.01)	0.11*** (0.01)	0.10*** (0.01)	0.20*** (0.06)	0.19*** (0.06)	0.10*** (0.02)	0.12*** (0.02)
Propensity to coordinate (non-financial partners)	0.04*** (0.01)						
Propensity to coordinate with domestic non-financial groups		0.36*** (0.06)				0.31*** (0.10)	
Propensity to coordinate with foreign non-financial groups			0.05*** (0.02)	0.02 (0.05)	0.13 (0.10)		0.35*** (0.07)
Subsidiaries Abroad						0.10 (0.07)	0.12** (0.05)
EU Lobbying Personnel						0.10 (0.10)	0.02 (0.07)
Constant	-1.73*** (0.50)	-1.22** (0.60)	-3.28*** (0.57)	-3.59*** (0.97)	-5.39*** (1.27)	-3.29*** (1.07)	-1.02 (0.82)
lnalpha	1.05*** (0.09)	1.27*** (0.11)	1.12*** (0.11)	0.96* (0.52)	1.87*** (0.19)	0.04 (0.34)	0.17 (0.27)
Observations	1078	1078	1078	527	527	160	160
Pseudo R ²	0.127	0.154	0.136	0.091	0.097	0.255	0.163
BIC	3264.20	2070.92	2587.94	697.05	776.17	331.41	524.18

Notes: Robust standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

These results indicate a regularity consistent with H1 but not H2 – i.e. higher internationalization of financial actors is associated with more cross-border alliances, but not at the expense of

domestic coordination. Figure 5 below visualizes our findings for the two key internationalization variables across Models 1-5, and helps to highlight the comparative dimension of our analysis by visualizing how the two different international actor variables have coefficients and 90% confidence intervals above the zero coefficients line in Models 3, 3b and 5 only, where the dependent variable is international ties only. The other models, shown on the top panel, all cross the zero coefficients line.

Figure 5. Coefficients Plot of Internationalization variables in Models 1-5

We re-ran the above Models 1-5 again but changed the dependent variable to a binary indicator and used logistic regression. The results, reported in Table A.7 in the Appendix, are the same with respect to the internationalization indicators for Models 3b, 4 and 5 (Model 2b did not converge). The fact that these statistical associations persist after a range of relevant controls are used and after we measure internationalized activities in different ways suggests to us that the scope of the activities by firms and associations remains an important predictor of whether these will join forces with financial actors located in other jurisdictions. Nevertheless, we endeavored to find ways in which the internationalization finding may be conditional on other factors described in the literature. Given that the research on coordination ties of the kind we are exploring here is still new, we found guidance from three literatures in particular.

First, we ran these regressions again using a country-level internationalization indicator,¹⁰ which was not significant while the actor-level internationalization variables remained so, suggesting to

¹⁰ This variable captures the possibility that the greater openness of a financial system to international flows could affect the opportunities for coordination available to financial groups, independently of how internationalized its activities. The 'Internationalization' variable measures the extent to which the banking system of a country as a whole is interconnected with other countries. We used data on Banks' Foreign Claims by Home Nationality from

us that it is not the country-level environments that drive actor-level behaviour but rather actor-level attributes, consistent with some other recent scholarship (see Maxfield et al 2017).¹¹ Second, the financialization literature discussed above suggests a variant in which individual firms are financialized, rather than entire (country-level) economies, and thus we gathered data on the percentage of subsidiaries of a firm that were financial in nature, using data from *Orbis*. We included variables for firm-level financialization in the form of the percentage of financial subsidiaries. This meant sub-setting the data for non-financial firms only (since measuring the financialization of financial firms is somewhat tautological). Third, a rich literature on inter-firm coordination and political action suggests that there may be a role for inter-corporate personnel networks in affecting coordination (Kaplan and Mun 2020; Chalmers and Young 2020; Murray 2017; Carroll and Sapinski 2010). From *Orbis* we collected information regarding the individuals that occupy senior management roles or sit in the Board of the companies in our dataset, and matched them with the list of individuals occupying these roles in the European financial institutions in order to identify corporate interlocks. We incorporated information on elite ties by counting the percentage of ties that a given firm had to foreign firms. Applying these methods dramatically reduce the number of observations (to 67) and thus we urge caution in their interpretation. Yet we did find some evidence that firm-level financialization may contribute to foreign coordination ties. More importantly, across two out of three models the internationalization patterns described above persist under these revised models. The exception is one model in which we include ties to foreign firms. Each of these models, 6-8, is reported in Appendix Table A.8.

6. Conclusion

This article set out to analyse systematically patterns of financial industry lobbying within and across different European countries for the first time. We developed a novel dataset to capture the extent to which financial organisations coordinated their lobbying with other financial and non-financial organisations in response to EU regulatory consultations, both domestically and internationally. Specifically, we use text analysis to: 1) measure co-signing and text re-use in consultation responses as evidence of formal and informal forms of coordination among groups in lobbying the EU policymaking process; 2) map domestic and international patterns of coordination by financial industry organisations at the country-level; and 3) statistically test the relationship between the internationalization of financial organisations and patterns of cross-border coordination at the actor-level.

The findings make two main contributions to political economy scholarship on business power (Lindblom 1977; Swank 1992). First, mapping the scale and scope of hitherto hidden forms of coordination reveals more subtle forms of financial industry influence which is arguably not adequately captured by traditional categories of ‘structural power’ (i.e. the dependency of the state on business for growth and investment) and ‘instrumental power’ (i.e. lobbying resources, revolving doors, etc) (Culpepper 2015). For example, analysis of text re-use networks contributes to a growing body of scholarship on the ‘relational’ or ‘network’ power of finance (see Knaack 2018; Pagliari and Young 2014; Winecoff 2015). In particular, mapping lobbying coordination systematically in this way potentially enables us to identify those powerful financial groups that

the Committee on the Global Financial System (GCFS 2018). This was divided by each country’s GDP (from the Global Financial Stability database) and averaged over the 2010-2018 period because we were not confident that across-time analysis would be useful given the uneven nature of financial policies over time.

¹¹ We cannot rule out the possibility of measurement error in this instance. Although banking internationalization is only one measure of country-level internationalization, it was the broadest indicator that we could find for this number of countries.

control information flows, broker relationships and/or coordinate industry-wide responses, based on their centrality (i.e. interconnectedness) within national or transnational text re-use networks. In addition, the capacity of firms to coordinate their communications also provides important new evidence of the ‘structural-informational’ power of finance (see Bernhagen 2007; James 2018). This refers to the fact that lobbying is a necessary but insufficient condition for influence: policy makers must also be persuaded that the information transmitted about the impact of regulatory change is credible. The ability to signal credibility through the careful coordination of consultation responses to ensure consistency and clarity alerts us to an underappreciated and understudied source of financial power.

Second, the article sheds new light on how financial power is mediated by domestic institutions. Our analysis shows how patterns of lobbying continue to be shaped by national structures of interest intermediation, which accords with recent work highlighting the critical role of institutions and ideas in constraining business power (e.g. Bell and Hindmoor 2015). It also points to the existence of distinct national ‘varieties’ of business power, characterised by variation in the extent to which financial industry influence is leveraged through organisational networks (as in coordinated market economies), rather than individual firm-level attributes (e.g. liberal market economies). We suggest that studies of financial lobbying would therefore benefit from a closer dialogue with the comparative capitalism literature as a means of further unpacking the national context-specific characteristics of financial power.

Finally, the article also makes a broader contribution to scholarship on the political economy of Europe. Importantly, we find that durable patterns of national-level lobbying are overlaid by extensive transnational alliances. Hence, the regression analysis confirms that actor-level internationalization is associated with the formation of greater ties with foreign financial firms, but is not associated with less ties to domestic groups. This is supportive of the argument that the removal of national barriers between European financial systems has led to the formation of a new layer of cross-border alliances (Beyers and Kerremans 2007; Mügge 2006). Crucially, however, our research suggests that these new transnational ties complement – but do not necessarily substitute for – existing domestic financial interest coalitions. This is important because it suggests that EU financial integration may support or even reinforce – rather than challenge – national-level diversity in lobbying networks (Ruigrok and van Tulder 1996; Weiss 2003). In conclusion, the article demonstrates how key insights from both comparative and international political economy scholarship can be integrated to capture the important dynamics of continuity and change unleashed by European integration.

We suggest two main directions for further research, both designed to address the limitations of this study. First, while the analysis in this paper has investigated the patterns of coordination in the post-crisis period, the diversity of regulatory initiatives during this period did not allow us to investigate change in the level of coordination across time. Further work might expand the analysis beyond the limited period investigated in this paper and explore how and why coordination within and across different countries varies across time. This would be better placed to detect longer-term macro-level developments and how these have shaped financial industry lobbying strategies. Second, our analysis focuses on countries within the EU, which may potentially serve as a source of bias in the results. We would fully expect trends towards internationalisation to be particularly pronounced in the context of European financial market integration. Future research would do well to test the hypotheses, and to apply the novel methods developed here, to a wider range of non-EU countries to investigate how robust our results are. The principal challenge of doing so, however, is to find meaningfully comparable data on industry responses to regulatory consultations.

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APPENDIX

Figure A.1. Consultation responses by country of origin

Figure A.2. Consultation responses by respondent type

Figure A.3. Consultation responses by business sector

Figure A.4. Consultation responses by scope of activities

Table A.1. List of European Commission regulatory consultations, 2010-2018

Consultation Title	Launch Date	No. Responses
Fitness check on supervisory reporting (deadline extended)	01/12/2017	152
Statutory prudential backstops addressing insufficient provisioning for newly originated loans that turn non-performing (targeted consultation)	10/11/2017	26
Institutional investors and asset managers' duties regarding sustainability	13/11/2017	158
Finalisation of Basel III (targeted consultation)	16/03/2018	50
Building a proportionate regulatory environment to support SME listing	18/12/2017	59
Post-trade in a Capital Market Union: dismantling barriers and strategy for the future	23/08/2017	55
Transparency and fees in cross-border transactions in the EU	24/07/2017	90
Prevention and amicable resolution of disputes between investors and public authorities within the single market (deadline extended)	31/07/2017	17
Development of secondary markets for non-performing loans and distressed assets and protection of secured creditors from borrowers' default	10/07/2017	53
Conflict of laws rules for third party effects of transactions in securities and claims	07/04/2017	32
FinTech: a more competitive and innovative European financial sector	23/03/2017	200
Operations of the European Supervisory Authorities	21/03/2017	212
Capital markets union mid-term review 2017	20/01/2017	197
Capital markets union: action on a potential EU personal pension framework	27/07/2016	63
Review of the EU Macro-prudential policy framework	01/08/2016	76
Main barriers to the cross-borders distribution of investment funds across the EU	02/06/2016	49
Evaluation of the financial conglomerate directive	09/06/2016	25
Non-binding guidelines on methodology for reporting non-financial information	15/01/2016	274
Green Paper on retail financial services: better products, more choice, and greater opportunities for consumers and businesses	10/12/2015	330
Call for evidence: EU regulatory framework for financial services	30/09/2015	264
Review of the European Venture Capital Funds (EuVECA) and European Social Entrepreneurship Funds (EuSEF) regulations	30/09/2015	45
Covered bonds in the European Union	30/09/2015	72

Possible impact of the CRR and CRD IV on bank financing of the economy	15/07/2015	84
Public consultation on further corporate tax transparency	17/06/2015	301
Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories	21/05/2015	171
An EU framework for simple, transparent and standardised securitisation	18/02/2015	121
Review of the Prospectus Directive	18/02/2015	157
Building a Capital Markets Union	18/02/2015	413
Potential economic consequences of country-by-country reporting under Directive 2013/36/EU	11/07/2014	8
Review of the European System of Financial Supervision	26/04/2013	92
Insurance of Natural and Man-made Disasters	16/04/2013	74
Structural Reform of the Banking Sector	16/05/2013	111
Long-term financing of the European economy	25/03/2013	349
Possible framework for the recovery and resolution of nonbank financial institutions	05/10/2012	73
Regulation of indices	05/09/2012	80
Recommendations of the High-level Expert Group on Reforming the structure of the EU banking sector	02/10/2012	95
Shadow banking	19/03/2012	149
Bank accounts	20/03/2012	129
Reforming the structure of the EU banking sector	03/05/2012	76
Towards an integrated European market for card, internet and mobile payments	11/01/2012	315
Application of Directive 2007/44 EC as regards acquisitions and increase of holdings in the financial sector	08/12/2011	10
Promoting Social Investment Funds as part of the Social Business Initiative	13/07/2011	68
New European regime for venture capital	15/06/2011	50
Possible measures to strengthen bank capital requirements for counterparty credit risk	09/02/2011	41
Study on interest rate restrictions	25/01/2011	57
Central securities depositories (CSDs) and on the harmonisation of certain aspects of securities settlement in the European Union	13/01/2011	107
Technical details of a possible european crisis management framework	06/01/2011	159
Legislative changes to the UCITS depositary function and to the UCITS managers remuneration	14/12/2010	63
Review of the Markets in Financial Instruments Directive (MiFID)	08/12/2010	388
Reinforcing national sanctioning regimes in the financial sector	08/12/2010	67

Consultation on legislative steps for the Packaged Retail Investment Products initiative	26/11/2010	143
Review of the Insurance Mediation Directive (IMD)	26/11/2010	129
Central securities depositories (solvency-2s) and on the harmonisation of certain aspects of securities settlement in the European Union	24/11/2010	88
Disclosure of non-financial information by companies	22/11/2010	365
Harmonisation of securities law	05/11/2010	151
Credit Rating Agencies (CRAs), new initiatives	05/11/2010	96
Financial Reporting on a Country-by-Country Basis by Multinational Companies	26/10/2010	97
Countercyclical buffers	22/10/2010	54
Access to a basic payment account	06/10/2010	78
White Paper on insurance guarantee schemes	12/07/2010	76
Review of the market abuse directive	28/06/2010	91
Short selling	14/06/2010	122
Derivatives and market infrastructures	14/06/2010	225
Study on tying and other potentially unfair commercial practices in the retail financial service sector	15/01/2010	66

Table A.2. Examples of Text Reuse

Match Detected in Text 1	Match Detected in Text 2	Smith Waterman Score
the endorsement process for international financial reporting standards in europe	the endorsement process for international financial reporting standards in europe	30
they should not give preference to which frameworks companies can use	they should not give preference to which frameworks companies can use	33
the study s analysis of the regulatory framework applicable to ##### ## the uk ##### is not exhaustive	the study s analysis of the regulatory framework applicable to insurance in the uk market is not exhaustive	36
short description of the general activity of your organisation company open reply optional	short description of the general activity of your organisation company open reply optional	39
seventh we have a comment on the integrity of the issuance of the securities	seventh we have a comment on the integrity of the issuance of the securities	42
requiring transnational corporations tcs to disclose their tax planning strategies can be useful additional information	requiring transnational corporations tcs to disclose their tax planning strategies can be useful additional information	45
to make high quality securitisations attractive to the market the costs for implementing and enforcing criteria	to make high quality securitisations attractive to the market the costs for implementing and enforcing criteria	48
that asset is a bundle of rights mainly claims of the account holder client on the intermediary	that asset is a bundle of rights mainly claims of the account holder client on the intermediary	51
citizens and customers can in case of unethical behaviour stage public campaigns which will lead to reputational damage	citizens and customers can in case of unethical behaviour stage public campaigns which will lead to reputational damage	54
the host insurer then sends the claim back to the home insurer for reimbursement as per their partnership agreement	the host insurer then sends the claim back to the home insurer for reimbursement as per their partnership agreement	57
this should include the definition of the law that governs the enforcement of the collateral and the rights flowing therefrom	this should include the definition of the law that governs the enforcement of the collateral and the rights flowing therefrom	60

in other words how to isolate the various reasons for which account providers would apply different prices to their account holders	in other words how to isolate the various reasons for which account providers would apply different prices to their account holders	63
worth stressing is the fact that a similar distinction is already made by the geneva securities convention and the financial collateral directive	worth stressing is the fact that a similar distinction is already made by the geneva securities convention and the financial collateral directive	66
concerning netting sets it remains unclear to what extent these proposals affect banks that have no internal model for the assessment of ccr	concerning netting sets it remains unclear to what extent these proposals affect banks that have no internal model for the assessment of ccr	69
liability of each actor involved in the given service e g cognitive engine provider system integrator that trained the machine company offering the service	liability of each actor involved in the given service e g cognitive engine provider system integrator that trained the machine company offering the service	72
currently without leaks and whistleblowers even governments only see a small window into the inner workings of companies which makes proving tax abuse nearly impossible	currently without leaks and whistleblowers even governments only see a small window into the inner workings of companies which makes proving tax abuse nearly impossible	75
the commission s proposal goes beyond cesr s advice in that it would remove the option for the ##### transmitting firm to report the client id directly to the	the commission s proposal goes beyond cesr s advice in that it would remove the option for the receive and transmitting firm to report the client id directly to the	78
review of the interaction of recent regulatory measures affecting collateral flow measures in particular mifid emir sft have been very helpful but should be reviewed regarding potential ### unintended obstacles or restrictions on the use of full title transfer omnibus structur ##### es or other effects on collateral use and collateral flow	review of the interaction of recent regulatory measures affecting collateral flow ##### in particular mifid emir sft ##### ##### ##### regarding ##### any unintended obstacles or restrictions on the use of full title transfer omnibus ##### structures ## or other effects on collateral use and collateral flow	80

Table A.3. Descriptive statistics of financial networks

	Total Business Lobbying			Financial Actors				
Headquarters	N° Business Actors Lobbying	N° Business Actors Co-Signing	N° Business Actors Text Reuse	N° Financial Actors	N° Financial Responses	% Responses with Ties to Domestic Finance	Average Domestic Finance Counterpart	Aggregate Density of Financial Network
AUT	11	0	1	7	16	0%	0	0
BEL	29	1	2	12	41	9.76%	0.33	0.1
CYP	3	0	0	2	2	0%	0	0
CZE	10	0	0	5	15	0%	0	0
DEU	129	27	32	59	320	19.69%	1.9	0.08
DNK	18	4	2	12	74	29.73%	1.5	0.27
ESP	25	0	2	14	65	9.23%	0.29	0.06
EST	3	0	0	2	3	0%	0	0
FIN	11	0	2	3	29	0%	0	0
FRA	94	11	18	49	304	30.92%	2.33	0.1
GBR	132	4	15	89	464	7.76%	0.54	0.01
GRC	4	0	0	2	7	0%	0	0
HUN	1	0	0	1	1	0%	0	0
IRL	13	0	2	9	41	7.32%	0.67	0.12
ITA	41	13	11	29	163	26.38%	5.52	0.33
LIT	0	0	0	0	0	0%	0	0
LTU	2	0	0	2	3	0%	0	0
LUX	13	2	0	11	68	8.82%	0.36	0.07
LVA	2	0	0	1	4	0%	0	0
NLD	37	7	7	26	97	13.40%	0.54	0.07
NOR	7	1	1	4	18	11.11%	0.5	0.5
POL	4	0	0	3	6	0%	0	0
PRT	7	0	0	5	10	0%	0	0

ROM	0	0	0	0	0	0%	0	0
SVK	2	0	0	2	5	0%	0	0
SVN	1	0	0	1	1	0%	0	0
SWE	18	2	0	8	58	3.45%	0.25	0.03

Non-Financial Actors						International			
Headquarters	N° Non-Financial Actors	N° Non-Financial Responses	% Responses with Ties to Domestic Finance	Average Domestic Finance Counterpart	Aggregate Density of NFC-Fin. Network	N° Financial Actors tied to Foreign Finance	% Financial Actors tied to Foreign Finance	% Financial Responses tied to Foreign Finance	Average N° of Foreign Financial Counterparts for Finance
AUT	4	59	8.47%	0.5	0.38	4	57.14%	37.50%	2.43
BEL	11	21	0%	0	0	4	33.33%	9.76%	1.08
CYP	1	2	0%	0	0	0	0%	0%	0
CZE	3	14	0%	0	0	2	40%	13.33%	1.2
DEU	59	171	18.13%	0.98	0.06	26	44.07%	24.06%	2.25
DNK	4	7	0%	0	0	8	66.67%	21.62%	2.75
ESP	7	12	0%	0	0	7	50%	32.31%	2.64
EST	1	1	0%	0	0	2	100%	100%	5
FIN	7	27	3.70%	0.14	0.1	2	66.67%	27.59%	5
FRA	26	84	5.95%	0.35	0.02	24	48.98%	28.62%	3.67
GBR	18	66	3.03%	0.11	0	32	35.96%	12.93%	1.44
GRC	2	2	0%	0	0	1	50%	57.14%	3.5
HUN	0	0	0%	0	0	1	100%	100%	5
IRL	4	6	0%	0	0	3	33.33%	24.39%	1.78
ITA	8	22	0%	0	0	18	62.07%	24.54%	2.76
LIT	0	0	0%	0	0	0	0%	0%	0
LTU	0	0	0%	0	0	2	100%	100%	4.5
LUX	1	1	0%	0	0	6	54.55%	26.47%	2.18
LVA	1	1	0%	0	0	1	100%	75%	9
NLD	8	19	10.53%	0.25	0.04	10	38.46%	24.74%	1.5
NOR	3	3	0%	0	0	1	25%	22.22%	2.5
POL	1	1	0%	0	0	0	0%	0%	0
PRT	2	4	0%	0	0	3	60%	50%	0.8

ROM	0	0	0%	0	0	0	0%	0%	0
SVK	0	0	0%	0	0	1	50%	20%	2.5
SVN	0	0	0%	0	0	1	100%	100%	5
SWE	10	16	6.25%	0.1	0.04	4	50%	24.14%	3

Table A.4a. List of financial actors

Headquarters	Most Frequent Respondents	Most Connected to Other Domestic Finance	Most Frequent Ties between Domestic Finance
AUT	Raiffeisen Capital Management (5)		
	Austrian Raiffeisen Banking Group (4)		
	Versicherungsverband Österreich (4)		
	Austrian Equity Issuers Association (1)		
	CONDA Crowdfunding (1)		
BEL	Euroclear (14)	Dexia (1)	Dexia ~ Euroclear (1)
	Febelfin (8)	Euroclear (1)	Febelfin ~ KBC Group NV (1)
	Beroep van zelfstandige bank en verzekeringsbemiddelaars (4)	Febelfin (1)	
	Assuralia, beroepsvereniging van verzekeringsondernemingen (3)	KBC Group NV (1)	
	Belgische Vereniging van Asset Managers (3)		
CYP	Cyprus Stock Exchange (CSE) (1)		
	Σύνδεσμος Τραπεζών Κύπρου (1)		
CZE	České bankovní asociace (9)		
	Česká asociace pojišťoven (3)		
	Česká bankovní asociace (2)		
	Czech Capital Market Association (AKAT) (1)		
DEU	Volksbanken Raiffeisenbanken (42)	Deutsches Aktieninstitut e.V. (10)	Verband deutscher Pfandbriefbanken ~ Deutsche Kreditwirtschaft (4)
	Gesamtverband der Deutschen Versicherungswirtschaft (40)	Deutsche Kreditwirtschaft (9)	Deutsche Kreditwirtschaft ~ Deutscher Sparkassen- und Giroverband (4)
	Deutsche Kreditwirtschaft (32)	Bundesverband deutscher Banken (8)	Verband deutscher Pfandbriefbanken ~ Bundesverband der Deutschen Volksbanken und Raiffeisenbanken (3)
	Deutsche Bank (31)	Bundesverband der Deutschen Volksbanken und Raiffeisenbanken (7)	Verband deutscher Pfandbriefbanken ~ Deutscher Sparkassen- und Giroverband (3)

	Bundesverband Investment und Asset Management e.V. (30)	Deutscher Sparkassen- und Giroverband (7)	Bundesverband der Deutschen Volksbanken und Raiffeisenbanken ~ Deutscher Sparkassen- und Giroverband (3)
		Gesamtverband der Deutschen Versicherungswirtschaft (7)	
DNK	Dansk Aktionærforening (16)	Finance Denmark (4)	Finansraadet ~ Børsmæglerforening Danmark (4)
	Finansraadet (13)	Finansraadet (4)	Realkreditforeningen ~ Finance Denmark (2)
	Forsikring & Pension (11)	Børsmæglerforening Danmark (2)	Børsmæglerforening Danmark ~ Finance Denmark (2)
	Realkreditforeningen (11)	Danske bank (2)	Finansraadet ~ Danske bank (1)
	Finance Denmark (10)	Forsikring & Pension (2)	Finansraadet ~ Finance Denmark (1)
		Nordea (2)	
ESP	Banco Bilbao Vizcaya Argentaria (13)	Banco Bilbao Vizcaya Argentaria (2)	Asociación Española de Banca ~ Banco Bilbao Vizcaya Argentaria (2)
	Asociación Española de Banca (11)	Asociación Española de Banca (1)	Banco Bilbao Vizcaya Argentaria ~ Banco Santander (1)
	Banco Santander (9)	Banco Santander (1)	
	Asociacion de Instituciones de Inversion Colectiva y Fondos de Pensiones (8)		
	BME Bolsas y Mercados Españoles (5)		
EST	Eesti Pangaliit (2)		
	Eesti Kindlustusseltside Liit (1)		
FIN	Finanssialan Keskusliitto (FKL) (28)		
	Finanssiala ry (3)		
	Finnish Pension Alliance (3)		
FRA	Fédération Bancaire Française (47)	Association française de la gestion financière (13)	Association Française des Professionnels des Titres ~ Fédération Bancaire Française (9)
	Association française de la gestion financière (32)	BNP Paribas Group (10)	BNP Paribas Group ~ Fédération Bancaire Française (9)
	BNP Paribas Group (27)	Fédération Bancaire Française (10)	Association française des marchés financiers ~ Fédération Bancaire Française (8)
	Le Groupe Credit Agricole (26)	Association française des marchés financiers (9)	Association française de la gestion financière ~ Amundi (7)

	Amundi (23)	Association Française des Professionnels des Titres (9)	Le Groupe Credit Agricole ~ Fédération Bancaire Française (5)
		Le Groupe Credit Agricole (9)	
GBR	British Bankers' Association (34)	Investment Management Association (7)	Crowdcube Ltd ~ UK Crowdfunding Association (2)
	Association of British Insurers (31)	Association of British Insurers (5)	Investment Management Association ~ M&G Investments (2)
	London Stock Exchange (27)	AVIVA (4)	Association of British Insurers ~ AVIVA (1)
	Investment Management Association (25)	British Bankers' Association (4)	Association of British Insurers ~ British Bankers' Association (1)
	Barclays (23)	M&G Investments (3)	Association of British Insurers ~ Investment Management Association (1)
GRC	Athens Stock Exchange (6)		
	ICAP Group (1)		
HUN	Magyar Biztosítók Szövetsége (2)		
IRL	Banking and Payments Federation Ireland (12)	Banking and Payments Federation Ireland (2)	Banking and Payments Federation Ireland ~ Irish Debt Securities Association (1)
	Irish Stock Exchange (9)	Irish Debt Securities Association (2)	Banking and Payments Federation Ireland ~ Irish Securitisation Industry Working Group (1)
	Irish Funds Industry Association CLG (8)	Irish Securitisation Industry Working Group (2)	Irish Debt Securities Association ~ Irish Securitisation Industry Working Group (1)
	MetLife (7)		
	Financial Services Ireland (2)		
ITA	Associazione Bancaria Italiana (37)	Assoprevidenza (14)	Associazione Bancaria Italiana ~ Unicredit group (4)
	Unicredit group (23)	Associazione Bancaria Italiana (13)	Associazione Bancaria Italiana ~ Associazione Italiana degli Intermediari Mobiliari (3)
	Associazione del risparmio gestito (19)	Associazione Italiana degli Intermediari Mobiliari (13)	Associazione Bancaria Italiana ~ Intesa Sanpaolo Group (3)
	Intesa Sanpaolo Group (19)	Associazione Italiana del Private Equity, Venture Capital e Private Debt (12)	Associazione Bancaria Italiana ~ Federazione ABI ANIA (3)
	Associazione Italiana degli Intermediari Mobiliari (16)	Associazione del risparmio gestito (12)	Associazione Italiana del Private Equity, Venture Capital e Private Debt ~ Federazione ABI ANIA (3)

		Associazione Nazionale fra le Imprese Assicuratrici (12)	
		Assofiduciaria (12)	
		Assoimmobiliare (12)	
		Federazione ABI ANIA (12)	
LIT			
LTU	Lietuvos Banku Asociacija (2)		
	Association of Lithuanian Banks (1)		
LUX	Association Luxembourgeoise des Fonds d'Investissement (26)	Association Luxembourgeoise des Fonds d'Investissement (2)	Association Luxembourgeoise des Fonds d'Investissement ~ Luxembourg Private Equity and Venture Capital Association (2)
	Association des Banques et Banquiers, Luxembourg (20)	Association des Banques et Banquiers, Luxembourg (1)	Association des Banques et Banquiers, Luxembourg ~ Association Luxembourgeoise des Fonds d'Investissement (1)
	AXA Investment Managers (10)	Luxembourg Private Equity and Venture Capital Association (1)	
	Clearstream (3)		
	Association des Compagnies d' Assurances du Grand-Duché de Luxembourg (2)		
LVA	Latvijas Komerbanku Asociacija (4)		
NLD	ING Groep (18)	Mn Services N.V. (2)	Mn Services N.V. ~ Pensioenfondsen Metaal en Techniek (2)
	Nederlandse Vereniging van Banken (14)	Nederlandse Vereniging van Banken (2)	APG Asset Management NV ~ Mn Services N.V. (1)
	APG Asset Management NV (8)	Stichting voor Ondernemingspensioenfondsen (OPF) (2)	Dutch Advisory Committee Securities Industry ~ Nederlandse Vereniging van Banken (1)
	Vereniging VEB NCVB (8)	Unie van Beroepspensioenfondsen (UvB) (2)	Nederlandse Vereniging van Banken ~ ING Groep (1)
	Dutch Advisory Committee Securities Industry (7)	Vereniging van Bedrijfstakpensioenfondsen (2)	Stichting voor Ondernemingspensioenfondsen (OPF) ~ Unie van Beroepspensioenfondsen (UvB) (1)
NOR	Finans Norge (16)	Finans Norge (1)	Finans Norge ~ Sparebankforeninger (1)
	Bits AS (1)	Sparebankforeninger (1)	
	Sparebankforeninger (1)		

	Visa Norway Bank Group (1)		
POL	KDPW CCP S.A. (4)		
	Konferencja Przedsiębiorstw Finansowych w Polsce (1)		
	Krajowy Związek Banków Spółdzielczych (1)		
PRT	Associação Portuguesa de Bancos (6)		
	Associação Portuguesa de Fundos de Investimento, Pensões e Patrimónios (3)		
	Banco Comercial Português (1)		
	BiG Start Ventures (1)		
	Interbolsa (1)		
ROM			
SVK	Slovenská asociácia poisťovní (3)		
	Slovenska bankova asociacia (2)		
SVN	Slovensko Zavarovalno Združenje (1)		
SWE	Nasdaq OMX (22)	Svenska Bankföreningen (1)	Svenska Bankföreningen ~ Svenska Fondhandlareföreningen (1)
	Svenska Bankföreningen (17)	Svenska Fondhandlareföreningen (1)	
	Svenska Fondhandlareföreningen (13)		
	Association of Swedish Covered Bond issuers (3)		
	Fondbolagens förening (3)		

Table A.4b. List of non-financial actors

Headquarters	Most Frequent NFC Respondents	NFC Most Connected to Financial Actors	Most Frequent Ties between NFC and FIN
AUT	Wirtschaftskammer Österreich (66)	Wirtschaftskammer Österreich (2)	Wirtschaftskammer Österreich ~ Raiffeisen Capital Management (3)
	Verbund AG (4)		Wirtschaftskammer Österreich ~ Austrian Raiffeisen Banking Group (2)
	Industriellenvereinigung (3)		
	Cablexperts (1)		
BEL	Conseil Supérieur des Indépendants et des PME (4)		
	European Confederation of Directors' Associations (3)		
	FoodDrink Europe (3)		
	Lufthansa (3)		
	Association of European Airlines (2)		
CYP	Cyprus Chamber of Commerce and Industry (2)		
CZE	Hospodářská komora České republiky (6)		
	Svaz průmyslu a dopravy České Republiky (6)		
	CEZ Group (4)		
DEU	Deutscher Industrie- und Handelskammertag (30)	Bundesverband der Deutschen Industrie (8)	Bundesverband der Deutschen Industrie ~ Deutsches Aktieninstitut e.V. (4)
	Bundesverband der Deutschen Industrie (23)	Deutscher Industrie- und Handelskammertag (7)	Deutscher Industrie- und Handelskammertag ~ Deutsche Kreditwirtschaft (2)
	Genossenschaftsverband Bayern (11)	Genossenschaftsverband Bayern (7)	Bayer ~ Deutsches Aktieninstitut e.V. (2)
	Bundesverband der Energie- und Wasserwirtschaft (7)	Genossenschaftsverband – Verband der Regionen e.V. (6)	Bundesverband der Deutschen Industrie ~ Deutsche Kreditwirtschaft (2)
	Siemens AG (7)	Bayer (5)	Bundesverband der Deutschen Industrie ~ Gesamtverband der Deutschen Versicherungswirtschaft (2)
		Deutsche Post DHL Group (5)	
DNK	Dansk Erhverv (4)		
	Dansk Energi (1)		
	Novo Nordisk AS (1)		
	Ørsted A/S (1)		

ESP	Repsol (4)		
	Confederación de Empresarios de la Construcción de Aragón (3)		
	Abertis (1)		
	AlterCompany (1)		
	Consejo General de la Abogacia Espanola (1)		
EST	Eesti Energia Aktsiaselts (1)		
FIN	Confederation of Finnish Industries (16)	Confederation of Finnish Industries (1)	Confederation of Finnish Industries ~ Finanssialan Keskusliitto (FKL) (1)
	Keskuskauppakamari (4)		
	ENERGIATEOLLISUUS (3)		
	Fortum OYJ (2)		
	Finnish Business and Society ry (1)		
FRA	Mouvement des entreprises de France (60)	Mouvement des entreprises de France (9)	Mouvement des entreprises de France ~ Association française de la gestion financière (4)
	Association Nationale des Societes par Action (16)		Mouvement des entreprises de France ~ BNP Paribas Group (2)
	EDF Group (9)		Mouvement des entreprises de France ~ Fédération Bancaire Française (2)
	Association Française des Trésoriers d'Entreprise (8)		Mouvement des entreprises de France ~ Association Française des Professionnels des Titres (1)
	Confédération Générale des Petites et Moyennes Entreprises (4)		Mouvement des entreprises de France ~ Association française des marchés financiers (1)
GBR	Confederation of British Industry (20)	British Property Federation (1)	British Property Federation ~ Investment Property Forum (1)
	Association of Corporate Treasurers (13)	The Association of General Counsel and Company Secretaries working in FTSE 100 Companies (1)	The Association of General Counsel and Company Secretaries working in FTSE 100 Companies ~ London Stock Exchange (1)
	Quoted Companies Alliance (7)		
	Rolls-Royce (7)		
	British Property Federation (5)		
GRC	Federation Of Hellenic Associations Of Young Entrepreneurs (1)		

	Hellenic Telecommunications Organization S.A. (OTE) (1)		
HUN			
IRL	Irish business and employers confederation (3)		
	An Lár TV (1)		
	Chambers Ireland (1)		
	FEXCO Merchant Services Unlimited Company (1)		
ITA	Associazione fra le Società Italiane per Azioni (9)		
	Enel SpA (5)		
	Poste Italiane (3)		
	Confederazione Generale dell'Industria Italiana (2)		
	Associazione Italiana per il factoring (1)		
LIT			
LTU			
LUX	Association of Corporate Treasurers in Luxembourg (1)		
LVA	Latvijas Darba devēju konfederācija (1)		
NLD	CRO Forum (5)	AEGON N.V. (1)	AEGON N.V. ~ ING Groep (1)
	VNO-NCW (4)	CRO Forum (1)	CRO Forum ~ ING Groep (1)
	Linda van Goor Regulatory Communication (3)		
	MKB-Nederland (3)		
	AEGON N.V. (2)		
NOR	Agder Energi (1)		
	ECOZH (1)		
	Eidsiva Vannkraft AS (1)		
POL	Towarzystwo Obrotu Energiją (1)		
PRT	Associação de Empresas Emitentes de Valores Cotados em Mercado (2)		
	Conselho Empresarial para o Desenvolvimento Sustentavel (2)		
ROM			
SVK			
SVN			

SWE	Svenskt Näringsliv (6)	Svenske Energy (1)	Svenske Energy ~ Nasdaq OMX (1)
	E.On Kärnkraft AG SE (2)		
	Göteborg Energi AB (2)		
	Dalakraft (1)		
	Enkla Elbolaget AB (1)		

Table A.5. Financial ties with foreign financial actors

Headquarters	Most Frequent Country Ties	Financial Firm with Most Foreign Ties	Most Frequent Ties between domestic and foreign finance
AUT	AUT ~ BEL (6)	CONDA Crowdinvesting (10)	Austrian Raiffeisen Banking Group ~ European Association of Cooperative Banks (2)
	AUT ~ FRA (3)	Versicherungsverband Österreich (5)	Raiffeisen Capital Management ~ European Association of Cooperative Banks (2)
	AUT ~ GBR (2)	Austrian Raiffeisen Banking Group (1)	CONDA Crowdinvesting ~ Afrikwity (1)
	AUT ~ CHE (1)	Raiffeisen Capital Management (1)	CONDA Crowdinvesting ~ Bee Invested (1)
	AUT ~ CZE (1)		CONDA Crowdinvesting ~ Bergfurst (1)
BEL	BEL ~ FRA (4)	My Micro Invest (9)	Belgian Association of Financial Analysts ~ CFA Institute (1)
	BEL ~ DEU (2)	Belgian Association of Financial Analysts (2)	Belgian Association of Financial Analysts ~ European Federation of Financial Analysts Societies (1)
	BEL ~ GBR (2)	Euroclear (1)	Euroclear ~ Nasdaq OMX (1)
	BEL ~ (1)	Fortis (1)	Fortis ~ BNP Paribas Group (1)
	BEL ~ AUT (1)		My Micro Invest ~ Afrikwity (1)
CYP			
CZE	CZE ~ AUT (1)	Česká asociace pojišťoven (6)	Česká asociace pojišťoven ~ Association des Compagnies d'Assurances du Grand-Duché de Luxembourg (1)
	CZE ~ BEL (1)		Česká asociace pojišťoven ~ European insurance and reinsurance federation (1)
	CZE ~ HUN (1)		Česká asociace pojišťoven ~ Magyar Biztosítók Szövetsége (1)
	CZE ~ LUX (1)		Česká asociace pojišťoven ~ Slovenská asociácia poisťovní (1)
	CZE ~ SVK (1)		Česká asociace pojišťoven ~ Slovensko Zavarovalno Zdrúženje (1)
DEU	DEU ~ BEL (91)	Munich RE (17)	Bundesverband Investment und Asset Management e.V. ~ European Fund and Asset Management Association (12)
	DEU ~ FRA (44)	Deutsche Kreditwirtschaft (11)	Deutsche Kreditwirtschaft ~ European Association of Public Banks and Funding Agencies (8)
	DEU ~ GBR (16)	Allianz (10)	Deutsche Kreditwirtschaft ~ European Savings and Retail Banks Group (6)
	DEU ~ ITA (7)	Bergfurst (10)	Deutsche Kreditwirtschaft ~ European Association of Cooperative Banks (5)
	DEU ~ USA (6)	ERGO Lebensversicherungen (8)	Deutsche Kreditwirtschaft ~ European Banking Federation (4)
DNK	DNK ~ BEL (17)	Finance Denmark (11)	Finance Denmark ~ European Covered Bond Council (ECBC) (3)

	DNK ~ FIN (5)	Finansrådet (7)	Finance Denmark ~ European Mortgage Federation (3)
	DNK ~ SWE (5)	Forsakrings Forbundet (3)	Finance Denmark ~ Svenska Bankföreningen (3)
	DNK ~ EST (4)	Forsikring & Pension (3)	Finance Denmark ~ Eesti Pangalit (2)
	DNK ~ LVA (4)	Nordea (3)	Finance Denmark ~ Finans Norge (2)
ESP	ESP ~ BEL (34)	Asociación Española de Banca (13)	Banco Bilbao Vizcaya Argentaria ~ European Banking Federation (6)
	ESP ~ FRA (6)	Banco Bilbao Vizcaya Argentaria (6)	Asociación Empresarial del Seguro ~ European insurance and reinsurance federation (3)
	ESP ~ GBR (4)	Banco Santander (6)	Asociación Española de Banca ~ European Banking Federation (3)
	ESP ~ NLD (2)	Asociacion Empresarial del Seguro (4)	Asociacion de Instituciones de Inversion Colectiva y Fondos de Pensiones ~ European Fund and Asset Management Association (2)
	ESP ~ DEU (1)	Asociacion Hipotecaria Española (3)	Asociación Española de Banca ~ Association for Financial Markets in Europe (2)
EST	EST ~ DNK (4)	Eesti Pangalit (6)	Eesti Pangalit ~ Finance Denmark (2)
	EST ~ FIN (3)	Eesti Kindlustusseltside Liit (4)	Eesti Pangalit ~ Finans Norge (2)
	EST ~ NOR (3)		Eesti Pangalit ~ Finanssialan Keskusliitto (FKL) (2)
	EST ~ LTU (2)		Eesti Pangalit ~ Latvijas Komercbanku Asociacija (2)
	EST ~ LVA (2)		Eesti Pangalit ~ Lietuvos Banku Asociacija (2)
FIN	FIN ~ BEL (5)	Finanssialan Keskusliitto (FKL) (12)	Finanssialan Keskusliitto (FKL) ~ European Banking Federation (3)
	FIN ~ DNK (5)	Finanssiala ry (3)	Finanssialan Keskusliitto (FKL) ~ Finans Norge (3)
	FIN ~ EST (3)		Finanssialan Keskusliitto (FKL) ~ Eesti Pangalit (2)
	FIN ~ NOR (3)		Finanssialan Keskusliitto (FKL) ~ Finance Denmark (2)
	FIN ~ SWE (3)		Finanssialan Keskusliitto (FKL) ~ Latvijas Komercbanku Asociacija (2)
FRA	FRA ~ BEL (88)	Fédération Bancaire Française (23)	Fédération Bancaire Française ~ European Banking Federation (12)
	FRA ~ GBR (49)	Association française de la gestion financière (18)	Association française de la gestion financière ~ European Fund and Asset Management Association (6)
	FRA ~ DEU (44)	BNP Paribas Group (16)	Fédération Bancaire Française ~ Association for Financial Markets in Europe (6)

	FRA ~ USA (18)	Association Française des Professionnels des Titres (15)	Federation Française de l'Assurance ~ European insurance and reinsurance federation (6)
	FRA ~ ITA (10)	Société Générale (14)	Association Française des Professionnels des Titres ~ European Banking Federation (4)
GBR	GBR ~ BEL (53)	British Bankers' Association (23)	British Bankers' Association ~ European Banking Federation (6)
	GBR ~ FRA (26)	AVIVA (13)	British Bankers' Association ~ International Swaps and Derivatives Association (5)
	GBR ~ USA (23)	Capital Cell (9)	Investment Management Association ~ European Fund and Asset Management Association (5)
	GBR ~ CHE (11)	Crowd Invest (9)	AVIVA ~ European Fund and Asset Management Association (2)
	GBR ~ DEU (9)	RSA Group (9)	British Bankers' Association ~ European Mortgage Federation (2)
GRC	GRC ~ BEL (5)	Athens Stock Exchange (7)	Athens Stock Exchange ~ European Central Securities Depositories Association (2)
	GRC ~ DEU (1)		Athens Stock Exchange ~ Federation of European Securities Exchanges (2)
	GRC ~ GBR (1)		Athens Stock Exchange ~ European Association of Central Counterparty Clearing Houses (1)
	GRC ~ IRL (1)		Athens Stock Exchange ~ Gruppe Deutsche Börse (1)
	GRC ~ USA (1)		Athens Stock Exchange ~ Irish Stock Exchange (1)
HUN	HUN ~ AUT (1)	Magyar Biztosítók Szövetsége (5)	Magyar Biztosítók Szövetsége ~ Association des Compagnies d'Assurances du Grand-Duché de Luxembourg (1)
	HUN ~ CZE (1)		Magyar Biztosítók Szövetsége ~ Česká asociace pojišťoven (1)
	HUN ~ LUX (1)		Magyar Biztosítók Szövetsége ~ Slovenská asociácia poisťovní (1)
	HUN ~ SVK (1)		Magyar Biztosítók Szövetsége ~ Slovensko Zavarovalno Združenje (1)
	HUN ~ SVN (1)		Magyar Biztosítók Szövetsége ~ Versicherungsverband Österreich (1)
IRL	IRL ~ BEL (8)	Irish Funds Industry Association CLG (10)	Irish Stock Exchange ~ Federation of European Securities Exchanges (3)
	IRL ~ USA (7)	Banking and Payments Federation Ireland (3)	Banking and Payments Federation Ireland ~ European Banking Federation (2)
	IRL ~ GBR (3)	Irish Stock Exchange (3)	Irish Funds Industry Association CLG ~ Institutional Money Market Funds Association (2)

	IRL ~ FRA (2)		Irish Funds Industry Association CLG ~ State Street Corporation (2)
	IRL ~ GRC (1)		Banking and Payments Federation Ireland ~ European Covered Bond Council (ECBC) (1)
ITA	ITA ~ BEL (43)	Associazione Italiana degli Intermediari Mobiliari (12)	Associazione Bancaria Italiana ~ European Banking Federation (8)
	ITA ~ GBR (27)	Associazione Bancaria Italiana (11)	Associazione Italiana degli Intermediari Mobiliari ~ Association for Financial Markets in Europe (4)
	ITA ~ FRA (10)	Crowd Fund Me (10)	Associazione Bancaria Italiana ~ Association for Financial Markets in Europe (2)
	ITA ~ DEU (7)	Generali (10)	Associazione Bancaria Italiana ~ European Covered Bond Council (ECBC) (2)
	ITA ~ CHE (4)	Unicredit group (7)	Associazione Bancaria Italiana ~ European Mortgage Federation (2)
LIT			
LTU	LTU ~ DNK (3)	Lietuvos Banku Asociacija (6)	Lietuvos Banku Asociacija ~ Eesti Pangalit (2)
	LTU ~ LVA (3)	Association of Lithuanian Banks (3)	Lietuvos Banku Asociacija ~ Finance Denmark (2)
	LTU ~ SWE (3)		Lietuvos Banku Asociacija ~ Finans Norge (2)
	LTU ~ EST (2)		Lietuvos Banku Asociacija ~ Finanssialan Keskusliitto (FKL) (2)
	LTU ~ FIN (2)		Lietuvos Banku Asociacija ~ Latvijas Komercbanku Asociacija (2)
LUX	LUX ~ BEL (18)	Association des Banques et Banquiers, Luxembourg (8)	Association des Banques et Banquiers, Luxembourg ~ European Banking Federation (5)
	LUX ~ DEU (4)	Association Luxembourgeoise des Fonds d'Investissement (6)	Association Luxembourgeoise des Fonds d'Investissement ~ European Fund and Asset Management Association (3)
	LUX ~ FRA (3)	Association des Compagnies d' Assurances du Grand-Duché de Luxembourg (5)	Association des Banques et Banquiers, Luxembourg ~ European Association of Public Banks and Funding Agencies (2)
	LUX ~ USA (2)	AXA Investment Managers (3)	Association Luxembourgeoise des Fonds d'Investissement ~ BlackRock (2)
	LUX ~ AUT (1)	Clearstream (1)	Association Luxembourgeoise des Fonds d'Investissement ~ Union Asset Management Holding (2)
LVA	LVA ~ DNK (4)	Latvijas Komercbanku Asociacija (9)	Latvijas Komercbanku Asociacija ~ Eesti Pangalit (2)
	LVA ~ LTU (3)		Latvijas Komercbanku Asociacija ~ Finance Denmark (2)
	LVA ~ EST (2)		Latvijas Komercbanku Asociacija ~ Finans Norge (2)

	LVA ~ FIN (2)		Latvijas Komercbanku Asociācija ~ Finanssiālan Keskusliitto (FKL) (2)
	LVA ~ NOR (2)		Latvijas Komercbanku Asociācija ~ Lietuvos Banku Asociācija (2)
NLD	NLD ~ BEL (28)	ING Groep (13)	Nederlandse Vereniging van Banken ~ European Banking Federation (6)
	NLD ~ GBR (6)	Betaalvereniging Nederland (8)	Vereniging VEB NCVB ~ European Investors' Association (5)
	NLD ~ DEU (4)	Nederlandse Vereniging van Banken (7)	Betaalvereniging Nederland ~ European Banking Federation (2)
	NLD ~ FRA (4)	Rabobank (4)	Euro CCP Ltd ~ The Depository Trust & Clearing Corporation (2)
	NLD ~ USA (3)	Vereniging VEB NCVB (2)	Rabobank ~ European Association of Cooperative Banks (2)
NOR	NOR ~ DNK (4)	Finans Norge (10)	Finans Norge ~ Finanssiālan Keskusliitto (FKL) (3)
	NOR ~ EST (3)		Finans Norge ~ Eesti Pangaliit (2)
	NOR ~ FIN (3)		Finans Norge ~ Finance Denmark (2)
	NOR ~ LTU (2)		Finans Norge ~ Latvijas Komercbanku Asociācija (2)
	NOR ~ LVA (2)		Finans Norge ~ Lietuvos Banku Asociācija (2)
POL			
PRT	PRT ~ BEL (5)	Interbolsa (2)	Associação Portuguesa de Bancos ~ European Banking Federation (3)
	PRT ~ USA (1)	Associação Portuguesa de Bancos (1)	Associação Portuguesa de Fundos de Investimento, Pensões e Patrimónios ~ European Fund and Asset Management Association (1)
		Associação Portuguesa de Fundos de Investimento, Pensões e Patrimónios (1)	Interbolsa ~ European Central Securities Depositories Association (1)
			Interbolsa ~ NYSE Euronext (1)
ROM			
SVK	SVK ~ AUT (1)	Slovenská asociácia poisťovní (5)	Slovenská asociácia poisťovní ~ Association des Compagnies d'Assurances du Grand-Duché de Luxembourg (1)
	SVK ~ CZE (1)		Slovenská asociácia poisťovní ~ Česká asociace pojišťoven (1)
	SVK ~ HUN (1)		Slovenská asociácia poisťovní ~ Magyar Biztosítók Szövetsége (1)
	SVK ~ LUX (1)		Slovenská asociácia poisťovní ~ Slovensko Zavarovalno Zdrúženje (1)
	SVK ~ SVN (1)		Slovenská asociácia poisťovní ~ Versicherungsverband Österreich (1)
SVN	SVN ~ AUT (1)	Slovensko Zavarovalno Zdrúženje (5)	Slovensko Zavarovalno Zdrúženje ~ Association des Compagnies d'Assurances du Grand-Duché de Luxembourg (1)

	SVN ~ CZE (1)		Slovensko Zavarovalno Zdrúženje ~ Česká asociace pojišťoven (1)
	SVN ~ HUN (1)		Slovensko Zavarovalno Zdrúženje ~ Magyar Biztosítók Szövetsége (1)
	SVN ~ LUX (1)		Slovensko Zavarovalno Zdrúženje ~ Slovenská asociácia poisťovní (1)
	SVN ~ SVK (1)		Slovensko Zavarovalno Zdrúženje ~ Versicherungsverband Österreich (1)
SWE	SWE ~ BEL (14)	Svenska Bankföreningen (12)	Nasdaq OMX ~ Federation of European Securities Exchanges (4)
	SWE ~ DNK (6)	Association of Swedish Covered Bond issuers (6)	Svenska Bankföreningen ~ Finance Denmark (3)
	SWE ~ FIN (3)	Nasdaq OMX (4)	Svenska Bankföreningen ~ Eesti Pangaliit (2)
	SWE ~ LTU (3)	Svenska Fondhandlareföreningen (2)	Svenska Bankföreningen ~ European Banking Federation (2)
	SWE ~ DEU (2)		Svenska Bankföreningen ~ Finans Norge (2)

Table A.6: Summary Statistics

Variable	Obs.	Mean	Standard Deviation	Min	Max	Source
Number of Finance Partners Coordinated With	1,140	3.165789	10.26709	0	161	European Commission's Website (authors' elaboration)
Number of Domestic Finance Partners Coordinated With	1,140	1.3	5.159391	0	57	European Commission's Website (authors' elaboration)
Number of Foreign Finance Partners Coordinated With	1,140	1.374561	5.305509	0	35	European Commission's Website (authors' elaboration)
International Actor	1,140	.4394737	.4965409	0	1	INTEREURO + additional coding by authors
Proportion of Bank Credit	1,096	.6450735	.1457857	.4685104	1.064832	World Bank
Financialization (Value-Added)	1,102	.0605528	.0282342	.024399	.268684	OECD Structural Analysis Database
Corporatism	1,110	.1184144	1.066449	-1.65	2.06	Jahn (2016).
Business Association	1,140	.4307018	.4953918	0	1	INTEREURO + additional coding by authors
Firm	1,140	.3236842	.4680865	0	1	INTEREURO + additional coding by the authors
Professional Association	1,140	.0552632	.2285935	0	1	INTEREURO + additional coding by the authors
Finance	1,140	.4780702	.4997381	0	1	Manual coding by the authors
Financial Centers	1,140	.3210526	.4670859	0	1	Authors' elaboration based on EU Transparency Register
Brussels	1,140	.2008772	.4008322	0	1	EU Transparency Register
Number of Letters	1,140	4.549123	7.000831	1	66	European Commission's Website (authors' elaboration)
Number of Partners Coordinate	1,140	1.932456	6.074443	0	44	European Commission's Website (authors' elaboration)
EU Lobbying Personnel	726	3.619146	5.447928	.25	86	EU Transparency Register
Subsidiaries Abroad	260	13.37692	23.0042	1	104	Orbis Database

Table A.7: Logit Results

	(1) Total Coordination Ties	(2) Domestic Coordination Ties	(3) Foreign Coordination Ties	(3b) Foreign Coordination Ties	(4) Domestic Coordination Ties	(5) Foreign Coordination Ties
International Actor	-0.21 (0.18)	-0.40* (0.20)	0.12 (0.20)	0.78** (0.33)		
Bank Credit Proportion	-0.87 (0.70)	-1.08 (0.74)	-0.40 (0.75)	-0.43 (1.12)	-2.96 (1.91)	-2.81 (2.25)
Financialization (VA)	0.24 (2.40)	-0.56 (2.53)	0.51 (2.66)	9.92** (4.85)	-22.72 (14.61)	-2.19 (5.63)
Corporatism	0.11 (0.09)	0.04 (0.09)	0.01 (0.10)	-0.22 (0.18)	0.22 (0.28)	0.36 (0.24)
Business Association	1.63*** (0.43)	1.65*** (0.51)	1.39*** (0.50)	1.15 (1.08)		
Firm	1.54*** (0.45)	1.60*** (0.53)	0.99* (0.53)	0.78 (1.03)		
Professional Association	-0.06 (0.75)	0.28 (0.82)	0.03 (0.77)	-0.86 (2.05)		
Financial Actor	1.57*** (0.19)	1.44*** (0.23)	1.86*** (0.22)	1.87*** (0.49)	3.39*** (1.03)	2.42*** (0.70)
Has office in a financial center	-0.26 (0.19)	-0.27 (0.21)	0.01 (0.20)	0.14 (0.34)	-1.16** (0.54)	0.12 (0.53)
Has office in Brussels	0.70*** (0.20)	0.21 (0.22)	0.92*** (0.22)	2.39*** (0.64)	-0.70 (0.58)	0.43 (0.65)
Lobbying Propensity	0.20*** (0.03)	0.15*** (0.02)	0.16*** (0.03)	0.23*** (0.06)	0.23*** (0.06)	0.27*** (0.07)
Propensity to coordinate with non-financial actors	0.04*** (0.01)					
Propensity to coordinate with domestic non-financial actors		0.46*** (0.07)			0.54*** (0.18)	
Propensity to coordinate with foreign non-financial actors			0.05*** (0.02)	0.08** (0.04)		1.12*** (0.26)
Subsidiaries Abroad					0.23** (0.11)	0.21** (0.09)
EU Lobbying Personnel					0.01 (0.15)	-0.07 (0.10)
Constant	-3.18*** (0.67)	-3.63*** (0.73)	-3.95*** (0.76)	-5.68*** (1.36)	-1.59 (1.60)	-2.35 (1.84)
Observations	1078	1078	1078	545	160	160
Pseudo R ²	0.308	0.302	0.312	0.233	0.446	0.465
BIC	1054.44	884.82	967.29	432.86	158.97	172.57

Notes: Robust standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.8: Additional Regression Models 6-8

	(6) Foreign Coordination Ties	(7) Foreign Coordination Ties	(8) Foreign Coordination Ties
% Financial Subsidiaries	4.21** (1.65)	3.17** (1.56)	2.56 (1.90)
Financialization (VA)	21.61 (20.89)	16.30 (20.69)	13.07 (18.55)
Subsidiaries Abroad	0.24** (0.12)	0.26* (0.15)	0.20 (0.15)
Corporatism	1.05** (0.46)	0.96** (0.47)	1.00** (0.44)
Has office in a financial center	-0.92 (0.73)	-1.03 (0.79)	-1.18 (0.83)
Has office in Brussels	0.41 (1.34)	-0.00 (1.41)	
Lobbying Propensity	0.35** (0.18)	0.39** (0.19)	0.41** (0.16)
Propensity to coordinate (non-financial partners))			
EU Lobbying Personnel	-0.06 (0.09)	-0.03 (0.08)	-0.03 (0.08)
Propensity to coordinate foreign-ly (foreign non-financial partners))	0.46*** (0.10)	0.49*** (0.10)	0.49*** (0.09)
% Individuals Tied		2.72** (1.34)	
% Individuals Tied to Foreign companies			6.05** (2.63)
Constant	-5.52*** (2.12)	-5.79*** (1.96)	-5.37*** (1.25)
Inalpha	-0.36 (1.32)	-0.44 (1.33)	-0.29 (0.92)
Observations	67	67	67
Pseudo R ²	0.291	0.310	0.314
BIC	141.35	143.04	138.21

Notes: Robust standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$