

# The Political Economy of Financial Regulation\*

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## Abstract

Increased interdependencies across countries have led to calls for greater harmonization of regulations to prevent local shock from spilling over to other countries. Using the rulemaking process of the Basel Committee on Banking Supervision (BCBS), this paper studies the process through which harmonization is achieved. Through leaked voting records, we document that the probability of a regulator opposing an initiative increases if their domestic national champion (NC) opposes the new rule, particularly when the proposed rule disproportionately affects them. Next, we show that smaller banks, even when they collectively have a higher share in the domestic market, do not have any impact on regulators' stand – suggesting that regulators' support for NCs is not guided by their national interest. Further, we find the effect is driven by regulators who had prior experience working in large banks. Finally, we show this unanimous decision-making process results in significant watering down of proposed rules. Overall, the results highlight the limits of harmonization of international financial regulation.

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# 1 Introduction

Increased interdependencies across countries have led to calls for greater harmonization of regulations (Nordhaus (2019)). The process of harmonization, however, is an outcome of complex negotiations between national regulators that are often conducted behind closed doors. While the objective of these negotiations is to produce a set of globally consistent standards that maximize overall welfare, national regulators are often torn between the dueling interests of maintaining stability through regulatory stringency and promoting the competitiveness of domestic economies (Boot and Thakor (1993), Kroszner and Strahan (2011) among others). Against this backdrop, this paper attempts to understand the process through which harmonization is achieved. We believe that a thorough understanding of these issues is important to gauge the efficacy of these harmonized regulatory reforms.

We use the negotiation process of the Basel Committee on Banking Supervision (BCBS) as a laboratory for our analysis. While the negotiations are often very secretive, leaked voting records provide us with a unique opportunity to examine this question. Specifically, we analyze the voting decision of national regulators from the UK, US, Germany, France, and Japan on all relevant issues negotiated in the Basel II and Basel III frameworks. While regulators are in broad agreement on these proposals prior to the consultations with banks, a significant amount of disagreement is observed in the position of the national regulators after they observe the position of their local banks as well as banks from other countries on the proposed regulatory issues. We find that regulators votes are highly correlated with the views of their national champions (NCs). We also find that the correlation is stronger if a proposed regulation creates a comparative disadvantage of the NCs in the global market. Since the proposed regulations were decided by the group of national regulators, any change in their voting on the same issue reflects the impact of the position taken by NCs. To probe this relationship further, we also collect speeches of regulators and infer their view (tone or sentiment) towards regulation through machine learning techniques on the corpus of speeches. Through this we check if there is a time series variation in the tone of speeches as a response to the position taken by the NCs. Next, we investigate the mechanism driving the relationship between the potential impact on local banks and the positions of national regulators through the prism of public vs. private theories of regulation (see Stigler (1971), Peltzman (1976), Becker (1983), Peltzman et al. (1989) among others). Finally, we find that the disagreement across regulators leads to original proposals being watered down during the process of negotiation.

BCBS is the primary body that sets global standards for prudential financial regulation. According to BCBS's charter its mandate "*is to strengthen the regulation, supervision and*

*practices of banks worldwide with the purpose of enhancing financial stability.*” The rule making process is generally initiated by the G20 and Financial Stability Board (FSB). Based on this input, the BCBS sets up working groups consisting of different national regulators to work out a proposal. The outcome of this process is published as a consultative document on BCBS’s website. In general, large international banks, lobby organizations representing them and banking associations representing smaller banks respond to the consultative document and state their opinion about the new proposed rule. Based on the information received from this process the involved national regulators negotiate among each other on the final code. New rules need to be decided by the committee on a unanimous basis. National regulators participating in BCBS work and decision-making are supposed to “*promote the interests of global financial stability and not solely national interests.*” Thus, to evaluate the role BCBS can play in fostering global financial stability it is imperative to investigate whether the BCBS members indeed follow the objective of global financial stability or they are guided by some alternate motivations such as national interests. BCBS is the primary body that sets global standards for prudential financial regulation. According to BCBS’s charter its mandate “*is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability*”. The rule making process is generally initiated by the G20 and Financial Stability Board (FSB). Based on this input, the BCBS sets up working groups consisting of different national regulators to work out a proposal. The outcome of this process is published as a consultative document on BCBS’s website. In general, large international banks, lobby organizations representing them and banking associations representing smaller banks respond to the consultative document and state their opinion about the new proposed rule. Based on the information received from this process the involved national regulators negotiate among each other on the final code. New rules need to be decided by the committee on a unanimous basis. National regulators participating in BCBS work and decision-making are supposed to “*promote the interests of global financial stability and not solely national interests.*” Thus, to evaluate the role BCBS can play in fostering global financial stability it is imperative to investigate whether the BCBS members indeed follow the objective of global financial stability or they are guided by some alternate motivations such as national interests.

We create a novel dataset to track the positions taken by regulators, large banks (i.e. national champions) and smaller banks from the UK, US, Germany, France, Japan and the European Union on all issues negotiated in the Basel II and Basel III frameworks. While the positions of banks for the relevant issues are public via consultative process,<sup>1</sup> regulators’

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<sup>1</sup>In general, banks summarize their position on the respective issue very clearly in the beginning of each response making it quite clear how to code on our scale.

positions are not available due to highly secretive nature of the negotiation process at the BCBS.<sup>2</sup> Nevertheless, a central banking journal called Risk.net openly reported about the individual positions of the different national regulators due to a leakage that likely originated from the working groups.<sup>3</sup>

Using this data, we investigate whether the position national regulators take on various issues is correlated with the positions of the banks headquartered in the same country. Under the hypothesis that the different national regulators aim to establish global financial stability and do not follow national interests, we would not expect such a pattern. First, we find that regulators tend to oppose the passage of a regulation if it is opposed by their national champions. The probability of the regulator opposing a proposed regulation increases by 30% if the national champion opposes the specific regulatory initiative. We include country and regulatory issue fixed effect to control for the possible country and issue specific heterogeneities. The fixed effects also allow the coefficient to be identified from within country variation in the degree of opposition of national champions across different regulatory issues as well as within issue variation across countries.

Second, the degree of opposition by a regulator is more pronounced when the passage of regulation is likely to have a differential impact on national champions across different countries. National regulators learn about the positions of their home as well as foreign banks during the consultative process and, thus, understand the expected impact of the regulatory initiative on different market participants. The degree of opposition by regulators is 45% higher in the instances when the potential impact of a proposed regulation disproportionately affects the national champions of a country (i.e. when the home banks oppose a specific initiative while foreign banks are neutral on this issue). The findings highlight that national regulators respond more when an initiative impacts the comparative disadvantage of their national champions.

Third, regulators do not respond to the impact that a regulation might have on smaller banks. For Example, European regulators protesting Basel's agenda of removing internal models has most importantly an impact on the largest banks (the national champions) and no impact on smaller banks under the standardized approach. European regulators did not oppose all the stringent disclosure standards of Basel III which asymmetrically affects the smaller banks that cannot spread fixed costs over many clients.

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<sup>2</sup>BCBS does not make any discussions/minutes of meetings available to the general public even after the regulation has been passed.

<sup>3</sup>We verify and supplement this information by downloading all speeches of regulators of the sample countries, official parliamentary documents, federal officials' testimonies, minutes of meetings from the Bank of England and Financial Conduct Authority, regulatory magazines/websites like risk.net and centralbanking.com, Roman Goldbach's coding of Basel II (Goldbach (2015)), newspaper articles - text mined from Factiva and LexisNexis. The details of the coding are provided in Data Section.

Although our analysis controls for the possible country and regulatory issue specific heterogeneities, the results could be driven by omitted issue-specific heterogeneities across countries simultaneously driving the position of regulators and larger banks. In order to fill this lacuna and probe the causal inference we collect around 2000 speeches made by the same central banker over time and use machine learning techniques on speeches and interviews to build a panel dataset of the position of national regulators across our sample countries from 2009-2016. The idea is to systematically analyze whether the tone of the speeches by the central banker responds to the potential impact of national champions in general and the relative impact of the national champion compared to other countries in particular.

To this effect, the empirical strategy exploits variation in the tone of speech of the same regulator across time. For instance, we highlight one example where we observe a complete reversal in the view toward the introduction of output floors.

*“I believe [output floors] to be a reasonable approach, because it keeps in check the complexity that is inherent in today’s risk-based regulations.”*

Andreas Dombret, Deutsche Bundesbank, Head of Bank Supervisory Department, 29<sup>th</sup> Oct 2015.

*“From a German perspective, there are two essential areas of action for the negotiations at the end of November. First, preservation of internal credit risk models, ... and second, **not** introducing an output floor.”*

Andreas Dombret, Deutsche Bundesbank, Head of Bank Supervisory Department, 16<sup>th</sup> Nov 2016.

The staggered nature of the introduction of the consultative document and the differences in the potential impact of regulation on the national champions across countries allows us credible identification. The results mimic the empirical facts that were laid out using the voting pattern of regulators in the BCBS. We find that regulators take a stance against regulation through their speeches following a proposed rule that is likely to reduce the comparative advantage of their domestic national champions.

A natural next question is why do regulators support the position of national champions? Public interest theories of regulation suggest that the alignment of regulators’ positions with the positions of their largest local banks is to foster domestic financial stability while private interest theories would characterize the nexus between banks and regulators as an outcome of regulatory capture. As the example above illustrates, German regulators changed their position on the issue of output floors to support their largest financial institution so that it is less likely to fall short of capital requirements. So supporting their national champion

might be in the mandate of regulators. Meanwhile, revolving doors between the regulator and the largest bank, where regulators promote and cater to the needs of the largest bank could be an alternate explanation.<sup>4</sup> A wide literature has documented that bankers are effective at lobbying in order to get their support (Johnson and Kwak (2011) and Mian et al. (2010)).<sup>5</sup>

We attempt to disentangle these alternate explanations in two ways. First, we exploit variation in the importance of national champions in a country’s economy and variation in regulators’ experience of working in large banks. The idea is that if the regulators care about national stability, their view would vary less with the national champions and more with the smaller banks if the relative importance of smaller banks taken together is higher than the national champions. We find that the degree of support of regulators towards the national champions is independent of their relative importance. This result suggests that the primary finding of the paper is unlikely to do with the promotion of domestic financial stability. Second, we exploit variation in the connection that regulators might have with large banks. This follows the premise that if the findings in this study are driven by regulatory entrenchment, it is likely to be more pronounced for regulators who had a link with large banks. We hand-collect data on the resume of regulators and identify individuals with prior experience of working in large banks. We find that propensity to support larger banks are strongest for regulators with prior connections with larger banks, providing credence to the private theory of regulatory rule making.

Finally, we find that the disagreement across regulators leads to original proposals being watered down during the process of negotiation. This follows the unanimous decision making process of the BCBS, which entails that reform will be adopted only if it constitutes a Pareto improvement over the status quo (Buchanan and Tullock (1962), Bouton et al. (2018) among others). We classify for each issue a measure of how much the original proposal has been watered down or diluted during the negotiation process.<sup>6</sup> We find that 11 issues out of a total

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<sup>4</sup>There has been a lot of anecdotal evidence about this, especially about revolving doors between the regulator and big banks. William Dudley, president of the New York Fed and vice-chair of the Federal Open Market Committee (FOMC) since 2009, hails from Goldman Sachs, where he worked as chief economist for a decade. He is in FOMC with Neel Kashkari (former ex-Goldman Investment banker) and Dallas Fed President Robert Kaplan, who worked as head of Asia-Pacific investment banking, over the course of his 23-year career at Goldman. The three of them together constitute a quarter of the FOMC’s twelve votes. Stephen Friedman, who chaired the New York Federal Reserve Board during the financial crisis was ex-chairman of the board of Goldman Sachs.

<sup>5</sup>Alternately, Barth et al. (2012) suggest a behavioral explanation responsible for financial supervisors supporting banks from their home country. According to their view regulators are subject to conformity resulting in a biased view on the banks they supervise.

<sup>6</sup>We code 0 for no dilution, 1 for no dilution but substantial delay in coming up with final standards for the reform, 2 for major relaxations from consultative document to final document and 3 for non-implementation/dropping from the agenda or no change from the existing framework.

of 30 issues from Basel II and III had some sort of dilution. Initiatives that had a differential impact on national champions of different countries have a higher probability of being diluted. Differential impact on national champions results in disagreement between regulators on account of rallying by the national regulators. This disagreement between regulators is what often seems to explain the dilution of certain rule making efforts since BCBS relies on unanimous decision-making. A common pattern illustrating such a behavior constitutes regulation that has an asymmetric impact on investments and commercial banks. Most issues adversely affecting the investment banks (e.g., Fundamental Review of the Trading Book) get watered down on account of opposition from the US and the UK and most issues which warrant higher capital requirements are blocked by European regulators.

Notwithstanding the underlying motives driving regulators' decision making, our results have important implications regarding the design of a global harmonized regulatory agency. By documenting that the harmonized rule making process is biased towards standards that have an asymmetric impact, the top-down global regulatory design fails short to implement certain rules. In other words, our findings suggest that regulators ignore the externalities of too 'soft' regulation in order to support the interests of their national champions. A considerable literature has documented how regulators have failed to introduce stabilizing policies and rules (see [Barth et al. \(2012\)](#) and [Thiemann \(2014\)](#) for a summary). Our results indicate that only the subset of regulations that are acceptable to national champions of players with negotiation power reach the implementation phase. Countries whose regulators have no substantial influence on the Basel negotiation process might implement rules that are mostly beneficial to large banks located in those countries that have a big influence on the BCBS.

The findings of this paper are the first attempt in understanding that the political and economic considerations of regulators can shape the international rule making process. Consequently, such considerations by regulators can prevent the passage of regulations pivotal in reducing regulatory failures. This is subsequently manifested in our finding that Basel regulations often get watered down from their intended extent. While our empirical analysis cannot clearly differentiate between these alternative explanations, we believe that the most likely candidate is that regulations are created in a competitive environment and larger banks are able to influence the regulator's positions. The finding that regulators particularly follow their national champions even when the collective weight of the smaller banks is more in the economy, indicates the possibility of a nexus between the larger banks and the national regulators. This, however, does not exclude any of the above-mentioned explanations.

Our paper contributes to several strands of the literature. As a starting point, our empirical evidence speaks to the economic theories of regulation. Under the public interest

theories of regulation, regulators are benevolent and aim to pursue the public interest (for a summary of this literature see [Laffont and Tirole \(1993\)](#), [Dewatripont et al. \(1994\)](#)). According to the private interest theories of regulation agents may pursue their own interests, perhaps at the cost of the public interest (See [Posner \(1974\)](#) for a discussion). As argued by [Stigler \(1971\)](#) and [Peltzman \(1976\)](#) regulation is often captured by the industry it is meant to regulate and is designed primarily for insiders' benefit. In the context of banking regulation this argument has been illustrated by [Kane \(1990\)](#) and [Boot and Thakor \(1993\)](#). Our findings suggest that regulators only follow public interest as long as these interests are aligned with the interests of the leading national bank.

More specifically, our research speaks to the design of international financial architecture. This literature has discussed the potential benefits and costs of harmonization of financial regulation as compared to increasing the national flexibility to depart from the international financial regulatory standards. [Romano \(2014a\)](#) illustrates how the existing global regulatory framework, the Basel Accords, can contribute to amplifying the errors of regulators. Harmonization of regulation may result in more homogeneity in financial institutions' business strategies which could potentially result in more instead of less systemic risk. Our paper suggests an alternative channel that is problematic to financial regulation. According to our paper, the incentives of regulators involved in shaping global financial regulators may be driven too much by competitive behavior and, therefore, the harmonized framework may not result in optimal rules, to begin with. This also highlights that unanimous decision making could often lead to inefficient decisions and a possible solution could be using different technology of rule making ([Bouton et al. \(2018\)](#)). The finding of this paper could also have implications on countries left out of the table. Since the rule making process is driven by the larger countries, rules that suit their collective benefits get passed and the resultant rule is imposed on other countries. Consequently smaller countries could find themselves in a relatively disadvantaged position following the passage of such harmonized international regulations.

In the aftermath of the financial crisis, several papers have discussed examples and the underlying reasons for regulatory failure that led to the financial crisis of the year 2008. [Barth et al. \(2012\)](#) discuss rule making activities prior to the financial crisis in several different countries illustrating evidence that regulators did not follow public interests. [Romano \(2014b\)](#) illustrates how the most problematic element of the Basel Accord, the measurement and definition of core capital ratios, has been a "subject of repeated political log-rolling". [Thiemann \(2014\)](#) provides an illustrative example of the failure to incorporate appropriate regulation on shadow-banking activities in the Basel Accord, even these activities has been identified as problematic by 1999 ([Jackson et al. \(1999\)](#)). Furthermore, large political science



literature has analyzed the standard setting process of Basel II (Goldbach (2015), Howarth and Quaglia (2016), Quaglia and Spendzharova (2017)). Tarullo (2008) questions the usefulness of extensive international harmonization of capital rules and supervisory practice. Our paper contributes to this literature by providing empirical evidence on why certain rules go through negotiations and other rules are watered down or even discarded.

The remainder of the paper proceeds as follows: Section 2 discusses the institutional background on which the empirical investigation of this paper is based. Section 3 provides a brief description of the data. Section 4 uses voting records to study the relationship between the positions of NCs and national regulators. Section 5 probes the causal relationship using the speeches made by central bankers. Section 6 provides the mechanism underlying the relationship. Section 7 studies the outcome on regulatory standard settings and section 8 concludes.

## 2 Institutional Background

### 2.1 About the Basel Committee on Banking Supervision

In 1974, the central bank governors of the Group of Ten (G10) countries established the Basel Committee on Banking Supervision (BCBS) as a committee of banking supervisory authorities. This step was taken in reaction to the collapse of the Bretton Woods agreement and disturbances in international currency and banking markets. The founding members were Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States. Currently, the membership stands at 28 member countries and 4 observer countries.<sup>7</sup> The committee is typically portrayed as a group of like-minded developed countries that choose this organizational arrangement due to similar interests regarding the establishment of a stable financial system. According to BCBS's charter its mandate "*is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability.*" Today, the BCBS is the primary body that sets global standards for prudential financial regulation. According to BCBS's charter its mandate "*is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability.*"

Countries are represented by the central bank and by any authority with formal responsibility for banking supervision. E.g., the US is represented by the Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York, Office of the Comptroller

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<sup>7</sup>Spain joined in 2001. Countries like Argentina, Indonesia and Saudi Arabia were invited in 2007 as a reaction to the beginning of the financial crisis. See [www.bis.org/bcbs](http://www.bis.org/bcbs) for more details.

of the Currency and Federal Deposit Insurance Corporation, and Germany is represented by Deutsche Bundesbank & Federal Financial Supervisory Authority (BaFin). While the regulators participating in the BCBS committee are thus employed by the different national institutions, their work and decision-making for the BCBS are supposed to “*promote the interests of global financial stability and not solely national interests.*” BCBS is located at the Bank of International Settlements (BIS) in Basel and the committee meets four times a year.

The main operating body of the BCBS – the Basel committee – is a collection of several working groups. These working groups are comprised of members and experts from various member agencies. Governors and Heads of Supervision (GHOS) is the governing body of the BCBS and is composed of central bank governors and heads of banking supervision. GHOS is the oversight body of the BCBS and BCBS relies on GHOS for approval of its major decisions. GHOS appoints the BCBS Chairman from among its members.

## **2.2 Regulation framing process at the BCBS**

In our empirical analysis, we investigate the positions different national regulators take in the international standard setting process of the BCBS. To this effect, it is important to understand the process followed by BCBS in framing the required rules and regulations. The process can be grouped into four steps.

First, the meeting of the Group of Twenty (G20) countries and/or the meeting of the Financial stability board (FSB) generally serve as a starting point for the regulatory standard setting process. The FSB was established after the 2009 G20 London summit and includes G20 economies and the European Commission. In these meetings, policymakers identify issues that potentially require new rules or a change in existing rules. The agenda of these meetings is then passed on to the BCBS. Formally, the G20 has delegated the task of framing international banking regulations to the BCBS. In our latter analysis, we consider the agenda provided by the G20 as exogenous input to the BCBS standard setting process.

Second, once the BCBS receives the input from the G20, it forms working groups that are composed of different national regulators that originate from different BCBS member countries. In general, an extra working group is created for each specific regulatory issue. The main task of each working group is to design a proposal for the new regulatory standard concerning this issue. Working groups employ their technical expertise to arrive at a consultative document.

Third, once a working group has reached a new proposal, the Basel Committee publishes the consultative document on its website and provides 3 months for the interested

parties to respond to the proposal. Banks, lobbying groups, banking associations, academicians and the general public can respond to this proposal. In responses provided by banks state their opinion (i.e. position) regarding the new regulatory initiative. This is the stage where national regulators learn about the positions of banks located in their own jurisdiction as well as of banks located abroad. The opinions stated by the different banks in their responses to the consultative document are likely correlated with the impact the new regulation would have on their business model. In some cases, a Quantitative Impact Study (QIS) is conducted by the Basel committee to assess the impacts of the regulations on banks.

Fourth, based on the information received from the comments of the banks and QIS, national regulators decide on the final regulation. Regulations need to be decided by the committee on a unanimous basis. This is mirrored in the unanimous decision-making approach characterised by an absence of voting. Since its inception, a vote has never been taken - unanimity in the Committee was somehow always achieved (Bundestag Finance Committee (2001)).

Negotiations on certain regulations can be straightforward and very complicated for some depending on how national regulators, their banks and banks of other countries feel about the regulation. We aim to explore this in our paper. The outcome of the final regulation can vary a lot as well. Some regulations are drafted without much change from the consultative document. Some can have substantial delays and multiple consultative documents depending on push back from the banks and if there are multiple views among the regulators. The difference in opinions or the lobbying can also lead to major changes from consultative documents to final regulations and even complete discard of the regulatory measure.

In this paper, we focus on all 30 issues for which consultative documents have been put forward for the Basel II and Basel III frameworks. While the so-called Basel II framework comprises 8 issues, there have been 22 major issues discussed that are now part of the framework called Basel III. Table 1 provides a list of all our sample issues.

As mentioned before, the BCBS standards are non-binding high-level principles. While the BCBS does not possess any formal supranational authority, the members are committed to implementing the BCBS standards in their domestic jurisdictions within the pre-defined timeframe established by the Committee (see Basel Committee Charter). The BCBS monitors the implementation of its standards by its member jurisdictions and their internationally active banks. The committee aims to ensure that the implementation of these standards happens in a timely, consistent and effective way. Committee has adopted a comprehensive Regulatory Consistency Assessment Programme (RCAP) that helps in monitoring its members' implementation of its standards.

Basel regulations are implemented by a huge number of countries that are not members of the BCBS or have any say in the framing of these regulations. For example, the Basel II accord has been incorporated into legally binding national legislation in more than 100 countries. Hence, the understanding how these regulations are framed is an important topic.

## 3 Data

The empirical analysis of this study hinges on novel ways to construct data from various sources of information. First, through leaked records, we obtain the position/voting records of regulators on the issues laid down in Basel II and Basel III. Second, we analyze the comments made by banks on the consultative documents published by the Basel committee and code their positions on the issues. Third, we collect speeches by regulators to infer the time-series evidence on regulators' view/sentiment on regulation.

### 3.1 Positions of Regulators

The position of the different national regulators on the issues is not available publicly due to the highly secretive nature of the negotiation process at the BCBS. The BCBS does not make any discussions/minutes of meetings available to the general public, even after the regulation has been passed. While specific national positions on most regulatory issues can be retrieved via protocols of parliamentary hearings, there has been one magazine called Risk.net that reported quite openly about the positions specific national regulators took during the BCBS rule making process described above. The only plausible explanation for this occurrence is that one or several members of Basel working groups or the staff of the BCBS itself have leaked this information to journalists associated with Risk.net. As a response to these reports, there has been anecdotal evidence that the BCBS urged members of the working groups to share information about the rule making process with journalists.

We take advantage of these Risk.net reports to code regulators' positions for the 30 major issues discussed during Basel II and III. We also supplement the positions obtained from the leaked reports using other sources like official parliamentary documents from Germany, testimonies of Fed officials, minutes of meetings for the Bank of England and the Financial Conduct Authority, regulatory magazines/websites [centralbanking.com](http://centralbanking.com), and newspaper articles - text mined from Factiva and LexisNexis.

We only code a binary variable for the positions of the different national regulators to reduce the subjectivity. We code the regulator position as -1 if the regulator opposes the measure and 0 if the regulator is in favor or indifferent. This can be interpreted as the

probability of opposing an issue in regression models. Since the regulators' opposition on an issue is easier to find, if we cannot find anything on a particular issue, we code it as 0 for the regulator (favor or indifferent). We proxy for the importance of an issue with the number of comments that it received for its consultative document or by including issue fixed effects in our regression models.

## 3.2 Speeches of Regulators

In order to understand the underlying reasons responsible for regulators' position, we infer their views on various regulatory aspects through their speeches made over time using the technique of topic modelling. We collect a corpus of around 1500 speeches of the board members and heads of regulatory authorities of our sample countries, that are maintained by the bank of international settlements for the year 2009 to 2016. We start the sample from the year 2009 which is the earliest that BIS has collected the speeches.

In the corpus of the speeches, we implement machine learning methodology to understand the sentiment that the central bankers express on regulation. To understand the part of speech that is associated with regulation vis-a-vis other topics we perform an LDA model. This allows us to look at the sentiment on regulation as well as sentiment on issues not related to regulation. The details of the methodology are explained in section 5.

## 3.3 Positions of Banks

The positions of banks and lobbying groups are coded from their comments on the consultative documents published by the Basel committee.<sup>8</sup> Our sample of issues consists of 22 from Basel III and 8 from Basel II that are listed in table 1. The leaked documents are obtained for France, Germany, Japan, the United Kingdom and the United States which are the leading players in Basel negotiations. All the countries in our sample are part of G7 and major economies. Countries like Switzerland, Canada and Nordic countries tend to be less involved in the Basel regulatory framework since they have stricter regulations at home already in place.<sup>9</sup> This can be also be seen from the fact that banks of these countries almost never comment on Basel consultative documents.

Responses to the consultative document by banks and lobbying groups are publicly available on the Basel committee's website. We bucket banks into national champions and smaller banks. National champion banks are the largest bank by asset size. Larger banks

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<sup>8</sup>In Basel II, all issues were published in a single consultative document.

<sup>9</sup><https://www.swissinfo.ch/eng/swiss-banks-get-strict-rules-than-basel-iii/28464958>  
<https://www.imf.org/external/pubs/ft/scr/2015/cr15257.pdf>

tend to reply individually and smaller banks reply as a part of a bankers association e.g, British Bankers Association, American Bankers Association and French Banking Federation.

While the responses to the proposed regulatory issues tend to be several pages, the positions each responding institution takes are very clearly stated for each issue in a summary at the beginning of the document. We code positions of banks from -2 (*strongly oppose*) to 2 (*strongly favor*). A bank is considered to *strongly oppose* a regulatory proposal if it has a problem with central parts of the regulatory standard and does not want the regulation to go through. An example of this is the opposition of Fundamental Review of the Trading Book (FRTB) by the US and UK banks since these banks have large trading books which were going to be severely impacted by this regulation. We classify position to be *weak opposition*(-1) if banks have problems with certain rules within the regulatory measure. For example, US banks opposed the derivatives part of the leverage ratio framework. A bank is classified to have a *neutral position*(0) if it did not choose to comment or was indifferent to the regulation as can be manifested by larger banks not being affected by disclosure regulations. We code banks to be in *strong favor*(2) of regulation if they support the passage of any regulation. For example, smaller German and French banks advocated any regulation increasing capital requirements associated with internal risk models (standardisation of risk-weighted asset calculation) since they argued that internal models were handing an unfair advantage to larger banks due to regulatory arbitrage. However, we do not find any case of large banks *favoring* the passage of any regulation.<sup>10</sup>

The analysis of the paper combines the three ways that we create the data. The description of this data that drives the empirical investigation is presented in table 2.

## 4 Regulators' positions in international standard setting

We start the analysis by showing the way regulators' position on issues laid down by BCBS, manifested through their voting records are guided by the way such regulations can impact their national champions. To this end, we first show a broad descriptive analysis by summarizing the voting patterns of the national regulators. Following which, we use a reduced form regression specification to understand the relationship between regulator's position and position of national champions.

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<sup>10</sup>Appendix C.1 explains the detailed process in which the positions are coded.

## 4.1 Descriptive Analysis

Figure 1 plots the voting patterns of national regulators in the BCBS negotiation process. As can be seen in panel A, there are 136 positions in favor of the passages of regulations discussed and 36 positions against these issues. Splitting these positions further according to cases in which the respective national champion that originates from the same country than the regulators opposes or is in favor of the specific issue. Interestingly, all the 36 positions of regulators against specific issues coincide with issues the respective national champion opposes as well. Still, we observe also 83 cases where national regulators were in favor of an issue once the national champion (NC) opposes it. Panel B shows the distribution of regulators' positions when the home country NC is more opposed to a specific regulation compared to NCs of other member countries vis-a-vis situations when the degree of opposition is equal across all the NCs. A large section of positions that were cast against regulation (28 out of 36) was for those regulations that had an asymmetrically higher impact on their own national champions compared to other countries, while we observe only 8 out of 136 regulatory positions in favor of such issues. In contrast, we observe only eight positions against a specific regulation when all NCs positioned against this rule and 75 positions in favor of these issues.

## 4.2 Empirical Specification and Results

We can further illustrate these patterns of regulators' positions by estimating the following regression specification:

$$Y_{cj} = \delta NC Support_{cj} + \beta_c + \beta_j + \epsilon_{cj} \quad (1)$$

with the main dependent variable  $Y_{cj}$  is a dummy variable taking 1 if the national regulators representing a country  $c$  in the BCBS supported an issue  $j$ . The main explanatory variable  $NC Support_{cj}$  is defined as the degree of support by the national champion banks for an issue as reflected through their comments in the consultative document. We include issue and country and issue fixed effects as denoted by  $\beta_c$  and  $\beta_j$ , respectively.  $\beta_c$  controls for all unobservable characteristics of a country and allows the identification to exploit variation in the position of local banks across different issues laid down by the BCBS.  $\beta_j$  controls for the potential perception of an issue by all the banks across the world and allows the identification from cross-sectional variation in banks' position across countries. The coefficient of interest  $\delta$  reports how the probability of a regulator increases to take a position in favor of an issue if the NC is also in favor of the issue.

Table 3, panel A reports the relationship between positions taken by the NC and the positions of the regulators during the Basel rule making process. When focusing on all issues in columns (1) and (2), it is evident that the position of the national financial regulator and national champion is highly correlated. The probability of the regulator opposing the regulation increases by 28%, (column 1) if its national champion opposes the regulation by one unit. Once we control for systematic differences of the different issues discussed by including issue fixed effects, this probability increases further to 30% (column 2).

Next, we move to analyse issues which created a differential impact on national champions of different countries in a regression setup. We estimate the same equation as before but we split the sample into issues which had a differential impact (columns 3-4) versus those that did not (columns 5-6). We explore the regulator's incentives and the kind of issues that it opposes. Regulators tend to oppose a regulation only when there is a differential impact being created by a regulation (columns 3 and 4 of table 3). Controlling for issue fixed effects, the probability of a regulator opposing a regulation is by 45% higher once the home country NC opposes the regulation while other NCs are neutral or in favor. We find substantial smaller positive but statistically insignificant coefficients (columns 5-6) when the regulation impacts banks of different countries in a symmetric way.

In Panel B of table 3 we use the position of small banks as the main explanatory variable in the regression specification 1. In column (1) which includes only country fixed effects, we find that there is no effect of the positions of small banks on the regulators. By including the issue fixed effects that control for issue specific characteristics, we find a positive and significant coefficient largely in line with the findings for the NCs reported in Panel (A). This potentially could be following the high correlation (0.59) between the positions taken by NCs and small banks. Consequently, in Panel C we augment regression 1 with the position of small banks together with the position of the NCs

We find that the position of smaller banks has no impact on the decision making of regulators (panel C of table 3). We even find that regulators end up going against the positions of smaller banks. The coefficient however drops to 0 when issue fixed effects are included. Once we split the issues into those where there is disagreement and no disagreement among the NCs of the BCBS member countries we basically find no significant relationship between the position of small banks and of regulator.

These findings, taken together shows that regulators have a strong tendency to vote in the same direction as the NC originated from the same country once there is disagreement about the issue by NCs of competing countries. The disagreement occurs primarily when the reform would asymmetrically impact them. Given that the US and European banking markets fundamentally differ in terms of the proportion of banks do investment banking and



corporate credit lending, reforms particular impacting one of these two business lines have a high likelihood of getting an adverse position by a regulator. Given the unanimous decision making process of the BCBS these are precisely the reforms that have a high probability of not getting implemented (see section 7 for further details). Meanwhile, smaller banks are not able to influence the regulator’s position. This could either be seen in line with the objective of the regulator trying to achieve financial stability in her region since larger banks have a bigger impact on the economy of the country. Alternatively, this does not exclude the possibility of regulatory capture. Larger banks have a higher influence on a regulator through revolving doors and political connections. In section 6.1 we will probe the cross-sectional differences in the relative importance of large banks across the sample of countries in the attempt to understand which of the explanation dominates the findings in this paper.

## **5 Evolution of regulators’ position in international standard setting: Evidence from the tone of speeches**

Analyzing the positions of national regulators suggests a strong tendency to vote in the same direction as the NC that originates from the same country once there is disagreement about the issue by other NCs. To probe the causal mechanism of this relationship we need to focus on time-series evidence to understand which factors do impact regulators’ positions. Given that regulators tend to hold frequently speeches about the regulatory agenda, we can use textual analysis techniques to obtain time series information on regulators’ positions. We first introduce our methodology to measure the tone of regulators’ speeches. Next, we test whether the way regulators view on specific issues discussed at the BCBS is impacted by NCs in general and the relative (dis)advantage imposition of the issue in particular.

### **5.1 Methodology**

We infer the views of the regulators through their speeches made over time using the technique of topic modelling. The methodology of starting with the speeches and finally inferring the attitude about regulation follows two-step process. The first step is the classification of a speech to a particular topic, and the second step is to analyse the sentiment associated with each topic.

For the first step, we use topic modeling on the 1,500 speeches of national regulators which is one of the most used dimension reduction techniques in the field of machine learning and natural language processing (Hansen and McMahon (2016); Bybee et al. (2020) among others). Particularly we use the Latent Dirichlet Allocation (LDA) topic modeling approach

of Blei et al. (2003). LDA is very flexible algorithm that clusters words into topics on the basis of repeated co-occurrence. We input the corpus of each speech in what is called a “*bag-of-words*” form that is translated into a numeric matrix with N rows of each line and M columns of each distinct word. Before using the words in the LDA analysis, we first remove stop words (such as ‘the’, ‘a’ and ‘and’) and also stem the remaining words which reduces them to a common linguistic root (‘economy’ and ‘economic’ both become ‘economi’). We also provide the second input - the number of topics- which for this paper, we use a 10-topic model.

Using these inputs, we follow Campbell et al. (2012) and use the LDA algorithm clusters the words into 10 different topics which are the probability distribution of words that tend to occur together in the speeches. Next, we get the probability of a line in the context of our speeches belonging to a particular topic. We get the probability of each sentence belonging to each of the ten topics. We classify the sentence as belonging to the regulation topic if the probability of regulatory topics is the highest for that sentence.

The LDA-estimated topics cover different aspects of the speeches of the regulators. The key words (tokens) are presented as word clouds figure 2. We select two topics which relate to issues regarding regulation.

**Topic 2:** It includes wide usage of stemmed words like “*regulatori*”, “*bank*”, “*supervisor*” among others

**Topic 8:** It includes wide usage of stemmed words like “*financi*”, “*regul*”, “*risk*” among others

Word clouds show that the methodology produces meaningful topics like monetary policy, economic growth, regulation etc.

The next step after identifying the sentences that are related to topics of financial regulation is to create a time series measure of the tone of regulators’ speeches in favor of regulation. This follows a standard way of measuring market sentiment in the finance literature, where word lists reflecting positive and negative sentiments are chosen and applied to newspaper text, company results releases or macro releases like FOMC documents.

To measure the tone of the sentences on financial regulation we use “directional” words using dictionaries provided by Loughran and McDonald (2011). Using the sentences, that using the first step we had identified financial regulation, we create a time series measure of regulators’ view in favor and against regulation in the following way:

$$RegSent_t^c = \frac{Words_{pos,t} - Words_{neg,t}}{TotalWords_t^c} \quad (2)$$

In the above equation  $RegSent_t^c$  is the regulatory sentiment of the speech given by central banker C in time t. This is measured as the difference between the positive ( $Words_{pos,t}$ ) and negative words ( $Words_{neg,t}$ ) as a share of total words.

Appendix tables C.1 and C.2 provide some example negative and positive sentences, respectively.

## 5.2 Results

We begin by investigating whether the possible impact of regulation on NCs can affect the views of regulators. The empirical strategy exploits speeches made by the same regulator over time and information about the relative impact on the NCs is inferred through the comments on the BCBS proposals. The regression specification takes the following form:

$$Y_{i(j)t} = \beta_1 NC\ Support_{jt} + \beta_i + \beta_t + \epsilon_{it} \quad (3)$$

Where  $Y_{i(j)t}$  dummy variable taking 1 if the speech of a regulator  $i$  of a country  $j$  delivered in the year  $t$  is in the favor of regulation.  $NC\ Support_{jt}$  is the degree of support of national champions towards ongoing regulatory issues. Regulatory issues are identified by the outstanding issues whose consultative documents are open for comments from banks. Since there are instances where multiple consultative documents on different issues are outstanding at the same time, we take the average position of banks across the issues. The fixed effects control for various confounding factors and allows the estimation of  $\beta_1$  to come from both time series and cross-sectional variations. The fixed effect  $\beta_i$  allows the identification to come from time series changes in the position that the national champion of country  $i$  takes on regulation. The fixed effect  $\beta_t$  allows the identification to come from variation in positions of national champions across countries.

The result from equation 3 is presented in the panel A of table 4. In columns 1 (and 2) we find that a one standard deviation of increase in support is associated with a 2.5 percentage (2.9 percentage) increase in the probability of support. Next, we restrict the sample to cases when there was disagreement in the views towards the passage of regulations across NCs of different countries. As mentioned in section 4 regulators particularly focus on instances that reduce the comparative advantage. We find that the effect is particularly high during such periods of disagreement as shown in columns 3 and 4. However, we do not find any impact when there is no disagreement as shown in columns 5 and 6.

Next, we use regression specific 3 with the primary explanatory variable being the average position of small banks on all the issues outstanding. We report the results in Panel B of table 4. We do not find any impact of the positions taken by small banks on the

opinions of the speeches of the regulators. In Panel C, we report results by augmenting regression specification 3 to include positions of small banks. We find the results reflect the results in Panel A and Panel B, that is we find that the national regulators changing their view on regulations only with the views of the NCs and not with the small banks. This is particularly salient in times when there is higher disagreement across the banks of different countries. Meanwhile, we do not find any impact when there is no difference in positions across countries.<sup>11</sup>

These results, taken together corroborate the findings in section 4. We find a shift in the tone of speech by regulators after an issue impacts their NCs asymmetrically compared to NCs of other economies. The results reflect Singer (2004), who highlights national regulators tend to oppose harmonized regulatory framework that reduces the competitive advantage.

### 5.2.1 Falsification Test

We construct a falsification test by investigating potential changes in the sentiment of regulators on issues other than regulation as the degree of opposition by NCs across issues changes. The idea of the test is that if our initial assertion of NCs driving the position of national regulators is true, change in the degree of opposition on issues laid down by BCBS should affect only the positions of national regulators surrounding financial regulations and not on economic topics unrelated to regulation.

To this effect, we create a measure of sentiment on topics that are observationally unrelated to regulation. More specifically we focus on all topics in figure 2 other than topics 2 and 8 (that reflect regulation) and topic 9 (which could potentially be linked to financial regulation). We then use regression specification 3 with the main dependent variable being a dummy that takes 1 if the speech of a regulator  $i$  of a country  $j$  delivered in the quarter  $t$  is in the favor of topics other than regulation. The results are reported in table 5. In Panel A, we find there is no impact of NCs position on the sentiment of national regulators on issues orthogonal to financial regulation. This holds true both for instances of disagreement and no disagreement. The coefficients are statistically insignificant and magnitudes are very close to 0. In Panel B, we do not find any impact on the position of small banks. Further, in Panel C, when we have both the large and small banks as the explanatory variable continue

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<sup>11</sup>There can be potential concerns that multiple speeches of the same speaker or from the national regulators of the same country associated with the same set of information on the position of National Champions regarding the existing issues. This could potentially have a potential impact on downward biasing the estimation of standard errors. In order to show that our results are robust to such issues, we collapse the data in two ways. First, we collapse all speeches from the same regulator when the issues are outstanding and the related positions of the NCs remain the same. We report the result in Appendix table A.1. Second, we collapse the speeches across the regulators from the same country and report the results in Appendix table A.2. The results from these are quantitatively and statistically similar to the ones obtained in table 4

to find close to zero impact.

The falsification result serves two primary purposes. First, it provides higher credence to the claim of the paper that opposition of NCs particularly in times of disagreement across competing economies impacts the position of national regulators on the desirability of financial regulations. Second, the null results on broad macroeconomic sentiment show that the change in regulatory sentiment is a broad reflection of the existing macroeconomic trend prevailing in the economy and the release of consultative documents was not related to such macroeconomic trends.

### 5.2.2 Alternate Specification

In this section, we explore an alternate way of identifying the way national regulators change the tone of their speech towards regulation in response to the competitive disadvantage of a potential regulation on their local NCs. To this effect, we perform an event-study approach – treating the issuance of consultative documents on different issues as distinct events and studying the evolution of the tone of regulators towards the regulatory issue around each event. This is distinct from the baseline specification where the main explanatory variable is the average position of the NCs on the outstanding consultative documents

For this analysis, we focus only on the 22 issues of Basel III as all the 8 issues of Basel II were laid down in the same consultative document. We use a window of 6 months before and after each consultative document and perform the following regression specification:

$$Y_{ir(c)k} = \beta_1 NC\ oppose_{ic} \times Post_k + \beta_{ic} + \beta_k + \beta_r + \epsilon_{irk} \quad (4)$$

Where  $Y_{ir(c)k}$  dummy variable taking 1 if the speech of a regulator  $r$  of a country  $c$  delivered in the event-time  $k$  around the consultative document related to issue  $i$ .  $NC\ oppose_{ic}$  is a dummy that takes a value 1 if the national champions in a country  $c$  opposed an issue  $i$ .  $Post_k$  is a dummy variable that takes a value 1 for 6 months post the event and 0 for 6 months prior to the event.

The results from the regression specification 4 is presented in Panel A of Table 6. In columns (1) and (2), we study events around all the issues. In column (1) which includes country $\times$  issue and event-month fixed effects, we find that when the national champions oppose a particular issue, the probability of support of a national regulator towards regulation as inferred through the tone of the speech goes down by 5%. In column (2), when we include speaker fixed effects to identify the effect within the same speaker, we find the impact to be quantitatively similar. In columns (3) and (4) we focus particularly on issues where there exists disagreement across the NCs. The results are quantitatively stronger. Meanwhile, we

do not find any significant effect on the positions taken by the national regulators around the issues where there does not exist any disagreement. The results provide additional support to our baseline results that regulators tend to take a less positive view on regulations once a proposed regulatory change could impact the competitive advantage of their NCs. The event-study results are more tractable as we can see the position of the same regulator before and after the event of the consultative document being laid down.<sup>12</sup>

In Panel B of the table 6, we report the result from regression specification 4, with the dependent variable being defined as sentiment on issues unrelated to regulation. Consequently, it serves as a falsification test. The results show that the coefficients on the falsification tests are statistically insignificant and quantitatively close to 0.

## 6 Potential Mechanism

In this section, we intend to investigate the potential mechanism that might drive the results. There could be two broad explanations for the result. First, regulators care about financial stability in their country and since the national champion is more important to financial stability than the smaller banks, they get support from the regulator in Basel negotiations. Second, there could be regulatory entrenchment by the national champions, following the self-interest/regulatory capture hypothesis, which includes revolving doors as a reason for supporting the largest financial institutions. A wide literature has documented that bankers are effective at lobbying in order to get their support (Johnson and Kwak (2011) and Mian et al. (2010)).

### 6.1 Relative Importance of Large Banks

We intend to shed some light to lend support to either of the channels by looking across countries that have relatively higher importance of smaller banks. The idea is that if the regulators care about national stability, their view would vary with the relative importance of the smaller banks. To perform this analysis we look at countries that have a higher share of small banks vis-a-vis other countries. First, we study if there is any difference in the

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<sup>12</sup>However since the consultative documents are open for discussion for a significant period before actual voting takes place, there are multiple open consultative documents at every point in time. Consequently, it is difficult to attribute a speech made by a regulator exclusively to either pre or post-period of a single event. Therefore, we look at only those speeches which were made in a window of 6 months around the consultative document (3 months prior and 3 months post the event) such that the classification of a speech to either pre or post of an event is cleaner. Nevertheless, there is some duplication of observations due to multiple consultative documents coming in a short span of time.

voting pattern by the following modification of regression specification 1:

$$\begin{aligned}
Y_{cj} = & \beta_1 NC Support_{cj} \times Low\ Small\ Bank\ Share_c + \\
& + \beta_2 NC Support_{cj} \times High\ Small\ Bank\ Share_c + \beta_c + \beta_j + \epsilon_{cj}
\end{aligned} \tag{5}$$

The results from the above regression specification are reported in the Panel A of table 7. We find that (columns 1 and 2) the probability of voting for the regulation is low when NCs oppose it and there is no difference across countries with high and small shares of small banks. In columns (3) and (4) where we particularly focus on the issue where NCs disagree, we find that countries with varying degrees of small-bank-share regulators follow the position of NCs and there is no statistically distinguishable results across countries varying in their share – in fact, the magnitudes are stronger in countries with a higher share of small banks. We do not find any impact on issues when there is no disagreement across countries.

Next, we corroborate the analysis using speeches of the national regulators and study if the degree of comovement of the sentiment towards regulation and views of NCs varies across countries based on a differential share of small banks. Consequently, we perform the following variation of regression specification 3:

$$\begin{aligned}
Y_{i(j)t} = & \beta_1 NC\ Support_{jt} \times Low\ Small\ Bank\ Share_{jt} \\
& + \beta_2 NC\ Support_{jt} \times High\ Small\ Bank\ Share_{jt} + \beta_i + \beta_t + \epsilon_{it}
\end{aligned} \tag{6}$$

Where  $Y_{i(j)t}$  dummy variable taking 1 if the speech of a regulator  $i$  of a country  $j$  delivered in the year  $t$  is in the favor of regulation.  $NC\ Support_{jt}$  is the degree of support of national champions towards ongoing regulatory issues. The results from this regression specification are reported in Panel B of table 7. In columns (1) and (2) where we include all the issues, we find the positive relationship between the position of NCs and the sentiment of national regulators is not different across countries varying in their share of small banks. The results in columns (3) and (4) where we include only the issues where regulators across countries disagree, mimic the results in columns (1) and (2). However, in columns (6) and (7) when we look at issues when there is no disagreement, there is neither significant impact of the position of NCs on the tone of central bankers in countries with a larger share of small banks nor in the countries with a relatively lower share of small banks.

In table 8 we augment the regression specifications 5 and 6 with the positions inferred by small banks interacted with the share of small banks across the countries. The results echo our existing findings that the results are driven by the position of NCs and not by the small banks and the findings are no different across countries with a varying share of small

banks.

The results taken together show that regulators tend to follow NCs even in countries that have a higher share of small banks. This reflects that the propensity to follow NCs by the regulators is not necessarily driven by the objective of maintaining the financial stability of the national economy. Consequently, our findings lend more support to the thesis of self-interest/ regulatory capture.

## 6.2 Personal Experience of Regulators

In order to further probe the mechanism, we exploit the difference in connection that national regulators have with large banks. The idea is that if the findings in this study are driven by regulatory entrenchment it is likely to be more pronounced for regulators who had a link with large banks. In order to measure links between regulators and large banks we hand-collect information on the work experience of regulators and identify regulators who had a (significant) prior experience of working in a large bank before joining the central bank. Using this information we perform the following regression specification

$$Y_{i(j)t} = \beta_1 NC\ Support_{jt} + \beta_2 NC\ Support_{jt} \times HighExperienceDummy_i + \beta_i + \beta_t + \epsilon_{it} \quad (7)$$

Where  $Y_{i(j)t}$  dummy variable taking 1 if the speech of a regulator  $i$  of a country  $j$  delivered in the year  $t$  is in the favor of regulation.  $NC\ Support_{jt}$  is the degree of support of national champions towards ongoing regulatory issues. Regulatory issues are identified by the outstanding issues whose consultative documents are open for comments from banks.  $High\ Experience\ Dummy_i$  takes the value 1 if the regulator has more than the median year of work experience (5 years) in a large bank.<sup>13</sup>

The results from regression specification 7 are reported in table 9. In columns (1) and (2) where we include all the issues, we find there is a positive relationship between the position of NCs and the likelihood of the tone of the regulator’s speech being in favor of regulation. We find a positive coefficient for  $\beta_2$  (though not significant), indicating the relationship to be stronger for regulators with prior experience of working in an NC. In columns (3) and (4) when we include only the issues where there is disagreement across the NCs of different countries, we find a positive and significant coefficient for  $\beta_2$ , highlighting that the regulators who are connected with the large banks are the ones who are toeing the lines of the NCs. We find results that are similar in spirit when we include issues where

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<sup>13</sup>In appendix tables B.1 and B.2 we report results when we define the high experience dummy as having a positive experience above 10 years of experience respectively. We see that the result gets stronger as the experience increases. In table B.3 we also report the result where we use a continuous variable of experience, standardized across the sample.



there is no disagreement across the NCs of different countries.

## 7 Consequences for international standard setting

Finally, we investigate the way positions taken by national regulators in the harmonization process manifest on the regulation that gets implemented through the negotiation process. To do so, we follow the regulatory initiatives from consultative to negotiation and finally the ultimate rule. In the rule-making process, that follows a unanimous voting rule, some rules get passed in the exact form that it was proposed, while others get diluted down, delayed or in some instances completely abandoned. In this section, we examine if opposition by national champions in general and disagreements across NCs in particular lead to watering down of the proposed rules as envisaged in the consultative documents.

### 7.1 Measurement

To do so, we measure whether the content of the given rule changes from the consultative document phase to the final implementation stage. We create a variable *water down* that takes the value 0 if there are no changes in the proposed and the implemented rules. Examples of such regulation are liquidity standards such as Net Stable Funding Ratio (NSFR) and Liquidity Coverage Ratio (LCR) which were passed almost unchanged. The variable *water down* takes the value 1 if there has been some form of dilution. We further construct a variable, *intensity of water down* based on the degree to which a proposed regulation had been subjected to changes and/or delays. *intensity of water down* = 1 if there no dilution but substantial delay in coming up with final standards for the reform. For example, the Fundamental Review of the Trading Book was primarily delayed due to heavy push-back from the large investment banks. *intensity of water down* = 2 if there are major relaxations from the consultative document to the final document. For example, the leverage ratio framework proposed a minimum of 5% leverage ratio and the inclusion of derivatives in the leverage ratio calculations. The final rule had 3% as the minimum leverage ratio and changes in the treatment of derivatives and Securities Financing Transactions (SFT). Finally, *intensity of water down* = 3 if the negotiation process leads to non-implementation/dropping from the agenda or no change from the existing framework. Identification and measurement of step-in risk (shadow banking) was dropped and a final rule was never established by the BCBS. We find that 11 issues out of a total of 30 issues from Basel II and III had some sort of dilution. Table 10 provides the list of issues and the intensity of the watering down.

## 7.2 Result

Using the above classification of watering down of regulation, we investigate the consequences of this behaviour of the regulator. Since we find in sections 4 and 5 that regulators tend to oppose a proposed regulation if there is disagreement across NCs, it is likely that such issues will be watered down. This follows the unanimous voting rule, where opposition from even one national regulator causes an impasse in the passage of a regulation. We aim to investigate this by performing an issue-level analysis and investigate the kind of issues that are implemented by the Basel committee. In order to do so, we estimate the following regression specification:

$$Water\ Down_j = \beta_0 + \beta_1 \times Disagreement_j + \epsilon_j \quad (8)$$

Where  $WaterDown_j$  is a dummy variable that takes a value of 1 if an issue  $j$  has been watered down.  $Disagreement_j$  takes a value of 1 if an issue had a differential impact across local banks of different countries as inferred through the consultative documents. Results are presented in table 11. In column (1), we present results of regression specification 8 with the main explanatory variable being disagreements across NCs. We find that the probability of such issues where NCs disagree has an 86% higher probability of getting watered-down. column (2) reports results from regression specification 8 where the main explanatory variable is disagreement across small banks. In line with the earlier results, we do not find any significant impact of disagreements of small banks on the probability of a rule getting watered down. In column (3) we use identifiers of disagreement across small banks and NCs in the same regression specification and find that only disagreements across NCs cause a watering down of regulation.

Do disagreement leads only to watering down and delays of the proposed regulation or it may end up in a complete stalling of them? In order to answer this, we code the intensity of watering down of an issue on a scale of 0-3. 0 is no dilution. 1 is no dilution in regulatory standards but major delays in arriving at the final regulation document from the consultative document (the basel committee does not mention a specified timeline but tries to come up with a final regulation within a year after the consultative document). 2 is major relaxations from the consultative to the final document. 3 is when the issue is completely discarded.

To test if some rules get completely discarded as a result of disagreement among NCs, we group issues coded as 1 and 2 and call it *delays and dilution* and issues coded as *discard* and run the baseline specification with these variables as the main dependent variable. The results with *delays and dilution* as the main dependent variables is reported in columns (4)-(6). We find that the probability of delay or dilution is 33% higher when there is disagreement

across NCs (column (4)). However, there is no impact of disagreement of small banks as reported in column (5). When we include both disagreement across NCs and disagreement across small banks in column (6) the effect is particularly driven by disagreement across NCs. In columns (7)-(9) the main dependent variable is *discard*. In column (7) we find that disagreement across NCs lead to more than 55% reduction in the probability of a regulatory issue being completely discarded. We do not find any impact of disagreement across small banks in column (8) and finally in column (9) the result mimics columns (3) & (6) and we find that the impact is driven by disagreement across NCs, when both disagreement across small banks and NCs are included in the regression specification 8.

These results taken together show that dilution is caused by the fact that differential impact on national champions is manifested in national regulators taking positions against the implementation of a proposed regulation. Given the rule of unanimous decision making at the BCBS, this ends up in rules getting not only diluted but in many instances completely stalled. These results indicate that only the subset of regulations that are acceptable to national champions of players with negotiation power reach the implementation phase.

## 8 Concluding Remarks

The rapid pace of globalization over the last few decades has made global production extremely interconnected. Consequently, there has been an amplification of international spillovers of domestic policy. This has led to increased calls for international harmonization of regulatory standards across different sectors. For example, the Paris Agreement brought 196 countries across the world with a common target of reducing emissions of greenhouse gases. In the airline industry, the Capetown treaty sets down the rules that govern creditor rights for the countries that have signed up for the treaty. Harmonization of these rules is done with the idea to reduce the negative externalities. However, the harmonization of rules imposes a one-size-fits-all approach that can have negative consequences. Further political economy and organizational constraints can limit its effectiveness. Therefore, to understand the effectiveness of international standard setting, it is important to understand the underlying rule-making process. This paper is an attempt to this end, using the setting of international standard setting by the BCBS.

The findings of this paper highlight that the national regulators follow the position of their NCs (and not the small banks) during the negotiation process of international standard setting. Particularly, we document that financial regulators support the position of their national champion if a given issue tends to threaten the competitiveness of the national champion. This behavior of the regulator could either follow the objective to improve

domestic public welfare by fostering financial stability or it could be driven by the alternate motives of catering to the private interests of large banks. We find that the alignment of the opinion of regulators and the NCs is particularly stronger for regulators with prior connections to NCs – providing support to the private interest theories of regulations. Meanwhile, we do not find any support for the public theories of regulation since the regulators do not particularly support the smaller banks and keep following the position of NCs even in countries where small banks are more important.

Our results have important implications regarding the design of a global harmonized regulatory agency. We find that the proposed rules get significantly watered down during the negotiation process, owing to the requirement of unanimous decision making. More specifically, we show that those regulatory initiatives that symmetrically affect national champions from countries actively determining financial regulation are successful. In contrast, a new regulation that has an asymmetric impact on different national champions is likely not implemented. This also highlights that larger economies that have a seat in the table of Basel decision makings drive the global standard setting. Since Basel rules are implemented in many economies, this might unfairly impose a cost on countries not participating in the Basel working groups. Overall, our findings question whether the current international standard setting via the Basel agency really provides optimal outcomes.

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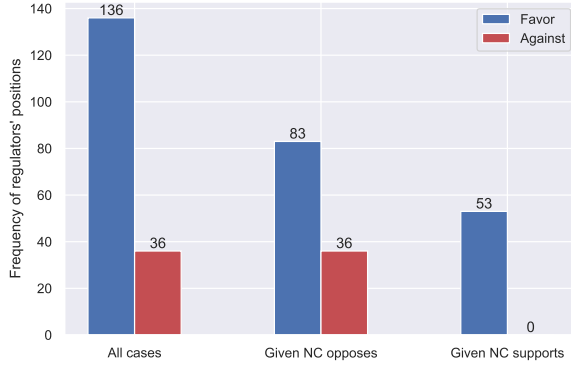
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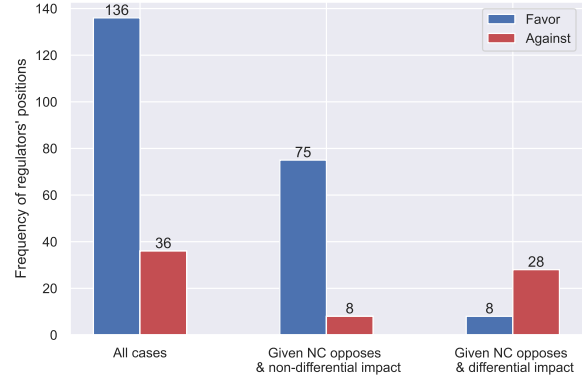
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Figure 1: Regulators Position and Opposition by National Champions

This figure presents the voting patterns of the regulators in the BCBS negotiation process. Panel A shows the votes of regulators in favor and against the passage of regulations and shows their distribution when the national champions supports a regulation vis-a-vis when they oppose the regulation. Panel B shows the distribution of votes by the central bankers when the national champions of the country is more opposed to regulation compared to the national champions of other countries vis-a-vis when the degree of opposition is equal across all the NCs



(a) Position of central bankers and Opposition by National Champions



(b) Position of central bankers and Disagreement among National Champions





Table 1: List of issues

This table presents the list of issues of Basel II and III for which the consultative documents were laid down. There are a total of 30 issues of which 22 issues are from Basel III and 8 issues are from Basel II.

Regulation	Basel
Identification and measurement of step-in risk (Shadow banking)	III
Leverage ratio framework	III
Leverage ratio disclosure requirements	III
Liquidity Coverage Ratio	III
Liquidity Coverage Ratio Disclosure	III
Net Stable Funding Ratio	III
Net Stable Funding Ratio Disclosure	III
Fundamental review of the trading book	III
Interest Rate Risk in the Banking Book	III
Total Loss Absorbing Capacity	III
Pillar 3 disclosure requirements	III
Measuring and controlling large exposures	III
Capital requirements for bank exposures to central counterparties	III
Margin requirements for non-centrally cleared derivatives	III
Simple, transparent and comparable securitisations (Securitisation framework)	III
Revisions to the standardised approach for credit risk (Capital floors)	III
Standardised Measurement Approach for operational risk	III
Non-internal method for capitalising counterparty credit risk exposures	III
Global systemically important banks	III
Global Regulatory framework (capital)	III
Market risk framework	III
Domestic systemically important banks	III
Securitisation in scope of IRB	II
Credit risk mitigation (further expansion of eligible assets)	II
Interest rate risk - capital requirements	II
Capital - credit risk	II
Capital - operational risk	II
Pillar 2 supervisory review	II
Pillar 3	II
Consolidated Evaluation	II

Table 2: Description of the Data

The table presents an overview of the final data for the primary empirical analysis of this paper. The description includes the number of issues, the positions taken by national champions and small banks on these issues and the voting records by the central bankers during the regulation process.

Total issues	30
Issues in Basel III	22
Countries coded for Basel III	DE, EU, FR, GB, JP, US
Issues in Basel II	8
Countries coded for Basel II	DE, FR, GB, JP, US
Issue-NCs or Issue-Regulator observations	172
Opposition from NCs (-1)	119
Strong opposition from NCs (-2)	42
Opposition from Regulators	36
Opposition from smaller banks (-1)	99
Strong opposition from smaller banks (-2)	12
Issues that had differential impact on NCs	8
Watered down issues	11

Table 3: Voting Pattern

This table presents the relationship between the position taken by the banks and the voting of the central bankers during the negotiation of Basel rule making. Panels A and B report the results on the way the voting of central bankers is affected by the positions taken by the national champions and small banks, respectively. Panel C reports the relationship between the voting of central bankers and the position taken by both national champions and small banks. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: National Champions						
Position of the NC	0.284*** (0.075)	0.303*** (0.065)	0.355*** (0.098)	0.452*** (0.059)	0.071 (0.054)	0.078 (0.083)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Issue Fixed Effects	No	Yes	No	Yes	No	Yes
Adj.-R <sup>2</sup>	0.287	0.755	0.482	0.859	0.0625	0.536
Obs.	172	172	46	46	126	126
Panel B: small banks						
Position of smaller banks	-0.074 (0.102)	0.160** (0.074)	-0.032 (0.103)	0.410*** (0.109)	0.097 (0.060)	0.085 (0.071)
R-squared	0.0447	0.652	0.174	0.574	0.0847	0.542
Obs.	172	172	46	46	126	126
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Issue Fixed Effects	No	Yes	No	Yes	No	Yes
Panel C: All Banks						
Position of the NC	0.308*** (0.064)	0.310*** (0.066)	0.355*** (0.099)	0.439*** (0.059)	0.025 (0.036)	0.038 (0.063)
Position of Small Banks	-0.133** (0.060)	-0.018 (0.058)	-0.031 (0.076)	0.050 (0.037)	0.081* (0.044)	0.066 (0.051)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Issue Fixed Effects	No	Yes	No	Yes	No	Yes
Adj.-R <sup>2</sup>	0.339	0.755	0.485	0.861	0.0875	0.544
Obs.	172	172	46	46	126	126

Table 4: Speeches by Central Bankers and Position of Banks

This table presents the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. Panels A and B report the results on the way the tone of speech of central bankers is affected by the positions taken by the national champions and small banks, respectively. Panel C reports the relationship between the tone of speech of central bankers and the position taken by both national champions and small banks. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: National Champions						
Position of National Champions	0.025** (0.010)	0.029** (0.013)	0.026** (0.010)	0.025** (0.011)	0.006 (0.006)	0.005 (0.006)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
Adj.-R <sup>2</sup>	0.0409	0.0405	0.0404	0.0399	0.0379	0.0378
Obs.	1439	1439	1439	1439	1439	1439
Panel B: Small Banks						
Position of Small Banks	0.005 (0.015)	0.021 (0.017)	0.002 (0.005)	-0.001 (0.006)	-0.015 (0.019)	-0.062 (0.038)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
Adj.-R <sup>2</sup>	0.0409	0.0405	0.0404	0.0399	0.0379	0.0378
Obs.	1439	1439	1439	1439	1439	1439
Panel C: All Banks						
Position of National Champions	0.026** (0.010)	0.028** (0.014)	0.027** (0.011)	0.027** (0.012)	0.004 (0.008)	0.008 (0.010)
Position of Small Banks	0.008 (0.014)	0.016 (0.018)	-0.004 (0.006)	-0.007 (0.007)	-0.019 (0.025)	-0.078 (0.052)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
Adj.-R <sup>2</sup>	0.0409	0.0405	0.0404	0.0399	0.0379	0.0378
Obs.	1439	1439	1439	1439	1439	1439

Table 5: Speech of Central Bankers and Position of Banks - Falsification

This table presents the time series variation in the tone of speech towards topics other than regulation by central bankers and the positions taken by the banks on regulations inferred through their comments on the consultative documents. Panels A and B report the results on the way the tone of speech of central bankers is affected by the positions taken by the national champions and small banks, respectively. Panel C reports the relationship between the tone of speech of central bankers and the position taken by both national champions and small banks. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: National Champions						
Position of National Champions	0.001 (0.002)	0.001 (0.001)	0.001 (0.001)	0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
R <sup>2</sup>	0.0610	0.0612	0.0609	0.0611	0.0614	0.0615
Obs.	1439	1439	1439	1439	1439	1439
Panel B: Small Banks						
Position of Small Banks	-0.001 (0.003)	-0.005 (0.004)	-0.001 (0.001)	0.000 (0.001)	-0.002 (0.004)	-0.005 (0.005)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
R <sup>2</sup>	0.0615	0.0621	0.0609	0.0611	0.0612	0.0613
Obs.	1439	1439	1439	1439	1439	1439
Panel C: All Banks						
Position of National Champions	0.000 (0.001)	0.002 (0.002)	0.002 (0.001)	0.002 (0.001)	-0.002 (0.002)	-0.002 (0.001)
Position of Small Banks	-0.001 (0.003)	-0.005 (0.004)	-0.001 (0.001)	-0.000 (0.001)	0.000 (0.004)	-0.001 (0.004)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
R <sup>2</sup>	0.0615	0.0621	0.0609	0.0611	0.0612	0.0613
Obs.	1439	1439	1439	1439	1439	1439

Table 6: Issuance of Consultative Documents as Events

This table presents an alternate way of identifying the way national regulators change the tone of their speech towards regulation in response to the competitive disadvantage of a potential regulation on their local NCs. We perform an event-study approach – treating the issuance of consultative documents on different issues as distinct events and studying the evolution of the tone of regulators towards a regulatory issue around each event. We focus only on the 22 issues of BASEL III as all the 8 issues of BASEL II were laid down in the same consultative document. We use a window of 6 months before and after each consultative document and perform the following regression specification:  $Y_{ir(c)k} = \beta_1 NC\ oppose_{ic} \times Post_k + \beta_{ic} + \beta_k + \beta_r + \epsilon_{irk}$  Where  $Y_{ir(c)k}$  dummy variable taking 1 if the speech of a regulator  $r$  of a country  $c$  delivered in the event-time  $k$  around the consultative document related to issue  $i$ .  $Oppose$  takes a  $NC\ oppose_{ic}$  is a dummy that takes a value 1 if the national champions in a country  $c$  opposed an issue  $i$ .  $Post_k$  is a dummy variable that takes a value 1 for 6 months post the event and 0 for 6 months prior to the event. Panel A reports the impact on sentiment surrounding regulation while panel B reports sentiments surrounding issues other than regulation. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Sentiment on Regulations						
Oppose × Post	-0.067** (0.031)	-0.056* (0.030)	-0.091* (0.048)	-0.093** (0.042)	-0.023 (0.041)	-0.023 (0.041)
Country × Issue	Yes	Yes	Yes	Yes	Yes	Yes
Event-Month × Issue	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	No	Yes	No	Yes	No	Yes
R <sup>2</sup>	0.0653	0.147	0.0587	0.171	0.146	0.146
Obs.	4324	4322	883	880	3439	3439
Panel B: Sentiment on Other Issues						
Oppose × Post	-0.001 (0.004)	-0.000 (0.001)	-0.006 (0.006)	0.003 (0.003)	0.000 (0.002)	0.000 (0.002)
Country × Issue	Yes	Yes	Yes	Yes	Yes	Yes
Event-Month × Issue	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	No	Yes	No	Yes	No	Yes
R <sup>2</sup>	0.0581	0.180	0.0559	0.306	0.154	0.154
Obs.	4324	4322	883	880	3439	3439

Table 7: Cross-Sectional Tests

This table presents the result of cross sectional variation in the baseline results based on whether a country has high share of banking by a national champion vis-a-vis others. In panel A the primary variable of interest is the voting by the central bankers while in panel B the main variable of interest is the tone of speeches by the central bankers. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Voting by Central Bankers						
Position of NCs $\times$ low small Share	0.282*** (0.077)	0.289*** (0.065)	0.265* (0.134)	0.453*** (0.065)	0.073 (0.059)	0.072 (0.082)
Position of NCs $\times$ high small share	0.287*** (0.081)	0.271*** (0.064)	0.405** (0.133)	0.659*** (0.067)	0.097 (0.071)	0.086 (0.082)
R-squared	0.248	0.733	0.398	0.881	0.0695	0.537
Obs.	172	172	46	46	126	126
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Issue Fixed effects	No	Yes	No	Yes	No	Yes
Panel B: Tone of Speech						
Position of NCs $\times$ low small share	0.025** (0.012)	0.027* (0.016)	0.018* (0.010)	0.018* (0.010)	0.005 (0.008)	0.003 (0.007)
Position of NCs $\times$ high small share	0.027* (0.016)	0.034* (0.019)	0.035** (0.014)	0.036** (0.016)	0.006 (0.008)	0.007 (0.009)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Adj.-R <sup>2</sup>	0.0402	0.0398	0.0404	0.0398	0.0371	0.0371
Obs.	1439	1439	1439	1439	1439	1439

Table 8: Cross-Sectional Tests with small banks

This table presents the result of cross sectional variation in the baseline results based on whether a country has high share of banking by a national champion vis-a-vis others. In panel A the primary variable of interest is the voting by the central bankers while in panel B the main variable of interest is the tone of speeches by the central bankers. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Voting by Central Bankers						
Position of NCs $\times$ low small Share	0.300*** (0.077)	0.265*** (0.058)	0.255* (0.134)	0.442*** (0.054)	0.011 (0.039)	0.023 (0.057)
Position of NCs $\times$ high small share	0.310*** (0.062)	0.255*** (0.057)	0.394** (0.129)	0.622*** (0.097)	0.058 (0.048)	0.053 (0.061)
Position of small $\times$ low small Share	-0.072 (0.072)	0.078 (0.054)	0.049 (0.065)	0.073 (0.137)	0.110* (0.056)	0.079 (0.062)
Position of small $\times$ high small share	-0.175** (0.069)	0.017 (0.051)	-0.150 (0.127)	0.039 (0.095)	0.076 (0.061)	0.067 (0.050)
R-squared	0.286	0.738	0.428	0.883	0.102	0.548
Obs.	172	172	46	46	126	126
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Issue Fixed effects	No	Yes	No	Yes	No	Yes
Panel B: Tone of Speech						
Position of NCs $\times$ low small share	0.030** (0.013)	0.031** (0.016)	0.018 (0.011)	0.018 (0.012)	0.010 (0.007)	0.005 (0.008)
Position of NCs $\times$ high small share	0.021 (0.029)	0.021 (0.030)	0.044** (0.018)	0.043** (0.020)	0.001 (0.015)	-0.004 (0.016)
Position of small $\times$ low small share	0.005 (0.035)	0.017 (0.034)	-0.009 (0.020)	-0.019 (0.023)	-0.010 (0.012)	0.004 (0.015)
Position of small $\times$ high small share	0.013 (0.027)	0.021 (0.028)	0.010 (0.018)	0.003 (0.021)	0.016 (0.019)	0.021 (0.019)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	Yes	No	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Adj.-R <sup>2</sup>	0.0391	0.0389	0.0400	0.0397	0.0365	0.0366
Obs.	1439	1439	1439	1439	1439	1439



Table 9: Experience of Regulators

This table presents the way the experience of regulators can affect the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. In order to measure experience, we hand-collect information on the work experience of regulators and identify regulators who had a (significant) prior experience of working in a large bank before joining the central bank. The primary variable of interest is the interaction term between the position of NCs and the experience of regulators. Experience dummy takes a value of 1 if the experience of working in large banks is greater than 5 years. In columns 1 and 2, the sample includes all the issues, in columns 3 and 4 we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	Dummy (Speech in Support of Regulation)					
	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Position of NCs	0.022*	0.025*	0.016	0.015	0.001	-0.001
	(0.012)	(0.014)	(0.011)	(0.013)	(0.007)	(0.006)
Position of NCs × Experience Dummy	0.011	0.013	0.023**	0.024**	0.011	0.017*
	(0.015)	(0.017)	(0.010)	(0.010)	(0.009)	(0.009)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Adj.-R <sup>2</sup>	0.0312	0.0308	0.0319	0.0313	0.0284	0.0287
Obs.	1425	1425	1425	1425	1425	1425

Table 10: List of issues that were watered down

The table presents issues that were watered down after the negotiation process. We code the degree of watering down to be 1 if there is no dilution but substantial delay in coming up with final standards in the reform. The degree of watering down is coded 2 if there are major relaxations from consultative document to the final regulatory framework. The degree of watering down is coded as 3 if there is an instance of non-implementation of the agenda.

Regulation	Basel	Intensity of Watering down
Identification and measurement of step-in risk (Shadow banking)	III	3
Leverage ratio framework	III	2
Fundamental review of the trading book	III	1
Interest rate risk in the banking book	III	3
Simple, transparent and comparable securitisations (Securitisation framework)	III	2
Capitalisation of bank exposures to central counterparties	III	1
Revisions to the standardised approach for credit risk (Capital floors)	III	3
Standardised Measurement Approach for operational risk	III	3
Securitisation in scope of IRB	II	3
Credit risk mitigation (further expansion of eligible assets)	II	3
Interest rate risk - capital requirements	II	3

Table 11: Watering Down

The table presents the way disagreement across large banks of different countries leads to watering down of proposed regulations. In columns (1) - (3), the main dependent variable is a dummy variable that takes a value of 1 if a proposed rule has been watered down. Watering down is composed of three constituents - delay, dilution and non-implementation. In columns (4) - (6) the main dependent variable is a dummy variable that takes a value of 1 if a proposed rule has been delayed or diluted. In columns (7) - (9) the main dependent variable is a value that takes 1 if a proposed rule has been stalled. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	Dummy = 1 if Watering Down			Dummy = 1 if Delay or Diluted			Dummy = 1 if Stalled		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Large bank disagreement	0.864*** (0.076)		0.877*** (0.071)	0.330* (0.183)		0.322* (0.185)	0.534*** (0.188)		0.555*** (0.189)
Small bank disagreement		0.154 (0.276)	-0.082 (0.057)		0.135 (0.233)	0.048 (0.200)		0.019 (0.240)	-0.130 (0.196)
R-squared	0.628	0.0118	0.631	0.184	0.0181	0.186	0.312	0.000239	0.322
Obs.	30	30	30	30	30	30	30	30	30

**Internet Appendix for:**  
*“Political Economy of Financial Regulation”*

## Appendix A Collapsing Data at Different Levels of Granularity

In this Appendix section, we use granularity of the data at alternate levels in order to perform the baseline regression specifications. In Appendix Table [A.1](#), we collapse the data at the speaker and outstanding issue level. This alleviates the concern that there might be a larger number of observations corresponding to the same speaker even when there is no new information. This could cause the t-statistic to be larger. In table [A.2](#) we collapse the data further to the country and issue level. The results reported in both the tables are qualitatively similar, highlighting the result observed in the main regression specification does not suffer from an underestimation of the standard errors.

Table A.1: Speech of Central Bankers and Position of Banks - Collapsed at speaker and issue(s) outstanding level

This table presents the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. Panels A and B report the results on the way the tone of speech of central bankers is affected by the positions taken by the national champions and small banks, respectively. Panel C reports the relationship between the tone of speech of central bankers and the position taken by both national champions and small banks. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

Panel A: National Champions			
	All	Disagreement	No Disagreement
Position of NCs	0.036** (0.017)	0.035** (0.014)	0.011 (0.009)
Speaker	Yes	Yes	Yes
Outstanding Issues	Yes	Yes	Yes
R <sup>2</sup>	0.254	0.253	0.246
Observation	358	358	358
Panel B: Small Banks			
	All	Disagreement	No Disagreement
Position of NCs	0.001 (0.026)	-0.001 (0.014)	-0.000 (0.031)
Speaker	Yes	Yes	Yes
Outstanding Issues	Yes	Yes	Yes
R <sup>2</sup>	0.255	0.254	0.266
Observation	358	358	358
Panel C: All Banks			
	All	Disagreement	No Disagreement
Position of NCs	0.038** (0.016)	0.038*** (0.014)	0.008 (0.010)
Position of Others	0.014 (0.024)	-0.014 (0.014)	-0.007 (0.034)
Speaker	Yes	Yes	Yes
Outstanding Issues	Yes	Yes	Yes
R <sup>2</sup>	0.255	0.254	0.266
Observation	358	358	358

Table A.2: Speech of Central Bankers and Position of Banks - Collapsed at Country and issue(s) outstanding level

This table presents the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. Panels A and B report the results on the way the tone of speech of central bankers is affected by the positions taken by the national champions and small banks, respectively. Panel C reports the relationship between the tone of speech of central bankers and the position taken by both national champions and small banks. In columns 1 and 2, the sample includes all the issues. In columns 3 and 4, we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

Panel A: National Champions			
	All	Disagreement	No Disagreement
Position of NCs	0.035** (0.013)	0.033** (0.013)	0.009 (0.013)
Country	Yes	Yes	Yes
Outstanding Issues	Yes	Yes	Yes
R <sup>2</sup>	0.254	0.253	0.246
Observation	64	64	64
Panel B: Small Banks			
	All	Disagreement	No Disagreement
Position of Small Banks	-0.045* (0.027)	0.019 (0.018)	-0.074** (0.031)
Country	Yes	Yes	Yes
Outstanding Issues	Yes	Yes	Yes
R <sup>2</sup>	0.255	0.254	0.266
Observation	64	64	64
Panel B: All Banks			
	All	Disagreement	No Disagreement
Position of NCs	0.027* (0.014)	0.030** (0.014)	0.013 (0.013)
Position of Others	-0.030 (0.035)	0.011 (0.019)	-0.080** (0.036)
Country	Yes	Yes	Yes
Outstanding Issues	Yes	Yes	Yes
R <sup>2</sup>	0.255	0.254	0.266
Observation	64	64	64

## Appendix B    Alternate definitions of Experience of regulators

In this section, we try alternate specifications with different definitions of experience. In table [B.1](#) we define experience dummy as 1 if a regulator had at least one year of experience of working with large banks. In table [B.2](#) we define experience dummy as 1 if a regulator had at least ten years of experience of working with large banks. Finally in table [B.3](#) we use a continuous definition of experience. The results taken together provides robustness to the main result presented in the paper. Additionally, this also shows that the impact of experience rises with higher years of experience.



Table B.1: Speech of Central Bankers and Position of Banks

This table presents the way the experience of regulators can affect the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. In order to measure experience, we hand-collect information on the work experience of regulators and identify regulators who had a (significant) prior experience of working in a large bank before joining the central bank. The primary variable of interest is the interaction term between the position of NCs and the experience of regulators. Experience dummy takes a value of 1 for positive years of experience of working in large banks. In columns 1 and 2, the sample includes all the issues, in columns 3 and 4 we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	Dummy (Speech in Support of Regulation)					
	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Position of NCs	0.025** (0.012)	0.029** (0.014)	0.018* (0.011)	0.017 (0.013)	0.002 (0.007)	-0.001 (0.006)
Position of NCs × Experience Dummy	0.000 (0.015)	0.003 (0.016)	0.019* (0.010)	0.020* (0.010)	0.010 (0.009)	0.016* (0.008)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Adj.-R <sup>2</sup>	0.0402	0.0398	0.0405	0.0401	0.0375	0.0379
Obs.	1425	1425	1425	1425	1425	1425

Table B.2: Speech of Central Bankers and Position of Banks - 10 years

This table presents the way the experience of regulators can affect the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. In order to measure experience, we hand-collect information on the work experience of regulators and identify regulators who had a (significant) prior experience of working in a large bank before joining the central bank. The primary variable of interest is the interaction term between the position of NCs and the experience of regulators. Experience dummy takes a value of 1 if the experience of working in large banks is greater than 10 years. In columns 1 and 2, the sample includes all the issues, in columns 3 and 4 we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	Dummy (Speech in Support of Regulation)					
	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Position of NCs	0.022*	0.026*	0.018*	0.018	0.002	-0.001
	(0.012)	(0.014)	(0.010)	(0.011)	(0.007)	(0.006)
Position of NCs × Experience Dummy ( $\geq 10$ )	0.011	0.014	0.029***	0.029***	0.010	0.017*
	(0.018)	(0.021)	(0.009)	(0.009)	(0.009)	(0.009)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Adj.-R <sup>2</sup>	0.0312	0.0308	0.0319	0.0313	0.0284	0.0287
Obs.	1425	1425	1425	1425	1425	1425

Table B.3: Speech of Central Bankers and Position of Banks - Continuous

This table presents the way the experience of regulators can affect the time series variation in the tone of speech towards regulation by central bankers and the position taken by the banks on regulations inferred through their comments on the consultative documents. In order to measure experience, we hand-collect information on the work experience of regulators and identify regulators who had a (significant) prior experience of working in a large bank before joining the central bank. The primary variable of interest is the interaction term between the position of NCs and the experience of regulators. Experience is measured as a continuous variable. We standardise the experience based on our sample. In columns 1 and 2, the sample includes all the issues, in columns 3 and 4 we restrict the sample to only the issues where there is a potential asymmetric effect across national champions and columns 5 and 6 are restricted to the cases where there is the same effect on the national champions. The standard errors are clustered at the level of speakers. \*\*\*, \*\*, \* represents statistical significance at the 1%, 5% and 10% levels.

	Dummy (Speech in Support of Regulation)					
	All		Disagreement		No Disagreement	
	(1)	(2)	(3)	(4)	(5)	(6)
Position of NCs	0.025** (0.010)	0.029** (0.013)	0.023** (0.009)	0.023** (0.011)	0.003 (0.005)	0.002 (0.005)
Position of NCs × Large Bank Experience	0.005 (0.007)	0.006 (0.009)	0.011*** (0.003)	0.011*** (0.003)	0.005 (0.004)	0.008* (0.004)
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Speaker	Yes	Yes	Yes	Yes	Yes	Yes
Adj.-R <sup>2</sup>	0.0312	0.0308	0.0323	0.0317	0.0286	0.0290
Obs.	1425	1425	1425	1425	1425	1425

## Appendix C Description of the Process of Data-Creation

This appendix is primarily to describe the way we construct the data for each step in our empirical analysis. There are three key empirical findings in the paper using the issues laid down by the Basel Committee on Banking Supervision (BCBS)- each hinges on the inference of textual documents either through manual reading/ hand-coding or machine learning. The first finding is the relation between positions taken by banks in general and national champions in particular on the voting by central bankers. This requires information on the positions taken by the banks on the consultative documents and the voting records on each issue of the central bankers. The second empirical finding shows central bankers changing their position towards regulation in response to the positions taken by national champions - the positions of central bankers are inferred using LDA techniques on various speeches made by them. Finally, we look at the implication on the regulations that were passed and infer the degree of water down of the regulation that was passed from the proposed regulation in the consultative document

### C.1 Position of Banks

As described in section 1 of the main text, the position that banks take on is coded manually by reading the comments. We code positions of banks from -2 (strongly oppose) to 2 (strongly favor). However, Although there is some subjectivity in coding these positions, we follow the following rules:

- -2 if banks have a problem with central parts of the regulatory standard and do not want the regulation to go through. An example of this is the opposition of the Fundamental Review of the Trading Book (FRTB) by the US and UK banks since these banks have large trading books which were going to be severely impacted by this regulation.
- -1 if banks have a problem with certain rules within the regulatory measure e.g. US banks opposed the derivatives part of the leverage ratio framework. For example, the US banks said in the comment “We do not agree with some aspects of the proposed framework.” More examples are provided in table D.1.
- 0 if the bank did not choose to comment or was indifferent to the regulation. This could be due to the banks not being affected by the regulation larger banks not being affected by disclosure regulations or if such a regulation is already in place in the bank’s country.

- 1 & 2 - In general, banks do not favor any extra regulation and are indifferent at best. There are no cases of deregulation either in our sample. Only cases where we find banks in favor of regulation is when the measure does not affect them and they feel that this if applied will give them a competitive advantage. E.g., smaller German and French banks advocated the abolition of internal models (standardisation of risk-weighted asset calculation) since they argued that internal models were handing an unfair advantage to larger banks due to regulatory arbitrage.

Using this, we infer the issues that had an asymmetric impact on the national champions, i.e. issues that were strongly opposed (coded as -2) by the national champions of some country while the national champions of the other country remained indifferent (coded as 0). We report these issues in table D and point out the countries that had shown strong opposition and the other countries that remained indifferent.

## **C.2 Examples of sentences with sentiment obtained using our Machine Learning Methodology**

We present examples of sentences with negative and positive sentiment in Tables C.1 and C.2, respectively obtained using our machine learning methodology.

## **C.3 Characterisation of Speeches of Central Bankers**

Following are some examples of changes in speeches that regulators made that showed switch in sentiment:

- 28 April 2015 – Christian Noyer (Banque De France): First, the proliferation of regulation brings uncertainty to market participants. The analysis of the cumulative impact and the interactions between regulations is still in its early days but it must be continued. Vigilance is indeed required to ensure that the implementation of reforms does not result in a reduction of activities that are vital for financing investments and firms. I notably think of the market-making activity which shows signs of decline, partly due to the regulatory costs.
- 7 October 2015 – Christian Noyer (Banque De France): Even though this objective is a very legitimate one as far financial stability is concerned, I would like to emphasize two ideas: 1. The first idea is that a number of pitfalls have emerged along the way. Indeed, consistency should not be mistaken with uniformity of the rules. 2. And the

Table C.1: Examples of sentences with negative sentiment

Example #	Sentence
1	And the second idea is that a “one size fits all” approach of shadow banking regulation could lead to unintended adverse consequences.
2	Embracing these goals does not, of course, answer the often complex questions raised in specific initiatives, such as the degree to which rules should be standardized and the degree to which national variation or discretion is warranted in pursuing shared regulatory ends.
3	Although adopting a robust, common set of capital and liquidity rules for internationally active banks is critical, it is neither practical nor desirable to negotiate all details of financial regulation internationally.
4	First, as already noted, there is considerable continuing disagreement over the key features of some of these proposals, even when the basic idea is accepted. The significant differences over the best form of resolution mechanism provide one example. Second, as also mentioned earlier, some ideas that may be promising ideas in concept – such as special charges calibrated to the systemic importance of a firm – are not easy to develop and put into practice effectively.
5	The LCR requirement is being carefully evaluated to ensure that there will be no deleterious, unintended consequences when it becomes effective.
6	If compliance to rules becomes an overarching goal, there could be unintended effects on the functioning of financial intermediaries. Financial regulation must not be the Procrustean bed of Greek mythology.

Table C.2: Examples of sentences with positive sentiment

Example #	Sentence
1	Concerning the recent evolutions of the banking regulation, let me first point out that, to me, the Basel package constitutes a very significant advance that will in the long run strengthen the prudential framework for banks.
2	The recent reform package of the Basel Committee will lead to a much more robust and resilient banking system in the future, with both a stronger capital and liquidity base.
3	The economics of all these approaches is essentially the same: recognising losses that have occurred, reducing the riskiness of bank balance sheets and finding new capital to restart the credit process.
4	A second item is to strengthen the prudential rules applicable to supervised institutions. This component of a reform program has manifold elements. There is little doubt that capital levels prior to the crisis were insufficient to serve as an adequate buffer against loss and constraint on leverage, particularly in some of the largest financial institutions. Working with our counterparts in the Basel Committee on Banking Supervision, U.S. supervisory agencies have already increased capital requirements for trading activities and securitization exposures, two of the areas in which losses were especially high.

second idea is that a “one size fits all” approach of shadow banking regulation could lead to unintended adverse consequences.

- 25 July 2017 – Francois Villeroy de Galhau (Banque De France): The objective of Basel III is to lay the foundations for a strong, balanced and risk-sensitive international regulation, while reducing the undue variability of risk-weighted assets (RWAs). So we need a prudent but a reasonable level of the output floor, combined with strengthened supervision of banks’ internal models – and Europeans made sensible proposals to achieve this. But should the output floor be set at too high a level, the consequences in terms of the reduction of risk sensitivity and the increase in capital requirements would be unacceptable: for example, a 75% output floor would affect half of international banks.
- 21 October 2010 Kiyohiko Nishimura (Bank of Japan): Macro-prudential policy from an Asian perspective : A one-size-fits-all regulation, which some institutions in a specific jurisdiction could more easily circumvent, might eventually prove rather harmful to social welfare. Moreover, too rigid regulation might encourage less-transparent entities to replace banks’ businesses and thereby stimulate “shadow-banking” in some countries. A one-size- fits-all approach, which would put carnivorous lions and herbivorous elephants in the same cage, can never produce good results.
- 9 May 2017 Haruhiko Kuroda (Bank of Japan): If compliance to rules becomes an overarching goal, there could be unintended effects on the functioning of financial intermediaries. Financial regulation must not be the Procrustean bed of Greek mythology.
- 30 June 2017 Jerome Powell (Fed): As we consider the progress that has been achieved in improving the resiliency and resolvability of our banking industry, it is important for us to look for ways to reduce unnecessary burden. We must also be vigilant against new risks that may develop. In all of our efforts, our goal is to establish a regulatory framework that helps ensure the resiliency of our financial system, the availability of credit, economic growth, and financial market efficiency.
- Jerome Powell (Fed): There are two important points I want to draw out which are by no means uncontroversial. First, it is sometimes said that the banking system still needs markedly more capital, and that a focus on other issues is a distraction from tackling a system that is still over-leveraged. The second, closely-related, point is that we should focus much more exclusively on non-risk based measures of capital requirements. I don’t agree with either of these positions, and nor would I say do most



supervisors I know. I have been and remain a strong supporter of the reforms to date and the higher levels of capital put in place, and I am a strong supporter of having the leverage ratio in our toolkit and that for some assets it is the "biting" approach and therefore it is not just a backstop. But I disagree with those who want to go much further, for reasons which are at the heart of what we are doing.

## Appendix D Regulation framing process at the BCBS

The BCBS is structured in three primary blocks - the Group of the governor and head of supervision, the Basel committee and the Basel committee secretariat. Figure D.1 shows the structure of BCBS. In this section we highlight the process followed by the BCBS in framing regulations & rules which are laid down as follows:

- Agenda is set by the Group of Twenty (G20) countries or the Financial stability board (FSB). FSB was established after the 2009 G20 London summit and includes G20 economies and the European Commission. G20 has delegated the task of framing international banking regulations to the BCBS.
- Working groups of the Basel committee work out a proposal. This is the second stage in the framing of regulations and is a crucial feature that is expected to have a significant effect on how regulatory standards are developed. Working groups employ their technical expertise to arrive at a consultative document. Member national regulators are aware of the proposal being worked out and its impact on their economies since the agenda or proposal cannot go through if it impacts negatively a leading player in negotiations in a major way. But the exact impact of the new regulatory standard on banks is not clear. Regulators are dependent on their banks to get information about a regulatory measure and its potential impacts. They obtain this information in the next stage.
- Basel Committee publishes consultative document on its website and provides 3 months for the interested parties to respond. Banks, lobbying groups, banking associations, academicians and the general public can respond to this proposal. This is the stage where national regulators get positions and potential impacts of the regulation of their banks and banks of other countries. Sometimes a Quantitative Impact Study (QIS) is conducted by the Basel committee to assess the impacts of the regulations on banks.

- Based on the information received from the comments of the banks and QIS, national regulators decide on the final regulation. Regulations need to be decided by the committee on a unanimous basis. This is mirrored in the unanimous decision-making approach characterised by an absence of voting. Since its inception, a vote has never been taken - unanimity in the Committee was somehow always achieved (Bundestag Finance Committee (2001)). This design of decision making at the BCBS makes these negotiations very complicated.

Negotiations on certain regulations can be straightforward and very complicated for some depending on how national regulators, their banks and banks of other countries feel about the regulation. We aim to explore this in our paper. The outcome of the final regulation can vary a lot as well. Some regulations are drafted without much change from the consultative document. Some can have substantial delays and multiple consultative documents depending on push back from the banks and if there are multiple views among the regulators. The difference in opinions or the lobbying can also lead to major changes from consultative documents to final regulations and even complete discard of the regulatory measure.

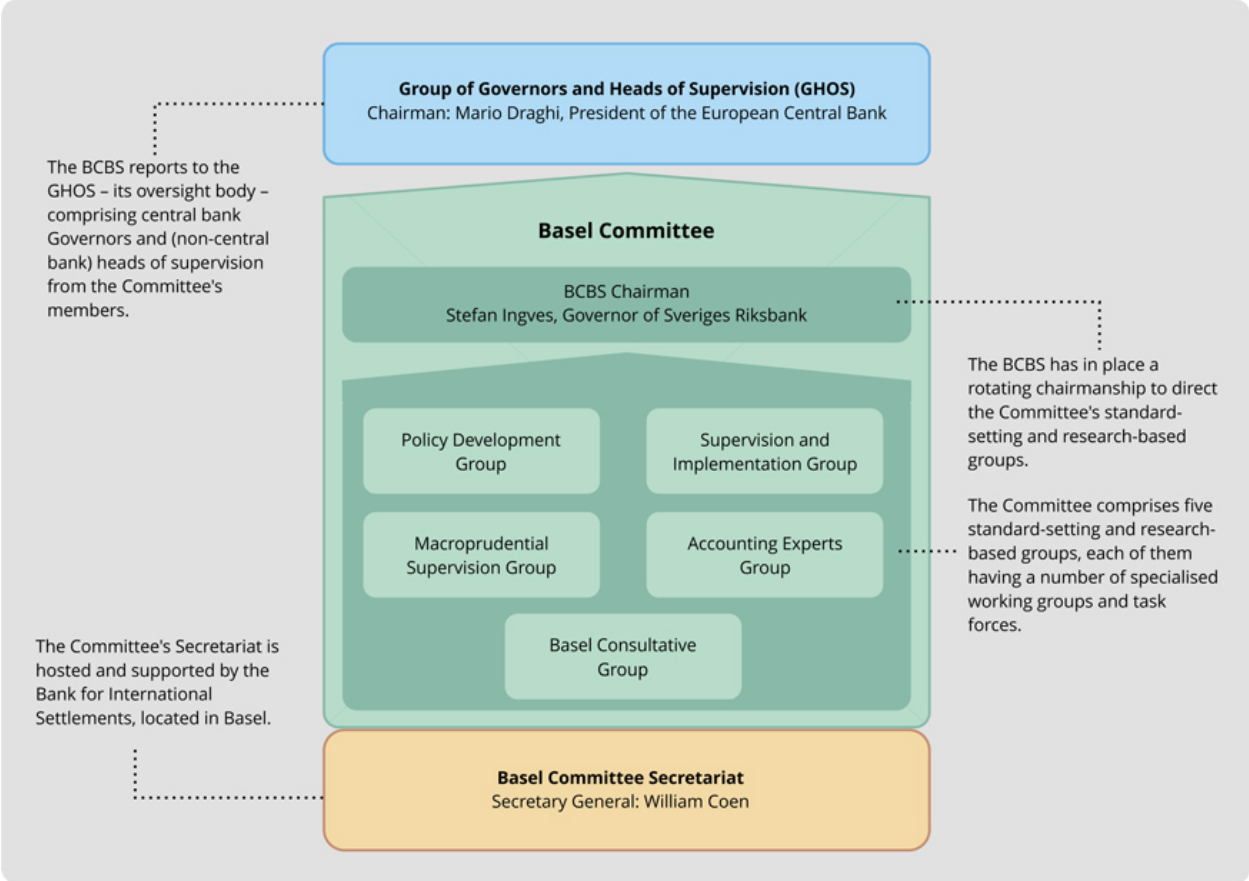


Figure D.1: BCBS's organisational structure (Source: BCBS's website)

Table D.1: Example through which positions are coded

Code	Position	Examples
-2	banks have a problem with central parts of the regulatory standard and do not want the regulation to go through	<ol style="list-style-type: none"> <li>1. We will be in a position to express out strong concern</li> <li>2. We urge the Committee to withdraw a proposal which it believes has no basis in fact</li> <li>3. The consequences will be dramatic</li> </ol>
-1	banks have problem with certain rules within the regulatory measure	<ol style="list-style-type: none"> <li>1. We do not agree with some aspects of the proposed framework</li> <li>2. The treatment of risk associated with asset securitizations is too conservative.</li> <li>3. We consider that the proposed TLAC Holdings definition is far too broad</li> </ol>
0	bank did not choose to comment or was in favor of the regulation	

Table D.2: List of issues that had differential impact on NCs

Regulation	Basel	Indifferent NC	Strongly opposing NC
Identification and measurement of step-in risk (Shadow banking)	III	EU	US, GB, FR, JP
Leverage ratio framework	III	GB	DE, FR, EU, JP
Fundamental review of the trading book	III	EU	US, GB, DE, FR, JP
Simple, transparent and comparable securitisations (Securitisation framework)	III	US	GB, DE, FR
Revisions to the standardised approach for credit risk (Capital floors)	III	US	GB, DE, FR, EU, JP
Standardised Measurement Approach for operational risk	III	US	GB, DE, FR, EU, JP
Securitisation in scope of IRB	II	DE	US
Interest rate risk - capital requirements	II	DE, US, JP	GB