

**TAMERS OF FINANCE: REGULATORS AND THE POLITICS OF  
MACROPRUDENTIAL POLICY**

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## ABSTRACT

The 2008 global financial crisis was a rude awakening for financial regulators. In its wake, a novel approach called macroprudential policy became an important pillar of financial regulation. But in the years after the crisis, the stringency of macroprudential policy outputs vary across countries, across specific financial sectors, and across time, a worrying reality given that uneven regulation across borders and sectors was one of the exacerbating factors of the 2008 crisis. What explains this cross-country, cross-sectoral and cross-temporal variations in macroprudential policy? This dissertation argues that when the political salience of financial regulation is high, politicians are more likely to intervene in regulatory affairs to impose their policy preferences. But in times when salience is low, it is the policy orientation of the regulators – the “tamers of finance” – that primarily shape the stringency of macroprudential policy. In institutional settings with multiple financial regulators who hold conflicting policy orientations, this bureaucratic tension is likely to increase policy stringency.

This theoretical framework is tested through an in-depth comparative historical analysis of the banking and asset management sectors in the United States and Japan. In the US banking sector, regulators to impose highly stringent macroprudential policies in the aftermath of the 2008 crisis, but they began to loosen these policies at the margins from 2017. The US asset management sector, on the other hand, was characterized by policies of moderate stringency in the wake of the crisis, and again after 2014. In the Japanese banking case, the crucial financial crisis for determining macroprudential policy outcomes came not in 2008 but in the late 1990s, when the government was compelled to contain a banking crisis and implemented highly stringent policies. After 2008, therefore, Japanese

regulators could afford to implement policies of only moderate stringency. Finally, the Japanese asset management sector remains untouched by macroprudential policy because both politicians and regulators gradually deregulated and liberalized to this sector, which historically struggled to grow, and have not felt the need to enact macroprudential policies. In all, this analysis broadly confirms the theoretical framework set forth in this dissertation.

## TABLE OF CONTENTS

ABSTRACT.....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
CHAPTER	
1. INTRODUCTION.....	1
The Concept of Systemic Risk.....	5
Behavioral Foundations of Systemic Risk.....	6
Structural Dimensions of Systemic Risk.....	7
Cyclical Dimension of Systemic Risk.....	11
Contagion.....	13
Macroprudential Regulation.....	15
Intellectual History of the Microprudential Idea.....	18
Macroprudential Regulation in Practice.....	24
Institutional Architecture for Macroprudential Policy.....	24
Macroprudential Policy Instruments.....	30
Plan of the Dissertation.....	35
2. THEORETICAL FRAMEWORK.....	37
Existing Explanations.....	38
Interest-Based Approaches.....	38
Institutional Approaches.....	39
Cognitive Approaches.....	42

Theoretical Framework.....	43
Actor-Level Framework.....	43
Political Salience.....	45
Bureaucratic Turf Tension.....	51
Empirical Expectations.....	53
Critical Junctures Framework.....	54
Methods.....	56
3. UNITED STATES BANKING.....	59
Global Financial Crisis as Critical Juncture.....	63
The US Banking System: Structure and Regulation.....	64
Deregulatory Trends, 1970s~.....	66
The 2007-8 Financial Crisis as Critical Juncture.....	71
Permissive Conditions.....	72
Productive Conditions.....	73
Political Salience of Banking Reform and Politicians' Stability Orientation, 2008-2017.....	76
Political Salience of Banking Reform.....	76
Elected Politicians' Policy Orientation.....	77
Regulators' Policy Orientation, 2008-2017.....	81
Pressure from Societal Actors in the Context of Noisy Politics.....	87
Diminished Influence of the Financial Industry.....	88
Diminished Salience and Politicians' Growth Orientation after 2017.....	91
Banking Regulatory Reform as a Low Salience Issue.....	92
Elected Politicians' Growth Orientation.....	92

Regulators' Policy Orientation after 2017.....	95
Pressure from Societal Actors under Quiet Politics.....	103
Conclusion.....	103
4. JAPANESE BANKING.....	106
NPL Crisis and Big Bang Reforms as Critical Juncture.....	108
The Political Salience of Financial Regulation.....	114
Regulators' Policy Orientation.....	120
The FSA's Extreme Stability Orientation, 1998-2007.....	121
The FSA's Shift to Stability Orientation.....	123
Explaining the FSA's Shift.....	127
The BOJ's Stability Orientation.....	129
The BOJ's Stability Orientation and Accommodative Monetary Policy.....	134
Regulatory Coordination.....	136
Political Power of Banks.....	138
Dynamics of Macroprudential Policymaking.....	142
Basel III.....	143
Bank Stress Testing.....	148
Small- and Medium-Sized Enterprises Financial Facilitation Act.....	151
Conclusion.....	154
5. UNITED STATES ASSET MANAGEMENT.....	157
Global Financial Crisis as Critical Juncture.....	158
The US Asset Management Sector: Structure and Regulation.....	159
Regulatory Trends from the 1970s to the early 2000s.....	162

The 2007-8 Financial Crisis as Critical Juncture.....	165
Political Salience of Asset Management Reforms.....	169
Elected Political Leaders' Policy Orientation, 2008-2014.....	171
Regulators' Policy Orientation, 2008-2014.....	172
The SEC's Growth Orientation.....	172
Glimpses of Policy Learning by the SEC.....	178
Bank Regulators' Stability Orientation.....	179
The 2014 MMF Reforms and the End of Critical Juncture.....	180
Regulators' Policy Orientation after 2014.....	184
FSOC's Worries Over ETFs.....	184
The SEC's Stability Orientation.....	185
Dynamics of the ETF Reform Outcome.....	187
Conclusion.....	189
6. JAPANESE ASSET MANAGEMENT.....	192
Incremental Liberalization.....	194
Political Salience of Japanese Asset Management.....	199
Regulator Preferences.....	206
Plan for Strengthening the Competitiveness of Japan's Financial and Capital Markets, 2007.....	207
Strategic Directions and Priorities, 2016-17.....	210
Conclusion.....	214
7. CONCLUSION.....	215
Evaluating the Theoretical Framework.....	216
Actor-Level Framework.....	217

Political Salience.....	218
Regulators' Policy Orientation.....	219
Bureaucratic Turf Tension.....	223
Critical Junctures Framework.....	224
Critical Junctures and Political Salience.....	225
Critical Junctures and Policy Orientation.....	226
Critical Junctures and Bureaucratic Turf Tensions.....	228
BIBLIOGRAPHY.....	230
APPENDIX	
List of Interviewees.....	256

## LIST OF TABLES

Table	Page
1. Macroprudential and Microprudential Perspectives Compared.....	18
2. Structure of Financial Stability Committees (FSC) in Advanced Democracies.....	28
3. Menu of Macroprudential Policy Instruments.....	31
4. Policies to Address Systemic Risk in Advanced Democracies, by Financial Sector.....	33
5. Effects of Political Salience.....	46
6. Regulators' Policy Orientation and Their Dimensions.....	50
7. Expectations for Policy Stringency.....	54
8. Summary of Macroprudential Reforms in the US Banking Sector.....	61
9. Dates of Basel Framework Implementation.....	143
10. Summary of Macroprudential Reforms in the US Asset Management Sector.....	157

## LIST OF FIGURES

Figure	Page
1. Critical Junctures Framework for the US Banking Sector.....	64
2. Political Salience of Systemic Risk in US Banking, 1995-2019.....	77
3. Critical Junctures Framework for the Japanese Banking Sector.....	112
4. Political Salience of Systemic Risk in Japan, 1995-2019.....	115
5. Critical Junctures Framework for the US Asset Management Sector.....	159
6. Political Salience of US Asset Management, 1995-2019.....	171
7. Total Net Assets Under Management of Investment Trusts, 2000-2019.....	199
8. Assets Under Management in the US, UK and Japan.....	199
9. Political Salience of Japanese Asset Management, 1995-2019.....	202

# Chapter 1

## Introduction

Financial crises are the violent mood swings of capitalism, an economic system that otherwise promises unprecedented growth. From the Tulip Mania of 1637, the Wall Street crash of 1929, to the Latin American debt crises of the late 20<sup>th</sup> century, the most liquid of markets – that of money, credit and financial securities – have proven to be the most volatile. Time and again, financial crises destroy wealth and savings of households, leaving a wave of bankruptcies and economic recessions in its wake, and sometimes go as far as triggering political instability. All of these maladies accompanies the global financial crisis (GFC) of 2007-8. With the near collapse of the financial industry around the world, the GFC drove many banks and businesses to failure, forced homeowners into foreclosures and workers into unemployment. Politically, it gave rise to the Occupy Wall Street and Tea Party movements in the United States, and, by some accounts, exacerbated polarization and portended the rise of populism across the industrialized democracies (Best 2018; Mian, Sufi, and Trebbi 2014).

The state was and remains the only institution powerful enough to curb the volatility of finance. The GFC revealed, more forcefully than crises in the past, the need for states to ensure the long-term stability of the financial system. States, in turn, responded by taking up the responsibility to govern finance with a new philosophy, now universally known as the *macroprudential* approach to financial regulation. In the macroprudential approach, preventing financial crises required states to conceive of the financial system as an integrated whole and to closely monitor and mitigate risks inherent in the system. The shift

to this regulatory philosophy has attracted attention from scholars of political economy for its intellectual novelty (Baker and Widmaier 2014, 2015; Brassett and Holmes 2016; T. Casey 2015a; Datz 2013; Thiemann, Aldegwy, and Ibrocevic 2018). Indeed, the idea that risks capable of destabilizing the whole financial system is intrinsic to the system, and that the state now needed to monitor the system rather than its individual components, was novel. It was a direct confrontation to pre-crisis regulatory orthodoxy predicated on the faith in the self-correcting nature of markets and centered on the safety and soundness of individual financial institutions rather than on system-wide negative externalities.

But many of these same scholars also found that the practical implementation of macroprudential policy fell far short of its rhetorical promises to curb the boom-and-bust cycles of financialized capitalism. Regulatory authorities in the Western world tended to adopt a strand in the macroprudential paradigm aimed at structurally enhancing the resilience of the financial system to external shocks, rather than the more radical version of countercyclically leaning against the build-up of risk over time. The ultimate result thus far has been a “status quo” reform (Helleiner 2014).

While this scholarship has greatly advanced our understanding of the political economy of macroprudential policy and its limited implementation, it has tended to understate the differences in the intensity of implementation in various jurisdictions. Even though macroprudential reform has settled for “status quo,” there still exists significant variation in its stringency, both across financial sectors and over time. Most advanced industrialized nations have implemented new and recalibrated policies to enhance the resilience of their banking sector, but some countries, Canada, Switzerland and the US for example, have reformed their banking regulation whose stringency goes beyond

international norms. There is even greater variation in financial sectors other than banking. In the asset management sector, for example, countries such as Japan and the UK have implemented virtually no policies to address systemic risk, whereas Germany has boasted relatively stringent macroprudential policies on its investment funds, and the US began to do the same several years after the GFC.

What explains the variation in the stringency of macroprudential policy across countries, across financial sectors, and over time? This is the central question that motivates this dissertation. This variation is puzzling on several fronts. It persists despite efforts by political and regulatory leaders to harmonize regulatory standards at the international level within forums like the Group of 20 (G20), Basel Committee of Banking Standards (BCBS) and the Financial Stability Board (FSB). The main theoretical perspectives in the scholarship of comparative politics and international political economy that privilege national institutional configurations and structural factors have trouble accounting for policy variation over time. Because gaps in regulatory measures between jurisdictions and between financial sectors (banking and shadow banking, for example) were among the oft-cited causes of the GFC, this variation is cause for concern. Explaining this variation requires close analysis of the micro-foundations that link macroprudential ideas to concrete policy outcomes (Macartney, Howarth, and James 2020). This is what this dissertation aims to do.

To explain this variation, this dissertation advances a theoretical framework of regulatory policymaking that draws on several strands of political science scholarship. First, by recognizing that regulatory politics is constrained by principal-agent relationships between regulatory agencies and elected political leaders, it first posits that when

politicians are incentivized to intervene in regulatory matters, the regulators' discretion shrinks. Politicians are incentivized to intervene in regulatory reform particularly when the political salience of financial regulation is high. When politicians do choose to intervene, the politicians' preferences largely determine the policy output. On the other hand, when political salience of regulation is relatively low, regulators have wider discretion over the content and stringency of policy output. Under these conditions, a different set of variables become important: regulators' policy orientation and the potential conflicts that arise between two or more regulatory agencies.

This framework is tested by comparing the reform processes in the banking and asset management sectors in the US and Japan. As long-established capitalist democracies, these countries are homes to some of the largest financial centers in the world and boast capable regulatory agencies. Yet the banking and asset management sectors in the two countries exhibit a range of variation in macroprudential policy implementation. The theory advanced in this dissertation is sector-specific, meaning that the political salience, regulators' policy orientation, and bureaucratic turf tensions vary by sector. Comparing different sectors within the same country allows the analyst to control for country-specific characteristics, while comparing the same sector across different countries controls for technical and structural conditions unique to a certain financial sector (Hsueh 2012; Shafer 1994). Within-country and cross-country sectoral comparisons, therefore, help to isolate the causal effects of regulatory orientation and reputational threat, greatly enhancing the analytical leverage of this project.

The rest of this chapter explicates the central problem that macroprudential policy is designed to address: systemic risk. It then examines the tenets of macroprudential policy

in more detail, including its conceptual principles, intellectual history, and the institutional reforms enacted in advanced industrialized countries to facilitate macroprudential regulation. Lastly, it demonstrates the cross-country and cross-sectoral variation in macroprudential policy implementation.

## **The Concept of Systemic Risk**

After some initial proliferation of definitions, policymakers and academics have converged on the definition of systemic risk as the disruption of the flow of financial services that is caused by an impairment of a large part of the financial system and has the potential to have serious negative consequences for the real economy (Freixas, Laeven, and Peydró 2015; IMF-FSB-BIS 2009). As such, systemic risk should be distinguished from other types of risks, including risks that affect individual financial institutions and trigger events that catalyze a systemic crisis.

Systemic risk in the financial system exhibits features of a complex problem because it is multi-causal, it manifests itself in different forms, and it is difficult to predict. At the most abstract level, it is a product of a massive negative externality, which some scholars have termed the “fallacy of composition” (Baker 2015): while investors and financial institutions pursue their boundedly rational self-interest which is often perfectly prudent from their individual perspective, in the aggregate these behaviors do not add up to a sound and efficient financial system. In the absence of appropriate rules and regulations, what results instead is systemic risk.

Understanding the roots of systemic risk requires a brief survey of insights about the psychological heuristics and boundedly rational actions of investors and financial firms.

These individual actions then become scaled up by the peculiar structural features and procyclicality of the modern financial system, deepening and amplifying the risk of systemic collapse.

### ***Behavioral Foundations of Systemic Risk***

The micro-foundations of systemic risk are found in the psychological heuristics of individual investors and financial institutions. As Paul Tucker, former Deputy Governor of the Bank of England noted, the financial system is “riddled with preferred habits, imperfect information, regulatory arbitrage, herding and inhabited by agents with less than idealized rationality” (Tucker 2011, 3–4). These traits are well-established in behavioral finance.

Human beings tend to be excessively optimistic under normal circumstances and refuse to properly account for downside risks. Added to this, the anchoring heuristic and familiarity bias lead investors to embrace unsustainable beliefs that the price rises of assets, (like stocks, real estate and other, much more complex financial instruments) will continue indefinitely. Inside financial institutions too, fund managers are enmeshed in concerns about the firms’ short-term performance, which determine their compensation, job security and professional reputation. Institutional investors, therefore, are also susceptible to overconfidence and join the “momentum” game, expecting to get out before the bubble bursts (Avgouleas 2009).

At the same time, human beings are risk-averse, particularly when confronted with the fear of losing money. They tend to feel the negative impact of a loss more acutely than the pleasure of an equal-sized gain. Bad news about the health of their investments or large financial institutions can thus trigger a “hide or flight” response, “hiding” by hoarding their funds or refusing to extend loans, or “fleeing” by quickly selling assets. Prone to herding,

either of these responses can lead to a downward spiral of falling asset prices and the drying up of liquidity for financial institutions (Gottesman and Leibrock 2017, 49–54).

From the individual vantage point, these behavioral traits help investors make returns and shield themselves from loss. They are forms of individual prudence. But as Andrew Baker argues, “what makes sense for an agent through their individual lens of self-interest and calculation is not necessarily good, either for the system as a whole, or ultimately for their own well-being and economic security” (Baker 2015, 14–15). When scaled up to the system level, the individual rationality produces a negative externality.

Negative externalities are ubiquitous in the economy. But two conditions make systemic risk in the financial system, arising from these externalities, particularly menacing. First, virtually every sector in a modern economy is intimately connected with the financial sector. Governments and the corporate sector are net borrowers of credit, while the household sector is a net lender. When the financial system malfunctions, savings cannot be efficiently allocated to private or public investment and the borrowing sectors suffer (Hartmann, de Bandt, and Peydró 2014). Second, the unique structural characteristics and procyclicality of the modern liberal financial system amplifies and accelerates the spread of systemic risk. We now turn our attention to each of these characteristics in detail.

### ***Structural Dimension of Systemic Risk***

Four broad characteristics of the modern financial system lead to the accumulation and contagion of systemic risk: (1) the business model of banking, (2) complex interconnections, (3) common exposures and (4) the ubiquity of uncertainty.

Banks are the most pervasive type of financial institution. At its core, the business model of banking is predicated on accepting liabilities from customers in the form of

deposits, which is then lent as assets to borrowers and paid back with interest. Even at this most basic level, this business model is risky because deposits can be withdrawn at any time, while loans are paid off over the long term, thereby creating a *maturity mismatch*.

In the era of modern banking, this business model has become immeasurably more complex. Most major investment banks are highly dependent on short-term wholesale funding structures, but the creditors of a bank will only roll-over short-term debt if they expect future creditors to do the same (Benoit et al. 2017, 123; Hartmann, de Bandt, and Peydró 2014). As competition intensified in the financial sector over the last few decades, banks have diversified their business strategies in two important ways. The first was the strategy to “originate and distribute,” whereby risk became a sellable commodity which could be bundled, sliced, diced, and re-bundled for future sale. Securitization and derivatives of myriad types were financial products that emerged from this practice. Second, banks diversified their business lines. They migrated activity to where returns looked largest, including proprietary trading, investment in or by money market mutual funds, which act as close substitutes for deposits, and shadow banking activities (Haldane 2009, 7).

From the perspective of individual banks, these operations look like sensible attempts to purge risk through diversification. Yet these operations could lead to excessive risk-taking in the banking system in the aggregate, as each bank only knows the risk it alone takes and ignores the risks taken by its peers and the negative externalities caused to others in reducing their provision of credit and liquidity in the system (Freixas, Laeven, and Peydró 2015, 65–67).

The second structural feature enabling systemic risk is the complex interconnections between financial firms. Banks, insurance companies, broker-dealers, asset management companies and other types of financial institutions, as well as financial systems across the globe have become much more densely connected since the late twentieth century (Haldane 2009; Oatley et al. 2013). These interconnections take many forms: multiple banks may be mutually linked via assets and liabilities, derivatives contracts, exposure to common assets and securities, or shadow banking activities (Gottesman and Leibrock 2017, 180–84; Scott 2016, chaps. 4, 5).

Applying network analysis methods, scholars have found that many of the properties common in other types of networks are also present in the modern financial system. Complex financial networks feature a “robust-yet-fragile” property, in which a highly connected network is more robust to shocks because of risk-sharing, but are more likely to see all institutions fail in the event of a large enough shock. The system also reveals its weakness when large, centrally connected financial institutions come under stress (Benoit et al. 2017, 120; Haldane 2009).

Common exposures, the third key structural feature of the financial system, takes two forms. The first is the correlation of investments. Financial institutions are exposed to the same risks if they are invested in assets whose prices fluctuate in tandem. Banks also invest too much in illiquid assets, thus exposing the banking system to the risk of aggregate liquidity shortages. Several factors conspire to push banks toward investment correlation. Banks face a free-rider problem: individual banks have an incentive to invest in illiquid assets only and borrow from other banks on the interbank market if they face pressure on their liquidity. There is also a moral hazard problem: by taking the same risks, banks

maximize the benefits from future government bailouts -- the so-called “too-correlated-to-fail” guarantee. Bailouts are optimal only when many banks fail at the same time, so that banks optimally engage in herding (Benoit et al. 2017, 117; Chari and Phelan 2014).

The second form of common exposures is the convergence of financial institutions’ balance sheets on more market-based financing (Hardie and Howarth 2013). As competition in the financial sector intensified over the last four decades, and as common risk management strategies were adopted, different types of financial institutions were driven to adopt similar lines of business in search for yield and risk management. In the words of Andrew Haldane, former Executive Director of the Bank of England’s Financial Stability division, “savings cooperatives transformed themselves into private commercial banks. Commercial banks ventured into investment banking. Investment banks developed in-house hedge funds through large proprietary trading desks. Funds of hedge funds competed with traditional investment funds. And investment funds ... imported the risk the others were shedding” (Haldane 2009, 18). Such balance sheet homogeneity is cause for concern. Because contagion of a systemic crisis is driven in large part by market inferences about the implications of a shock (as will be discussed in more detail below), the more widespread the reliance on common risk models and funding strategies, the more extensive the inferences are likely to be (Jackson 2019, 7)

The fourth and last structural feature highlighted here is the ubiquity of uncertainty in the modern financial system. The financial network has over time become progressively complex, in which a financial institution may have hundreds of counterparties with whom the financial institution engages in transactions. These counterparties form complex chains of claims, and it becomes almost impossible to know the soundness and solvency of each

link in the chain in a crisis situation (Haldane 2009, 15–16). The same uncertainty also plagues the interbank markets. In times of financial distress, lenders on the interbank markets cannot tell safe from risky banks. A financial firm thus faces uncertainty in the Knightian sense about the true network structure. Because banks that lend to other banks cannot know the stress that their counterparty’s counterparty faces, they stop lending to each other after large shocks. As a result, interbank lending freezes, even solvent banks lose access to funding and are forced to quickly liquidate their assets to meet funding and collateral constraints, in turn further amplifying the market downturn (Benoit et al. 2017, 121–22).

### ***Cyclical Dimension of Systemic Risk***

In addition to taking on structural characteristics that make spread of financial distress more likely, a liberal financial system undergoes phases through which financial imbalances grow over time. This endogenous accumulation of systemic risk is known as the financial system’s *procyclicality*.

In an influential article, economist Hyman Minsky popularized the “financial instability hypothesis,” what he called a theory of “how a capitalist economy endogenously generates a financial structure which is susceptible to financial crises and how the normal functioning of financial markets in the resulting boom economy will trigger a financial crisis” (Minsky 1977, 25). Subsequent economic literature has grown enormously, confirming many of Minsky’s propositions about the mechanisms of boom-and-bust cycles. These cycles typically follow several identifiable stages.

First, a credit cycle begins with a prolonged period of economic growth or with an event that instills optimism among investors about the future prospects of the economy. In

periods of sustained economic growth, investments are financed through debt while this debt is easily paid off. Perceptions of acceptable levels of debt change among both lenders and borrowers of credit as it becomes routine to finance various economic activities. The increase in the proportion of debt financing raises the market price of capital-assets and increases investment, producing a boom economy (Minsky 1977, 25).

Second, the rise in asset prices accelerates as “irrational exuberance” (Shiller 2015) drives investors to expect stock returns and asset prices to continue rising. Responding to and fueling investor optimism, financial institutions also lower their perception of risk and harbor unrealistic beliefs about future economic growth. They increase their risk-taking behavior by becoming over-leveraged, investing in riskier assets with borrowed money (Bhattacharya et al. 2011). New securitizations take place, new financial institutions are established, new financial instruments are concocted, old financial instruments balloon, and lending standards are lowered. These activities increase the amount of available financing, bidding up the prices of assets, again in turn increasing investment. Analyzing extensive bank-level data from 17 countries spanning almost 30 years, Brunnermeier et al (2020) find that systemic risk significantly rises during asset price bubbles, and that large banks exacerbate systemic risk during such bubbles. And indeed, a large empirical literature has established that excessive credit growth is the best signal of impending financial crises (see Freixas, Laeven, and Peydró (2015, 77–85) for a review of this literature).

There are several reasons why financial institutions increase their risk-taking behavior. The same psychological factors that shape investor behavior -- anchoring, herding behavior, representativeness heuristic -- also underlies the decisions of financial

institutions (Barberis, Huang, and Santos 2001; Shleifer 2012). Managerial factors also impinge; loan officers tend to forget the lessons of the last crisis, while newly hired officers may never have experienced an asset bubble (Berger and Udell 2004). One of the most important conditions leading to the increased risk-taking by financial institutions, however, seems to be financial liberalization and deregulation. In the latter decades of the twentieth century, governments were motivated to liberalize and deregulate their financial sectors to spur financial and economic growth. In the absence of regulations that temper valuation and risk perception of various financial products, financial institutions were incentivized to increase leverage and securitize, with easy access to short-term funding on international markets fueling such behavior (Freixas, Laeven, and Peydró 2015, 94–97).

Almost inevitably, the third phase of the cycle arrives. Investors of financial assets become more conservative, either because of a rise in interest rates making credit more expensive or because of changes in expectations about future economic growth, and sellers of assets become more aggressive, willing to sell at lower prices. This forms the beginning stages of the impending crisis. Banks and other forms of financing begin to quickly dry up as lenders fear credit losses on their loan portfolio. Shortage of credit and early declines in asset prices lead to the recognition on the part of a large sector of the economy that it is time to increase their liquidity, and this fuels further selling by investors until eventually the asset bubble bursts. “The prices of commodities dwindle, bankruptcies swell, economic activity slows, and unemployment increases” (Kindleberger and Aliber 2008, 11).

### ***Contagion***

In both its structural and cyclical dimensions, the catalyst for the spread of financial losses is contagion. Contagion occurs when losses in one financial institution spill over to

other financial institutions with which it is linked (Benoit et al. 2017, 119). More specifically, Hal Scott explains that contagion is “an indiscriminate run by short-term creditors of financial institutions that can render otherwise solvent institutions insolvent due to the fire sale of assets that are necessary to fund withdrawal and the resulting decline in asset prices triggered by such sales” (Scott 2016, 10).

The “indiscriminate” nature of contagion that threatens to bring down even “otherwise solvent institutions” is an illustration of the perniciousness of the fallacy of composition – even prudent banks are not immune to financial distress once a systemic crisis is sparked. It also illustrates the consequences of the uncertainty that exogenous shocks and the resulting information gaps can create, because the key to sparking contagion is incomplete information. If depositors, investors and counterparties believe that the failure of a bank is a signal of the health of other banks, and indeed the broader banking system, then they will rush to withdraw their deposits, sell their assets, or call their loans, catalyzing contagion (Benoit et al. 2017, 121).

Contagion is typically preceded by the discovery of problems in an isolated group of firms or the unexpected devaluation of an important class of assets. For example, the failure of a systemically important financial institution (SIFI) can affect other financial institutions because it is a counterparty for many other market participants; the SIFI is forced to fire-sell assets, which leads to depressed prices for assets that other institutions use as collateral, and its default sparks a panic that spreads to other institutions. These consequences, in turn, carry over to the real economy.

The subprime mortgage bubble and the ensuing global financial crisis in 2007-9 urgently brought the structural and cyclical dimensions of systemic risk and the dangers of

contagion to the attention of governments and financial regulators. In short order, the crisis led to the emergence of a new approach to financial regulation known as macroprudential regulation.

## **Macroprudential Regulation**

If we were to name one definitive change in the way governments regulate the financial system in the twenty-first century, the ascendancy of the macroprudential approach to regulation would be a fitting candidate. Macroprudential regulation refers to the paradigm among financial policymakers that (1) assumes that risks are, in part, endogenously generated in the financial system and that (2) aims to limit these systemic risks so as to minimize financial crises' costs to the broader economy by (3) the use of regulatory tools calibrated by both the cross-sectional and cyclical dimensions of systemic risk (Borio 2003).<sup>1</sup>

From the above discussion of the sources of systemic risk, the case for macroprudential regulation is easy to make. By its nature, systemic risk is a product of negative externalities which individual investors and financial institutions are not incentivized to correct on their own accord. Disciplining pressures of pure market forces or industry self-regulation are likely to fall short of mitigating systemic risk. The responsibility of maintaining financial stability through macroprudential regulation, therefore, “rests on the legitimacy of a public authority pursuing interventions to protect a wider public interest” (Baker 2015, 15–16).

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<sup>1</sup> In regulatory jargon, these are called *prudential regulation*, which requires financial institutions to control risks by holding adequate capital and subjecting to reporting, disclosure, and supervisory auditing regarding their financial activities.

Prior to the GFC, the traditional approach to financial regulation was based on the efficient market hypothesis (EMH), developed by Eugene Fama, evident in both international agreements, such as the Basel II standards, and in national-level regulation. Simply put, the EMH holds that in efficient capital markets, “the prices of securities observed at any time are based on ‘correct’ evaluation of all information available at that time. In an efficient market, prices ‘fully reflect’ available information” (Fama 1976, 133). The implication of this proposition was that, in liquid financial markets, the actual price of a security is a good estimation of its intrinsic value. Simplified versions of the EMH came to dominate in leading central banks, regulatory agencies, and in risk management departments of large banks.

These large banks and their investment strategies were driven by “Value at Risk” (VaR) models and techniques, which assumed that one can infer the probability distribution of future potential movements of market prices from the observations of movements over the recent past. Market prices were assumed to be driven by the rational interaction of multiple independent agents and market risk could therefore be mathematically modeled. Greater transparency, more disclosure, and more effective risk management by financial firms based on market prices became the cornerstones for the regulation of “efficient markets.” Regulators engaged in assessments of these models, effectively asking financial institutions and their managers what they did, resulting in a focus on process or IT capacity, rather than results or risk capacity (Baker 2013a). The narrow focus on financial institutions’ risk management models effectively meant that the ultimate objective of financial regulation was the safety and soundness of individual institutions, rather than the stability of the system as a whole – *microprudential* rather than *macroprudential*.

Several early proponents of the macroprudential approach have clearly delineated the conceptual distinctions between microprudential and macroprudential policy in terms of their objectives and the models of risk (summarized in Table 1). The objective of the macroprudential approach is to limit the risk of episodes of financial distress with significant losses in terms of the real output for the economy as a whole. The objective of microprudential regulation, on the other hand, is to limit the risk of episodes of financial distress that individual institutions face, regardless of their impact on the overall economy (Borio 2003). The basic assumption of the microprudential approach is that “financial stability is ensured as long as each and every institution is sound” (Crockett 2000, 3).

Regarding the model used to describe risk, the macroprudential perspective assumes that risk is in part endogenous to the behavior of financial institutions and investors. The microprudential perspective assumes that risk can be taken as exogenous (Borio 2003).

The macroprudential objective on ensuring the stability of the overall system and its model of risk as endogenous implies that macroprudential regulators would calibrate regulatory measures by first setting the relevant threshold of acceptable losses for the financial system as a whole, then setting prudential controls on the basis of contribution of each financial institution to overall risk. This means that a macroprudential standard for individual institutions would be calibrated with reference to their systemic significance, both in terms of their size, interconnectedness and complexity, while its standard for the system as a whole would be derived from a top-down approach, based on a view of the likelihood and costs of a systemic crisis. On the other hand, an institution-specific objective and an exogenous view of risk means that a microprudential standard for calibrating

regulatory measures would be bottom-up, applying a uniform standard for all financial institutions, regardless of their systemic importance or cyclical behavior (Crockett 2000).

Table 1. Macroprudential and Microprudential Perspectives Compared

	Macroprudential	Microprudential
Proximate objective	Limit financial system-wide distress	Limit distress of individual institutions
Ultimate objective	Avoid output (GDP) costs	Consumer (investor/depositor) protection
Model of risk	(In part) Endogenous	Exogenous
Correlations & common exposures across institutions	Important	Irrelevant
Calibration of prudential controls	In terms of system-wide distress; Top-down	In terms of risks of individual institutions; Bottom-up

Source: Borio (2003, 183)

But as the GFC demonstrated, a regulatory focus on VaR and a reliance on market discipline did not account for the structural and procyclical dimensions of risks discussed above. The crisis thus quickly discredited the traditional reliance on microprudential approach and the EMH as the sole foundation of financial regulation. But the intellectual edifice undergirding macroprudential regulation did not simply appear out of thin air once the crisis hit. Its origins can be traced back to the 1970s in the hushed halls of international financial organizations. We briefly detail the intellectual history of macroprudential regulation and its international diffusion that took place in the midst of the 2008 GFC.

### ***Intellectual History of the Macroprudential Idea***

Relative to the EMH and its corollary microprudential regulation, macroprudential ideas held a heterodox status and were on the margins of the regulatory doctrine. The

earliest use of the term “macroprudential” seems to date back to 1979 during a meeting of a committee within the BIS. This meeting was held amidst worries within the BIS about the implications of rising oil prices for the lending and stability of the international banking system. The minutes from the meeting indicate that a handful of BIS research staff were already beginning to think about the links between microeconomic problems, particularly at the level of individual banks, and macroeconomic concerns, thus anticipating the modern elaboration of macroprudential ideas (Clement 2010, 59–60).

Despite this, these ideas did not explicitly appear in official BIS publications until 1986. That year, the Euro-Currency Standing Committee within the BIS published a document that devoted a few paragraphs to the discussion of how financial innovation may raise risks for the financial system as a whole. The 1997 Asian Financial Crisis also gave macroprudential ideas some boost, prompting the IMF to urge the need for macroprudential analysis in its 1998 report, which began the development of better statistics to evaluate financial system vulnerabilities (Clement 2010, 62–63).

Another watershed moment came in 2000 with a speech by Andrew Crockett, the General Manager of the BIS, at the International Conference of Banking Supervisors. In his speech, Crockett provided a more precise analytical definition of both microprudential and macroprudential perspectives. He also outlined two distinguishing features of the macroprudential approach. The first was a focus on the financial system as a whole, with an objective of limiting the costs of financial distress in terms of macroeconomic output. The second was a recognition that aggregate risk was dependent on the collective behavior of financial institutions -- in other words, systemic risk is endogenous to the financial system. Crockett also identified two dimensions of systemic risk -- the cyclical and cross-

sectional (or structural, as discussed above) -- and outlined policy strategies to address both (Clement 2010, 63–65).

Still, macroprudential ideas were largely confined to infrequent appearances in publications by isolated committees within these international organizations. The international circle of central bankers, who centered around the then-revered US Federal Reserve Chairman Alan Greenspan, and who saw his low interest-rate and laissez-faire doctrine as having spurred the economic exuberance in the industrialized world since the 1980s, regarded the advocates of macroprudential policy as eccentric. For example, in several well-documented exchanges at the Jackson Hole Conference of the Kansas City Federal Reserve in 2003 and at later meetings of central bankers at the BIS headquarters in Basel, Greenspan was notoriously dismissive of the macroprudential analysis and arguments put forth by both Claudio Borio and William White, who warned of the dangers of an inflating financial boom. Other central bankers at these meetings largely agreed with Greenspan, and regarded the macroprudentialists as prophets of doom. William White, in particular, was openly and sarcastically derided at the Federal Reserve as “Merry Sunshine.” Ben Bernanke, who succeeded Greenspan as the Fed chair in early 2006, was equally deaf to the warnings of the macroprudential advocates (Baker 2013, 119, 123; Balzli and Schießl 2009).

Why was the macroprudential perspective sidelined by its more neoliberal counterpart? Andrew Baker (2013) contends that three factors militated against the spread of macroprudential ideas before the 2008 crisis. First, the material interests of powerful players incentivized the preservation of regulatory approaches founded on the EMH. These players included the US and UK governments, whose economies benefited from jovial

financial markets that market-friendly regulation made possible, private sector groups, such as the Institute of International Finance, elected politicians and electorates, who enjoyed the prosperity offered by booming economies in the 1990s and early 2000s. The second factor was the shared cognitive framework of the EMH between central bank staff and regulators. For example, in the UK, the assumption that financial markets were rational and tended toward equilibrium was not only accepted at the Financial Services Authority (FSA) prior to the crisis, but had “become part of the institutional DNA” (Turner 2011, 29).<sup>2</sup> Third, the advocates of macroprudential ideas, including Borio and White, lacked the sufficient professional position. “We were staff,” William White told journalists. “All we could do was to present our expertise. It was not within our power how it was used” (quoted in Balzli and Schießl 2009). While the macroprudential advocates at the BIS were junior staff members, US central bankers, including Greenspan and Bernanke, both minimalist regulators and adherents of loose monetary policy, served on the BIS board of directors and commanded enormous respect (Balzli and Schiessl 2009).

The GFC cracked open a window of opportunity. The crisis was a multi-faceted phenomenon with many causes. Reviewing twenty-one books on the causes of the GFC, Andrew Lo likened the bewildering array of interpretations to the classic 1950 film *Rashomon* (Lo 2012). Despite this complexity, the way the crisis unfolded quickly and directly undermined the core assumptions of the status quo ante. In particular, the collapse of Lehman Brothers brought down a host of other financial institutions in the fall of 2008 and attested to the systemic quality of the crisis. Furthermore, the rapid decline in a number of interrelated asset classes was impossible to explain with the efficient market model,

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<sup>2</sup> See also Johnson and Kwak (2010) for a somewhat different but related argument that US financial regulators were cognitively captured by financial interests preceding the GFC.

which assumed that, given adequate information, rational market participants would bring asset prices back to equilibrium (FSA 2009). Indeed, Alan Greenspan, in his testimony to the US House of Representatives in October 2008, epitomized how the crisis had shaken the confidence in the prevailing paradigm: “Those of us who have looked to the self-interest of lending institutions to protect shareholders’ equity, myself included, are in a state of shocked disbelief ... This modern risk-management paradigm held sway for decades. The whole intellectual edifice, however, collapsed in the summer of last year” (quoted in Eatwell 2009, 11, fn 2).

The macroprudential perspective quickly filled the vacuum left by the discredited efficient market approach. Important international organizations internalized its ethos, interpreting the crisis and advanced policy recommendations based on the tenets of macroprudential principles. For national governments, too, macroprudential regulation became one of the leading items on the post-crisis reform agenda. A 2010 survey by the IMF found that macroprudential policy “is becoming an overarching public policy in the wake of the global financial crisis” in nearly 50 countries, including all of the G-20 nations (IMF 2011, 48). Claudio Borio declared to central bankers from around the world after the crisis that “we are all macroprudentialists now” (Banque de France 2009, 32).

Again according to Baker (2013, 121–27), the macroprudential diagnosis and policy prescription took center place in the intellectual lacuna left by the crisis for several reasons. First, advocates of the macroprudential approach had been laboring for years to develop a credible and coherent body of ideas, backed by the technocratic research capacity housed at the BIS. By the time the crisis struck, the macroprudential program was poised to offer a roadmap to reform the *approach* to financial regulation without fundamentally

dislodging the existing regulatory and economic institutional arrangements. This program was politically viable, in stark contrast to the radical market fundamentalist perspective that attributed the crisis to excessive government intervention or equally radical calls for wholesale nationalizations of financial sectors.

Second, the crisis forced key policy actors that composed the professional ecology of monetary and financial governance to be much more receptive to macroprudential ideas. These actors included national central bank staff and regulators, professional economists, and private sector actors such as banks, investment firms, and rating agencies (Seabrooke and Tsingou 2009a).

Third, in addition to wielding an organizational infrastructure to make their case, the macroprudential advocates became better at engaging with and selling their ideas to national policymakers in the post-crisis period. These advocates became more adept at positioning themselves in many of the key post-crisis committees -- such as the UK Financial Services Agency, Germany's G-20 team, Canadian officials, meetings of the FSF and the BCBS -- that produced key reports on the crisis, ensuring that their ideas were featured in the resulting proposals.

The fourth and last factor that allowed macroprudential ideas to gain prominence among financial policy circles was their plausibility. The advocates of macroprudential policy could demonstrate that they had a track record of making prescient calls prior to the GFC, which lent them rising levels of professional esteem, a valuable currency in the circle of technocratic policymakers.

## ***Macroprudential Regulation in Practice***

Once the macroprudential idea gained prominence in the international regulatory fora, implementation followed. Yet in the years after the GFC, scholars appraised the practical regulatory reforms as far less radical than the transformative ideas they were supposed to embody (Baker 2013; Grant and Wilson 2012; Helleiner 2014; Moschella and Tsingou 2013). The entrenching of the macroprudential principles within the regulatory doctrine was a radical departure from the past; the transformative nature of the tangible reforms was much more mixed. As observers of political and policy processes can readily attest, ideas for change can soar high in the skies of imagination, but the grunt work of realizing change bumps up against the stubborn forces of the past.

The implementation of macroprudential regulation has two necessary elements: 1) the reform of the institutional arrangement of the financial regulatory architecture and 2) the activation of specific policy instruments. The next two sections examine each element in turn.

**Institutional Architecture for Macroprudential Policy.** Given the theoretical precepts of macroprudential policy, what are the ideal characteristics of a financial regulatory architecture? Scholars, government agencies and international financial institutions have put forth best practices for institutional design, generally highlighting three principles.

First, governments should legislatively give an explicit macroprudential mandate to a regulatory body; that is, a macroprudential objective, or at the very least a focus on financial stability from a systemic perspective, needs to be made part of the agency's official mission statement. There is by now a consensus that the central bank should be the

core of the macroprudential architecture (FSB, IMF, and BIS 2011; Nier et al. 2011; U.S. Department of Treasury 2009). Three factors empower central banks as a key macroprudential regulator: they are typically independent from political pressure; they already have a mandate to maintain economic stability via their power over monetary policy and interest rates; and they boast technical expertise in economic and financial analysis. Alongside the central bank, a strong case has also been made for vesting independent regulatory and supervisory authorities with the macroprudential mandate (Kohn 2015; Kremers, Schoenmaker, and Wierds 2003; Llewellyn 2006). Because macroprudential regulation requires close coordination between multiple regulatory authorities, agencies overseeing securities markets, the banking and insurance sectors, and consumer protection should all be included in the decision-making process (IMF-FSB-BIS 2016; Nier et al. 2011).

Second, macroprudential authorities need strong powers to conduct its business. These powers can be divided into four types: the power to collect information regarding loan exposures, business models and levels of leverage from all financial services providers; the power to designate individual financial institutions as systemically important, and to bring them within the scope of more stringent regulatory requirements; the power to make and calibrate rules – essential given that the profile of systemic risk can change both across the financial system and over the credit cycle; and the power to adjust its own regulatory perimeter to encompass financial institutions may give rise to financial stability risks (IMF-FSB-BIS 2016).

The third and last consideration in devising effective macroprudential institutions is that policymakers need to define some mechanism for cooperation and information-

sharing among different authorities. This mechanism can range from empowering the macroprudential authority to direct other agencies, to make recommendations to them, or act as a forum for representatives from those agencies to meet on a regular basis. A stronger version of such a coordinating mechanism can fuse the macroprudential authority and the central bank together, for example, by housing a macroprudential department that is formally independent within the central bank (Nier et al. 2011).

Though these recommendations leave much room for national discretion, and indeed the choice of the regulatory architecture does vary considerably across countries, most governments in advanced industrialized economies have incorporated these institutional principles into their financial regulatory regimes. New mandates to ensure financial stability – macroprudential in nature – have vested central banks and other regulatory agencies enhanced policy and supervisory powers (C. Goodhart 2010; C. Goodhart et al. 2014; L. M. Goodhart 2015; McPhilemy 2016; McPhilemy and Moschella 2019). In the dataset on macroprudential governance structures in 58 advanced and emerging countries compiled by Correa, Edge and Liang (2017), over half (32) of the countries mandated that their central banks be the lead macroprudential authority. In most of the countries where the central bank is not the lead macroprudential authority, it still exercises influence along with other financial regulators over the decision to enact macroprudential policy tools.

Another striking institutional convergence is the creation, or in some cases the repurposing, of forums of financial regulatory agencies – generically called “financial stability committees” (FSCs). These committees play roles ranging from serving as mechanisms for interagency coordination and information sharing, advising and making

recommendations to member agencies, analyzing systemic risks, designating individual financial institutions as “systemically important,” to directly wielding macroprudential policy instruments. Although the powers given to these FSCs, the number of regulatory agencies constituting them, and the institutional affiliation of the individuals chairing them vary across countries (see Table 2), the establishment of FSCs in most advanced democratic nations mark a striking institutional convergence. What is more in terms of the formal institutional changes emanating from the macroprudential paradigm shift, these reforms meet the principles of best practices outlined by international regulatory bodies.

Table 2. Structure of Financial Stability Committees (FSC) in Advanced Democracies

Country	Name	Founding Year	# of Agencies	Powers	Institutional Affiliation of FSC Chair
Australia	Council of Financial Regulators	2003	4	Advisory; Can make recommendations	CB
Canada	Senior Advisory Committee (informal)	1987	5	Advise to MoF; Information sharing; Coordination	MoF
France	High Council for Financial Stability	2013	5	Adjusts tools based on proposal by CB	MoF
Germany	German Financial Stability Committee	2013	3	Warning & recommendations	MoF
Japan	Council for Cooperation on Financial Stability (informal)	2014	2	Coordination	No chair
South Korea	Macroeconomic Financial Meeting (informal)	2012	4	Assesses systemic risk; coordinates use of MPR tools	MoF
Switzerland	Steering Committee (informal)	2010	2	Information sharing; Coordination	CB and PR co-chair
United Kingdom	Financial Policy Committee	2012	2	Authority to set MPR tools	CB
United States	Financial Stability Oversight Council	2010	9	Collects information; Investigates risks; SIFI designation	MoF

Abbreviations: CB = Central Bank; FSC = Financial stability committee; MoF = Minister of Finance (i.e., Treasury); MPR = Macroprudential Regulation; PR = Prudential Regulator; SIFI = Systemically Important Financial Institution  
 Source: (Correa, Edge, and Liang 2017)

The recommendations by the IMF, BIS, and others on the institutional arrangements for macroprudential regulation discussed above are the logical extensions of a functionalist perspective: because macroprudential regulation must be countercyclical, it is assumed to be politically contentious, and the expertise-intensive nature of macroprudential regulation requires delegation to technocratic experts. But there is evidence, particularly after financial crises, that elected political leaders created FSCs because of symbolic motivations. Analyzing the political processes leading up to the creation of FSCs in the US, UK and the EU, Lombardi and Moschella (2017) find that governments established FSCs to signal to the public that one of the critical flaws of pre-crisis regulatory architectures – one in which no public agency was in charge of preventing financial instability – is being addressed. The creation of FSCs, then, was at least partly to demonstrate to voters that responsibility for systemic financial oversight is being clearly allocated.

**Macroprudential Policy Instruments.** If countries have more or less converged on the institutional architecture for macroprudential regulation what about the policy instruments? As with institutional structures, international bodies and academics have proposed policy instruments aimed at mitigating systemic risks in its various dimensions. Table 1.3 identifies some of the main systemic risk instruments. A full explanation of these policy tools is beyond the scope of this dissertation,<sup>3</sup> but a note should be made about the relationship between microprudential and macroprudential measures in limiting systemic risk.

Many of the policy instruments set forth by international regulatory bodies such as the BCBS are traditional microprudential measures but are recalibrated and used to deal specifically with systemic risk. Governments have recalibrated them, for example, by making them time-varying to reduce the procyclicality of the financial system or by applying them to systemically important institutions whose failure would disproportionately impact the financial system and the overall economy. Some of these instruments now incorporate a systemic dimension by being applied to with a broader financial systemic perspective, say, to reduce financial connections in the system or to apply them to derivatives (Freixas, Laeven, and Peydró 2015, 263–64). For example, some elements of the new capital and liquidity requirements under Basel III, including the leverage ratio and the capital conservation buffer, help mitigate systemic risk by buffering financial institutions against the risks associated with credit and asset price cycles. Similarly, the new liquidity instruments – the liquidity coverage ratio (LCR) and the net

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<sup>3</sup> The literature on macroprudential policy instruments and their financial and macroeconomic effects is extensive. See (Cerutti, Claessens, and Laeven 2017; Claessens 2015; IMF 2011; Lim et al. 2011; Lombardi and Siklos 2016)

stable funding ratio (NSFR) – should help increase banks’ liquidity buffers and lower maturity risk transformation, which in turn should make them more resilient against the transmission and amplification of liquidity shocks (IMF 2011). A clear delineation of microprudential and macroprudential instruments is therefore often difficult, as the same instruments may serve multiple objectives depending on how they are used and calibrated.

Table 3. Menu of Macroprudential Policy Instruments

Risk dimensions	
Time dimension	Cross-sectional dimension
<b>Instruments developed specifically to mitigate systemic risk</b>	
Countercyclical capital buffers (CCyB)	Capital surcharges for systemically important banks and financial institutions (SIBs/ SIFIs)
Time-varying systemic liquidity surcharges	Systemic liquidity surcharges
Countercyclical change in risky weights for exposure to certain sectors	Levy on non-core liabilities
Through the cycle valuation of margins or haircuts for repurchase agreements	Higher capital charges for trades not cleared through central counterparty clearinghouses
Liquidity Coverage Ratio (LCR)	Institution-specific limits on financial exposures
Net Stable Funding Ratio (NSFR)	
Capital conservation buffer (CCB)	
<b>Recalibrated instruments</b>	
Time-varying loan-to-value (LTV), debt-to-income (DTI), and loan-to-income (LTI) caps	Powers to break up financial firms on systemic risk concerns
Time-varying limits on currency mismatch or asset exposures	Capital charge on derivative payables
Time-varying limits on aggregate credit, credit growth, and loan-to-deposit ratios	Deposit insurance risk premiums sensitive to systemic risk
Dynamic provisioning rules	Restrictions on permissible activities (e.g., ban on proprietary trading for systemically important banks)
Limits on leverage ratios	

*Source:* Adapted from IMF (2011, 23) and Claessens (2015)

Advanced democratic countries have adopted a number of these policy instruments in the run-up and after the GFC. Table 4 draws on the IMF Annual Macroprudential Policy

Survey database to show macroprudential policies implemented in nine such countries, sorted by three financial sectors – banking, asset management, and financial market infrastructures. Patterns of both convergence and variance are apparent in this table. It is clear that in implementing macroprudential instruments in the banking sector, countries institute very similar measures, such as the CCB, LCR, NSFR, and capital surcharges for SIBs. Governments similarly converge on regulating financial markets infrastructure. This can be explained by these governments’ adoption of the international and European Union-level regulatory standards for these sectors. Yet, there are also patterns of variation. Even in the banking sector, some countries, notably Canada, Switzerland and the US, have enacted measures in excess of these Basel III standards. Differences in the extent of macroprudential regulation in other financial sectors are even starker. In some countries, the asset management sector is virtually untouched by macroprudential policy, while others require asset management firms to implement liquidity risk management programs, limit their investments in illiquid assets, and permit them to suspend withdrawals in times of distress. Finally, as will be shown in the empirical chapters, there is considerable variation in the number and stringency of policy instruments over time. While we can expect that governments utilize a greater number of policy instruments as they experiment with these new tools, in some cases, the stringency of these instruments become watered down over time.

Table 4. Policies to Address Systemic Risk in Advanced Democracies, by Financial Sector

	Banking	Asset Management	Financial Market Infrastructures
Australia	CCB; cap on CG; NSFR; Liquidity limits; SIB surcharge; Exposure limits	Suspension requirements;	Requirements on financial resources, liquidity, margins and collateral
Canada	CCyB; CCB; Leverage limits; Dynamic provisioning; LTV limit; DTI limit; LCR; NSFR; SIB surcharge; Exposure limits		Requirements on margin, default management, collateral management and minimum reserve requirements
France	CCyB; CCB; Exposure limits; LCR; SIB surcharge;		
Germany	CCyB; CCB; Leverage limits; LCR; NSFR; SIB surcharge; Exposure limits; bank levy	Leverage limits; Limits on the use of derivatives, securities loans, and repo transactions; Liquidity requirements;	European Market Infrastructure Regulation
Japan	CCB; Leverage limits; household & corporate sector capital requirements; LCR; SIB surcharge; annual recovery & resolution plans; Exposure limits		Capital adequacy; credit & liquidity risk management frameworks; margin requirements;
South Korea	CCB; Leverage limits; Dynamic provisioning; LTV limit; LTI limit; DTI limit; LCR; NSFR; LTD limit		
Switzerland	CCB; Leverage limits; Household sector capital requirements; LCR; SIB liquidity requirement; SIB surcharges; Exposure limits;	In emergencies, funds are permitted to suspend redemption, impose redemption gates, defer payments; Leverage limits; Limits on asset concentration; Limits on investment in illiquid assets; Restrictions on short-selling;	Licensing requirements; Prudential supervision; Capital requirements and adequacy; Liquidity requirements;
UK	CCyB; CCB; Leverage limits; LCR; LTI limits; Corporate sector capital requirements; SIB surcharges; G-SIB buffer		European Market Infrastructure Regulation: stress testing; recovery plans;
US	CCB; Leverage limits; Dynamic provisioning; Supervisory stress tests; LCR; Enhanced liquidity & internal stress testing requirements for large bank holding companies; SIB surcharges; Exposure limits;	Liquidity standards, floating NAV requirement and permission to suspend redemptions for MMFs; Liquidity risk management programs for open-end mutual funds	Enhanced supervision and stress testing for systemically important financial market infrastructures

*Abbreviations:* CCB = Capital conservation buffer; CCyB = Countercyclical capital buffer; CG = Credit growth; DTI = Debt-to-income ratio; G-SIB = Global systemically important bank; LCR = Liquidity Coverage Ratio; LTI = Loan-to-income ratio; LTV = Loan-to-value ratio; MMF = Money market fund; NAV = Net Asset Value; NSFR = Net Stable Funding Ratio; SIB = Systemically Important Bank

*Source:* IMF Macroprudential Policy Survey (updated 2019)

The core question that this dissertation tries to answer, then, is *what explains the variation, across countries, across financial sectors, and across time, in the stringency of macroprudential regulation?* In the course of addressing this question, it also suggests answers to associated puzzles: Do regulators implement macroprudential policy corresponding to the degree of systemic risks they perceive in the financial system? How do they make sense of and assess systemic risk in the financial sector under their purview? What roles do politicians, financial industry lobby groups, and civil society organizations play in formulating macroprudential policies?

As mentioned at the outset of this chapter, this dissertation develops a theoretical framework that points to three factors that are responsible for explaining the variation in macroprudential policy stringency: high political salience of financial regulation, regulatory officials' policy orientation, and bureaucratic turf tensions. When the salience of financial regulation is high – that is, when the issue of financial regulation is under scrutiny by the voting public – politicians are incentivized to intervene in regulatory reform. When politicians do choose to intervene in regulatory affairs, their preferences largely determine the policy output. On the other hand, when salience is low, politicians are less incentivized to step in to reform regulation, and regulatory officials have wider discretion over the content and stringency of policy output. Under these conditions, a different set of variables become important: regulators' policy orientation – growth or stability orientation – and the presence or absence of turf tensions between multiple regulatory agencies. The next chapter elaborates this theoretical framework in more detail.

## **Plan of the Dissertation**

This dissertation unfolds as follows. Chapter 2 surveys various strands of scholarship to take account of potential competing explanations for the variation in the stringency of macroprudential regulation. Then it explains in detail the explanatory framework employed in the rest of the dissertation. It closes by explaining the research strategy and justification for selecting the cases compared in the rest of the dissertation. Chapters 3 through 5 present empirical case studies of the regulatory reform processes in the banking and asset management sectors in the United States (US) and Japan.

Chapter 3 examines the formation of macroprudential policies in the US banking sector. The issue of financial regulation became a highly salient political issue with the eruption of the 2008 financial crisis, prompting elected politicians to reform key banking regulations. US bank regulators were growth-oriented since the 1980s, they swung to stability orientation when the 2008 crisis took place. These factors help explain the highly stringent macroprudential policies in the period after the crisis. Yet the victory of the Republican Party in both the legislative and executive branches, as well as the regulators' shift toward more growth orientation served to relax post-crisis macroprudential reforms.

We turn our attention to the reform processes in the Japanese banking sector in Chapter 4. In that case, we see that the key financial crisis was not in 2008 but in 1998. With Japan's own banking crisis in the late 1990s, financial regulation became a highly salient issue, which caused regulators to implement highly stringent banking inspection and supervisory practices to address systemic risk. Yet several years later, these same regulatory officials began to loosen the restrictive policies, in large part because both they and elected politicians had become more growth oriented. By the time the 2008 crisis took

place, Japan's banking sector enjoyed a significant level of stability, negating the need for macroprudential policies of high stringency.

## **Chapter 2**

### **Theoretical Framework**

The practical implementation of macroprudential policy is much less radical than what its earliest proselytizers envisioned (Baker 2018; Helleiner 2014; Stellinga 2020; Thiemann 2019, 2020; Thiemann and Tröger 2020). This incremental, rather than novel, implementation might be expected, given that new ideas must contend with existing institutions and political interests (Hall 1989). The true puzzle to be explained, then, are the gaps in the actual use of macroprudential policies between countries, financial sectors, and over time.

Three long-standing theoretical traditions in political science offer initial explanations for this puzzle. I group these traditions as institutionalist, interest-based, and principal-agent theories. While each explanation has merit, each of these theories alone cannot account for the extent of variation in the stringency of macroprudential policy we witness across the advanced democratic world. I thus construct an analytical framework by incorporating some elements of these existing explanations. This original framework features three explanatory factors: the political salience of financial regulation, the regulators' policy orientation, and bureaucratic turf tensions.

## **Existing Explanations**

Existing explanations for the stringency of a given regulatory regime are diverse, but they can be broadly classified into the categories of interest-based, institutional, and cognitive approaches.

### ***Interest-Based Approaches***

Interest-based approaches to the stringency of macroprudential regulation see the role of financial industry and other political actors as paramount in the formulation (or the lack thereof) of policy. Particularly influential is what may be labeled the “political constituency thesis.” The political constituency thesis argues that, because the benefits of effective macroprudential policy (financial stability) are only seen in the long term and are not easily measured, while its costs are visible and immediately felt (in the form of higher interest rates for borrowers and lower profits for financial institutions), macroprudential policy is likely to be politically unpalatable. Financial stability is also a public good with classic free-rider problems: while all financial institutions benefit from a stable financial system, this benefit is diffuse and cannot be directly measured in terms of its impact on their balance sheets, and the costs of maintaining a stable financial system (compliance with regulation) fall acutely and disproportionately on those institutions. Since the duration of a credit cycle is anywhere between eight to twenty years (Haldane 2013), the success of macroprudential policy will not be immediately obvious and will not make headlines. On the other hand, effective counter-cyclical measures impose significant costs on the profitability of financial intermediaries, who will be forced to hold additional capital. Rather than submitting to such regulatory burden, the political constituency thesis goes, the financial industry will mobilize with the support of elected politicians, whose

constituencies also temporarily benefit from cheap credit and booming financial markets during a bubble (Armour et al. 2016; Baker 2015; Mészáros 2013; E. W. Nier 2011).

The political constituency thesis and interest-based arguments of financial regulation in general are informed by notions of regulatory capture and the structural power of business. A long lineage of scholarship on economic governance has emphasized that governments and policymakers are susceptible to being “captured” by the very private enterprises they are supposed to regulate (Becker 1983; Laffont and Tirole 1991; Stigler 1971). This is particularly true in the governance of financial markets and banking, scholars argue, since these policy areas are highly technical and hence out of the public eye, which enhances industry lobbies’ access to regulators (Culpepper 2010; Lall 2012a, 2015; Lindblom 1977; Woll 2014). The practice of revolving doors also creates an amiable atmosphere between regulators and the financial sector, making finance-friendly regulation more likely (Seabrooke and Tsingou 2009b). Approaches that emphasize the structural power of business in shaping regulation argue that because governments in capitalist countries are dependent on investment by capital holders, they are compelled to bend to capitalist preferences, lest they suffer capital flight (Lindblom 1977; Przeworski and Wallerstein 1988). Again, analysts claim that the financial industry’s political power is particularly potent, since it is at the heart of credit allocation and because the financial industry controls the most liquid form of assets – money and currency (Culpepper and Reinke 2014; Pagliari and Young 2014; Woll 2016; K. Young 2015; K. L. Young 2012).

### ***Institutional Approaches***

Explanations of regulatory stringency relying on institutional factors also stem from several strands of political economy scholarship but the most influential thus far has been

the body of works emerging from the comparative capitalisms literature (Deeg and Jackson 2007; Hall and Soskice 2001; Zysman 1983). Deployed in the context of explaining bank bailouts (Mitchell 2016), regulatory responses to globalization (Deeg 1999; S. K. Vogel 2006; Yamamura and Streeck 2003), and national preferences over international regulatory standards (Fioretos 2010; Howarth and Quaglia 2014, 2016), the diversity of capitalist models can be redirected to explaining the restrictiveness of post-crisis macroprudential regulation. In market-based financial systems, sizable equity markets predominate, with important but secondary privately-owned banking sectors. Because of the arms-length relationship between states and markets in these economies, the comparative capitalisms approach would predict that policymakers would find it more difficult to rein in financial activities, thus settling for laxer regulation. In bank-based systems, as the name indicates, equity markets are subordinated to well-organized banking sectors. States value the stability of the banking sector in these systems, hence implementing more stringent macroprudential regulation to prevent runs on the banks.

A very different strand of institutional approach focuses on the structure of financial regulatory regimes. As part of the debate on whether national economic models were undergoing convergence as a result of globalization, scholars in the 1990s and early 2000s pointed to the crucial role of the regulatory structures of finance (Deeg and Lütz 1996; Lütz 2004; W. Reinicke 1995; Verdier 2003). More recently, the domestic structure of financial regulation has also been used to explain national preferences over the design of international regulatory bodies (Reisenbichler 2015). These approaches generally classify countries along a unitary (or centralized) vs. federalist (or fragmented) regulatory systems, and argue that federalist systems have exhibited weaker ability to respond to economic

internationalization because the authority over financial governance is divided between many domestic regulators, while unitary systems can more effectively and assertively reform their regulatory approaches.

The limitations of both interest-based and institutional explanations are worth pointing out at the outset. Interest-based approaches, in their various guises, see the failure or weakening of financial regulation as an overdetermined outcome – that is, any weakness or failure to regulate is attributed to industry influence over policymakers. In particular, the idea of regulatory capture has been roundly criticized in recent scholarship. In Carpenter and Moss’s sustained critique of the bluntness of the capture literature, they write that “Perhaps the deepest problem with much of the research on regulatory capture is [...] its lack of nuance in describing how and to what degree capture works in particular settings” (D. Carpenter and Moss 2013). Similar criticisms have been directed at the concept of the structural power of business (Smith 2000; D. Vogel 1987).<sup>4</sup> While the idea that business, and finance in particular, enjoys disproportionate political sway compared to other societal actors has intuitive appeal, these explanations have a hard time accounting for instances of successful imposition of strict policies that go against business preferences. Arguments that privilege national regulatory structure, too, are too blunt to account for sectoral variation in regulatory stringency. And lastly, what interest-based and institutional approaches miss is the theoretical importance of the regulator. By focusing exclusively on societal actors and structures, these explanations have failed to theorize the cognitive and psychological dimensions of the very technocrats who formulate and implement policies.

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<sup>4</sup> But recent efforts have begun to “precise” the concept of structural power as a useful analytical tool (Culpepper 2015; Culpepper and Reinke 2014; Fairfield 2015).

## *Cognitive Approaches*

Analysis of the political economy dimensions of macroprudential regulation by economic sociologists fare much better in probing the motivations and constraints that regulators face. This analysis begins with the observation that macroprudential policy is still a new policy domain. Its incipience means that “its operational scope is not yet clearly specified as many other aspects of regulation,” including monetary and fiscal policies that have much longer practical and intellectual histories (Armour et al. 2016). This lack of clarity raises several challenges that regulators must confront. First, a definition of what exactly constitutes financial stability and the macroprudential objective is yet to be settled (European Systemic Risk Board 2016; Haldane 2013; Thiemann 2018). Second, even after the definition and parameters of macroprudential policy are worked out, according to scholars who privilege cognitive factors, there remain formidable obstacles to accurately observing and measuring systemic risk. Because preemptively mitigating systemic risk requires extensive and up-to-date data on the state of the financial system and the interactions between its constituent parts, smooth macroprudential policy demands high level of expertise and scientific consensus on the types of data and their interpretation (Barwell 2017; Coombs 2017; Kranke and Yarrow 2018; Thiemann, Birk, and Friedrich 2018). The implication of the cognitive approach is that when technocratic regulators succeed in defining the scope and objective of macroprudential regulation, and when they have gained sufficient experience with and consensus on systemic risk indicators to know which are reliable predictors of financial cycles, they can implement effective financial stability policies. Otherwise, we would expect regulators to be paralyzed by the myriad of indicators of financial activity, leading to hesitant macroprudential regulation.

The cognitive approach delves deep into the conundrums that policymakers in regulatory agencies face with respect to the enormously complex task of ensuring financial stability. In this respect, it offers a much more granular analysis into the micro-processes of macroprudential policymaking than neither interest-based or institutional approaches do not. But its focus on the cognitive challenges has meant the exclusion from its theoretical frameworks the political pressures that regulators face in formulating and implementing policies. And again, the current state of the sociological literature on macroprudential regulation would lead us to expect that cognitive challenges would consistently produce weak regulations. Policy laxity is once again overdetermined. The price of a narrow focus on the epistemic obstacles is to overlook the success that some countries have had in their actual implementation of stringent macroprudential policy.

## **Theoretical Framework**

To provide a more compelling explanation for the varying stringency of macroprudential regulation, I now develop a theoretical framework that conceptualizes the behavior of key actors in regulatory politics and embeds that conceptualization in a broader historical framework. This section thus lays out this framework in two steps. The first step, the actor-level framework, looks at interactions between politicians, regulators, and societal actors. The second step, the critical junctures framework, embeds this actor-level framework in the historical context of that country and sector.

### ***Actor-Level Framework***

I begin with David Andrew Singer's (2007) model for explaining the stringency of bank capital requirements and regulators' preference for international harmonization. He starts with the observation that political principals delegate the task of economic regulation

to regulatory agencies, and that intervention from politicians is the “bane of regulators’ existence” (Singer 2007). To avoid political intervention, regulators must balance financial stability with international competitiveness. This balance creates room for regulator discretion which Singer calls “win-set.” When a country experiences a shock to its banking sector’s stability or international competitiveness, regulators’ win-set shrinks as they need to modify capital requirements so as to stay on the good side of their political principals. Among other predictions, Singer argues that after a shock to a banking sector’s stability, regulators will need to increase the stringency of capital requirements, while a shock to international competitiveness will provoke a decrease in capital requirements. Regulators will seek to harmonize regulatory standards at the international level when a dual shock to stability and competitiveness shrinks their win-set to the point of desperation.

While Singer’s argument is elegant, influential and almost directly applicable to the question of macroprudential policy, its focus is too narrow. In the words of James March, we need to understand “real bureaucrats dealing with real politicians” (March 1997, 693), as well as broaden the scope to encompass interest groups other than the financial industry.

In explaining the differences in the stringency of macroprudential reforms, I refine Singer’s model in three ways. First, I argue that changes in a policy issue’s public salience largely shapes whether politicians threaten to intervene in regulatory affairs. Second, I assume that, even though regulatory agencies are constrained by institutional mechanisms for political control and industry pressure, they maintain policy preferences independent of these actors. Third, bureaucratic turf tensions between multiple domestic financial regulators can act as a force similar to the threat of political intervention. I conceptualize each of these refinements in turn.

## ***Political Salience***

In Singer's framework, legislatures intervene in regulatory policy in one of two circumstances: a bout of financial instability or pressure from financial industry to lighten onerous regulation. I further specify this proposition by assuming that these two circumstances are driven by varying levels of the political salience of an issue. Following Culpepper, I define the public salience as of an issue "as its importance to the average voter, relative to other political issues" (Culpepper 2011, 4). Culpepper's work on political salience is particularly applicable to issue areas that are technically complex and normally do not attract the public's attention, such as corporate governance and, for our purposes, financial regulation.

When voters pay attention to an issue – i.e., when salience is heightened, or what Culpepper provocatively calls "noisy politics" – they influence the character of regulatory politics through three mechanisms (Culpepper 2011, 178). First, they incentivize politicians to scrutinize the issue. This is consistent with classic principal-agent models; Barry Weingast observes that "Congressmen judge agency success through the 'decibel meter,' i.e., by listening to constituency reactions to agency decisions" to monitor agencies (Weingast 1984, 155; McCubbins and Schwartz 1984). Second, heightened salience also incentivizes the media to direct resources to cover that topic, even if the topic is highly complex and normally do not command great public interest. Third and no less significantly, noisy politics tempers and indeed "shrink to insignificance" the political power of business (Culpepper 2011, 190). In other words, all of these conditions make it much more likely that in periods of noisy politics, politicians will impose their preferences on regulatory agencies without hindrance from organized interest groups.

In periods of low salience – “quiet politics” – these mechanisms are inverted. In the absence of voter demands for change, politicians are content to let the economic status quo continue. A much smaller corner of the media continues to cover the issue. Business interest groups, furthermore, enjoy an expanded arsenal of tools for policy influence: direct lobbying of politicians, form and control informal working groups with significant agenda-setting capacities, influencing how the media frames the topic, and informal access to regulatory officials (Culpepper 2011, 9-11). In times of quiet politics, therefore, business power over regulatory policymaking is greatly amplified.

Table 5. Effects of Political Salience

Salience	Political Environment	Power of Business	Political Interference
High	“Noisy”: media, voters and civil society groups are involved	Weak	Likely
Low	“Quiet”: only business interests are involved	Strong	Unlikely

Source: Adapted from Culpepper (2011)

Singer notes that regulators’ preferences for stability and competitiveness are shaped by “domestic pressures from politicians and industry” or “some aspect of the institutional environment” (Singer 2007, 23). Beyond these factors, his model leaves no room for regulators to hold policy preferences independent of external actors or the institutional structures. I depart from this assumption by arguing that regulatory agencies can and often do hold their own policy preferences.<sup>5</sup> Many modern regulatory agencies enjoy a large degree of operational independence and autonomy from their political principals (Gilardi 2008; Majone 1997). And to navigate policymaking within their

<sup>5</sup> For a typology of bureaucrats’ motivation and a review of political science literature on bureaucracy preferences, see Adolph (2013, 9–15).

autonomous space, regulators adopt their own policy preferences. At least two reasons make this argument compelling.

First, most bureaucracies are overseen by multiple principals, who often have different preferences about what the bureaucratic agents should do. Writing about the American bureaucracy, James Q. Wilson observed that “Every federal agency is overseen by at least four committees (or subcommittees): the House and Senate committees that authorize the agency and shape the legislation it enforces and the House and Senate appropriations committees that determine the size of its staff and budget” (Wilson 1989, 256). The challenge of constraining agencies is common in jurisdictions where an agency is accountable to both the executive and the parliament, or where an international organization must answer to multiple member states (McCubbins, Noll, and Weingast 1989, 439; Nielson and Tierney 2003; Pollack 1997, 112). If these principals hold different preferences over what they want the agencies to do, the agencies maintain some scope for independent preference formation (Hammond 2003).

Second, financial regulation, especially macroprudential regulation, is a policy domain that places a high premium on regulators’ technical expertise. Understanding and mitigating systemic risks in the financial system is a complex task (Battiston et al. 2016; Datz 2013; Schwarcz 2009). Most elected politicians do not possess the technical expertise necessary to closely instruct regulators on the precise policies they should devise (Huber 2002, 33). This is one reason why they delegate these tasks to agencies in the first place (Majone 1997; Moe 1987). Financial regulatory officials, on the other hand, are highly trained in the subject matter over which they preside. As sociologists and organizational theorists have long recognized, the autonomy of bureaucracies arises from their expertise

(D. P. Carpenter 2010; Weber 1958), and their training and professional backgrounds imbue them with “some social purpose or set of cultural values” (Barnett and Finnemore 1999, 708; see also Nelson 2014).

If a macroprudential regulator’s autonomy implies an independent policy preference, what preference does it have? Here, Singer’s framework is again instructive. As noted above, Singer (2007) argues that regulators’ policy discretion lies between the poles of stability and international competitiveness. This is directly applicable to the domain of macroprudential regulation, whose ultimate objective is financial stability. There is a trade-off between financial stability achieved through stringent macroprudential policies and the efficiency of the financial sector, which can be undermined by the costs of regulatory compliance incurred by financial institutions. Regulators can therefore prefer a policy option that lie between two ends of a spectrum, which I call *policy orientation*. At one end of the spectrum is stability-orientation, in which the regulator adopts a broadly macroprudential perspective and prioritizes the prevention of systemic shocks to the financial system. At the other end, the regulator takes on an efficiency or growth orientation, which is more consistent with a microprudential and the Efficient Market Hypothesis outlooks.

In contrast to Singer, whose framework assumes that stability and competitiveness are simply policy priorities for regulators to appeal to their political principals, I argue that these policy orientations are relatively complete and internally consistent beliefs that regulators hold. Here I borrow from scholars on the role of ideas in politics, who have found that political leaders and policymakers often use ideas to make sense of uncertainty, define problems, and guide them toward policy solutions (Berman 2013; Blyth 2002, 2003;

Mehta 2010). Following this insight, I theorize that both stability and growth orientations consist of three dimensions: ontology, diagnosis, and prescription. Ontology denotes the regulators' beliefs about how a given financial sector functions and the role of regulation in that sector. Efficiency-oriented regulators see the financial system as a collection of individual financial institutions and market participants who are fundamentally rational. Taking the cue from partial equilibrium models, they assume that market forces and the price mechanism bring the financial system to self-correct in the long run. Failures of financial institutions of course can and do occur, but these are generally isolated events and their damage is confined to depositors and investors. Stability-oriented regulators, on the other hand, take on a more systemic perspective. They see the financial system as consisting of closely interconnected institutions and participants who are boundedly rational and susceptible to behavioral heuristics. While market forces may be self-correcting in the short run, they can produce systemic negative externalities if not properly regulated. Failure of financial firms, particularly large or interconnected institutions, can spark widespread contagion.

The second dimension of policy orientation – diagnosis – signifies regulators' understanding of why and how disruptions affect the financial system and the wider economy. The most obvious object of diagnosis is the GFC, but depending on the country and sector contexts, regulators must also diagnose other disruptions; the European sovereign debt crisis and the Japanese asset bubble collapse, for example. Efficiency-oriented regulators are likely to diagnose these disruptions as being caused by external shocks, and market participants' panicked response as a consequence of a lack of accurate and timely information about their assets and liabilities. Stability-oriented regulators, on

the other hand, diagnose shocks as a symptom of accumulating systemic risks, which in turn were endogenously generate within the financial system. They may also see regulatory failure as a facilitating condition for the build-up of risks.

Lastly, the dimension of prescription naturally follows from diagnosis. This is the preference that regulators hold about what policy solutions are necessary to prevent future crises. Flowing from their diagnosis, efficiency-oriented regulators are likely to prescribe stronger oversight of individual financial institutions (*microprudential* measures) and more transparency to better inform investors and depositors about assets or banks. Stability-oriented regulators will likely advocate correctives that take into account the systematic importance of financial institutions, mitigate moral hazard, and enhance regulatory supervision across the entire financial system. Table 6 summarizes these dimensions.

Table 6. Regulators' Policy Orientation and their Dimensions

	Ontology	Diagnosis	Prescription
Growth	Financial system is a collection of individual units Market participants are rational actors Market mechanisms are self-correcting in the long run Failure of financial firms damages depositors and investors	Shock was exogenous or idiosyncratic Runs occur because of information asymmetry	Enhanced transparency for investors Deposit protection Market discipline Bail-in mechanisms
Stability	Financial system is interconnected & dynamic Market participants are boundedly rational & susceptible to behavioral heuristics Market mechanisms can produce systemic risks Failure of financial firms can reverberate beyond depositors and investors	Risks and shocks are endogenous Regulatory failure	Enhanced regulation for SIFIs Restrictions on investments in risky assets Countercyclical measures Forward-looking stress tests

Two caveats are in order. First, these dimensions of policy orientations are necessarily ideal-typical because the precise contents and assumption of regulators' beliefs vary by the contexts of the national and sectoral political economy. As ideational scholars have observed, political and economic ideas mesh with existing political contexts and institutional arrangements (Hall 1989). This means that, for example, stability-orientation can encompass both the weaker version of the macroprudential perspective that privileges enhancing the resilience of financial institutions and its stronger counterpart that aims to enhance the countercyclicality of the entire financial system – a distinction that political economy scholars of macroprudential policy have poignantly identified (Baker 2018; Kranke and Yarrow 2019; Stellinga 2020; Thiemann 2019, 2020).

Second and relatedly, the origins of policy orientation lie in a complex set of factors. This theoretical framework treats as exogenous how a given regulatory agency's policy orientation came about, although I do describe how each agency came to hold its orientation in the empirical chapters. I simply suggest here that, in general, an agency comes to hold a particular orientation because of a combination of its organizational mission, history, the professional background of its staff (J. Q. Wilson 1989, chap. 4), as well as their socialization with like-minded regulatory officials within international forums (Zürn and Checkel 2005).

### ***Bureaucratic Turf Tension.***

Singer's model assumes that each country has one regulator that navigates the contending priorities between financial stability and international competitiveness. Yet in practice, financial regulation is often a policy area characterized by two or more regulatory agencies. This is particularly important in macroprudential regulation because systemic

risk emerges from the interactions between multiple financial sectors, thus requiring agencies to share information and coordinate policymaking. As shown in Chapter 1, advanced democracies have established financial stability committees as an institutional forum in which their regulatory officials can do just that. But as also shown in Table 1.2, the powers given to these committees as well as the number of agencies represented in them vary across countries, making inter-agency coordination far from a *fait accompli*. Complicating matters further, macroprudential regulation requires that financial regulators be given new mandates, resources and policy instruments, which may challenge the boundaries of regulatory turf between these regulators (Blinder 2010). These turf tensions threaten the autonomy of regulatory agencies.

It is a truism among scholars of bureaucracy that government organizations seek to build and maintain autonomy. “Bureaucratic autonomy,” in Carpenter’s definition, “prevails when a politically differentiated agency takes self-consistent action that neither politicians nor organized interests prefer but that they either cannot or will not overturn or constrain in the future” (D. P. Carpenter 2001, 17). In new policy domains such as macroprudential regulation, expansive mandates can push rival agencies to encroach on another’s turf, which in turn threatens the autonomy of the agency whose regulatory boundaries are under attack.

Scholars have observed that agencies whose turf is threatened take defensive regulatory measures, including seeking out tasks not performed by others, fighting the encroaching agencies by enacting similar policies, and staking out jurisdictional claims on novel markets (Maor 2010; J. Q. Wilson 1989, chap. 10). They do this to avoid the perception by their political principals and the regulated industries as being negligent and

to bolster their expertise over the regulatory domain under question (Maor 2010, 138–41; Carpenter 2010).

Drawing on these observations, I argue that threatened agencies will attempt to preempt rival agencies by implementing more stringent macroprudential policies than their preferences may dictate. I expect that this effect of turf tension to be uniform regardless of the regulator’s policy orientation: growth-oriented regulators whose turf is under threat will likely implement moderately stringent policies, and stability-oriented regulators will be inclined to enact highly stringent reforms.

I further expect that the possibility of turf tensions depends on several factors: the institutional structure that enables inter-agency coordination, including the number of regulatory agencies responsible for a given financial sector and the binding strength of the mechanisms for their coordination, the divergence or convergence of agencies’ policy orientations, and the incentives of politicians to override inter-agency squabbles. As such, I expect to observe turf tensions when all three of the following conditions are present: (1) a country’s financial stability committee or other coordination mechanism with a weak capacity to enforce inter-agency coordination; (2) the relevant regulatory agencies hold diverging policy orientations; and (3) the political salience of reform in a particular financial sector remains low, making political intervention unlikely.

## **Empirical Expectations**

With three explanatory variables, it is useful to set out how these factors interact in explaining the outcome of interest. Since politicians hold de facto power over regulatory agencies, I argue that the threat of political intervention trumps both policy orientation and

bureaucratic turf tensions in explaining the direction of policy stringency. When there is no strong political pressure to act, regulators’ policy orientation will be the primary determinant of stringency. And as mentioned above, divergent orientations of multiple agencies are likely to lead to turf tensions if there is no strong institutional mechanism to coordinate their decisions, and this is likely to drive up the stringency of regulation. Table 7 summarizes how the interactions of these three variables yields the predictions in policy stringency.

Table 7. Expectations for Policy Stringency

Policy Orientation	Independent Variables		Stringency
	Political Saliency	Bureaucratic Tension	
Growth	Low	Low	Low
Growth	Low	High	Moderate
Growth	High	Low	Moderate
Growth	High	High	High
Stability	Low	Low	Moderate
Stability	Low	High	High
Stability	High	Low	High
Stability	High	High	High

### ***Critical Junctures Framework***

So far, the actor-level framework has emphasized the causal importance of the political saliency of an issue area, the regulators’ policy orientation, and the presence or absence of bureaucratic turf tensions. But what shapes these factors in a given case? Here, I propose a broader, historical institutionalist explanation. Specifically, I draw on the critical junctures framework that is prominent in comparative politics.

Historical institutionalism is an analytical approach that seeks to understand how political struggles are mediated by the institutional settings in which they take place

(Thelen and Steinmo 1992). Although “institutions” can point to a wide range of structures and orders that shape political, economic and social behavior, scholars working in the historical institutionalist tradition have generally focused on formal institutions – that is, formal policies or rules that either prescribe or prohibit behavior and patterns of interactions. Historical institutionalists have identified many ways in which institutions can change over time. Among them is the critical juncture.

I adopt the definition of critical junctures proposed by Capoccia and Kelemen (2007, 348): relatively short periods of time during which there is an acutely heightened chance that agent’s choices will affect the outcome of interest. By relatively short periods of time, we mean that the duration of the juncture must be brief relative to the duration of the path-dependent process it initiates. An acutely heightened chance refers to the heightened probability that agent’s choices will affect the outcome of interest relative to that probability before and after the juncture.

Financial crises can act as a critical juncture for a number of institutions (Carstensen 2017; Verdun 2015). Of particular interest for the empirical chapters in this dissertation is the causal role that financial crisis as critical juncture plays for the salience of financial regulatory reform, regulators’ policy orientation, and bureaucratic turf tensions.

To bring analytical precision to how financial crises shaped these three explanatory variables, I draw on efforts to clarify the causal logic of critical junctures. First, the analysis recognizes that critical junctures do not occur on a blank slate, and that there are factors preceding these junctures that exert causal force on developments during junctures to produce the outcome of interest. Slater and Simmons (2010, 889) calls these factors critical antecedents: “factors or conditions preceding a critical juncture that combine with causal

forces during a critical juncture to produce a long-term divergence in outcomes.” In other words, they are the sets of factors (institutions, policies, coalitions, ideas, etc.) that interact with developments during a critical junctures in meaningful ways.

Next, to specify those developments during critical junctures, the analysis distinguishes between permissive and productive conditions (Soifer 2012a). Permissive conditions “change the underlying context to increase the causal power of agency or contingency and thus the prospects for divergence,” whereas productive conditions are “the aspects of a critical juncture that shape the initial outcomes that diverge across cases” (Soifer 2012a, 1574–75). Referring again to the definition of critical junctures above, permissive conditions are the things that heighten the probability that agents’ choices will affect the outcome of interest, while productive conditions are the forces that pushes changes to become locked in to become the long-term outcome of interest, including contingency and agents’ choices.

## **Methods**

To test this theoretical framework as well as the alternative explanations discussed above, this dissertation conducts an in-depth comparative historical analysis using a range of qualitative data sources.

I will select cases on the basis of two criteria: representative variation in the dependent variable and control of independent variables drawn from the theory developed above as well as the alternative explanations identified above (Slater and Ziblatt 2013). Judging from the variation in the stringency of macroprudential regulation across country-

sectors (Table 1.4), I select the banking and asset management sectors in two industrial democracies: the United States and Japan.

To arrive at accurate causal inference in each of these cases, I conduct systematic process tracing of the political and regulatory dynamics of policy reforms and implementation. Process tracing is appropriate to establish the temporal sequence of events or processes, and that a temporally *priori* event caused a subsequent event (Beach and Pedersen 2013; Bennett and Checkel 2015; Mahoney 2012). Given the theoretical framework proposed above, this analysis is based on the following types of evidence.

First, I establish a measure of the dependent variable, regulatory stringency, by reference to the IMF's Macprudential Survey and Financial Sector Stability Assessments, as well as the Financial Stability Board's peer reviews of each country.<sup>6</sup> Further, to accurately ascertain stringency, I assess how the regulated firms themselves perceive the proposed and implemented policies. Often, industry associations, think tanks and consulting firms produce estimates of compliance costs of proposed rules as reference points for lobbying efforts.

Second, following previous scholarship, I assess the political salience of financial regulation by presenting data on newspaper coverage of the issue over time. Using databases that cover the political spectrum in each country case, these data allow us to observe the oscillation of issue salience and shine a light on periods in which political intervention in regulatory affairs is more likely.

Third, the other hypothesized proximate determinants of regulatory stringency, regulators' policy orientation and bureaucratic turf tensions, are ascertained using publicly

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<sup>6</sup> <http://www.fsb.org/publications/peer-review-reports/>; <https://www.imf.org/external/np/fsap/fssa.aspx>

available documents and semi-structured interviews with key individuals. Publicly available documents run the gamut – public speeches by regulatory officials, testimonies before legislative committees, white papers and policy documents by governments, political parties and regulatory agencies, newspaper reports, and so on. These sources also allow us to observe interactions between political principals and regulatory agents.

Semi-structured interviews with key individuals – regulatory officials, government employees, financial industry leaders, representatives of civil society groups – were used for several different but overlapping purposes. At initial stages of the research process, interviews with experts familiar with macroprudential regulation in the selected cases served as plausibility probes, in which the theoretical framework sounds appropriate for the variation in stringency. These interviews were used to refine the theory if the proposed framework is seen as wide of the mark. Carefully designed questions helped conceptualize and measure the key variables. As the project progressed, and with the theoretical framework better refined and the empirics in each case better fleshed out, interviews focused on higher-profile actors in regulatory agencies, governments, and in financial sectors.

## **Chapter 3**

### **United States Banking**

The US banking sector can be called the ground zero of the 2008 global financial crisis. Lehman Brothers' bankruptcy on September 15, 2008 unleashed a wave of failures or near-failures of other large investment banks within days. The remaining, relatively healthy banks were forced to bail out those ailing banks in a rescue effort coordinated by the Federal Reserve (the Fed) and the US Treasury. All said, a conservative estimate of the government expenditure by 2011 to save the financial system was \$50 billion (Woll 2014).

This painful shock to the US economy was undoubtedly a critical juncture that created an opportunity for radical change in the institutions governing American finance. The GFC came, after all, after several decades of deregulation and liberalization that many observers agreed produced a more competitive yet unstable banking system. But rather than fundamentally correct the structural and institutional features that led to its instability, the GFC yielded a more incremental change, building on many of the existing institutions and policies that prevailed before the crisis.

Even within this incremental change, the crisis motivated a period of intense legislative reform of financial regulation. Yet the most striking feature macroprudential regulation in the US banking sector is the waxing and waning of its stringency in the decade after the crisis. This changing pattern of stringency can be divided into two periods: the first period, stretching from the passage of the Dodd-Frank Act (DFA) in 2010 to the end of 2016, saw a steady wave of implementation and strengthening of systemic risk

regulations; in the second period, starting in 2017, these post-crisis reforms have been incrementally relaxed by lowering regulatory standards and exempting certain segments of the banking sector from existing rules. In the words of former Federal Reserve Governor Deniel Tarullo, this period marked “a kind of low-intensity deregulation, consisting of an accumulation of non-headline-grabbing changes and an opaque relaxation of supervisory rigor” (Tarullo 2019).

Table 8 summarizes the key macroprudential reforms that will be the subject of investigation in this chapter. Post-crisis macroprudential regulation in the US banking sector consists of three main pillars, each designed to address systemic risks arising from the size and complexity of financial institutions: 1) the various capital requirements imposed on banks; 2) the two annual Federal Reserve bank stress tests – the Dodd-Frank Act Stress Test (DFAST), and the Comprehensive Capital Analysis and Review (CCAR); and 3) liquidity requirements.<sup>7</sup> Each of these pillars will be explained in more detail below. All three pillars were strengthened in the period between 2010 and 2017, and then subsequently loosened after 2017.

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<sup>7</sup> The Volcker rule (Section 619 of the DFA), which is designed to restrict banks from making certain kinds of speculative investments that do not benefit their customers, is another key pillar of the Dodd-Frank Act and often considered to have systemic risk-mitigating effects. But since the IMF Macroprudential Database does not list it as a macroprudential tool implemented in the US, I leave it out of this analysis.

Table 8. Summary of Macroprudential Reforms in the US Banking Sector

Period	Reforms	Stringency
2010-2017	Increasingly demanding Fed stress test regime (DFAST and CCAR) Capital conservation buffers, SIFI capital surcharges, liquidity requirement and leverage ratio exceeding Basel III	High
Post-2017	Regional banks exempted from stress tests Enhanced transparency and simplification of stress tests Lowered and simplified capital requirements and leverage ratios for non-SIFIs	Low

Abbreviations: DFAST (Dodd-Frank Act Stress Test); CCAR (Comprehensive Capital Assessment Review); SIFI (Systemically important financial institution)

What explains the changing degree of stringency of macroprudential policy in the American banking sector after the GFC? The US banking sector serves as a cross-temporal test for the theoretical framework proposed in Chapter 2. Employing that framework, we will see that the policy orientation of the dominant political party was the primary factor in explaining this change. In 2008, the Democratic Party took control of both the executive and legislative branches of the federal government, setting in motion the landmark financial reform legislation and the lengthy period of its implementation. The Democrats' stability orientation pushed systemic risk policies in the direction of increasing stringency. At the end of 2016, however, the Republican Party swept the White House and Congress, initiating a process of weakening post-crisis regulatory reforms. The lowered stringency of key policies was a consequence of the Republicans' growth orientation.

But the policy orientation of elected politicians was not the only explanatory factor. Regulatory officials, while being appointed by their political principals, held policy orientations independently of them. This meant that these officials vigorously carried out the work of translating legislation into administrative rules according to their policy orientation.

The vicissitudes in politicians' and regulators' policy orientation took place in a context of changing political salience of systemic risk reform. While not a primary explanatory factor, the "noisy politics" of the immediate post-crisis period and the much quieter politics after 2013 had profound consequences for the balance of power between societal actors. In the former period, intense public scrutiny over the issue of financial reform ensured that the financial industry lobbies were sidelined and reform-minded advocacy groups to be included into the policymaking process. On the other hand, once public attention on these issues faded, it was much easier for financial interests to regain their influence on policy formulation.

The next section places the GFC in the historical context of US financial regulation. Particular attention is given to the pattern of deregulation since the 1970s, the causal mechanism that unfolded during and after the subprime mortgage crisis, and to key post-crisis systemic risk policies. Sections 3 through 5 examine the regulatory politics in the period between 2010 and 2017. Section 3 demonstrates that the political salience of systemic risk spiked in 2008 but quickly faded after a few years once reforms and economic recovery were under way. It also shows that stability oriented Democratic politicians exerted significant pressure on regulatory officials to implement their landmark legislation, the Dodd-Frank Act. In the fourth section, we shift our attention to the policy orientation of regulatory officials. There, we will see that these officials themselves were strongly stability oriented, but held their policy preferences independently from their political principals.

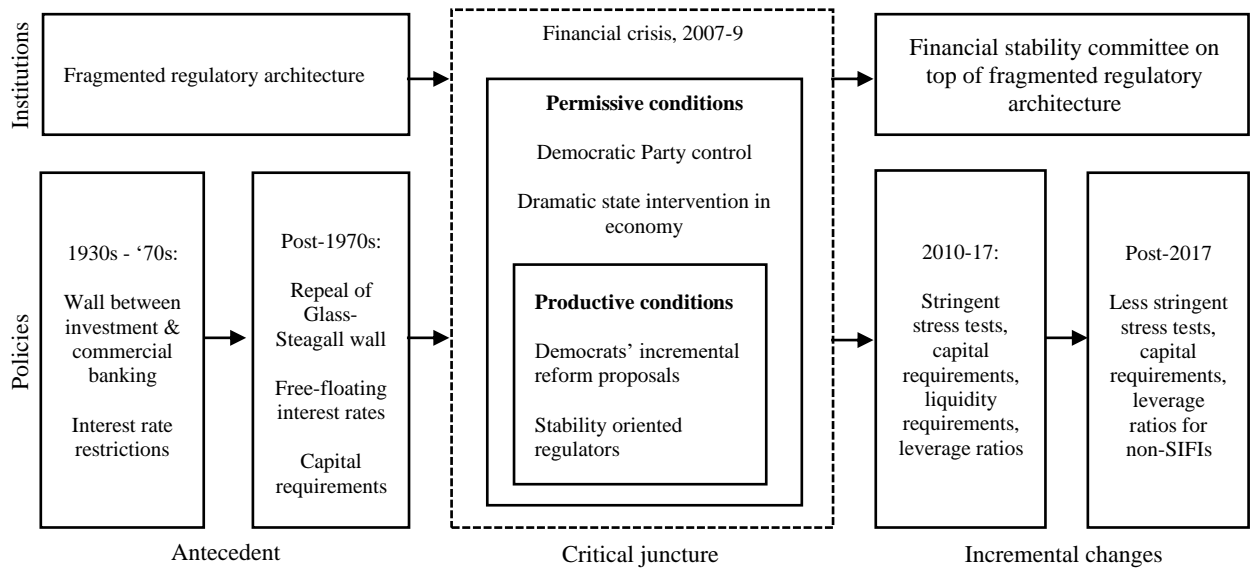
Sections 6 through 9 show how political dynamics in reverse of the earlier period led to the weakening of systemic risk policies. Section 6 discusses the effects of lowered

political salience of systemic risk reforms. Section 7 shows how growth-oriented Republicans pressured regulatory officials to lower the stringency of post-crisis policies. Section 8 documents the growth orientation of regulators themselves. Finally, section 9 briefly details the shifting balance of influence between societal actors in the context of low salience, in which financial industry interests regained power and advocacy groups were sidelined.

## **Global Financial Crisis as Critical Juncture**

We would be hard-pressed to fully grasp the causes or the regulatory consequences of the GFC without first embedding it in the historical context of American financial regulation. For much of the 20<sup>th</sup> century, the US financial sector was governed by the regulatory framework constructed during the New Deal era. Yet that framework was gradually eroded between the 1970s and the early 2000s. The GFC and its effects on American politics can certainly be called a critical juncture, but the institutional and regulatory changes that emerged from this juncture were far from a radical departure from what prevailed before the crisis. Figure 1 depicts the historical institutionalist interpretation of these developments. The rest of this section examines each step of these developments in more detail.

Figure 1. Critical Junctures Framework for the US Banking Sector



### *The US Banking System: Structure and Regulation*

The structure of the US banking sector is unusually decentralized. One of the main features of the banking sector is the dual banking system. This allows banks to seek a charter at either the federal or the state level. In addition to being decentralized along state-lines, the banking system was also differentiated by function for much of the twentieth century. Commercial banks specialized in traditional lending business to firms and households. Thrift institutions (or S&Ls – savings and loans associations) were like commercial banks in that they take in deposits and derived most of their revenue from interest on loans. Yet they were distinct in that their lending was limited to home mortgages and consumer loans, not commercial loans. Lastly, investment banks focused on all aspects of corporate finance, such as securities underwriting, mergers and acquisitions, as well as proprietary trading of financial assets. But many of these distinctions were eroded with

changes in the financial markets and the regulatory framework over the course of the late twentieth century.

The regulatory architecture of the US banking sector is notoriously fragmented. Most strikingly, the dual banking system means that there are 50 state legislatures with authority over bank regulation within their own states. At the federal level, the regulation and supervision of commercial banks is mainly divided among three separate agencies: the Federal Reserve (Fed), the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC).

A handful of New Deal-era legislation effectively built the basis for this federal regulatory architecture. This architecture remains essentially unchanged today. The Glass-Steagall Act of 1933 established a system of deposit insurance for consumers with the creation of the FDIC. The FDIC guarantees consumer deposits up to a certain level, placating fears of bank failures and preventing bank runs that were common in the early years of the Great Depression.

Glass-Steagall also built a wall between commercial banking and investment banking. This wall prohibited banks from being “engaged principally” in non-banking activities like the securities or insurance business. After the experience of the Great Depression, this restriction was intended to curb conflicts of interest and excessive risk-taking in the combination of banking and securities dealing. Financial institutions were thus forced to choose between becoming a bank involved in simple lending (commercial banking) or securities underwriting and dealing (investment banking). Later legislation in 1956 would extend this restriction to bank holding companies (Sherman 2009).

Another important restriction that Glass-Steagall placed on banking was a ceiling on the interest rates that banks could offer on deposits. For commercial banks and S&Ls, attracting deposits by offering interest and lending those funds to borrowers constituted their principal business. Yet this restriction on interest rates put a lid on the possibility of competitive interest rate wars and kept rates from soaring to exorbitant levels.

### ***Deregulatory Trends, 1970s~***

In the wake of the Vietnam War and the oil price shocks of the 1970s, annual inflation rate rose above 10%. In parallel, international integration of financial markets was intensifying competition among national financial systems. The regulatory roots of the GFC go back to changes in the global financial markets and regulatory reforms that began in that period. One author characterized the 1980s as “one of the most eventful and consequential decades in the development of the US financial system” that transformed it “from a not very competitive and stable system to a competitive, but unstable system” (Cunha 2021, 24).

John Campbell (2010) offers a useful framework for thinking about the regulatory changes that began in the 1970s. Three types of regulatory decisions happened. First, in a few instances, government oversight over financial markets was dramatically reduced, although not eliminated entirely in the conventional sense of the term “deregulation.” Second, and more often than the first, regulatory rules were revised or reconfigured rather than being reduced. And third, on rare occasions, regulators preferred the practice of forbearance, choosing not to regulate newly emerging markets. Without a doubt, the overall trend in banking regulation in the last quarter of the twentieth century was an unleashing of market-based finance (Hardie and Maxfield 2013).

The most notable examples of weakening regulation were the lifting of the interest rate ceilings and the abolition of Glass-Steagall's separation between commercial and investment banking. The inflation of the 1970s caused interest rates prevailing in the markets to rise above the limits placed on banks by the Glass-Steagall Act. This induced investors to exit from traditional deposits in search of higher yields. A popular destination were money market mutual funds (MMFs), which pooled small investors' funds to purchase commercial paper. Unable to raise interest rates they offered to depositors, banks and thrifts watched as funds bled away. With the goal of allowing these financial institutions to compete with MMFs, President Carter signed a law in 1980 that phased out the interest rate ceilings. Traditionally, thrifts were authorized to offer slightly higher interest rates than commercial banks to encourage mortgage lending. Yet with this deregulatory measure, thrifts were now thrust onto the same playing field as commercial banks. Then in 1982, Congress passed another piece of legislation that let thrifts engage in commercial loans up to 10% of assets and offer a new account to compete directly with MMFs (Sherman 2009).

While this move opened the avenue for thrifts to compete with commercial banks, that avenue was one that they were not equipped to exploit. Some thrifts attracted capital by offering large brokered deposits at above-market rates of return. Deposits flowed back in, fueling a rapid expansion of the thrifts sector. They began investing in highly speculative commercial real estate investments and junk bonds (corporate bonds with a high risk of default that pay high interest to compensate for the risk), and less in home mortgages. This inflated a commercial real estate bubble. But in the mid-1980s, that bubble collapsed, triggering the savings and loans crisis. Deposits again fled from thrifts,

bankrupting several hundred institutions. The industry's deposit insurance fund was far too underfunded to bail out these failed institutions. In 1989, President Bush took decisive action by signing into law a bailout plan and restructuring the regulatory system for the thrift industry. All told, the total thrift industry declined from 3,234 to 1,645 institutions, a drop of almost 50%, and cost taxpayers around \$210 billion (Admati and Hellwig 2013; Sherman 2009).

The other example of deregulation – the breaking down of the separation between commercial and investment banking – took place more gradually yet every bit as intentionally on the part of politicians and regulators. In addition to inflation, the 1970s was marked by increasing sophistication and integration of finance across national borders. The Glass-Steagall Act was an important pillar of financial stability, but it was also a hindrance to American banks' international competitiveness. With the growth of securitization and financial globalization, the center of financial gravity was shifting away from commercial bank lending and toward MMFs and other complex financial instruments. Commercial banks that could only engage in lending were therefore at a disadvantage.

In the decade spanning from 1986 and 1996, the Fed took a series of steps to weaken Glass-Steagall. It reinterpreted its restrictions to mean that a bank could derive up to 5% of gross revenue in investment banking business. Its Board approved the request of several banks to participate in securities underwriting, allowing them to handle commercial paper, municipal bonds, and mortgage-backed securities. Once Alan Greenspan was appointed Fed Chairman in 1987, the Fed allowed banks to deal in certain debt and equity securities up to 10% of their gross revenue. In 1996, it allowed bank holding companies to own investment banking operations that accounted for as much as 25% of their revenue,

effectively nullifying the Glass-Steagall restrictions. The final blow for the Act came in 1999, when Congress passed the Financial Modernization Act (also known as the Gramm-Leach-Bliley Act). This law repealed all restrictions against the combination of banking, securities and insurance operations for financial institutions. This was a victory for commercial banks. Combined with the ongoing consolidation of the US banking sector, this led to the rise of what would later come to be called “too-big-to-fail” banks (Sherman 2009).

Aside from repealing long-standing restrictions on the banking industry, American policymakers also chose not to regulate newly emerging financial markets. This was most strikingly the case with new derivatives instruments in the 1990s. Derivatives are financial instruments that derive their value from their claim to another asset, such as the option to purchase or a futures contract on oil. Derivatives can be used to hedge against risk, protecting against a decline in the value of the underlying asset. Or they can be used for simple speculation, to profit from expected changes in values. They do not involve the actual transfer of assets, so a buyer often does not own the underlying asset. With the growth of the derivatives market in the 1990s, the Commodity Futures Trading Commission (CFTC, a federal agency created in 1974 to regulate futures contracts) raised concerns about the potential risks of the unregulated market. But Fed Chairman Alan Greenspan, Treasury Secretary Robert Rubin and his successor Lawrence Summers pressured the CFTC not to regulate the market. Regulatory forbearance was made formal in 2000 when the Commodity Futures Modernization Act exempted derivatives from regulation (Sherman 2009). Other complex financial instruments, like subprime mortgages, fueled by the Bush Administration’s decision to encourage private mortgage companies to

expand lending by reducing the dominance of government-sponsored entities Freddie Mac and Fannie Mae in the market (Campbell 2010).

Another and final pattern of market-friendly re-regulation in this period were bank capital requirements. With the reduction of competitive barriers in the banking industry, regulators believed that a reasonable level of capital was necessary to sustain the safety and soundness of the banking system. This was particularly urgent since the largest American banks steadily lowered their capital levels throughout the 1970s, driven by intensifying international competition to cut costs. This erosion in capital reserves alarmed US regulators, who rightfully feared that this posed a threat to the safety and soundness of the banking system. Yet they could not unilaterally raise capital requirements, as this would put American banks at a competitive disadvantage internationally. US regulators thus turned to international coordination in the Basel Committee, which was able to reach an agreement in 1988 on a general set of guidelines for bank capital adequacy (W. H. Reinicke 1995; Singer 2004).

Yet the initial Basel capital adequacy standard proved too crude to capture the existing categories of assets and accompanying risks. The defining task of international bank regulation in the 1990s, therefore, became the updating of the Basel standard. Here again, consistent with the de- and re-regulatory moves highlighted above, regulators' decision to agree on capital requirements was premised on their belief that market participants – the banks themselves – could reliably determine the risks inherent in their assets. In 1996, the standard was amended to allow banks engaging in more complex activities to use their own internal models and databases to self-assess their risk exposure. The fully updated Basel Accord (often called Basel II) again enshrined this option for large

banks. Less sophisticated banks, for their part, could weigh the risk of their sovereign and corporate exposure according to the ratings by commercial credit ratings agencies (e.g., Moody's, Standard & Poor's). The Basel II agreement even relied on "market discipline" as one of its three pillars of regulation, alongside quantitative capital requirements and supervision (Helleiner 2011; Helleiner and Pagliari 2010; Porter 2001). This reliance on private-sector standards and the market mechanism to regulate banks was criticized as one of the causes of the GFC (Lall 2012b; Underhill and Zhang 2008).

### ***The 2007-8 Financial Crisis as Critical Juncture***

The collapse of the US subprime mortgage market that began in 2007 and spread into a global financial crisis in 2008 is often seen as a moment in recent history when dramatic change in economic and financial governance was acutely possible. Indeed, in that sense, the GFC was a critical juncture for financial regulation. Yet it was a critical juncture that did not produce a fundamental change in many outcomes.

For the purpose of this dissertation, however, the GFC did yield important changes in regulators' policy orientation, raised the political salience of regulation of systemic risk, and temporarily undermined the influence of financial industry interests who, under normal circumstance, would have obstructed key macroprudential reforms. As a consequence of these shifts in key explanatory factors, policies designed to limit systemic risk swung toward high stringency between 2008 and 2017.

To analyze the causal logic of the GFC as a critical juncture, I distinguish between permissive and productive conditions (Soifer 2012b) between 2008 and 2010. During this time, a permissive condition existed for institutional and policy change, but the productive

conditions were not strong enough to push through deep-seated changes that some political and policy actors called for.

*Permissive Conditions.* At the end of 2008, two permissive conditions emerged, creating the space for longer-term institutional and policy in the US banking sector. First of these was the Democratic Party's victory in 2008. The Republicans had held the White House and Congress when the GFC erupted, but unsurprisingly, they were punished for the crisis. And in the 2008 elections, the comparatively liberal Barack Obama was inaugurated as the President and the Democrats gained large majorities in both houses of Congress. In theory, the Democrats had a majority large enough in the Senate to overcome the many obstacles that the Republicans might pose (such as the filibuster).

The second permissive condition was the government's dramatic intervention in the financial system unparalleled in recent decades. This came in the form of strong-armed crisis response measures that were, for the most part, seen as necessary for saving the economy – the nationalization of one of the world's largest insurance companies (AIG), the government's acquisition of a behemoth automobile company (General Motors), the government-sponsored takeover of another by a foreign manufacture (Chrysler by Fiat), the government-sponsored mergers of major investment banks, the Fed's massive quantitative easing and toxic asset purchasing program alongside the Treasury's Troubled Asset Relief Program (G. K. Wilson 2012). These interventions gave the Democrat-controlled government rare leverage over some of the largest private firms in the American economy.

With these political and regulatory constraints loosened, the Democrats had an opportunity to implement drastic changes in the structure of the American financial system.

Many reform ideas surfaced in the immediate aftermath of the subprime crisis, floated by those within policy circles, think tanks, and academia. These included breaking up “too-big-to-fail” financial institutions, regulating large banks as if they are public utilities rather than private firms, restricting commercial banks to commercial banking activities (in effect, bringing back Glass-Steagall), and incentivizing financial institutions to sell simple and safe financial products (D. Carpenter 2010). These proposals, among many others, had the potential to transform American finance from “a competitive, but unstable system” back to “a not very competitive and stable system.”

*Productive Conditions.* Yet the Democrats did not push these radical ideas through. Despite the presence of permissive conditions, the primary productive condition – the Democratic Party’s commitment to pursue radical reforms – proved weak. Scholars have proposed various explanations for this phenomenon but adjudicating between them is beyond the scope of this chapter.

Suffice to say that the three most important explanations are mutually compatible and can be offered here. The first is that, since Clinton’s presidency, the Democratic Party has tried to “foster close and friendly ties to business interest and especially to finance...to encourage business success and economic growth while retaining a portion of the proceeds to advance a progressive policy agenda” (G. K. Wilson 2012, 75). In short, it has espoused a progressive flavor of neoliberalism that was comfortably complementary to the deregulatory pattern of the late 20<sup>th</sup> century. Second, the norm of securing unanimous agreement among Congressional Democrats to signal partisan unity gave moderate members of the party veto power. These members included Senator Chuck Schumer, who had close ties to the financial industry and who opposed more government regulation of

derivatives trading in the early 2000s, and Senator Ben Nelson whose political inclinations were often like the Republicans than his colleagues. And last, because these moderate Democrats became so important, financial industry lobbying was able, to some extent, kill the more consumer-oriented reform proposals before they left Congressional committees (Carpenter 2010; Wilson 2012).

Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) in July 2010. In the words of President Obama, the Act marked “a sweeping overhaul of the financial regulatory system, a transformation on a scale not seen since the reforms that followed the Great Depression” (The White House 2009). He was not wrong, but the reforms were much less radical than what many advocates and scholars called for. To highlight a few of its most notable provisions, it created the Financial Stability Oversight Council (FSOC) that pulls together the heads of the major financial regulatory agencies, acts as a forum for sharing information and identifying gaps in regulation, and can designate non-bank financial institutions as systemically important, which places those firms under more stringent supervision. Dodd-Frank requires financial institutions that create securitized products to hold 5% of the products and therefore have skin in the game by retaining their risks. Though with significant exemptions, swaps (e.g., credit default swaps) were now required to be sold on exchanges rather than sold “over-the-counter,” thereby ending the possibilities for excessive profits based on limited information. Dodd-Frank also banned banks from trading on their own behalf (“proprietary trading”) in securities and derivatives.

But as scholars rightly pointed out, it was a reform better characterized as incremental than radical. It left many of the structural causes and amplifiers of the GFC

intact. For example, financial institutions that were “too big to fail” were not whittled down. In fact, the mergers of large banks during the crisis led to further consolidation in the American banking sector. Neither did Dodd-Frank improve the fragmented nature of the regulatory architecture. While the FSOC was given strong powers to coordinate member agencies, the US financial regulatory system is still crowded, vulnerable to regulatory overlaps and arbitrage, and bureaucratic turf tensions.

In the absence of a strong Democratic willingness to fundamentally reform the financial system, the GFC was a critical juncture that ended with moderate institutional and policy changes. Within these moderate changes, however, there was a second productive condition that ensured that the newly implemented systemic risk regulations were stringent. This productive condition was the fact that the Democrats appointed many reform-minded officials to head the key financial regulatory agencies. This cohort of stability-oriented regulators will become important later in this chapter.

With the 2010 midterm elections, the key permissive condition ended. The Republican Party won a substantial majority in the House of Representatives, ending unified Democratic control of the White House and Congress. This “Republican wave,” unprecedented in recent electoral history, was attributed to a number of factors: voters’ discontent with the highly contested bank bailouts, continued economic recession, deepening budget deficits, the Tea Party’s electrifying role in Republican politics, and conservative backlash against the Affordable Care Act. Whatever the cause, the moment for radical change in financial governance had passed and the politics of regulatory implementation had begun.

## **Political Salience of Banking Reform and Politicians' Stability Orientation, 2008-2017**

A rise in the political salience of an issue area will increase the likelihood of political intervention in regulatory matters. In periods of low salience, on the other hand, the public's and politicians' attention is directed away from that issue area, bureaucratic discretion widens, giving regulatory officials more freedom over policy formulation and implementation. In this section I show that the political salience of regulatory reform in the US banking sector spiked in the crisis and immediate post-crisis period. Yet soon after the worst effects of the crisis was averted, its salience began to fade. I then show that political leaders – Democrats in particular but also Republicans to some extent – were stability oriented between the start of the crisis until 2017. These elected politicians exerted strong pressure on regulatory officials to implement the Dodd-Frank Act.

### ***Political Salience of Banking Reform***

To assess the political salience of systemic risk regulation in the US banking sector, Figure 2 shows data on newspaper coverage of five major newspapers. In addition to coverage of systemic risk-related coverage, I also track coverage of monetary policy and government finance. These latter two issues are arguably equally technical as systemic risk and serves as a comparison to the policy domain of systemic risk regulation.<sup>8</sup>

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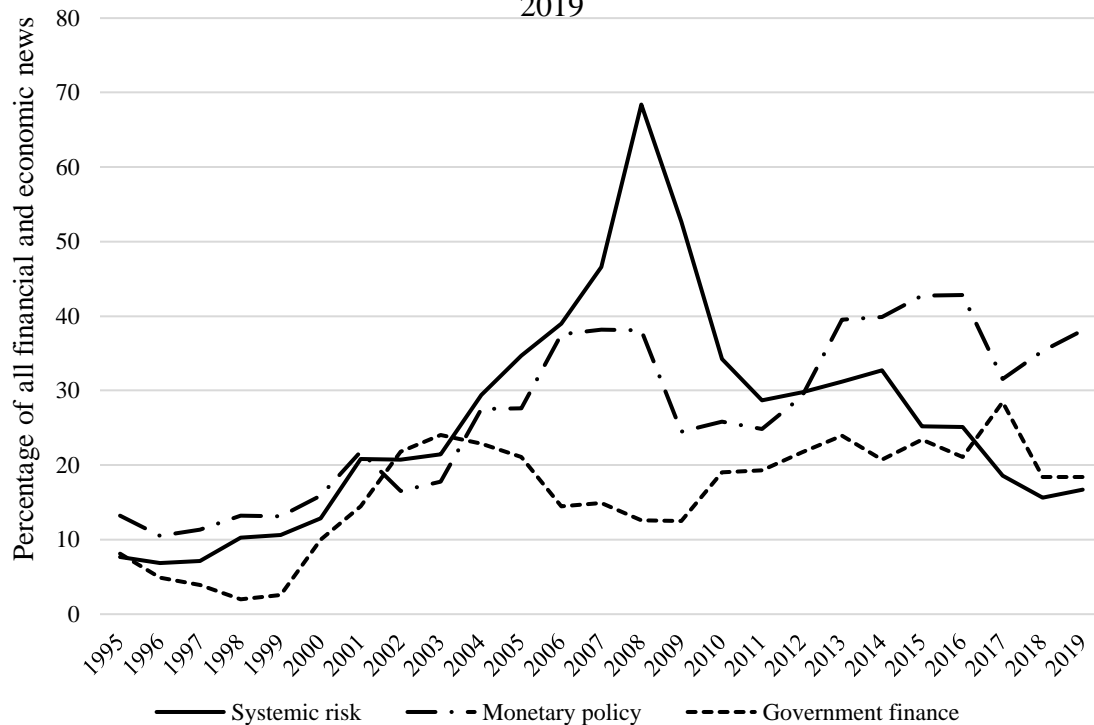
<sup>8</sup> The data on newspaper coverage was collected using the Factiva database. The five newspapers are *The New York Times*, *The Wall Street Journal*, *USA Today*, *Los Angeles Times*, and *The Washington Post*. The search terms I used were the following:

Systemic risk: "systemic risk" OR "Systemic risk" OR "too big to fail" OR "too-big-to-fail" OR "Too big to fail" OR "TBTF" OR "American International Group" or "AIG" or "Chrysler" or "Citigroup" or "Fannie Mae" or "Freddie Mac" or "Lehman Brothers";

Monetary policy: "monetary policy" OR "interest rate" OR "interest rates" OR "quantitative easing"

For "Government finance," I selected the pre-set subject category provided by Factiva, which includes government borrowing, spending and taxation.

Figure 2. Political Salience of Systemic Risk in US Banking, 1995-2019



Financial reform in the post-crisis years was a high-salience issue, creating an environment of “noisy politics” (Culpepper 2011). Systemic risk coverage, which includes the names of troubled and failed financial institutions, clearly peaked at 68% of all financial and economic news in 2008. But it dropped back down to an issue of relative low salience after 2011, once the controversies and threats of bankruptcies, bailouts, and political blame subsided. By 2012, coverage of systemic risk was eclipsed by coverage of monetary policy, and then by government finance in 2016.

### *Elected Politicians’ Policy Orientation*

To varying degrees, Democratic politicians in the White House and Congress were stability oriented. In the immediate post-crisis years, they blamed large financial

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To obtain a measure of all financial and economic news, I selected “Commodity/Financial Market News” and “Economic News.”

institutions for recklessness and greed, accused regulators of irresponsibility, absolved financial consumers and borrowers, and pushed for reform. Once Dodd-Frank was passed, Democrats – and to some extent Republicans – pressed regulators to implement the statute as quickly as possible.

One of the most visible indications of the White House’s penchant for reform in the early post-crisis period was the series of speeches that President Obama gave in 2009. In a speech in which he introduced his administration’s recommendations for reform, Obama explicated his diagnosis of the financial crisis, often pointing to large banks and flaws in the regulatory regime as prime culprits:

It is an indisputable fact that one of the most significant contributors to our economic downturn was an unraveling of major financial institutions and the lack of adequate regulatory structures to prevent abuse and excess. A culture of irresponsibility took root from Wall Street to Washington to Main Street. And a regulatory regime basically crafted in the wake of a 20<sup>th</sup> century economic crisis – the Great Depression – was overwhelmed by the speed, scope, and sophistication of a 21<sup>st</sup> century global economy (The White House 2009).

Later in the same speech, he depicted financial institutions as predatory, while exonerating the borrowing public. Regulators, in this reading of events, were powerless and unaccountable:

In recent years, financial innovators, seeking an edge in the marketplace, produced a huge variety of new and complex financial instruments...And as the appetite for these products grew, lenders lowered standards to attract new borrowers. Many Americans bought homes and borrowed money without being adequately informed of the terms, and often without accepting the responsibilities...Where there were gaps in the rules, regulators lacked the authority to take action. Where there were overlaps, regulators lacked accountability for their inaction (The White House 2009).

What Obama introduced in his speech was his administration’s full regulatory reform priorities, titled *Financial Reform: A New Foundation* (U.S. Department of

Treasury 2009). This mostly proposed to tighten existing regulations and to close regulatory gaps. The most significant changes that the administration aimed for were to 1) establish a new systemic risk monitoring and regulatory agency; 2) impose more stringent supervision of large financial institutions; 3) raise capital and prudential standards on large financial institutions; 4) impose comprehensive regulations on derivatives markets; 5) create a new consumer financial protection agency; and 6) put in place a new resolution regime for bank holding companies and non-bank financial institutions. In one way or another, all of these provisions were included in the final Dodd-Frank Act.

For their part, Congressional Democrats were also stability oriented. Once the Dodd-Frank Act was passed, the Senate Banking Committee and the House Financial Services Committee pushed regulators to implement the voluminous legislation. These interactions were particularly visible during congressional hearings, in which the heads of regulatory agencies are summoned to testify and answer questions before these congressional committees. In one such hearing in 2013, the Chairman of the Senate Banking Committee Tim Johnson told the heads of the Fed, FDIC and OCC that “While progress has been made, it has been nearly 5 years since reckless financial firms put our economy in jeopardy and 3 years since the passage of the Wall Street Reform [Dodd-Frank] Act. It is time to finish implementing these reforms as quickly as possible to put an end to ‘too big to fail’ and to protect American taxpayers from ever again bailing out a failing financial company” (U.S. Senate 2013a). In these meetings, lawmakers often probe regulatory officials on what progress has been made in rulemaking, and how quickly the remaining work can be done. The following exchange that took place in the same year is a typical example:

[Senator Mike Crapo (R-ID), addressing officials of all three bank regulators]: [C]an you provide an insight for us into what we can expect from the regulators on these issues and when?

[FDIC Chair Mark Gruenberg, replying]: For the FDIC, in the capital area, the big outstanding work will be completing the rulemaking in regard to the leverage ratio... We really viewed it as an important part of moving to completion on the entire Basel III package, and... we would hope to reach conclusion on that, I would think, by the end of the year...

[Senator Sherrod Brown (D-OH), addressing Fed Governor Daniel Tarullo]: We clearly agree we need stronger, better capital standards. We would both like them to be higher than they are. I am particularly concerned, though, that banks can use risk weights and internal models to game their capital rules...What more should we be doing...to address this potential gaming of the capital rules that appear to be imminent?

[Tarullo, replying]: [I]n terms of what we have got to do, we have got to take account of the shortcomings of each of these [Basel I and II capital ratios], the potential for gaming, whether it is gaming of risk-based capital or,... the potential for gaming leverage ratio, and to make sure that we have got a good risk-weighted approach, which I think we have now got in the Basel III package; a leverage ratio which is a strong complement and floor to that, making sure that you cannot game risk weighting to get too much leverage; and third, and from my point of view, this has been the real innovation in banking regulation in the last 4 or 5 years, is the stress testing that we are now doing for firms over \$50 billion (U.S. Senate 2013a).

Stability oriented members of Congress thus pressed regulatory officials to complete the work of implementing Dodd-Frank. Regulators themselves were amenable to this pressure for two reasons: 1) as we will see in the next section, regulatory officials themselves were stability oriented, motivated to go beyond simply implementing the post-crisis legislation; and 2) these officials' understanding of their independence from political interference made them susceptible to complying with pressures from elected politicians.

Speeches made by Fed officials in 2010, the year in which Dodd-Frank was passed, substantiate this second claim. Fed Governor Kevin Warsh shared his philosophy of the much-vaunted central bank independence to an audience of academics and policymakers:

“My reading has it that the Congress granted the Fed independence in the conduct of monetary policy ... [N]o particular deference is owed – no promise of non-intervention due – in the conduct of regulatory policy, consumer protection, or other responsibilities granted to the Federal Reserve” (Warsh 2010). This sharp distinction between monetary policy and other regulatory authority was shared by Fed Chair Ben Bernanke:

[T]he independence afforded central banks for the making of monetary policy should not be presumed to extend without qualification to its nonmonetary functions ... In the conduct of its regulatory and supervisory activities, the central bank should enjoy a degree of independence that is no greater and no less than that of other agencies in the same activities (Bernanke 2010a).

In other words, top Fed officials professed that the political insulation given to the central bank is only confined to its conduct over monetary policy, and that the central bank should carry out the will of the legislature in the domain of bank regulation. This view of regulatory discretion – or the lack thereof – made the post-crisis relationship between elected politicians and regulators with respect to Dodd-Frank implementation relatively unproblematic.

## **Regulators’ Policy Orientation, 2008-2017**

While it is true that stability-oriented politicians prodded bank regulators into carrying out Dodd-Frank reforms, the regulators were not simply obeying their political principals blindly. One of the productive conditions that emerged after the subprime mortgage crisis was the stability orientation of the top regulatory officials themselves. Their persistent effort to implement relatively stringent systemic risk policies enabled these reforms to “stick” in the post-crisis years.

We can observe that regulatory officials were stability oriented *independently* of politicians' stability orientation when we see the rhetorical differences with which these two sets of actors spoke of the crisis. President Obama's speech in June 2009 quoted above exemplified how elected politicians communicated the causes of the crisis: they blamed the excesses of financial institutions, financial innovation, and the anachronistic regulatory architecture that could not prevent the accumulation of risk. Regulators, on the other hand, explained the causes of the crisis in technical, disinterested, and analytical language.

Testifying before the Financial Crisis Inquiry Commission, for example, Fed Chairman Bernanke distinguished between "triggers (the particular events or factors that touched off the crisis) and vulnerabilities (the structural weaknesses in the financial system and in regulation and supervision that propagated and amplified the initial shocks)" (Bernanke 2010b). The most prominent trigger, according to Bernanke, was "the prospect of significant losses on residential mortgage loans to subprime borrowers" that catalyzed a bank run-like rush of investors to pull funds from various financial markets, which in turn put pressure on major banks. As for vulnerabilities, Bernanke pointed to the shadow banking system's dependence on short-term funding, deficiencies in private-sector risk management practices, excessive debt incurred by households, businesses, and financial firms, and the prevalence of financial derivatives that encouraged excessive risk-taking on the part of financial institutions. Regarding vulnerabilities in the regulatory system, Bernanke identifies the gaps engendered by a fragmented regulatory architecture, and crucially, a "broader failing was that, for historical reasons, regulation and supervision were focused on the safety and soundness (or the practices) of individual financial

institutions or markets” (Bernanke 2010b). In other words, Bernanke concluded that a *microprudential* focus was one of the main causes of regulatory failure.

Other examples of regulators’ technocratic diagnosis of the crisis abound. Janet Yellen, who succeeded Bernanke as Fed Chair in 2014, also explained the crisis through Hyman Minsky’s theoretical lens of asset price bubbles (Yellen 2009). Yellen demonstrated deep familiarity with Minsky’s work, a financial economist whose thought formed the basis of the current macroprudential approach to financial regulation (Baker 2013b; Casey 2015b).

Dan Tarullo, a member of the Fed Board of Governors, also couched the crisis in a systemic narrative: “The crisis arose against the backdrop of a regulatory system that had not adjusted to the extensive integration of traditional lending with capital market activities, which had created new sources of systemic risk” (Tarullo 2010b).

These cyclical and systemic risk diagnoses of the crisis directly informed regulators’ preference for more stringent reform. In the area of stress testing, regulators regularly referred to the success of the SCAP – the Fed stress test conducted in early 2009 and quelled investors’ fears about further collapse of large banks – in justifying the stringency and the level of information it disseminates to the public about banks’ stability. This explicit connection demonstrates that the regulators’ policy orientation in the immediate aftermath of the crisis was shaped directly by the lessons they drew from their crisis management actions. Tarullo directly linked the macroprudential approach to financial regulation and the need for forward-looking stress tests, and justified the stringency of the CCAR on those grounds:

A forward-looking, macroprudential perspective also requires attention to the co-movement of firms’ asset valuations and revenues in a stressed

environment...For this reason, in our recent CCAR exercise we required the six largest firms to estimate potential losses from trading and related activities using the same severe global market shock scenario that was applied in the SCAP... In future supervisory exercises of this sort, we will need to find additional ways to take account of co-movement effects (Tarullo 2011).

Regulators' call for higher capital requirements, too, were shaped by their stability orientation, and more specifically by their belief in the desirability of the macroprudential approach to regulation. A year before her nomination to the Fed Board of Governors, Yellen made her position on countercyclical capital requirements clear:

[M]acro-prudential supervision – to protect the system as a whole – is needed to mitigate financial crises. Capital requirements could serve as a key tool of macro-prudential supervision...[C]apital requirements would rise in economic upswings, so that institutions would build strength in good times, and they would fall in recessions. This pattern would counteract the natural tendency of leverage to amplify business cycle swings” (Yellen 2009).

Tarullo voiced a similar need for macroprudential capital requirements:

[T]he reform process cannot be judged a success unless it substantially reduces systemic risk generally and, in particular, the too-big-to-fail problem...Without better capital requirements, a horizontal approach to supervising the largest financial institutions, and a sophisticated macroprudential complement to traditional bank and bank holding company supervision, the regulatory system is unlikely to deliver on a promise of greater financial stability (Tarullo 2010a).

Another member of the Fed Board of Governors, Stanley Fischer, voiced “the need to prevent future crises through the implementation of changes in laws and regulations, like the Dodd-Frank Act, which provide tougher and higher capital requirements for banks, a binding liquidity ratio, the use of countercyclical capital buffers, better risk management, the increasingly sophisticated use of stress tests...and improved and usable resolutions mechanisms” (U.S. Senate 2014). Tarullo signaled in 2014 that even stricter rules that what Dodd-Frank mandated were in the works. “The agencies still have some work to do in

adopting some regulations specifically required by Dodd-Frank. Moreover, the Fed has some additional work to do in filling out a regime of additional prudential requirements for systemically important financial firms,” including proposing capital surcharges for 8 US banks that had been identified as global systemically important. These surcharges are requirements for banks to hold common equity “above Basel III levels...to improve their resiliency to take account of the impact their failure would have on the financial system” (U.S. Senate 2014).

The head of the OCC, too, expressed his preference for tougher regulation on large banks. A few days after the bank regulatory agencies adopted final rules implemented the Basel III leverage ratio, The Comptroller of the Currency told the Senate Banking Committee “I was pleased to sign a new rule that not only memorializes the heightened standards we have applied to large, complex banks since 2010, but provides also an enforcement mechanism to compel compliance when necessary. Requiring higher supervisory standards for the largest and most complex banks we oversee is consistent with the Dodd-Frank Act’s broad objective of strengthening the stability of the financial system” (U.S. Senate 2014).

Thus, in the post-crisis period, many of the top officials’ preferences were toward more stringent regulations, which were shaped by their diagnosis of the crisis and policy prescriptions firmly rooted in macroprudential ideas.

## **Pressure from Societal Actors in the Context of Noisy Politics**

In addition to being particularly sensitive to constraints from congressional Democrats, the stability-oriented regulators of the immediate post-crisis period paid

particular attention to interest groups that demanded implementation of tougher financial reforms. This observation comports with recent scholarship demonstrating that “noisy politics” – a policymaking environment in which non-industry interests, such as consumer, labor, and other civil society groups, voice their demands – can put significant constraints on the instrumental and structural power of business (Culpepper 2010; Fairfield 2015; Kastner 2017; Young 2013; Ziegler and Woolley 2016).

In one account of the noisy politics surrounding DFA’s implementation, a loose coalition of advocacy groups composed of labor and consumer groups, academics, and former policymakers arose to put pressure on regulators to continue the implementation of stringent regulations. In the post-crisis period, groups submitted sophisticated public comment letters to proposed rules put out by regulatory agencies, arguing for the need to end too big to fail and maintain reform efforts in consumer protection (Ziegler and Woolley 2016). On systemic risk issues, a host of organizations has become proactive since the financial crisis, submitting letters and frequently meeting with regulatory officials. These organizations include the Americans for Financial Reform (AFR), Systemic Risk Council, Better Markets, American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), Public Citizen, and the Center for American Progress (Interview 1).

High issue salience has profound implications for the politics of regulatory implementation. In the words of an AFR official, one of the leading reform advocacy groups, when the DFA was being considered in 2010, “these issues were white hot and you were really able to get things and move things” (Interview 1). As a close observer of financial policy at the Government Accountability Office remarked of the political environment in 2013, “we were just recovering from the financial crisis, and people were

worried about rolling back Dodd-Frank. It wasn't politically possible to suggest the rollback of key regulations, especially because one cause of the crisis was regulatory failure" (Interview 2). Regulators thus were tightly bound by reputational constraints from "noisy" and stability-oriented audiences.

### ***Diminished Influence of the Financial Industry***

If stability-oriented audiences held a privileged position in regulators' attention, then growth-oriented actors were relatively marginalized. One important implication was that the lobbying strength of the financial industry was compromised. While the banking sector's lobbying efforts continued unabated, getting direct access to, not to mention persuading, regulatory officials became much more difficult. Kevin Young details how, in the context of high issue salience, "Not only has the credibility of financial industry views taken a serious blow, but there has also been a tangible perception among financial industry groups that their views in general matter less than in the past" (Young 2013). While policymakers still regularly met with industry groups, they restricted their access and gave more access to other stakeholders, thereby diminishing the proportion of industry voice. Once in the room with regulatory officials, these interactions became much stiffer and more formal. As one staff member at the American Bankers Association put it, "Gone are the days of hand-shakes and getting beer together with regulators" (Interview 3).

Regulators' penchant for more stringent rules and tighter reputational constraints from stability-oriented audiences were aided by the diminished structural power of the banking sector. For private sector businesses to exercise structural power, their threat to move their capital abroad or at least to withhold investment in the domestic economy must be credible to policymakers (Fairfield 2015). Banks operating in the US, from large to

small, certainly argued that implementing the DFA and Basel III would impose excessive regulatory burden that would force them to curtail lending to businesses. Congressional Republicans and other opponents of the DFA also argued quite clearly that tighter regulation would harm the international competitiveness of US banks.<sup>9</sup> Yet, to the stability-oriented regulators in the post-crisis period, these threats and fears lacked credibility. There were three reasons for this.

First, while it is true that the American state and economy are structurally dependent on banks for their investments and credit for a well-functioning and growing economy, it is no less true that the largest players in the American banking sector make most of their profit in the US. These banks are thus equally, if not more, structurally dependent on the goodwill of US regulators (Culpepper 2015; Culpepper and Reinke 2014).

Second, the argument that post-crisis regulations would undermine domestic investments and international competitiveness rang hollow in light of several independent reports of the potential effects of Dodd-Frank and Basel III. The Government Accountability Office (GAO), which conducts research on a multitude of issue areas on behalf of Congress, is mandated to investigate the regulatory impacts of Dodd-Frank on an annual basis. Its reports suggested that post-crisis reforms would enhance financial stability while imposing only negligible costs on banks to continue their investments and lending activities. With respect to the effects of Dodd-Frank, the GAO reported that the law has had “moderate to minimal initial reductions in the availability of credit” extended by

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<sup>9</sup> “In a world in which capital knows no boundaries and competition is global,” Representative Patrick McHenry argued during a House Financial Services Committee hearing, “the extent to which new financial regulations impose greater burdens on U.S. firms and financial markets relative to Europe, Asia, and other advanced economies will further harm the U.S. economy as foreign banks and capital markets grow at our expense” (U.S. House of Representatives 2014b).

community banks and credit unions, large US bank holding companies’ “leverage generally decreased and liquidity generally improved since the act’s passage,” and Dodd-Frank “has had little effect on the funding costs of these companies and may be associated with improvements in some measures of their safety and soundness” (GAO 2015). Assessing the impact of Basel III capital requirements on lending, the GAO concluded that “[a]lthough the U.S. Basel III capital requirements may increase compliance costs, they likely will have a modest impact on lending activity as most banks may not need to raise additional capital to meet the minimum requirements” because “the vast majority of bank holding companies and banks currently meet the new minimum capital ratios and capital conservation buffer” (GAO 2014). To be sure, the GAO makes clear that these conclusions are tentative and the evidence is mixed – estimating the effects of rules so soon after they are implemented is difficult.<sup>10</sup> But on net, the early evidence after the passage and implementation of post-crisis reforms promised enhanced stability and resilience of the banking system while incurring only modest costs on the economic activities of banks. Because these reports partly integrate research done by the regulatory agencies themselves, and because the drafts of these reports are sent to each of the regulatory agencies as well as to members of Congress, we can be confident that there is a convergence of views between the regulators, the White House, and the GAO on the economic impacts of post-crisis reforms. Asserting a radical end of this view, the former Treasury Secretary Tim Geithner countered Republican opponents of the Dodd-Frank by saying “[t]here is no credible evidence to support the argument that these reforms are having a material negative

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<sup>10</sup> Indeed, some experts interviewed by the GAO said that, “in response to reforms, financial institutions may pass increased costs on to their customers. For example, banks could charge more for their loans or other services, which could reduce economic growth” (GAO 2013).

effect on the ability of the economy to recover and grow. In fact, the evidence is overwhelmingly the opposite” (quoted in Boak 2012). In the minds of regulators and proponents of post-crisis reforms, stability-enhancing consequences of these reforms generally outweighed their harm, undermining the credibility of bank structural power.

The third reason why banks’ threat of disinvestment lacked persuasiveness is because American regulators and the Treasury were working to harmonize international regulatory standards. One source of business’ structural power is the possibility that they can move their capital abroad to a jurisdiction with laxer rules – lower taxes, less stringent regulations, and less bureaucratic red tape. But in the immediate post-crisis period, US bank regulators and administration officials were proactively engaging foreign counterparts to equalize bank regulators standards that would serve as templates for implementation in advanced economies. In so doing, US leaders sought to preempt regulatory arbitrage. As Lael Brainard, then-Under Secretary of International Affairs in the Treasury Department, told the Senate Banking Committee, “I have participated in multiple international negotiations, both at the G20 and the FSB, where our goal has been to bring the world to convergence around the very strong protections put in place under Dodd-Frank in order to guard against a competitive disadvantage and also to protect the safety and soundness of our system” (U.S. Senate 2012a). At the same hearing, Fed Governor Tarullo explained to Senators that the regulatory areas in which there had been the most progress in forging international agreements were precisely the major macroprudential elements of bank regulation: capital surcharges for systemically important banks, other capital requirements, liquidity standards, and resolution mechanisms (U.S. Senate 2012a). An IMF official confirmed in an interview that US regulatory agencies have been united in leading

the development of international standards, particularly Basel III, to prevent a regulatory “race to the bottom” by governments and regulatory arbitrage by US banks which operate globally (Interview 4). US bank regulators and political leaders, therefore, have preempted American banks’ move to move capital abroad by creating a relatively uniform regulatory framework across international borders.

## **Diminished Salience and Politicians’ Growth Orientation after 2017**

After the first six year after the passage of the Dodd-Frank Act, the key components of macroprudential regulations in the US banking sector saw a pattern of relaxation. Much of this softening of stringency occurred around the margins of post-crisis reforms, in the form of exemptions of certain classes of banks from strict oversight. Systemic risk regulation for the largest systemically important banks remained mostly intact, but changes in the stress test regime and capital requirements alarmed many observers both inside and outside of the highest echelons of the policymaking circles.

The initial period of increasing policy stringency and the subsequent period of loosening provides a useful cross-temporal test for the theoretical framework spelled out in Chapter 2. An examination of the key independent variables – the diminished political salience of financial reform, elected politicians’ and regulatory officials’ swing to growth orientation, and the shifting balance of influence between growth oriented and stability oriented societal actors – indicate that the theoretical framework withstands the test. We will look at each of these variables in turn.

## ***Banking Regulatory Reform as a Low Salience Issue***

The political salience of systemic risk reforms began to diminish as early as the passage of the Dodd-Frank Act in 2010, and it continued fading from media attention thereafter. By 2016-7, the salience of systemic risk was lower than other financial and economic issues (Figure 2). In the absence of public scrutiny, growth-oriented politicians could press regulators to relax many of the post-crisis reforms. And as we will see below, regulatory officials themselves also became more growth oriented and more amenable to the influence of financial industry interests. These developments were enabled by the low salience environment.

## ***Elected Politicians' Growth Orientation***

The November 2016 elections put the Republican Party in control of both houses of Congress and the White House, with the strongly deregulatory President Donald Trump at the helm. No sooner than the dust had settled after the 2016 presidential election, the Trump Administration signed two executive orders that set the agenda for the entire financial regulatory system. The first executive order, signed in January 2017, called for a general reduction in regulations and regulatory costs: “It is important that for every one new regulation issued, at least two prior regulations be identified for elimination” (Federal Register 2017a). The second, signed in February, proclaimed that the administration will regulate the financial system to promote, among other things,

- economic growth;
- competitiveness of American firms vis-à-vis foreign firms both domestically and internationally;
- American interests in international financial regulatory negotiations and meetings;
- efficient, effective, and appropriately tailored regulation (Federal Register 2017b).

Following these executive orders, the Treasury published a series of reports titled *A Financial System that Creates Economic Opportunities* (U.S. Department of Treasury 2017) that highlighted specific areas of regulation that should be adjusted to meet those objectives. While these executive orders and Treasury reports did not have the statutory authority to compel policymakers to take specific action, they certainly clarified the White House’s policy orientation and exerted pressure on regulators.

Taking the signal from the White House, Congress also began pressing regulators in a growth-oriented direction of reform. Republicans in both the House and the Senate demanded greater transparency, easing regulatory burden for smaller banks, and argued that stringent regulations may have a perverse effect of increasing systemic risk. In May 2019, for example, 26 Republican members of the House sent a letter to the heads of six financial regulatory agencies urging them to implement two of the Treasury reports’ recommendations: 1) need for greater transparency in the Fed’s stress tests and 2) a reconsideration of the Basel III risk-based capital surcharge for US global systemically important banks in light of a “significantly enhanced resiliency of the banking system.” The letter went on to make an explicitly growth-oriented case for these recommendations:

It is our belief that many of the recalibrations recommended would unlock billions of dollars of trapped capital that would in turn be deployed into the real economy to support job creation and economic growth...We feel strongly that you should move forward with implementation of these recommendations as soon as possible and that they be given priority alongside other ongoing workstreams (Budd et al. 2019).<sup>11</sup>

In a separate letter addressed to Fed Chair Yellen, Senator Patrick Toomey specifically criticized the utility, legitimacy, and effectiveness of the CCAR, one of the Fed

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<sup>11</sup> It is striking that the letter only cites one study, conducted by the US Chamber of Commerce Center for Capital Markets Competitiveness, a conservative think tank and advocacy group, to make the claim that Basel III capital standards on large US banks are hurting business lending.

stress test programs. His complaint was threefold. First, that banks subject to the stress test “are spending hundreds of millions of dollars each for annual compliance with CCAR.” Second, Toomey points out that CCAR is a regulatory process that is not grounded in Congressional statute, and that it is essentially redundant alongside DFAST. Third and most seriously, the Senator argued that CCAR has the unintended consequence of increasing systemic risk by “correlating the risk profiles of the nation’s largest banks.” This means that banks subject to CCAR allocate their capital in similar patterns, underweighting their balance sheets in residential mortgages and small business loans which have higher risk weights assigned to them (Toomey 2017).

But the most significant political pressure in the period of regulatory moderation was the Senate bill that became law in May 2018 – the Economic Growth, Regulatory Relief, and Consumer Protection Act (U.S. Congress 2018). Proposed by Republican Mike Crapo and passed with bipartisan support, the legislation was an embodiment of regulatory “tailoring” – its main purpose was to relax the most burdensome elements of living wills, stress tests, and Basel III risk-based and leverage capital rules applying to community and regional banks. Unlike Treasury recommendations, legislation, by definition, has the force of law to compel regulators to change the content of regulation (Interviews 5 and 6). Pressing the issue of regulatory loosening even further, the Senate Banking Committee sent a letter to the three bank regulators in July 2019, urging them to implement the provisions of the legislation (Crapo et al. 2019).

While much of these deregulatory pressures came from Republicans, some Democrats in Congress also began to voice the importance of loosening some systemic risk policies. For example, Representative Maxine Waters, a ranking member of the House

Financial Services Committee, pushed Fed Chair Yellen to explain how the Fed will “tailor” post-crisis reforms: “Chair Yellen, I am eager to hear about the Fed’s progress in implementing Wall Street reform and how the Board’s supervision practices have evolved over the last several years. Specifically, I am interested to hear more about how the Fed is using the flexibility embedded in Dodd-Frank to tailor regulations appropriate to the sizes and risk of different types of banks” (U.S. House of Representatives 2016, 3).

Taken as a whole, therefore, both the White House and Congress became noticeably more growth oriented in 2017 than in the preceding period. Their growth-oriented policy preference did not call for outright deregulation. Rather, it took the form of requesting that regulators enhance the transparency of stress tests, tailor capital requirements to the risk profiles and sizes of banks, and lighten the regulatory burden that financial institutions faced. They argued that, now that the US financial sector has regained stability, reforms in these directions would enhance the international competitiveness of American finance, unlock the flow of capital into the real economy and therefore help growth the overall US economy.

## **Regulators’ Policy Orientation after 2017**

But the regulatory moderation that began in 2017 was not a simple partisan story. To be sure, Republican politicians exerted tremendous political pressure on regulators to relax post-crisis systemic risk policies. Yet at the same time, top officials of regulatory agencies themselves also came to hold a policy orientation similar to that of their political principals. This came about in three identifiable ways: (1) policy learning by existing regulatory officials, (2) the shift toward growth-orientation by a new cohort of regulatory

leaders beginning in 2017, and (3) the new regulators' susceptibility to lobbying influence by the financial industry in the context of low salience. This section shows each of these processes in turn.

Once post-crisis reforms had been implemented and several years passed, leaders of bank regulatory agencies began to modify their views about the necessity of stringent systemic risk regulations. A form of "policy learning" seems to have taken place among these regulators toward the end of their tenure as heads of agencies. At the Fed, Dan Tarullo, who was at the forefront of beefing up capital requirements and the stress tests, began to moderate his rhetoric. In the area of capital requirements, he began to float the idea that smaller and less complex banks should face simpler capital rules (Ryan 2016). Regarding stress tests, he doubted as early as 2014 that banks that are not large enough to be classified as "systemically important" should be required to incur the same costs as the largest banks in complying with the stress test requirements (U.S. Senate 2014, 17). But it was in July 2016 that Tarullo explained that consultation with bank officials, market analysts, interest groups, and academics had led the Fed to reconsider the stringency of some stress testing for mid-sized and less complex banks. "We do not intend," he told his audience "for less complex firms to invest in stress testing capabilities on par with the most complex firms" (Tarullo 2016).

Fed Chair Yellen also seems to have moderated her views of systemic prudential regulation. Recall that in 2010, she was an advocate of stringent macroprudential tools to enhance the stability of large financial institutions. Now, emphasized the importance of "tailoring" post-crisis regulations. When testifying before the House Financial Services Committee in 2016, she told lawmakers that:

[o]ne of the Federal Reserve's fundamental goals is to make sure that our regulatory and supervisory program is tailored to the risk that different financial institutions pose to the system as a whole...The largest, most complicated firms must therefore be subject to prudential standards that are more stringent than the standards that apply to other firms. Small- and medium-sized banking organizations, whose failure would generally pose much less risk to the system, should be subject to standards that are materially less stringent (U.S. House of Representatives 2016, 3).

Jerome Powell, who had been a member of the Fed Board of Governor since 2012 but whose earlier speeches focused mainly on monetary policy, now also shifted his attention to tailoring post-crisis reforms. In his June 2017 testimony to the Senate Banking Committee, he highlighted four guiding principles in assessing the effectiveness and efficiency of those reforms: protecting the core elements of capital requirements, stress testing, liquidity regulation, and resolution mechanisms for the largest banks; tailoring these requirements to the size, risk, and complexity of banks, paying particular attention to community banks; simplifying rules and reduce unnecessary regulatory burden without compromising safety and soundness of the financial system; and instill greater transparency in regulation (U.S. Senate 2017, 37). Observers both inside and outside the regulatory agencies have attributed this shift in attitude to “learning” on the part of policymakers (Interviews 2, 3, 6, 8).

Just as these Dodd Frank-era regulators were beginning to show signs of a move away from staunch stability orientation, a new cohort of officials were appointed to head the agencies. This generation of appointees, many of whom were not in leading positions in the regulatory community during the financial crisis, were far more amenable to the idea of tinkering with post-crisis reforms to permit greater competition in the banking sector and enhance economic growth by reducing regulatory burden. These regulators were, of course, nominated by the White House and confirmed and overseen by Congress. But while

their growth orientation was closely aligned with the deregulatory rhetoric from their political principals, differences in how the agency leaders and their principals discuss the need for regulatory tinkering indicates that they were not simply pandering to their principals.

Randal Quarles was appointed as Vice Chairman for Supervision at the Fed Board of Governors in 2017, a position directly responsible for the Fed's banking regulation. While never losing sight of the objective of systemic stability, Quarles' numerous speeches and testimonies make it clear that his priorities for adjusting post-crisis regulation were "efficiency, transparency, and simplicity" (Quarles 2018a). Implicit, and at times explicit in his statements is his belief that a more transparent, efficient, and simpler regulatory regime would reduce compliance costs and arbitrage, and ultimately lead to a greater flow of bank lending throughout the economy and hence to economic growth. Quarles' perspective on a more efficient regulatory system consists of improving "the degree to which the net cost of regulation – whether in reduced economic growth or in increased frictions in the financial system – is outweighed by the benefits of the regulation" (Quarles 2018a). With respect to his priority of enhancing transparency, Quarles notes:

Transparency provides firms clarity on the letter and spirit of their obligations, it provides supervisors with exposure to a diversity of perspectives, and it provides markets with insight into the condition of regulated firms which fosters market discipline. Transparency increases public confidence in the role of the financial system to support credit, investment, and economic growth (U.S. House of Representatives 2018, 6).

For Quarles, then, transparency in the process and output of regulation is a win-win for all stakeholders.

If Quarles and Powell were at the helm of a cautiously growth-oriented Fed, the newly appointed FDIC Chair Jelena McWilliams professed much of the same belief in

transparency, tailoring, and simplification, particularly with respect to small and mid-sized banks that the FDIC oversees (FDIC 2018, 2019). Leadership in the OCC, too, was aligned with the objective to streamline post-crisis regulations. Keith Noreika, who, during his short stint as Acting Comptroller of the Currency (the highest office in that organization), “shared 17 ideas for Congressional consideration,” including “proposals to minimize regulatory inefficiency, ‘right-size’ regulation, and provide regulatory certainty” (Noreika 2017). Thomas Otting, who took over as the Comptroller after Noreika, struck the same chord in a more poetic language. Looking back at his first year at the OCC, Otting told his audience:

In my view the safeguards put in place after the financial crisis had succeeded. It was time to reassess our regulatory approach and carefully determine what we could do to reduce unnecessary burden on banks so that they could be the engine of economic opportunity they were meant to be. Creating economic growth and opportunity is at the core of a banker’s identity. Bankers, in ways, make dreams come true, helping others achieve things they could never accomplish on their own. As Comptroller, I want bankers to help customers realize their dreams by reducing the unnecessary burden and inefficient regulation (Otting 2018).

These calls for “right-sizing” and tailoring regulation to banks of different sizes and risk profiles, and making regulation simpler and more transparent are a far cry from the rhetoric by regulators in the post-2008 period that predominantly focused on mitigating systemic risk and ending too-big-to-fail. The new generation of regulators, to be sure, almost always appended the importance of maintaining safety and stability as a goal of regulatory reform. But without a doubt, these key policymakers across the three bank regulatory agencies shifted their policy priorities toward loosening post-crisis reforms to encourage economic growth.

As these speeches and testimonies attest, many of the leading figures in bank regulatory agencies who had been at the forefront of implementing Dodd-Frank were beginning to shift their perspective to a cautious variant of growth-orientation around 2016, and the new group of regulators who were appointed in 2017 were likewise more willing to relax regulatory stringency at the margins than their predecessors. This shift is attributable to policymakers' learning in response to changing material conditions. For one, there was widespread consensus that the US economy had fully recovered since the crisis and that the banking system had become significantly safer and more resilient as a result of post-crisis reforms (Quarles 2018b).

But entirely attributing this shift in policy preferences to a more stable financial system cannot explain the dissent that existed within these same organizations. One of the ways in which scholars in the ideational tradition have demonstrated the causal force of ideas is by showing that individuals within the same or similar organizational and material positions differed in their interpretation of the world around them. As Craig Parsons notes, "We could isolate ideas precisely if we found an extremely close comparison, contrasting actors in near-identical places in the objective world to highlight the purely subjective variations in their behavior. Such comparisons are available at the *individual* level, within groups. Close organizational peers share positions in the objective world; comparing their views of their groups' interests can separate variation in their ideas from variation in objective pressures" (Parsons 2002).

One such individual whose ideational outlook diverge from her peers in the same organization is Lael Brainard, a member of the Fed Board of Governors. Formerly serving as the Under Secretary of International Affairs at the Treasury, Brainard was nominated to

the Board of Governors in 2014. In a Board that prioritizes consensus, Brainard has cast 11 dissenting votes among the 197 votes that the Board of Governors took since 2017.<sup>12</sup> Brainard's votes centered around policy changes that would modify the stringency of systemic risk regulations, such as swap margin rules, resolution plan requirements, tailoring regulations for large banks, simplifying the Volcker rule, keeping the countercyclical capital buffer at 0%, and limiting the Fed's use of the qualitative objection in its CCAR. In an October 2019 statement accompanying her dissenting vote against a major package of final rules to tailor regulations for domestic and foreign banks, she wrote: "Today's actions go beyond what is required by law and weaken the safeguards at the core of the system before they have been tested through a full cycle. At a time when the large banks are profitable and providing ample credit, I see little benefit to the banks or the system from the proposed reduction in core resilience that would justify the increased risk to the financial stability in the future" (FRB 2019).

Another regulatory leader who sounded the alarm at the regulatory moderation was none other than Dan Tarullo, who resigned from the Fed Board of Governors in April 2017. Despite having shifted from a macroprudential hawk to being more amenable to relaxing some of the Dodd-Frank reforms toward the end of his time as a Governor, Tarullo nevertheless criticized the direction and extent of growth-oriented adjustments that were underway. In his farewell speech, he described the Fed's initiative to make its stress tests more transparent as an "unwise idea." Referring specifically to the banking industry's pleas to publicize the stress test model – a proposal that Vice Chair Quarles proved favorable to – Tarullo argued that:

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<sup>12</sup> Author's calculation as of December 2019, based on FRB, "Board Votes." <https://www.federalreserve.gov/aboutthefed/boardvotes.htm>.

there are very good reasons not to publish the model itself...[B]anks would use the models to guide changes in their behavior that do not change the risk they pose to financial stability, but do change the measured results of the stress test. Regulators and academics have long recognized that this type of behavior by banks, known as regulatory capital arbitrage, has been a persistent threat to financial stability. Additionally, given the firms the model will likely encourage increased correlations in asset holdings among the larger banks – a trend that increases systemic risk, since everyone will be exposed should those asset classes suffer reversals (Tarullo 2017).

Two years later, Tarullo continued to warn about the patterns of regulatory reforms.

By then, his concerns had become more general. “There are things to be concerned about in many of the individual proposals on such matters as the leverage ratio, resolution planning, and foreign banking organizations,” Tarullo told his audience in Washington, D.C. “It’s the cumulative effect, though, that is truly worrisome” (Tarullo 2019). After explaining the potential dangers of a laxer stress testing regime and capital requirements, Tarullo concluded: “I am not so cheery-eyed as to see a prospect that the current leadership of the banking agencies will consider raising capital requirements. But I had hoped they would not lower them for the biggest banks. Yet a few steps down this road have, regrettably, already been taken” (Tarullo 2019). Brainard and Tarullo, current and former leaders of the Fed who understand as well as anyone the efficacy of post-crisis reforms on enhancing the stability of the US banking system, criticized the excessive lowering of regulatory standards by the new cohort of agency leaders. This divergence among individual officials within the same organizational and material positions suggests that ideas – or more specifically, regulators’ policy orientation – mattered independently of changing material conditions in shaping regulators’ preferences for less stringent systemic risk regulations.

## **Pressure from Societal Actors under Quiet Politics**

As Figure 2 demonstrates, by 2016-7, the political salience of systemic risk reforms was lower than other financial and economic issue areas. In the “quiet politics” of low salience context, and emboldened by the growth-orientation of the White House, Congress, and regulatory officials the financial industry was able to exert more influence over policymaking. As a staff member of the American Bankers Association told me, “There was more opportunity to interact with regulators after the Obama administration...The current [Trump] administration has more receptivity, but not in a capture-kind of way. It just feels like the officialdom is more receptive” (Interview 1).

On the other hand, stability oriented advocacy groups were pushed to the sidelines. According to an official at the AFR, “[T]here were a few notable examples where we had wins with the Obama regulators where we could say that we had a role in changing the direction of regulation. That is no longer on the table with the Trump regulators” (Interview 3).

## **Conclusion**

New Deal-era reforms and subsequent legislation made the US banking system a stable and, frankly, a boring industry. Interest rates were capped. Banks that specialized in taking deposits and extending loans were barred from entering the investments and securities underwriting business, and vice versa. This segmentation kept a lid on bank competition and the reach for yield, which in turn limited the engineering of complex financial products. But with the collapse of the Bretton Woods monetary order and deepening international integration of finance, American policymakers disbanded these

restrictions in stages. The US subprime mortgage crisis and the ensuing global financial crisis of 2007-8 was arguably a natural outcome of the deregulatory decisions (Hardie and Howarth 2013).

The depth of the crisis loosened the structural and institutional constraints. One of the checks and balances intrinsic to the US federal government was weakened with the Democratic Party's control of the executive and legislative branches. Through the steps it took to avert another depression, the state found itself in a position to guide the management decisions of some of the largest corporations. Yet by most accounts, the concrete regulatory changes that emerged once the dust had settled were incremental rather than radical, layered on existing institutions and policies. The fragmented and crowded financial regulatory architecture remained. Massive banks and bank holding companies still stood at the pinnacle of the banking sector. Complex and risky financial products were better regulated but are still sold and traded.

Despite this incrementalism, important systemic risk policies were enacted in the post-crisis period. These included the various capital requirements imposed on banks, the Fed stress tests, and liquidity requirements. Since the passage of the Dodd-Frank Act in 2010, the three bank regulatory agencies implemented these stringent policies. Three factors combined to produce this reform outcome. First was the stability orientation of the Democrats who oversaw the regulators. Second was the regulatory officials' own stability orientation. Third and no less importantly, systemic risk regulation and "ending too-big-to-fail" was a hot topic, an issue of high political salience during and immediately after the crisis.

Once the economy was well on its way to recovery and reforms underway, however, there were signs of reversal. Around 2017, political leaders and regulatory officials began weakening key post-crisis systemic risk reforms. The three explanatory factors for the earlier period were virtually reversed: Republicans who took control of the White House and Congress were explicitly growth oriented and weary of the regulatory burden they argued resulted from Dodd-Frank and related policies; regulators themselves began to shift toward growth orientation by calling for the simplification, tailoring, and transparency of existing policies; and in the context of much diminished political salience of financial reforms, reform-minded advocacy groups were marginalized and the financial interests returned to exert more influence in the policymaking process.

## **Chapter 4**

### **Japanese Banking**

“We were peeking into the cauldron of hell.” Those were the words of one Minister of Finance official (Nishino 2019, 140). Another observer conveyed the sense of despair in no less harrowing terms: “I felt like a passenger on a ship, who found that a torpedo was heading straight toward the ship” (quoted in Himino 2021, 64). What they faced was the brink of the first banking crisis in Japan’s postwar history.

This brink was not in late 2007, when American banks were beginning to feel the ground underneath them shake. Rather, it was a decade earlier in November 1997. Between then and the early 2000s, Japanese banks lived through a non-performing loan (NPL) crisis that left a deep imprint on the way Japanese financial regulators approach the work of financial stability. This traumatic period left Japan’s regulators mildly stability-oriented by the time the effects of the American subprime mortgage meltdown reached the archipelago’s shores. At the same time, the banks they oversaw were themselves wary of the complex derivatives and securitized products that their western counterparts had gambled so perilously.

The post-2008 systemic risk regulatory reforms in Japan’s banking sector can be classified as moderately stringent. Basel III rules were implemented on schedule starting in 2012. But the capital, leverage and liquidity requirements imposed on Japanese banks were modest by international comparison. Bank stress tests were initiated, but the results of these tests were not designed to trigger changes in policy instruments. In short, the stress tests had no teeth. That was it. Unlike in the United States, where regulators implemented

a number of measures beyond what was recommended by international standards, Japanese banks were let off the hook as long as they complied with Basel rules.

This reform outcome – macroprudential policy instruments of moderate stringency – is the fruit of the combination of three factors. First, unlike in the US and Europe, banks in Japan remained safe, sound and risk-averse during and after the 2008 crisis. Second, largely owing to this fact, domestic financial regulation was a low-salience policy domain by the time the GFC erupted. Third, the policy orientation of Japanese financial regulators was moderately stability-oriented after around 2007. In the context of low political salience, therefore, regulators could implement the systemic risk policies according to their preferences without much intervention by efficiency-oriented political parties.

Yet none of these three explanatory factors – a stable banking sector, the low salience of financial regulation, and regulators’ moderate stability-orientation – was a given. Drawing on the framework of historical institutionalism, the NPL crisis of the late 1990s acted as a critical juncture that led to fundamental changes in Japan’s financial regulation (Figure 4.1). The political dynamics during that crisis led to fundamental changes in the institutions of financial regulation. The lessons from that crisis taught regulators bitter lessons on how to conduct bank supervision. The resolution of that crisis forced banks to become risk averse. Banks’ risk-aversion after that crisis, in turn, helps explain why financial regulation became a relatively low salient issue.

The next section traces these historical processes that flowed from the NPL crisis of the late 1990s. The third section presents data on the fluctuating political salience of financial regulation from 1995 to 2019 and identifies the moments of political pressures that narrowed regulators’ discretion. Section 4 demonstrates the policy orientations of

Japan's two regulatory bodies – the Financial Services Agency (FSA) and the Bank of Japan (BOJ). In the case of the FSA, the policy orientation of its officials went through a clear shift around 2007 from extreme to moderate stability orientation. The BOJ, the country's central bank, was more consistently moderately stability oriented. This section also shows that these two regulatory bodies were able to coordinate effectively to formulate policies, which eliminates bureaucratic turf tensions as an inhibiting factor to policymaking. The fifth section rules out a potential competing explanation for Japan's moderate macroprudential stringency – the political power of banks. It shows that the lobbying strength of banks in Japan is at best limited, and that the regulators held their moderate stability orientation independently of banks' influence. Given these independent variables, section 6 traces the process by which the policy outputs were formed. This section also offers a case study of a contestation between the ruling political party and regulators when they hold diverging policy orientations. As this case study reveals that, while politicians generally have the upper hand when their policy orientation is at odds with that of regulators, regulators can still attempt to protect their autonomy and insist on their policy preferences. Section 7 concludes the chapter.

## **NPL Crisis and Big Bang Reforms as Critical Juncture**

The reconstructed financial sector as Japan recovered from the Second World War was bank-based. This meant that corporations obtained most of their financing from bank credit rather than issuing equities on financial markets, and that households preferred to keep their funds in the form of bank deposits instead of investments. The high rate of

household savings in banks were in turn channeled to the corporate sector. An active stock market existed, but it played a minor role in raising new funds for firms (Lincoln 2013).

The government played an indirect but powerful role in the allocation of capital throughout the economy. To fulfil the political agenda of rapid economic growth, its tools included lending by government-owned banks to industries and even individual firms that the government deemed strategically important, informal pressure on commercial banks to do the same, and the repression of interest rates to reduce the cost of exports and stimulating investments. Central to this regime was the Ministry of Finance (MOF). The MOF's policy remit was broad, overseeing the government budget, taxation, tariffs, national property, banking, securities, and international finance. In its role as banking supervisory, it tacitly guaranteed that banks would not go bankrupt as long as their lending activities conformed to the government's industrial policy (Amyx 2004). The MOF's prudential policy was commonly called the "convoy approach." When a bank was perceived to be in poor financial health, the MOF's Banking Bureau advised the bank and arrange for bailouts or private mergers between healthy banks and the failing one. The sounder bank (often called the "White Knight") would inject capital or initiate a merger in exchange for complete or partial ownership of the weaker bank (Interview 9). These were the financial foundations of Japan's industrial policy for a quarter-century after World War II (Zysman 1984, 234–51).

But the pace of economic growth dampened in the 1970s. The government began to run deficits. Japanese exports to the US – the workhorse of Japanese economic growth – came under strain. In response, the government attempted to spur demand and increase investments by issuing bonds, relaxing restrictions on corporate bond issuance, and

directing the BOJ to drop interest rates and encourage banks to lending more. The result was an enormous real estate bubble.

The causes of the Japanese bubble collapse in the early 1990s have been analyzed many times and need not be repeated here (Hoshi and Kashyap 1999; Nakano 2016; Seok and Shin 2013). What is relevant here is that this collapse did not trigger a financial crisis right away. A recession had begun – the start of Japan’s Lost Decades – but not a financial crisis. Yet all was not well in the years after the bubble collapse. Banks and securities firms had accumulated many non-performing loans (NPLs), and the real estate sector, which became a large debtor, could not pay these loans and were beginning to default. NPLs are loans in which the borrowers (in this case companies that had borrowed to invest in real estate) are in default and have not made principle or interest payments for some time. As of September 1996, the banking sector was carrying ¥24,383 billion in NPLs and ¥12,035 billion of loans losses (Hoshi and Kashyap 1999).

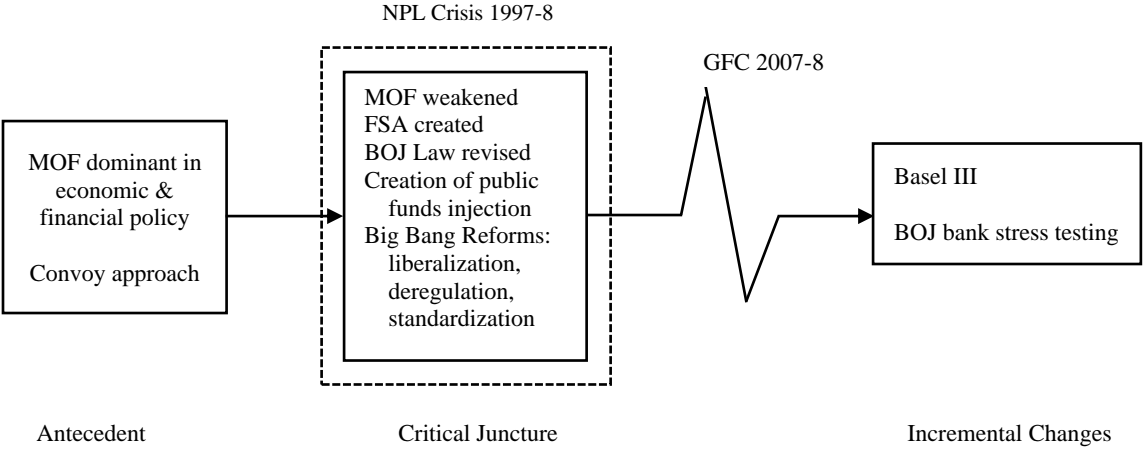
These NPLs could not be ignored by the summer of 1997. With NPLs ballooning on their balance sheets, several large securities firms and banks began to show signs of trouble. This was when MOF officials caught a glimpse of hell’s chasm. The chasm – a critical juncture – was the total implosion of Japan’s financial system, and by extension a large swath of its real economy. Confronted with this crisis, the government acted quickly. It provided a blanket guarantee on deposits to ease depositors’ anxieties. It purchased NPLs from sound financial institutions. The BOJ extended special loans needed for the smooth resolution of failed financial firms, bought stocks held by banks to unburden them of the risk that could arise from the drop in their market value.

The NPL crisis caused or accelerated several fundamental institutional changes in financial regulation. The MOF was caught red-handed in wining and dining scandals with banks and was blamed for letting the NPLs fester for so long. As a result, its powers were drastically reduced, and its supervisory functions were transferred to the newly created FSA. The FSA was designed as an integrated regulatory agency, with a mandate to supervise the banking, insurance, and securities sectors. The need to strictly inspect banks' balance sheets led the FSA to develop a supervisory manual, which the MOF never had. A full revision of the Bank of Japan Law in 1997 enhanced the central bank's independence from political interference in monetary policy. Policymakers lacked a formal procedure for bailing out banks because they had relied on the MOF's convoy approach to avert bank failures. But in a systemic crisis, the convoy approach was useless. The Diet therefore passed legislation that established a framework for injecting public funds into troubled financial institutions for the first time.<sup>13</sup>

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<sup>13</sup> A comprehensive financial reform package, collectively called the "Big Bang" reforms, was also passed in 1998. This included liberalization and deregulation of many areas of finance, enhancement of market infrastructure, fairness and transparency, and harmonization with international practices. But the impetus for the Big Bang reforms preceded the NPL crisis and therefore was not caused by the crisis (Toya 2006).

Figure 3. Critical Junctures Framework for the Japanese Banking Sector



By the early 2000s, many of these institutional changes had been implemented. It was against this backdrop that the US subprime mortgage bubble became unsustainable. In August 2007, the first signs of the GFC appeared in Japan, when BNP Paribas declared that it was banning investors from withdrawing funds from three of its investment funds. With this “Paribas Shock,” it was widely recognized that problems with the subprime mortgage market were indeed grave. But in Japan, it was perceived as “fire on the other shore” (Kamikawa 2013). Japanese policymakers had a distinct sense of de-ja-vu but did not feel it necessary to take special measures domestically. One former FSA official told me that “in Japan, there was not a sign of a bubble coming back” in Japan (Interview 10). Notwithstanding the scare leading up to the bankruptcy of Lehman Brothers’ Japan branch in September 2008, realized losses of Japanese banks because of subprime-related products only amounted to 0.17% of GDP in the critical period between April 2007 and December 2008 (Kamikawa 2013). Not only did Japanese banks not need government bailouts unlike their American counterparts, they took advantage of the turmoil in Western economies. The investment bank Nomura Holdings acquired the Asian, European and Middle Eastern

operations of Lehman Brothers after the firm collapsed, and Mizuho Financial Group invested \$1.2 billion in Merrill Lynch (Tabuchi 2010).

Why was Japan able to escape the worst impacts of the GFC? The explanation lies in the risk-aversion of Japanese banks. According to Kamikawa (2013), Japanese banks were much less market-based compared to their American and European counterparts. They held a large volume of financial assets, but a huge amount of these assets was held for the purpose of cross-shareholdings. They had the lowest exposure to securitized financial products among the G7 economies, and one of the lowest exposures to subprime-related products and leveraged loans among industrialized economies. Owing to the enormous national savings rate, Japanese banks also did not have to rely on interbank lending. For deposit-taking institutions, deposits accounted for 75.7% of total bank liabilities. Particularly important, Japanese banks' interbank borrowing from abroad was extremely low at only 3.4% of GDP. Japanese banks' risk-aversion was fostered in large part by the FSA's strict stability-orientation. The FSA was suspicious of the business models of foreign financial institutions operating in Japan like Credit Suisse and Citibank, viewing them as "vultures" (Interview 11). In particular, it was wary of their reliance on derivatives and securitized products, and harshly penalized them through on-site inspections. The FSA's strict stability orientation will be treated in more detail in Section 4.

After the radical reforms during the critical juncture of the NPL crisis, financial regulatory reforms in Japan have been incremental. There were no notable institutional changes like those in the US, UK and the EU, where new regulatory bodies tasked with systemic risk oversight were created. No major legislation was introduced to reform bank regulation. The incremental reforms that did take place confined to the level of regulatory

rulemaking, particularly the Basel III capital rules. What has commanded more political debate are policies not directly related to financial stability – monetary policy, corporate governance and structural reforms, and attempts at making Tokyo an attractive international financial center. Banks’ stability and risk-aversion is one cause for the moderate macroprudential stringency. The changing political salience of financial regulation and the regulators’ policy orientation are two other factors. We now examine each of these factors in turn.

## **The Political Salience of Financial Regulation**

The theoretical framework set forth in chapter 2 predicts that a rise in the political salience of an issue area will increase the likelihood of political intervention in regulatory matters. In periods of low salience, the public’s and politicians’ attention is directed away from that issue area, bureaucratic discretion widens, giving regulatory officials more freedom over policy formulation and implementation.

To assess the political salience of financial regulation in Japan over the entire period under consideration, I rely on the press coverage of five major newspapers. These five national newspapers cover most of the political spectrum in Japan.<sup>14</sup> In addition to coverage of financial regulation, I also track coverage of bailouts and monetary policy. Bailout, or the use of public funds to rescue troubled banks, was a persistent and controversial issue in the late 1990s to early 2000s and could serve as a proxy for calls for

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<sup>14</sup> These newspapers are *Yomiuri Shimbun*, *Asahi Shimbun*, *Mainichi Shimbun*, *Nihon Keizai Shimbun*, and *Sankei Shimbun*. I did not have access to a database that could search the archives of these newspapers in aggregate. Instead I relied on the database that each newspaper maintains. These were: Yomidas Rekishikan (for *Yomiuri Shimbun*), Asahi Shimbun Cross-Search, Maisaku (for *Mainichi Shimbun*), Nikkei Telecom21 (for *Nihon Keizai Shimbun*), and Sankei Shimbun Database.

regulatory reform. Monetary policy is an orthogonal issue area that is arguably equally technical as financial regulation and serves as a comparison to the other two policy domains.<sup>15</sup> Figure 4 presents the coverage of each issue domain as a proportion of all economic and financial news coverage in Japan.

Figure 4. Political Salience of Systemic Risk in Japan, 1995-2019



Between 1995 and 2019, financial regulation generally received less coverage than bailout and monetary policy. Yet in 1996, when the NPL problem was starting to come to

<sup>15</sup> The search terms I used were the following (English translations is followed by bracketed Japanese original):

Financial regulation: “financial regulation,” “financial administration” and “systemic risk” [金融規制, 金融行政, システミックリスク and システミック・リスク]

Bailout: “public funds” [公的資金]

Monetary policy: “interest rate,” “monetary policy” and “quantitative easing” [金利, 金融政策 and 量的緩和]

a head, reporting on financial regulation rose. More notably, mentions of bailouts spiked from less than 4% of all financial and economic news in 1997 to over 8% in 1998. Bailout coverage declined in 2000, but saw another small spike to about 6% in 2002. Coinciding with the GFC, the coverage of bailout rose again in 2008 and 2009. This was primarily because of news reports on bailouts in the US and Europe. Mentions of financial regulation also rose between 2009 and 2010, as international negotiations of financial regulatory reform got underway. The increased salience of bailouts and financial regulation during the GFC and its aftermath, therefore, was focused on events outside of Japan.

The political salience of monetary policy fluctuated considerably during the entire period. Spikes in 2001, 2006, 2013 and 2016 were all years in which political debates on lowering interest rates and quantitative easing were particularly heated as the BOJ came under pressure to engage in accommodative monetary policy.<sup>16</sup>

In line with the expectations of the theoretical framework advanced in chapter 2, each period of rise in the political salience of bailout and financial regulation before 2008 was accompanied by heightened political scrutiny of regulators. We examine each of these periods of high political salience in turn.

As mentioned above, the period between 1996 and 2000 witnessed political and financial turmoil. During the NPL crisis that unfolded, political leaders and regulatory officials were greatly concerned about financial stability and the use of public funds to save the banking system. Throughout 1997, major banks and securities companies failed or

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<sup>16</sup> Although the political economy of BOJ's monetary policy is an important pillar of the Japanese government's attempt to revive the economy in the last three decades, we will not treat it directly here. Suffice it to say that despite its enhanced de jure independence, the BOJ has usually succumbed to political pressure to ease monetary policy. Since the start of the Abe government in 2012, the BOJ has been headed by Governor Kuroda, who has staunchly maintained the BOJ's quantitative easing program.

teetered on the brink of collapse. In July 1998, the public ire over its economic policy resulted in the ruling Liberal Democratic Party (LDP) to lose its majority in the Upper House elections and the prime minister's resignation. Before the election, however, the LDP injected a total of ¥10 trillion of public funds into the financial system and adopted plans that (1) would allow banks to choose between two accounting standards (based on market value or acquisition value) to facilitate the banks' ability to meet the capital-to-assets ratio prescribed by international standards, and (2) would put a maximum of , and (2) would put a maximum of ¥30 million toward the resolution of bank failure and the operation of banks to encourage lending. Yet these measures were still not enough to quell market fears. The LDP and its coalition partners drew up plans that included transactions of NPLs and real estate as collateral for the NPLs and setting up a public bridge bank using public funds to assume the operation of failed banks (Toya 2006, 198–200).

Even after losing its Upper House majority, the LDP was still dominant in the more powerful Lower House. The extraordinary session of the Diet from July to October 1998 was colloquially called the Financial Diet because most of the session centered on legislative measures to resolve the NPL crisis. The government submitted six bills to the Diet in August 1998 designed to accelerate the disposal of real estate as a source of NPLs and to introduce a bridge banks plan (Toya 2006, 198–200).

Parallel to these political developments, the Japanese bureaucracy was also mired in an existential controversy. Financial scandals that had been ongoing for years exposed the spending habits of banks and securities firms, leading public prosecutors to target the MOF and BOJ for investigation in early 1998. These prosecutors obtained evidence of the wining and dining of MOF and BOJ officials by financial institutions. Several MOF and

BOJ staff were arrested, the Minister and Vice-Minister of Finance, the BOJ Governor and Vice-Governor resigned, and two MOF officials committed suicide in the fallout of these investigations. To make amends the MOF and the BOJ sanctioned 112 and 98 employees, respectively (Nishino 2019, 151–52). One former MOF official recalled the political sentiment at the time: “people blamed us – ‘why not split the MOF... They have too much power and they’re monopolizing the policymaking apparatus. At the same time, they’re wining and dining with the banks. They’re enjoying their life. Let’s punish them”” (Interview 9). This incident was the last straw that broke the MOF’s political influence and catalyzed the creation of the FSA in June 1998. As we will see in the next section, its separation from the disgraced MOF as well as the broader political and financial context compelled the FSA to crack down on the NPLs on banks’ balance sheets.

The heightened political salience of bailouts in 2002 was also accompanied by political pressure on regulators. In the second half of 2001, the LDP Prime Minister Koizumi mounted pressure on the FSA to get rid of NPLs once and for all. The initial NPL crisis of 1997-9 was averted, but NPLs were growing again. Loans that banks newly lent to support poorly performing firms had become non-performing. The FSA tried to address these NPLs with a “2 year/3year rule” that requires banks to eliminate pre-existing NPLs from their balance sheets within two years and new NPLs within three years. The FSA also proposed an auxiliary “50% / 80% rule” which stipulated that banks needed to reduce NPLs by 50% within one year and 80% within two years. Top FSA officials were confident that these two rules would effectively eliminate NPLs but they cautioned the prime minister that this would take some time (Nishino 2019, 208).

Unwilling to wait for the FSA's plans to take effect, the prime minister assembled a project team in October 2002 headed by economist and vocal critic of the FSA's plan, Heizo Takenaka. In less than 2 weeks, the project team hammered out a proposal whose goal was to halve NPLs on the balance sheets of the largest banks. What shocked the banking industry the most was the mechanism that would have allowed the government to nationalize banks whose borrowers declare bankruptcy. The project team wanted this plan to be implemented starting in March 2003, less than six months after the plan was hatched. But as a result of severe uproar from the banking industry and the FSA's and the Cabinet's concerns about the short timeline of the plan, a compromised "Takenaka Plan" was adopted. The threat to nationalize banks was dropped but its six-pronged plan included a stricter assessment of bank assets and left open the possibility of using public funds to bail out banks if necessary (Nishino 2019, 208–10).

The heightened political salience of bailout and financial regulation between 2008 and 2010 was prompted by the GFC. All five Japanese newspapers were rife with coverage of the financial emergency that enveloped the US and Europe. The reporting on bailouts spiked as the political controversy over bailing out too-big-to-fail financial institutions in the West reached its peak. The rise in coverage about financial regulation followed developments in the negotiations over international financial regulatory reforms in the aftermath of the GFC. In particular, Japanese media followed with great interest what the new Basel capital standards would mean for Japanese banks (Nihon Keizai Shimbun 2010). Amidst this heightened attention on developments abroad, there was little political pressure on regulators to change domestic financial regulation. As detailed above, this was because Japanese banks remained fundamentally sound throughout this period.

There was, however, one incident that panicked both regulatory officials and political leaders alike. As American policymakers scrambled to arrange an ill-fated rescue of Lehman Brothers, Japanese policymakers also scrambled to minimize the damage from the failure of Lehman Brothers' Japanese branch. It was certain that once the failure of Lehman's rescue plan was made public, this would trigger a massive outflow of funds from the firm's assets. Japanese policymakers sought to limit this capital flight to protect Lehman's Japanese creditors and investors. After four days of intense communication with US policymakers, the BOJ, FSA and MOF ordered Lehman Japan to retain assets within Japan and to file for bankruptcy. In terms of assets, it was the second largest bankruptcy in postwar Japanese history (Nishino 2019, 246–49). Because Lehman was a US firm and because Japanese policymakers successfully protected Japanese assets, this scare did not lead to calls for domestic financial reform.

We can thus conclude that domestic financial regulation was a high political salience issue between 1996 and the early 2000s and a relatively low salience issue after 2005. In keeping with the theoretical expectations identified in chapter 2, the high salience context brought with it increased political scrutiny and pressure on regulators and the low salience environment alleviated this pressure. In the next section, we examine the policy orientation of regulators in both periods.

## **Regulators' Policy Orientation**

An important variable in explaining the stringency of macroprudential policy is the regulators' policy orientation. Regulatory officials often hold policy orientations that are

independent of their political principals and can change their orientations independently of changes in government.

This section sets out to demonstrate that both assumptions held true in the case of the Japanese banking sector. In the period from 1998 to around 2007, the FSA – the main banking regulator – was highly stability oriented. In large part, this was because financial regulation was a high salience issue and because resolving the NPL problem was a top priority for the ruling political coalition. But FSA officials also had an intrinsic motivation to be highly stability oriented. This included the need to distinguish the FSA from the disgraced MOF. It also included the realization that bank failures during the NPL crisis posed a serious systemic risk. The BOJ also took on a stability orientation informed by an acute sense of systemic risk. In this way, Japanese regulators internalized a macroprudential perspective far earlier than their American or European counterparts. By the time the 2008 global crisis took place, however, the FSA had shifted to become moderately stability oriented. As we will see in Section 4.6, this moderate stability orientation, combined with the relatively low political salience of domestic financial regulation in the period after 2005, that led to macroprudential policy of moderate stringency in the Japanese banking sector.

### ***The FSA's Extreme Stability Orientation, 1998-2007***

The ruling coalition between the LDP and the Democratic Party of Japan (DPJ) established the FSA's predecessor, the Financial Supervisory Agency, in June 1998. After several organizational changes over the next two years, the FSA took on its current form in July 2000. The new agency's responsibilities were those that previously belonged to the discredited MOF: the supervision of banks, insurance companies, broker-dealers, and asset

managers, and the surveillance of the capital market and securities transactions. Compared to the US regulatory landscape, the FSA's remit corresponded to those of the OCC, the supervision division of the FRB, part of the FDIC, state banks and insurance regulators, the SEC, and part of the CFTC (Himino 2021, 72).

The context of its birth endowed the FSA with an extreme stability-oriented approach to supervision and regulation. This was true in two ways. First was its effort to distance itself from the reputation of the MOF. As a former FSA official recounted, after the MOD was disgraced for being too cozy with bankers, the FSA in 1998 “was requested to develop more transparent, rules-based, accountable supervision. And that led to the [FSA's] inspection manuals. A guideline, kind of lots of guidelines, and which used to be very necessary and helpful to establish the benchmarks and standards for private banks to develop internal control” (Interview 12).

Second, with the near-existential need to address the NPL crisis, the FSA's work was informed by three high-level goals: to regain the public's trust in financial regulation, to resolve the NPL problem and to maintain the minimum standards of protecting bank depositors. Its inspection and supervisory styles that emanated from these priorities was characterized by a strict adherence to the FSA's inspection manual, scrutiny of each asset and loan at financial institutions, and a thorough emphasis on banks' legal compliance (Endō 2020). More concretely, the FSA conducted on-site inspections by visiting the offices of banks and securities firms. Financial institutions that were found to be in violation of rules received business improvement orders. “In worse cases,” a bank lobbyist told me, “they would be sanctioned. Penalized, temporary closures, or ‘make sure you get rid of the personnel who was responsible’” (Interview 13). So frequently did the FSA issue

improvement orders that the Minister of State for Financial Services<sup>17</sup> half-jokingly called it the Financial Sanction Agency (Meeting of the 192th House of Representatives Financial Affairs Committee 2016).

The FSA's penchant for strict supervision was based on the recognition that the failure of important financial institutions could pose systemic risks throughout the real economy. In fact, the seeds of the macroprudential perspective may have reached the FSA before it had reached US and European regulators. One former FSA official who attended the meetings of the Financial Services Forum in Basel first heard the term "macroprudential" around 2004. "And at that time," he told me, "the word macroprudential itself was not common knowledge. And I came across that word, I think in 2004 ... So I remember when I came back to FSA, I reported to the Commissioner that we have to focus more on macroprudential issues. We didn't really have that kind of department that deals with it" (Interview 10). Takafumi Satō, who headed the FSA's Inspection Department and Commissioner in the early 2000s, also recounts their experience of the NPL in systemic terms:

Our country experienced financial instability as a consequence of the non-performing loans in the late 1990s after the collapse of the bubble. Banks that lost financial soundness declared bankruptcy, and banks' reluctance to lend was widespread, leading to disruptions in financial intermediation which caused the economy to stagnate. In 1997, a single default in the money markets threatened to dry up liquidity in the entire market. Systemic risk centered around the banking sector was becoming apparent (Satō 2010, 33).

### ***The FSA's Shift to Stability Orientation***

Two factors converged in 2007 to moderate the FSA's stability orientation. The first was the unintended consequence of its stringent approach to bank supervision. Owing

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<sup>17</sup> A senior position within the Cabinet to which the FSA answers.

to the concerted actions by the FSA, BOJ and the government, banks had eliminated most NPLs by around 2005. Yet at the same time, FSA officials noticed that, because of their stringent scrutiny, “Japanese banks overall became too conservative” (Interview 12). Adhering to the FSA’s tough supervision, banks adjusted their lending in ways that proved detrimental to regional small and medium-sized firms: they disproportionately focused on formalistic criteria like the borrowers’ credit and collateral, as well as balance sheet soundness indicated by the borrowers’ past records, rather than on their business models, product, or future sustainability; banks showed a penchant for proving that they were complying with rules rather than providing services that bank clients needed; and they overweighed individual assets in their risk evaluation, rather than the potential risks at the core of the banks’ business (Endō 2020). Indeed, banks’ reluctance to lend was so pronounced that the DPJ warned about an impending credit crunch (Interview 14). On top of this, the moribund economic growth since the early 1990s and resolving NPLs had been a deadweight and, in the words of FSA Commissioner Satō, Japan’s financial sector was “left behind as international competition among financial centres intensified” (Satō 2008).

The second factor was the government’s explicit shift to growth-orientation. Japan’s Lost Decade turned into the Lost Decade-and-a-Half. Population growth was grinding to a halt, casting a shadow on future rate of investments, government revenue, and welfare provisions. Japan’s lagging digitization, uncompetitive information technology sector, lackluster innovation and startup landscape were also targets of mounting criticism. Given these ailments, the government published its policy program, unceremoniously titled “Economic and Fiscal Reform 2007” (Cabinet Office 2007b).

Responding both to banks' excessive risk-aversion and the government's growth plan, the FSA announced its own policy package in December 2007 titled "Plan for Strengthening the Competitiveness of Japan's Financial and Capital Markets" (JFSA 2007). With this package, the FSA's policy orientation toward systemic stability also shifted from high to moderate stability oriented. Among the four goals for the Japanese financial sector that this plan set forth was "improving the regulatory environment." To this end, FSA Commissioner Satō put forth an initiative that he labeled "Better Regulation." The core tenets of this initiative were four-fold: (1) rather than a strict adherence to inspection rules, the FSA will balance rules-based and principles-based supervisory approaches; (2) a risk-focused, forward-looking approach (which simply means a timely recognition of priority issues and effective response); (3) encouraging voluntary efforts by financial firms and placing greater emphasis on incentives for them to lend; (4) improvement in the transparency and predictability of regulatory actions (JFSA 2007, 16).

The Better Regulation initiative signaled the FSA's move toward a moderate stability orientation in several ways. Its abandonment of a strict adherence to rules and an embrace of a more principles-based approach meant that the FSA would explicitly promulgate principles that will revive Japan's financial and capital markets. Financial institutions, in turn, will be encouraged to voluntarily work toward fulfilling those principles, but also be given the managerial discretion to choose precisely how.<sup>18</sup> A focus on principles also meant a much closer dialogue with financial institutions. Commissioner

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<sup>18</sup> As the FSA explains, "'rules-based' approach involves establishing detailed rules and applying them to individual cases. The advantage of this approach is that it ensures predictability and eliminates arbitrariness in regulatory actions from the viewpoint of financial firms. The 'principles-based' approach is a framework in which several key principles are explicitly stated so as to encourage voluntary efforts by financial firms in line with such principles. Its advantage is that it ensures the maximum freedom of business management for financial firms" (JFSA 2007, 16)

Satō explained his rationale in 2008: “The principles are expected to play a guiding role for financial firms in exercising best practices and to serve as a basis for the interpretation of rules. Thus, more principles-based regulation will help to ensure maximum flexibility in business operations for financial firms” (Satō 2008). The tool that facilitates these dialogues were the discussion papers that the FSA began to publish.

... discussion papers were intended to have more, closer discussions and to let private-sector banks to think by themselves rather than following [rules]. So it’s not compliance. Compliance, of course, is important, but compliance is not for the purpose of FSA. Compliance, internal control, it’s for the sake of the banks themselves. But rules-based approach was not good to let the banks’ management think for themselves (Interview 12).

One principle that the FSA sought to propagate was “vitalizing the financial services industry.” This goal had several components, which the FSA acknowledged were “deregulations” (Satō 2008). First, the ban on interlocking officers and employees among banking, securities, and insurance businesses in a financial group was to be lifted, and restrictions on the sharing of undisclosed corporate customer information between banking and securities businesses will be relaxed. Second, the scope of businesses permitted to banking and insurance groups was to be broadened. This included permitting banks and insurance companies to engage in emissions trading and Islamic finance, and relaxing cross-shareholding requirements that applied to banking groups. In all, these measures were intended to promote competition among financial firms and to instill creativity among them so as to provide higher quality financial services to customers (Satō 2008).

The FSA’s December 2007 plan went far beyond relaxing restrictions on the banking industry. For example, it contained proposals that would widen the range of financial instruments traded on exchanges (including exchange-traded funds and

derivatives) and mobilizing household investments in financial markets. At the same time, these deregulatory measures would be tempered by strengthened market surveillance by the FSA and self-regulatory mechanisms, enhanced disclosures, strengthened corporate governance, and reforms of financial infrastructures. Reminiscent of Steven Vogel's (1996) maxim "freer markets, more rules," the FSA's policy package in 2007 was designed to free up Japanese finance while laying down rules to harness that freedom.

Its policy package and Better Regulation initiative marked a moderation in the FSA's stability orientation, but not a full swing to growth orientation. FSA officials were careful to articulate their new regulatory philosophy with an emphasis on systemic stability. Commissioner Satō explicitly connected the Better Regulation initiative with the macroprudential that would come to predominate international financial regulatory discourse after 2008:

The macroprudential approach is not unknown in our country. The FSA, in the summer of 2007, established the Better Regulation initiative as an explicit goal for improving the administrative process. Its second pillar, 'risk-focused, forward-looking approach' instructs us to read the future with an eye to risks. The idea is to carefully monitor market movements, detect common risks that affect many financial institutions early, and to actively respond (Satō 2010, 325–26).

The FSA's newfound moderate stability orientation did not budge when the GFC hit. In fact, the crisis reinforced its resolve to revitalize the Japanese financial sector. We will see how these dynamics played out below, when we examine the Japanese position during the Basel III negotiations and bank stress testing.

### ***Explaining the FSA's Shift***

Which was more causally important in bringing about the change in the FSA's policy orientation – the government's growth-oriented policy agenda or the FSA's own

realization that it needed to shift its supervisory approach? In short, political pressure or policy learning? Available evidence suggests the strength of the latter. Policy learning took place in two ways.

First, in virtually every recounting of how the Better Regulation initiative came about, FSA officials point to the urgent need to adjust to changing domestic and international financial conditions. Crucially, political pressure was not mentioned in any of these accounts. The FSA was beginning to feel the need to relax its supervisory stance in 2005, before the government began considering its fiscal and economic strategies for 2007. The Minister of State for Financial Services Tetsuya Itō told reporters that the Japanese financial system is entering a “new forward-looking phase ... one in which the attitude of the Japanese financial administration toward the financial system changes from an emphasis on ‘financial system stability’ to an emphasis on ‘financial system’ vitality” (Kyodo News 2005). The FSA even formed a project team in 2005 to study how deregulation can enhance Japanese financial institutions’ international competitiveness (ibid). Commissioner Satō explained this shift in more detail in his monograph:

Why did the FSA explicitly raise the Better Regulation approach as an objective in the summer of 2007? It is because of the recognition within the agency that financial regulation needs to respond to the times, and because of the changing circumstance within our own country. At the time, the changing era confronted us with the following two needs. First, as the conditions surrounding our country’s financial sector was changing, there was a need for financial regulation to adjust accordingly. Second, we needed to advance and support the policies to make our financial and capital markets more internationally competitive (Satō 2010, 82).

Domestically, what Satō was referring to was Japanese banks’ risk-aversion and reluctance to lend. Internationally, the FSA was weary of Japan’s lag in competitiveness behind other financial centers. As Satō explained in 2008, Tokyo not only trailed behind global financial centers like London and New York, but also behind regional rivals like

Hong Kong and Singapore. In addition to the shortage of skilled human resources and language barrier, a crucial cause of this lag was the high “proportion of funds that flow through indirect channels such as bank deposits” rather than through capital markets. “As a result,” he continued, “our capital markets remain relatively underdeveloped and lack depth.” But he reassured his audience: “We are aware of these weaknesses, and we are not standing idly by ... Fortunately, those years of difficulties are over for Japan’s financial sector, and we have entered a new stage” (Satō 2008). Commissioner Ryūichi Hatanaka, who took over after Satō, attributed the Better Regulation initiative to the need to overcome the agency’s reputation as a “Financial Sanctions Agency”: “To be called a sanctions agency is not a complement. Rather, it means that we lack authority and that we are supervising through brute force. Around four years ago [in 2007], we decided that we needed to fundamentally change this. To raise the level of regulation, to raise its quality, that's what Better Regulation was” (Hatanaka 2011, 3).

Second, though to a lesser degree, the FSA learned by looking abroad. In particular, the FSA looked to the United Kingdom’s Financial Services Agency as a model of principles-based approach (Interview 12). For Commissioner Hatanaka, this meant the necessity of dialogue between inspection personnel and financial institutions. “What we saw as our model at the time,” he related in a lecture in 2011, “was the UK’s FSA ... The [UK] FSA had a saying that ought to be passed on – the level of a country’s financial regulation isn’t determined by laws or outstanding ministers or bureaucrats, but rather by the work of the staff who daily interact with financial institutions. Unless their level rises, no matter how good the laws are or how good the leaders are, the level of the country’s

regulation won't rise ... Better Regulation is an effort to raise the level of each of the staff members who are on the ground every day" (Hatanaka 2011, 3).

### ***The BOJ's Stability Orientation***

The harrowing experience of the late 1990s pushed the BOJ to take on a macroprudential perspective, considerably earlier than central banks in other major economies. And unlike the FSA, whose policy orientation shifted from high- to moderate stability orientation, the BOJ's stability orientation seems to have remained steady over time since the country emerged from the NPL crisis. Just as we examined the FSA's policy orientation above, this section investigates the formation of the BOJ's policy orientation and how it interpreted the 2008 GFC.

Originally modeled after the Third Reich's Deutsche Reichbank, the BOJ's early function was to purchase government bonds to finance the Japanese military's imperial ambitions in the early twentieth century. Until the Diet revised the Bank of Japan Law in 1997, the BOJ's statutory independence from political intervention (especially MOF's authority) was one of the lowest among industrialized economies (Cukierman, Web, and Neyapti 1992). The amended BOJ Law established several safeguards against political influence and introduced, for the first time, clear objectives for the BOJ: financial stability and price stability (Park 2022). These mandates are a natural foundation on which the macroprudential perspective is based. Indeed, because of its institutional and organizational roots, the BOJ has maintained its stability orientation in the domain of banking regulation.

Even before the revision of the BOJ Law, the BOJ was sensitive to systemic risks in the financial system, particularly as it related to invoking the BOJ's function as the lender

of last resort. In an October 1994 speech by the BOJ Governor Mieno, he spelled out two criteria that should help decide whether or not a given bank should be rescued via the BOJ's lender of last resort function. First, if a given bank's illiquidity might threaten the stability of the entire financial system and has no recourse to liquidity except central bank money. Second, if the bank can restore its management discipline after receiving the funds (Nakaso 2022, 169). Over the next few years, these criteria were further developed into four principles for the BOJ's special lending program: (1) there must be a strong likelihood that systemic risk may materialize if the firm were to fail; (2) the firm must have no alternative to the provision of central bank money; (3) all responsible parties are required to take clear responsibility to avoid moral hazard; and (4) the financial soundness of the BOJ itself must not be threatened. These principles were simple, yet they proved wise. Among its firefighting tactics during the NPL crisis, the BOJ extended special loans to two large financial institutions, averting a systemic collapse of the real economy (Bank of Japan 2005, 3).

Despite this, the crisis of the late 1990s forced BOJ officials to learn bitter lessons. Hiroshi Nakaso, who was the BOJ's Head of Financial System Division at the time, reflected on their rude awakening. The BOJ, he wrote in his memoir, needed to strengthen research and analysis to "(1) evaluate the robustness of the financial system; (2) understand the mechanisms behind the materialization of systemic risk; (3) understand the mechanism behind systemic risk's impact on the real economy; and (4) understand the links between monetary policy and financial stability policies." This realization led to the inauguration of the BOJ's semi-annual Financial System Report in 2005 (Nakaso 2022, 190).

The Financial System Report is hence the BOJ's exercise in financial system monitoring. The main analysis it contains is the evaluation of financial intermediation by domestic financial firms using various indices. Analyzing the size, pace, and distribution of risk accumulation, it also assesses whether financial institutions' capital reserves and liquidity are at appropriate levels. No less important, it reports the results of the BOJ's macro stress testing, which models financial institutions' resiliency when confronted with hypothetical stress scenarios (more on these stress tests below).

“History repeated itself.” Those were Nakaso's words when looking back at the collapse of the US subprime mortgage bubble in 2007 and its aftermath (Nakaso 2022, 210). The overheating real estate market, the central bankers and regulators who had to clean up the mess – these were reminiscent of the bursting of the Japanese bubble in the early 1990s. Although the BOJ was already attuned to the threats of systemic risk since the late 1990s, the GFC reinforced its macroprudential perspective. Recalling both crises, Nakaso summarized three lessons that the BOJ learned. First was that financial crises not only paralyzes the financial system, but they also have after-effects on the real economy. Second, the necessity of understanding the unique characteristics of systemic risks to adequately respond to the crisis. “The soundness of individual financial institutions is important for the stability of the financial system,” he wrote, “but if that's the only thing you set your gaze on, you will take the wrong response” (Nakaso 2022, 593). Third is the importance of swift detection and response to systemic risk. Japanese regulators were criticized for doing too little too late in the 1990s, but US regulators also underestimated the risks of the subprime bubble in the summer of 2007. The Fed's complacency made the bubble even larger, ultimately forcing the US government to bailout the banking system.

Even though the BOJ's macroprudential perspective was reinforced, it still viewed the GFC very much as a foreign crisis. Multiple BOJ officials expressed their resentment at post-crisis international negotiations to strengthen banking regulation. To them, the GFC was purely the result of risky financial products that American and European financial institutions gambled with. "It was a financial crisis that came out of the bursting of an American bubble," one of them recalled. "We were frustrated that Japan had to be pulled into international negotiations to strengthen regulations, whose real purpose was to protect European and American taxpayers' money...My honest opinion is that 'this was all because you were too greedy'" (Interview 15).

A crisis "on the other shore." A lesson the BOJ had already learned nearly a decade ago. These two facts explain why the BOJ's policy orientation and its policy toolkit did not change after the GFC. In 2011, against the backdrop of heightened attention on macroprudential policy in the financial world, BOJ staff published "The Bank of Japan's Approach to Macroprudential Policy" (Bank of Japan 2011). Masaaki Shirakawa, who was BOJ Governor from 2008 to 2013, explained that the publication of this white paper intended to explicitly clarify the BOJ's macroprudential framework in response to major institutional changes taking place in the West (creation of the FSOC in the US, granting of strengthened regulatory authority and macroprudential mandates to the European Central Bank and the Bank of England) (Shirakawa 2018, 520–21). Yet, few things in the white paper were new after the GFC. While the BOJ's financial system monitoring exercises now prioritize the system as a whole rather than individual financial institutions, pays greater attention to the finance-real economy nexus, cross-financial sector risks, and risks from complex securitized financial products, the results of these monitoring exercises are

published in the Financial System Report, which dates back to 2005. In addition to this high-level monitoring, the BOJ emphasizes the complementarity between bank inspection (which is considered a microprudential tool) and macroprudential risk assessment. In its usual dry central bank-speak, the white paper explains this complementarity:

The micro information obtained from the examination of individual financial institutions, combined with an evaluation of their management soundness, are used to assess the risk trends in the broader financial system. By collecting these types of micro information and combining them with macroeconomic data and financial statistics, we aim to compensate for the lag in macro data and grasp the seeds of systemic risk at an early stage (Bank of Japan 2011, 7).

But again, the BOJ's bank inspection and examination were tools developed long before the GFC. So it is fair to conclude that the BOJ's stability orientation, formed during the NPL crisis of the late 1990s, did not change in any meaningful way after the GFC.

### ***The BOJ's Stability Orientation and Accommodative Monetary Policy***

As Japan's monetary authority, the BOJ had been engaged in accommodative monetary policy since the late 1990s. This meant keeping the interest rate to 0% virtually nonstop since 1998, below 0% since 2016, and purchasing of massive amounts of Japanese government bonds and exchange-traded funds. The long-standing aim of this accommodative monetary policy has been to pull Japan out of deflation. The BOJ's stability orientation in the macroprudential realm coexists, sometimes uncomfortably, with its insistence on a monetary policy of low interest rate, quantitative easing. There is a simple reason why the BOJ continues to hold both views: despite the BOJ's monetary policy and the government's fiscal policy, Japan has been unable to escape deflation.

Discourse among academics and policymakers on the relationship between monetary policy and macroprudential policy is still unsettled. To put it bluntly, accommodative monetary policy is designed to lower interest rates, making it easier to

borrow, which in turn stimulates investments and consumption. In short, it is a tool to heat up the economy.

Low interest rates put banks in a difficult situation in two ways. First, in a low interest rate environment, profit margins from lending shrink. Because interest rates on loans is how traditional banking business make profits, low interest rates squeeze bank profits.<sup>19</sup> Narrow profit margins leave banks in danger during periods of financial stress. Second, low interest rates push down long-term yields on government bonds. In Japan, where the combination of extraordinarily high savings rate and banks' risk-aversion led banks to hold large amounts of government bonds. As the yields from these bonds become lower, banks are pressured to seek greater risk in search for higher returns. This may mean increasing investments in stocks, real estate, securitized products both domestically and abroad. One potential outcome, therefore, is an asset price inflation.

Macroprudential policy, on the other hand, does the opposite. By raising bank capital requirements, restricting loans, limiting leverage, putting a cap on the proportion of risky assets that financial institutions can hold, it attempts to curb excessive lending and risks from financial products. It tried to cool down and flatten the financial cycle. Any central bank engaged in accommodative monetary policy should, therefore, be wary of the potential overheating of the financial system.

BOJ leaders are wary of these risks. Understanding fully well that low interest rates put pressure on bank profits, one BOJ official told me that “it would be a lie to say we’re not concerned about the resilience of banks if a financial shock occurs” (Interview

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<sup>19</sup> Monetary policy is by no means the only reason for low bank profitability in Japan. Inefficient management and overbanking – the crowded regional banking sector (including regional banks, secondary regional banks, trust banks and credit unions) – as well as the firewall that separates bank deposits from securities trading by large banks are also considered causes (Interviews 1 and 9).

15). Admitting that low interest rates push banks to seek greater risks, particularly through investments in foreign markets, one former BOJ official explained that “increasingly the Japanese authorities [are] watching the risks from foreign exposures by financial institutions. Not only megabanks<sup>20</sup>, but also those regional banks, which can no longer enjoy stable profits from JGB portfolio, they started to buy various kinds of risky products like investment trusts with exposures to the US corporate credit or ETFs and those things” (Interview 16).

But BOJ officials find it difficult to make these concerns very public. It is, after all, the BOJ’s own monetary policy decisions that are putting banks in a challenging situation. “If the BOJ loudly voices these worries, then the criticism would be ‘well, it’s your monetary policy’s fault.’ So it’s hard to put these concerns out to the public as the BOJ’s institutional opinion” (Interview 15).

Ultimately, the BOJ persists in its accommodative monetary because there is no evidence of an asset price bubble. “But looking at Japan,” a former BOJ official explained, “after our own financial bubble in the late ‘90s or early 2000s, Japanese economy lost a kind of dynamism, and we haven’t seen so much asset bubbles domestically.” For this reason, “from a monetary policy perspective, there’s no reason to change these current super accommodative monetary policy settings” (Interview 16).

### ***Regulatory Coordination***

An important variable in the theoretical framework advanced in Chapter 2 is whether or not all of the relevant regulatory authorities in a jurisdiction can coordinate their policy formulation and implementation. In the case of Japan, the BOJ and FSA have indeed

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<sup>20</sup> The term megabanks point to the three largest multinational banks in Japan.

coordinated successfully on the macroprudential front. Their ability to coordinate, aided greatly by the fact that both bodies have generally been stability-oriented, allowed them to avoid bureaucratic tensions.

Soon after the NPL crisis, there was not a well-established arrangement for FSA-BOJ coordination. As soon as the FSA was created in July 1998, the LDP announced its Comprehensive Plan for Financial Revitalization. This plan contained an emergency measure for the FSA and the BOJ to carry out concentrated inspections of the nineteen largest banks in Japan. This was then followed by the inspection of regional banks (Hino 2000). Financial institutions found that inspections by both regulators overlapped considerably with much redundancy. “So sometimes there are too much burden on the financial institutions to report, making regular reports and also receiving on-site examination is very costly. Everybody has to stop everything and prepare mountains of documents,” one former BOJ official recalled (Interview 16).

After this frenzied start, the division of labor between the FSA and BOJ developed gradually. Both bodies realized that each of their strengths were complementary in macroprudential supervision. Legally, the FSA has the sole authority to supervise financial institutions. Its supervision covers regulatory compliance in all aspects of the financial business: internal control, risk management, compliance, anti-money laundering, and prudential regulation (Interview 12). In contrast, the BOJ’s supervisory responsibilities encompass private-sector banks that hold current accounts with the BOJ to receive liquidity from the central bank as lender of last resort. As such, the BOJ’s supervision primarily focuses on these banks’ liquidity. A bank must be sound enough for the BOJ to keep in the

payments system, or else the BOJ can choose to close the bank's current account, which, according to a former BOJ official, is "almost a death sentence" (Interview 16).

Once the NPL problem was under control in the early 2000s, the FSA recognized that, to effectively monitor systemic risks, it needed to draw on the economic expertise of the BOJ (Interview 10). This plays nicely in the BOJ's advantage, since the central bank is staffed with trained economists and econometricians, "who enter the BOJ because they want to do monetary policy and economic analysis ... and like to read econometric papers" (Interview 17). But the BOJ lacks the legal authority to enforce rules and regulations that the FSA possesses. The division of labor that developed between the two bodies is therefore one of analysis and enforcement. "BOJ has been supporting FSA behind the scenes a lot through this kind of quantitative analysis" (Interview 16).

The communication between the two bodies takes the form of an informal yet dense network. The Council for Cooperation on Financial Stability was established in June 2014 as a forum for senior officials from both bodies to share recent developments and achievements. But this Council is not formalized in regulation or law, lack decision-making power and does not publish its meeting minutes (FSB 2016). According to BOJ officials who have attended these meetings, the Council is largely ceremonial, a way for the regulators to "appeal to the public that we are cooperating and also [a] courtesy to each other" (Interviews 15 and 16). More meaningful communication takes place at the lower levels of the bureaucracy. The BOJ, for example, sends its economists to the FSA on secondments to lead parts of its analytical tasks. Officials from both bodies regularly hold discussions and meetings that are not publicized (Interview 16). These informal ties are important in maintaining coherence in the policy orientation of the FSA and the BOJ.

## Political Power of Banks

With macroprudential reforms being a policy issue of low salience in the post-GFC period, were banks able to influence the outcome of macroprudential policy in Japan? Culpepper's framework would predict that banks would be able to exploit this moment through their "quiet politics" tactics.

But in the case of Japanese banking regulatory reform, the political power of banks in shaping the reform outcome was of secondary importance. There are several organizational and institutional factors that limit the influence of banks. These include the absence of a revolving door in the world of Japanese finance, the fact that financial industry associations blur the line between interest groups and corporatist organs of the state, and the difficulty of financial institutions to act in unison.

In the US, financial industry professionals are often recruited into leading positions of regulatory agencies or federal departments, and return to their private-sector roles after their public-sector appointment. In Japan, on the other hand, such revolving door is rare. A much more common practice is for university graduates to be recruited into one of the government bureaucracies (such as the FSA and to some extent the BOJ) and to spend most of their careers in a handful of government positions. Once they retire from their public-sector role, these bureaucrats are often given comfortable roles as advisors in some private-sector position – practice often referred to as *amakudari* (literally translated as "descent from Heaven"). In other words, bureaucrats may move into the private sector after retirement but not the other way around.

In the case of the FSA, because it was created as a spin-off of the MOF, most of its early personnel were career MOF officials. Over the last two decades of the FSA's

existence, these former MOF officials have climbed up the organizational ladder, and now hold top FSA positions. One former MOF official explained that these FSA officials have become acculturated to the organization's mission. "They would strongly argue that 'although I'm from the MOF, but I transferred to the FSA. I'm working for the FSA'" (Interview 9).

The context in which the FSA was split off from the MOF also strengthened FSA officials' resolve to stay independent of financial industry influence. Recall that one of the root causes of the MOF was disgraced was because of its close ties with banks. Despite the resignations and sanctions of MOF officials, public trust in the bureaucracy was lost. In a public survey by one of the national newspapers in March 1998, 71% of respondents said they did not trust the bureaucrats, up from 65% in 1996 and 51% in 1994 (Toya 2006, chap. 6). One official, who began his career at the MOF before spending the next 20 years at the FSA, explained that this origin story of the FSA led to FSA staff's determination to stay independent of banks' influence. "Due to the experience of its origin separating from the Ministry of Finance, which was created [because of] too close relations [with banks] and lack of proper supervision by the Ministry of Finance, from the FSA's creation in '98, we respected the independence and fair supervision, transparency, accountability." He explained that while the FSA sometimes adjusts the details of its supervision depending on macroeconomic conditions and banks' outlooks, its officials adhere to the organization's code of conduct. "So we FSA listen to the views by banks, private banks, and we have closed discussions. But it doesn't mean we accept everything from what the banks are arguing. It's the balance between having an objective perspective and taking into account

the views by banks, in particular in relation to their risk appetite, internal control” (Interview 12).

The absence of a revolving door and the bureaucratic insulation around the FSA were two forces that kept the regulatory agency above the fray of banks’ political power. There was another reason why banks could not exert much lobbying power. The institutional arrangement for the banking industry’s lobbying activities lacked strength. The financial sector in Japan is organized into several industry associations that simultaneously act as self-regulatory organizations and as channels of interest intermediation that represent the industry’s preferences during policymaking negotiations. Yet these two functions coexist in an inherent tension, and from them emanate two weaknesses in these peak associations’ ability to shape regulatory outcomes.

First is that as self-regulatory organizations, financial industry associations often play the role of organs for implementing the FSA’s guidance. One former bank CEO explained this dynamic to me in the case of the Japan Bankers’ Association (JBA). “The JBA ... has everyone, starting with the megabanks. But from the FSA’s perspective, it’s sometimes an agency that communicates the FSA’s will. It used to be that the FSA would order around the banks through the JBA, but now, although it doesn’t go as far as rules, the FSA conveys that banks *should* do this and that through the Japan Bankers’ Association. Not rules, but guidance.” He acknowledged that the JBA at times has conflicting views with the FSA. “We do speak up when we simply can’t take it [the FSA’s guidance]. But the FSA has its own reasons, so we can’t simply resist for no reason” (Interview 11). Reinforcing the associations’ status as self-regulatory organs is the career trajectory of bureaucrats discussed above: retired bureaucrats take up seats on the boards of these

associations. The Japanese Securities Dealers' Association, for instance, has two vice chairs. "Both of them are from the FSA," one bank lobbyist explained. "One person heads the self-regulatory side and the other on the trade association side. Both from the FSA. Both are respectable individuals, but in a way, they're liaisons. Their mindset is that 'we can't fight with the boss [the bureaucracies].' Their mindset is to follow the boss' requests" (Interview 13).

Another weakness in the financial industry associations' ability to aggregate the interest of their members firms is a familiar bedfellow of large organizations: collective action problems and in-fighting. As hinted at above, the JBA includes smaller regional banking associations, bank holding companies, and domestic and foreign banks of all sizes, totaling 253 members as of August 2022 (Japanese Bankers Association n.d.).

## **Dynamics of Macroprudential Policymaking**

To sum up this chapter thus far, we have seen how the key independent variables that shaped Japan's macroprudential stringency were formed. Domestic financial regulation was a policy domain of relatively low political salience. In this environment, the two banking regulators were moderately stability oriented. The young FSA began its life as a highly stability-oriented regulator, but soon learned to relax this stance before the start of the GFC. As the central bank, the BOJ's role as a macroprudential authority co-existed uncomfortably with its accommodative monetary policy, yet it maintained its moderate stability-orientation more consistently than the FSA. These two regulatory bodies were able to coordinate their supervisory responsibilities effectively enough, avoiding inter-bureaucratic tensions that could undermine policy formulation or implementation. Lastly,

for a variety of organizational and institutional reasons, the influence of the financial sector on the policymaking process was weak.

Now we turn to how these independent variables produced the dependent variable –the moderate stringency of macroprudential policy in the Japanese banking sector after 2008. The key policy outputs are the Basel III capital requirements and the BOE’s bank stress tests. Because the stress tests do not trigger changes in the level of banks’ capital requirements, and because the Basel III rules are the only formal measures to limit systemic risks, Japan’s banking sector is classified as a moderate stringency case. We take a look at each of these outcomes in turn.

### ***Basel III***

In the wake of the GFC, American and European regulators felt the need to fundamentally upgrade global banking regulatory standards. As shown in Table 9, Japan was one of the earliest adopters of the Basel II framework. But its stance toward Basel III was anything but conciliatory.

Table 9. Dates of Basel Framework Implementation

<b>Regulation</b>	<b>Basel guideline</b>	<b>Japan</b>
Basel 2	Finalized in June 2004	Fully implemented by March 2007
Basel 2.5	Finalized in July 2009	Fully implemented by December 2011
Basel 3: minimum common equity capital ratio (4.5%)	Full implementation by 2019 (extended to 2023)	Full implementation by January 2015
Basel 3: capital conservation buffer (2.5%)	Full implementation by 2019 (extended to 2023)	Implementation starts at 0.625% in 2016 Gradually raised to 2.5% by 2019

Basel 3: liquidity coverage ratio	Partial implementation starting in 2015 Full implementation by 2019	Start implementation in 2015 (60% of full implementation)
Basel 3: net stable funding ratio	Finalized by 2018	Start implementation in 2015 (60% of full implementation) Start implementation in 2018

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Source: Harada et al. (2015)

In the immediate post-crisis period, US banking regulators were stability-oriented and motivated to strengthen bank regulations at home and globally (see Chapter 3). The FSA and the BOJ, on the other hand, watched these American zealots with jaundiced eyes. The Japanese regulators had already moderated their stability-orientation by 2008, and by the time they arrived in Basel, their approach to systemic risk regulation sought to satisfy the need to maintain stability but also to revitalize the Japanese economy.

In 2009-10, they were particularly sensitive to the potential costs of global regulation. While Japanese banks withstood the fallout of the US subprime bubble, the Japanese economy as a whole was not immune. The export sector had suffered the contraction of demand in the American and European markets. Equity prices of Japanese companies had dropped considerably. The immediate post-crisis years should have been a time to revitalize Japanese firms at home and to enhance their competitiveness abroad. The global priority to strengthen and proliferate regulation seemed to fly in the face of the Japanese agenda.

The Japanese officials I interviewed were uniformly resentful of the American and European approach to global regulatory reform. “Ultimately,” one BOJ official said, “the American and European regulators wanted to strengthen their own domestic regulations, but that would create an uneven playing field where it would benefit people in other jurisdictions. So to do anything, they try to get the whole world to do it with them. So we

were involved in something like a collateral damage” (Interview 15). Another former BOJ official, who was involved in the on-site monitoring of Lehman Brothers’ Japan office in 2008, remarked “we didn’t carry any subprimes at all, but we got sucked into these ridiculous regulations by the people who played with subprimes. It really felt like we were *embroiled*” (Interview 17; emphasis original).

They worried that, if the American and European delegates at Basel went unchecked, the regulatory outcome would overburden Japanese banks and firms. “FSA and BOJ,” one former FSA official said, “[were] very much concerned about the impact of Basel III to the Japanese financial system, which was regarded as safe compared with other international banks. So the impact could be negative rather than positive...reducing the risk appetite of the Japanese banks vis-à-vis the real economy” (Interview 12). A BOJ official voiced a similar concern: “being told to pile up capital and secure liquidity, [financial institutions] won’t be able to do business. So there must be an appropriate level [of capital requirements]” (Interview 15). Former FSA official Hirofumi Gomi was more outspoken when he told the *New York Times* that “Japan cannot let this trend become the global standard... The United States, the very origin of the financial crisis, has been burned so badly it is now trying to compensate by overregulating...Japan must call for a more measured approach” (Tabuchi 2010).

European regulators, for their part, wanted to limit the amount of government debt that banks can hold. This was because if government bonds’ quality deteriorates and market pressures force banks to sell these bonds, banks would be in a precarious position. This did not jive well with Japanese regulators because Japanese banks hold enormous amounts of

government bonds. “Looking at what’s happening here in Japan,” a former BOJ official explained,

the financial institutions hold lots of government bonds... Because [of households’] excess savings here, and [banks] always have to park their money somewhere. And if they try to take, say, equity, foreign equity... it’s going to increase capital cost. And there’s no good lending opportunities anymore domestically. So the best thing’s to park money in JGBs [Japanese government bonds]. But if the regulations started to regulate it, what will happen to this whole economy and equilibrium in the Japanese economy? (Interview 16).

Given these grievances, Japanese regulator’s stance in Basel was to balance stability and growth. “The first element was to strengthen regulation and prevent the recurrence of the Lehman Crisis. On the other hand, the second element was to limit the costs from over-regulation and excessive side effects on effective financial intermediation. We went into the negotiations with the sense that we needed to balance those two points” (Interview 15). More concretely, this meant designing Basel III in a way that takes into account the unique economic situation of each country and setting capital requirement levels that all parties could agree to.

Of course, Japan was not the only country that viewed a radical raising of capital requirements with skepticism. In his memoire, former BOJ Governor Shirakawa distinguished two groups of countries at the Basel negotiations. One group, including the US, UK and Switzerland, wanted to force banks to carry much more capital. The other group, led by Japan, Germany and France, agreed with the need for higher capital requirements but sought a more moderate level. In the halls of technocracy at the BCBS, Japanese regulators took the initiative in several ways. Rather than simply asserting their own position, they enhanced their persuasiveness by facilitating discussions and proactively developing their relationships with other negotiators. In short, they worked

hard to be seen as respectable members of the international regulatory community (Shirakawa 2018, 507–8). The BOJ also leveraged its analytical prowess by presenting a working paper that simulated the interactions between financial institutions and the macroeconomy and estimated optimal levels of capital for banks. According to BOJ officials familiar with the Basel negotiations, this working paper seemed to set a tone during the discussions (Interview 15).<sup>21</sup>

In these efforts to bend the negotiations toward moderation, the FSA and BOJ benefitted tremendously from their close coordination. Recalling that representatives from multiple regulatory agencies in the same country often took mutually conflicting positions, former BOJ official Hirotaka Hideshima, who took part in the Basel negotiations, wrote that “there was not a single instance that the FSA and BOJ fell out of step. Other countries recognized this, and we were often asked ‘How are you guys so synchronized?’ The fact that other countries recognized this gave us an edge in bargaining” (Hideshima 2021, 177).

In the end, the Basel III agreement incorporated Japanese preferences. It respected the plea by Japan and others to take into account differences between national financial sectors by distinguishing between domestic and global “systemically important financial institutions” (D-SIFIs and G-SIFIs). In Japan, the Basel III requirements were imposed on sixteen major banks that are internationally active. Three of these banks – Mitsubishi UFJ Financial Group, Mitsui Sumitomo Financial Group, and Mizuho Financial Group – are classified as G-SIFIs and so are required to hold more capital than the other thirteen. But, conforming to Japanese regulators’ position, the additional capital imposed on these Japanese G-SIFIs were much lower than for American and European banks. From the start,

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<sup>21</sup> For the working paper itself, see Kato, Kobayashi, and Saita (2010).

these Japanese banks were confident that they could meet the additional capital requirements (Nihon Keizai Shinbun 2011). In addition to these numerical requirements applied to banks, Basel III also left room for national discretion in how these rules were enforced. The so-called Pillar II of Basel III spelled out the oversight of financial supervision, which gave Japanese regulators “a kind of maneuver or room to consider Japanese banks’ risk-averse attitudes,” one former FSA official explained. “So that’s why finally, we agreed to the Basel III” (Interview 12).

Once the Basel negotiations concluded, Japan implemented each phase of the agreement punctually. One might wonder why, despite having a sound banking sector that was little affected by the GFC, Japanese authorities would be so diligently proceed in putting into practice an international agreement they did not seem to need. When I put this question to my interviewees, they invariably gave a cultural explanation. “Japan’s basic stance – not limited to the world of finance – is that Japan always follows through international agreements,” one BOJ official explained. “We don’t really want to be the people who make a promise and not keep it” (Interview 1). An international observer confirmed this sentiment. In recounting the attitude of Japanese regulators, an official at the FSB in Basel said “when it comes to international standards, Japan will fight against standards during negotiations, but will comply to the letter once standards are passed” (Interview 18). A Japanese banker also echoed this. “Once a rule is made, the FSA tells banks to implement the rule on schedule. Once a rule is established in an international committee, not just Basel III, Japan focuses on keeping its promise” (Interview 11).

## ***Bank Stress Testing***

The other macroprudential policy instrument is Japan's bank stress tests. Bank stress tests are risk management exercises in which the banks themselves or regulators assess, through accounting and statistical modeling, whether the banks can withstand financial or macroeconomic shocks of various magnitudes. Unlike the stress tests that the FRB conducts in the US, the BOJ's macroprudential stress tests do not trigger changes in banks' capital requirements according to the stress test results. The question, then, is why not? Our answer begins by first looking at how bank stress tests evolved in Japan and then examining how the regulators perceive it as a supervisory tool.

The US Federal Reserve's Supervisory Capital Assessment Program (SCAP) in 2009 is often hailed as a system-wide bank stress test that helped recapitalize the 19 largest bank holding companies during the darkest days of the GFC. Yet experiments in bank stress tests began much earlier in Japan. The first wave took place during the NPL crisis. The BOJ and the MOF jointly examined each major bank in early 1999 to determine how much additional capital it needed to withstand stressful scenarios. If a bank was deemed to be undercapitalized, it was forced to increase its capital reserves by accepting public funds (Harada et al. 2015). It was a stringent measure that both recapitalized troubled banks and pressured them to improve their management by the naming and shaming that comes with the injection of taxpayer money. Yet it was an ad-hoc crisis management measure that was not continued.

That is, until 2007, when the BOJ began conducting what it calls "macro stress-testing" and publishing its results in its Financial System Report. This seems to have been in response to the fact that a growing number of central banks, regulatory authorities and

international organizations began to conduct similar stress tests to assess the stability of financial systems (Bank of Japan 2007, 44).

More recently, Japan's stress testing regime consists of two types. The first is the FSA's microprudential stress tests. Banks are required to undertake stress tests using their own stress scenarios and submit a report that details their method and results to the FSA every quarter. The FSA then examines the appropriateness of these stress scenarios and statistical models, and more importantly, if the test indicates that the banks cannot withstand those scenarios, the FSA requires that banks raise their capital and improve their risk management (Harada et al. 2015). Because these tests solely focus on the robustness of individual banks and are thus microprudential, we do not consider this as part of the macroprudential policy regime in Japan's banking sector.

The second type is the BOJ's macro-stress tests that assess the vulnerability of the banking system as a whole to stress scenarios. This was revamped after the BOJ jointly conducted a macro stress-test of Japanese banks with the FSA and the IMF in 2011-12 as part of the IMF's Financial Sector Assessment Program (IMF 2012, 38–40). Until then, the BOJ only considered how banks' business models would be affected under certain disruptions in the real economy and interest rates. The refined stress tests after 2012 are more complex, modeling adverse feedback loops between the financial system and the real economy (Bank of Japan 2012, 99–100).

Despite the increasingly complex nature of BOJ's stress tests, it is not designed in a way that automatically requires banks to raise capital and liquidity levels if they are found to be vulnerable in any of the stress scenarios. One reason for this is that since the NPL problem was solved in the early 2000s, the BOJ has found that the Japanese banking system

as a whole is sufficiently sound. A former BOJ official explained that “the Financial System Report publishes the results of the tests, and if you ask whether we use it to do something administrative, then the bottom line is that we don’t. But that’s because we don’t get results that suggests that we’ll be in trouble if we don’t” (Interview 17). In fact, some regulatory officials consider using the stress tests as a switch to change capital requirements as potentially detrimental to economic growth. “Of course, capital requirements, stress testing, that’s important,” one former FSA official said.

But the ultimate goal is to ensure the safety and soundness of the financial system, which could contribute to the macroeconomic development or the economy recovering. So stress testing, yeah, it’s a kind of tool to achieve such a goal. And in the Japanese context, the banks, including mega-banks, [are] still risk averse. We need to encourage them to take risks... So I think the priority is a bit different in Japan than other countries in the macroeconomic situation (Interview 12).

In other words, given Japan’s economic slowdown since the early 1990s and banks’ conservatism since the NPL crisis, automatically requiring banks to raise capital in response to stress test results would be counterproductive.

Another reason for this design of the BOJ’s stress test is the regulators’ preference for close dialogues with financial institutions over arms-length, rules-based supervision. The same former FSA official explained this point. “[W]e try to avoid too prescriptive [of an] approach...That’s why the stress testing results are not directly linked to the prescriptive requirement for capital change...So instead of prescriptive, rules-based requirements, [we prefer] more principles-based, more often, closer monitoring and discussions” (Interview 12).

### ***Small- and Medium-Sized Enterprises Financial Facilitation Act***

As we have seen, there was hardly any contestation between regulators and politicians regarding systemic risk regulation in the Japanese banking sector. While the governing political parties and regulators held different policy orientations in the period after 2008 – the former were growth-oriented and latter moderately stability-oriented – the fact that systemic risk regulation of large banks was a low-salience issue meant that regulators were given wide discretion. The low-salience condition precluded political intervention in regulatory affairs.

There was one notable instance, however, that serves as a test for how politicians can pressure regulators to implement their preferred policies and how regulators attempt to protect their autonomy. This instance took place in 2008-9 with the formulation of the Small- and Medium-sized Enterprises (SME) Financing Facilitation Act.<sup>22</sup>

When the GFC hit the shores of Japan in September 2008, Japan's financial institutions stood firm. But because of decline in exports and precipitous drop in equity prices of non-financial firms, Japan's real economy suffered a slump. Worse, this slump came amid the lackluster recovery since the collapse of the Japanese real estate bubble in the early 1990s. The BOJ and the government took several crisis response measures to support flagging firms and to stave off a liquidity crunch in the short-term money market. In the end, they succeeded in averting a general liquidity crisis.

Yet, SMEs still struggled to access sufficient bank credit and to repay their loans. Their predicament was made worse in the early 2000s when the ruling LDP and the FSA

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<sup>22</sup> The colloquial title of this legislation in Japanese literally translates to “SME Financing Smoothing Act.” Here I choose the slightly less awkward “SME Financing Facilitation Act.”

committed to resolve non-performing loans on banks' balance sheets. The FSA's strict supervisory approach had made banks reluctant to lend to SMEs, which have a history of loss-making.

The LDP lost the general parliamentary election in 2009 and the DPJ became the dominant party in both houses of the Diet. With the NPL problem largely resolved by this time, one of the top items on the DPJ's policy agenda was to address the plight of SMEs. DPJ's Financial Services Minister Shizuka Kamei was openly critical of the LDP's emphasis on bearing down on NPLs. The DPJ, and Kamei in particular, was ideologically motivated to support those whom they considered were economically weak and powerless. In this context, SMEs were the weak while financial institutions held the lever to power (Interview 6). Kamei thus proposed a plan, colloquially called the "moratorium." The moratorium would have required banks to allow SME borrowers, across the board, to postpone repayment for three years (Reuters 2009).

Around the same time, the FSA was also taking steps to support SMEs throughout Japan. As we have seen, the FSA was going through its own shift in policy orientation from high- to moderate stability orientation. Also concerned about the problems confronting SMEs, FSA officials met with regional banks to request that they maintain adequate financial intermediation for small and medium firms. It announced in November 2008 "Measures to encourage loan restructuring for SMEs." This guidance let banks avoid disclosing restructured loans to SMEs as "non-performing" if the borrowers submitted recovery plans to make loans performing in five years (Harada et al. 2015).

Yet even for the regulators who were sympathetic to SMEs, the DPJ's push to allow SMEs to unconditionally postpone loan repayments went too far. The FSA and BOJ

believed this plan would create a moral hazard on the part of borrowers and would incentivize them to borrow without taking necessary steps to become profitable (Interview 14). Regional banks whose profitability had already been squeezed by low interest rates and non-performing loans, would see their profits diminished even further if borrowers were allowed to defer payment for three years.

FSA officials, particularly Junichi Naito who was the Director General of the Planning and Coordination Bureau at the time, negotiated with the DPJ's Kamei to try to moderate his stance. As a senior journalist who covered this incident told me, "the FSA's 'bureaucrats,' especially Junichi Naito, assessed the rationality [of Kamei's moratorium] and put a brake on Mr. Kamei" (Interview 14).

The outcome of this negotiation was the SME Financing Facilitation Act that passed into law in December 2009. This law was a formalization of the FSA's guidance. Rather than an across-the-board loan deferment, the law encouraged banks to relax terms of loans for troubled SME borrowers but ultimately left it up to banks to negotiate the terms with borrowers in a case-by-case manner. What's more, the law lacked an enforcement mechanism. It instead relied on the FSA to publish aggregate data on restructured SME loans so as to morally pressure banks to show leniency toward their distressed clients. Because this was essentially a continuation of the FSA's guidance, most banks felt that nothing had fundamentally changed (Diamond Online 2009).

The dynamics leading up to the SME Financing Facilitation Act serves as a rare instance of a public dispute between a political party and financial regulators in Japan. It demonstrated how, when a handful of politicians are intent on a given policy outcome, they can attempt to force the hand of regulators. Regulators on the other hand, often hold policy

preferences that are similar to but still distinct from their political principals. In this case, the FSA worked to preserve its policy autonomy by negotiating with key politicians and by moderating those politicians' stance. We can consider the SME Financing Facilitation Act as the FSA's success.

## **Conclusion**

The key moment of institutional change for the Japanese banking and financial regulation came in 1998, not 2008. Before then, a financial regulatory system dominated by the powerful MOF prevailed. The mounting non-performing loans on banks' balance sheets since the real estate bubble collapse in the early 1990s posed a looming threat not only to the debtor firms but also to the banks themselves. In 1997, these NPLs came to a head with several high-profile bankruptcies of large banks and securities firms. Bankruptcies continued into 1998, forcing the government to inject several trillion yen worth of taxpayer money into major banks. Parallel to these crisis response measures, the financial regulatory system was being upended in Japan. The MOF was broken up, and many of its powers and responsibilities were transferred to the newly created FSA. A formal framework for bailout of troubled financial institutions using public funds was finally established. The BOJ was made more independent from political pressures. An ambitious reform package called the Big Bang liberalized, deregulated, and enhanced the transparency and standardization of many parts of the financial sector.

Particularly important for the purposes of this dissertation is that the key factors that explain the moderate stringency of macroprudential policy instruments in the Japanese banking sector were formed during this period. The political salience of financial regulation

and bailing out financial institutions rose, unsurprisingly, during the NPL crisis, but the issue of domestic financial regulation became a relatively low salience issue thereafter. The two regulators were stability-oriented, but (especially in the case of the FSA) relaxed this stability orientation once the NPLs were resolved. Through informal arrangements, the FSA and BOJ have been able to coordinate effectively, avoiding bureaucratic turf tensions that may have hampered policymaking and implementation.

The regulators' moderate stability orientation and wide discretion enabled by the relative absence of political intervention produced the policy outputs that are at the core of this chapter. At the Basel negotiations immediately after the GFC, the Japanese regulators made a concerted attempt to play the intermediary role between the American and European delegations, while themselves attempting to shape the outcome of the negotiations in their favor. This meant being accommodating to the US preference for higher bank capital requirements, but at the same time advocating for a standard that was tailored to banks' size, complexity and risk profile. The final Basel III agreement largely honored Japanese preferences. Once settled, the Japanese regulators dutifully implemented the rules on schedule.

In the domain of BOJ's bank stress tests, the central bank's moderate stability orientation was again on display. Stress tests are a crucial tool in the macroprudential monitoring toolkit, but in the case of Japan, these tests are not directly linked to changes in bank capital requirements. Aside from the fact that the stress tests have not returned results that called for increases in capital requirements, the stress test is designed this way because the BOJ is concerned that raising capital requirements may pose an obstacle to the

country's much-needed economic growth, and because regulators prefer closer dialogue with financial institutions over a rules-based triggering of changes in capital requirements.

## Chapter 5

### United States Asset Management

Systemic risk reforms of the US asset management industry broadly proceeded in two phases, with each phase targeting a different segment of the sector. In the first phase, between 2008 and 2014, the regulatory agency responsible for overseeing the asset management sector implemented reforms of moderate stringency for money market funds. In the second phase between 2015 and 2018, the regulators shifted to require mutual funds and exchange-traded funds (ETFs) to institute internal liquidity risk management programs, a reform that was also widely seen as moderate in its stringency. Table 10 summarizes these two phases of reforms.

Table 10. Summary of Macroprudential Reforms in the US Asset Management Sector

Period	Reforms	Stringency
Pre-2014	Requirement for MMFs to sell and redeem shares based on a “floating” NAV and “gating” rules	Medium
Post-2014	Limits on use of derivatives by investment companies Requirements for investment companies to establish liquidity risk management programs Enhanced disclosure of liquidity information	Medium

Abbreviations: MMF (money market fund); NAV (net asset valuation)

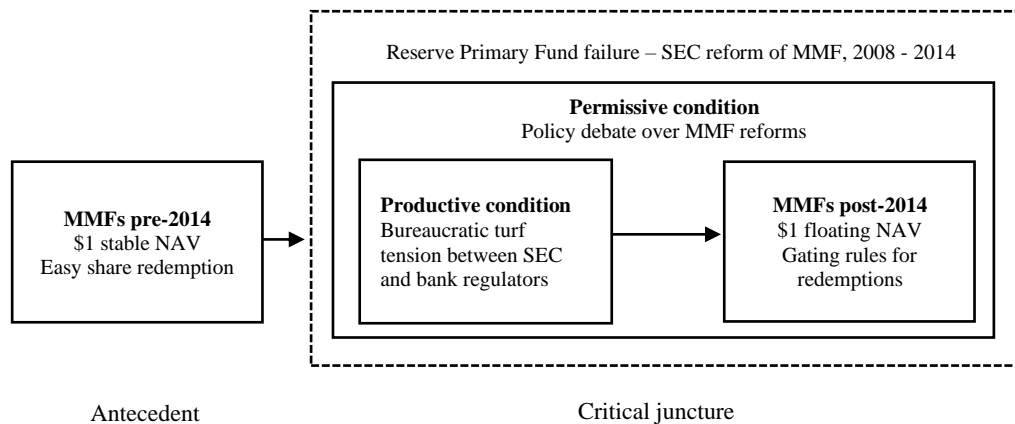
The two reform outcomes of intermediate stringency were the result of two different causal processes. In the first phase, the SEC was largely a growth-oriented regulator that resisted the emerging tide of macroprudential regulation generally and saw the asset management sector as a safe haven in sharp contrast to systemically fragile banks. But it faced a strong pressure on its regulatory turf from banking regulators who attempted to set the agenda on reforming the asset management industry as part of their effort to bring

the “shadow banking” system under the purview of macroprudential oversight. To preempt bank regulators from encroaching on its regulatory domain, the SEC opted to reform the money market fund-segment of the asset management sector.

Later reforms of mutual funds and ETFs followed another dynamic. By 2015, the SEC’s beliefs about the asset management industry had shifted, with officials highlighting the increased complexity and risks that some segments of the sector may pose. In short, the regulator became more stability oriented. Reform proposed by the stability-oriented SEC went virtually uncontested by its audiences, who saw these reforms as appropriate for the size of the US mutual fund industry. The distinct causal paths that led to two reform instances of intermediate stringency are thus an illustration of equifinality.

## Global Financial Crisis as Critical Juncture

Figure 5. Critical Junctures Framework for the US Asset Management Sector



## ***The US Asset Management Sector: Structure and Regulation***

Until the GFC, the US asset management sector was not subject to rules designed to mitigate systemic risks. Yet investment managers long operated in a well-established regulatory framework set down by three pillars: legislation, regulatory enforcement, and self-regulatory organizations. On the legislative front, the Investment Company Act and Investment Advisers Act of 1940 constituted the bedrock of investment management. The Investment Advisers Act defines the responsibilities of investment advisers and subjects them to a host of reporting and disclosure requirements, both to the SEC and to their investor clients (Brown, Fraser and Loder 2019, 413-415). The Investment Company Act prohibits some types of investment funds from issuing senior securities to limit their leverage (using debt rather than equity to finance asset purchases) and prevented investment companies from dumping securities on the market (Fink 2011b, chap. 2).

The US Securities and Exchange Commission (SEC or simply “the Commission”) is the primary regulatory agency for the asset management industry. Created in 1934, the SEC’s mission remains to protect securities investors from fraud, to maintain fair, orderly, and efficient markets, and to facilitate capital formation. The five commissioners, designated by the US President and confirmed by the Senate to sit at the pinnacle of the agency, have traditionally taken these mandates to heart. The Securities and Exchange Act that created the SEC dictates that the Commission remain non-partisan by limiting the number of Commissioners who belong to the same political party to three. To maintain a degree of independence from the political process, the Act does not grant the US president the authority to fire Commissioners once they are appointed.

Of the five divisions within the SEC, the Division of Investment Management (IM) and the Division of Economic and Risk Analysis (DERA) are particularly relevant for our discussion of systemic risk reforms. The former oversees investment companies and enforces the above-mentioned 1940 Acts, while the latter, created in September 2009, integrates financial economics and data analytics to inform rulemaking and enforcement. With lawyers long dominating the staff, the SEC's main levers for fulfilling these missions are requiring companies to submit a myriad of reports to allow their investors to make informed decisions and enforcing securities laws by bringing civil actions or administrative proceedings against violators. The Commission's organizational apparatus is amplified by the cooperation of a dense web of market institutions, including self-regulatory organizations and credit rating agencies.

Interest-intermediation between the SEC and the asset management industry is relatively centralized. The primary organ that represents asset managers is an overarching trade association, the Investment Company Institute (ICI). With ICI membership consisting of virtually every investment fund manager, the association fulfils multiple functions: facilitate consensus on policy issues among asset managers, promulgate best practices throughout the industry, propose rules for consideration by the SEC, and aggregate granular data on the industry, much of which the SEC itself draws on for its rulemaking (Fink 2011, ch. 13). In addition to the ICI, the Mutual Fund Directors Forum (MFDF) represents directors of funds of all sizes, frequently meets with regulators, and amasses its expertise through comment letters on proposed rulemakings.

With this governance framework as a base, the US asset management industry went through a spectacular period of growth in the latter half of the 20<sup>th</sup> century. Low inflation

and rapid economic growth in the decades between the 1940s and 1960s enabled a modest but steady growth in the asset management industry (Pozen and Hamacher 2011, chap. 1). The stagflation of the 1970s dragged equity prices down, forcing asset managers to think creatively in innovating new investment products to supplement mutual funds that were heavily concentrated in equities thus far. Needing a product that wasn't excessively dependent on equities, investment professionals invented the money market mutual fund (or money market funds – MMFs – for short), tax-exempt funds, index funds, and municipal bond funds in the early 1970s. MMFs, in particular, proved to be an unrivalled success. Their portfolios included Treasury bills, certificates of deposit and other short-term financial assets. They would earn high interests on these instruments and pay out that interest minus the expenses to investors. Their attractive returns and the unique ability to redeem shares led to their massive success. Assets held in MMFs grew from less than \$2 billion in 1974 to \$11 billion in 1978 to \$76 billion in 1980 (Fink 2011b, 82).

Other than the growth of MMFs, several other developments contributed to the overall growth of the asset management sector. The entry of securities firms into the sector in the late 1970s and the entry of commercial banks in the 1970s to the 1990s with the erosion and repeal of Glass-Steagall (see Chapter 3) increased the number of funds being offered and the total AUM. Rising stock and bond prices from 1984 to 1999 encouraged people to take their money out of savings accounts and begin investing in these financial assets. All of these factors combined, mutual fund assets increased 30-fold between 1984 and 2009, turning open-end mutual funds into the largest financial industry in the world, surpassing the US banking sector (Fink 2011b; Pozen and Hamacher 2011).

## *Regulatory Trends from the 1970s to the early 2000s*

Regulatory changes were both a cause and an effect of this growth. In important respects, the SEC has been growth oriented with respect to asset management regulation. This growth orientation was evident in the SEC's efforts to both promote and protect the interests of the asset management industry, usually in close consultation with the industry's leaders, during moments of heated debates over regulatory reform.

The SEC promoted the industry's interests and thereby facilitated the growth of asset management through rulemaking.<sup>23</sup> In 1979 it adopted rule 434d, which permitted investment funds to run ads in newspapers, magazines, television and radio. This helped fund companies to boost share sales. In 1980, the SEC adopted rule 12b-1, authorizing mutual funds to pay for the distribution of their shares rather than requiring them to distribute them through an underwriter. This change allowed asset managers to offer various share classes to investors, each with a different method of paying for distribution. On another occasion in 1991, the Commission adopted revisions to rules regulating MMFs. These changes came after two real estate companies defaulted on their commercial paper, which was held by a number of MMFs. These funds scrambled to ensure that their shareholders do not suffer losses on their principal. The SEC consulted with the asset management industry – specifically, CEOs of MMFs – on potentially updating MMF regulation. In particular, the Commission sought proposals on whether and how rule 2a-7, which permits MMFs to maintain \$1 per share net asset values, should be modified. After some debate among industry leaders, the SEC adopted a final rule that reflected a compromise between several industry proposals.

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<sup>23</sup> Unless otherwise noted, this subsection draws heavily on Fink (2011b).

The SEC also defended the interests of the asset management industry against threats of what it and the industry considered ill-conceived legislative changes. Two developments in the mid-1990s and early 2000s illustrate the SEC-asset management alignment. The rapid growth of the industry from the 1980s garnered intense public interest and scrutiny in mutual funds. ICI president Matthew Fink recounts how this heightened public salience of the asset management business fomented calls for regulating the funds industry beyond the traditional rules around fraud and abuse, to be extended to mitigate its systemic implications in case of rapid investor redemption. Some in the banking industry floated ideas to extend bank-like regulations to asset managers in the 1990s. Yet the SEC and the asset management industry were able to fend off these proposals by highlighting the structural differences between the asset management and banking business models.

A more serious threat to the asset management sector came in the early 2000s with the revelations of late trading and market timing by over a dozen asset management firms.<sup>24</sup> The industry again came under the bright light of public scrutiny, with Congress holding several hearings on possible legislative reform of the mutual fund regulation. As a consequence of these hearings, many of which included testimonies from critics of the industry, the Senate crafted a bill that combined many proposals that, in the eyes of industry leaders, would stifle the growth of the industry. The ICI, in an attempt to preempt such punitive legislation, crafted its own detailed reform proposal that centered on strict enforcement, full restitution to fund shareholders who had suffered losses, and adoption of

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<sup>24</sup> Details of these offenses are technically complex. To grossly simplify, late trading “involves purchasing mutual fund shares at the 4:00 p.m. price after the market closes” and “is prohibited . . . because it allows a favored investor to take advantage of post-market closing events not reflected in the share price set at the close of the market.” Market timing, on the other hand, “is an investment technique involving short-term, ‘in and out’ trading of mutual fund shares, which has a detrimental effect on the long-term shareholders for whom mutual fund investors are designed” (New York State Office of the Attorney General 2003).

new SEC rules to combat illegal trading. In short, these were stringent regulatory reforms that the industry itself suggested should be imposed on itself to regain its reputation by snuffing out unlawful investment practices. Between late 2003 and early 2004, the SEC brought a series of cases against mutual fund firms, broker-dealers, and individuals for trading abuses. It also proposed a record number of new mutual fund rules that the ICI endorsed. Seeing the SEC's aggressive actions to address the malpractices, Congress chose to back away from enacting new legislation. The asset management industry, in other words, succeeded in protecting itself from hostile legislation by advocating for reforms that were stringent yet conducive to the survival of the industry. The SEC, for its part, arguably protected its bureaucratic turf by adopting many of the industry's proposals to fend off Congressional encroachment.

What these reform episodes suggest is the very close affinity between the SEC and the asset management industry and its determination to defend its turf over securities and investment management regulation more generally. Brown (2016) analyzes the 2003-4 late trading and market timing debacle and other reforms and concludes that the investment management industry has successfully "captured" the SEC. At the level of ideas, too, scholars have suggested that the SEC has been cognitively captured. The SEC's understanding of financial markets closely approximates the Efficient Market Hypothesis, the idea that prices of financial assets reflect all available information about those securities, and that prices would then provide accurate signals for resource allocation (Deakin 2015). Langevoort, tracing the migration of the efficient market assumptions from academic economists to legal scholarship, and ultimately to corporate and securities law, finds that the SEC began incorporating the rhetoric of efficient markets in its disclosure rulemakings

in the early 1980s (Langevoort 1992, 874-888). Former SEC staff member Norman Poser, too, points to the influence of the Chicago-school laissez-faire economic thinking in the 1980s to explain why the SEC weakened investor protection rules and “embraced the climate of deregulation” that pervaded the government in the last decades of the twentieth century (Poser 2009, 44). In an in-depth study of the SEC, Khademian (1992, 211) challenges the view that the SEC is captured by narrow industry interest, and instead concludes that the SEC’s unique characteristic “is the traditional domination of a single professional view – that of the securities lawyer – over agency decision making.” In this professional view, investors’ interests are best served by focusing on preventing fraud through full disclosure and the prosecution through enforcement. Of course, SEC staff includes teams of economists, whose perspective prioritizes efficient capital markets over investor protection, the SEC’s formal internal structure and decision-making patterns ensure that the views of the legal staff remained dominant.

### ***The 2007-8 Financial Crisis as Critical Juncture***

As we saw in Chapter 3, the start of the subprime mortgage meltdown served as a critical juncture for US financial regulation as a whole. For macroprudential policy in the US banking sector, the crisis yielded two permissive conditions: the control by the Democratic Party over the White House and Congress, and the government’s control over some of the largest private firms that was unprecedented in recent decades. While the Democrats did not pursue deep institutional changes in their landmark Dodd-Frank Act, stability oriented regulatory officials acted as the productive condition that implemented the legislation. The critical juncture ended when the Republican Party took back control of

the House of Representatives in 2010, thereby “locking in” a moderate institutional change in financial regulation.

In the asset management sector, a different set of causal factors were at work that produced a prolonged, low-intensity critical juncture. Here, permissive conditions opened in September 2008 and closed in the summer of 2014, marking a critical juncture of more than six years. That permissive condition was the undermining of the status quo of MMF regulation that was triggered by the failure of the oldest MMF, the Reserve Primary Fund. This failure produced a vigorous debate among policymakers over how to reform MMF regulation. The productive condition that brought about the reform outcome was bureaucratic turf tension between the SEC on the one hand and bank regulators and the FSOC on the other. As we saw in Chapter 3, the subprime mortgage turned banking regulators toward stability orientation, and these officials advanced reform proposals for the MMFs that would have encroached on the SEC’s turf. This threat forced the Commission to adopt MMF reforms to protect its regulatory authority. The reform outcome was of moderate stringency. The critical juncture ended when the SEC settled on a final rule for MMF reforms in 2014.

Bureaucratic turf tension was the only antecedent that exerted significant causal force that produced a moderate reform outcome between 2008 and 2014. The two other explanatory variables that should produce stringent reform outcomes – high political salience of an issue area and the policy orientation of the main regulatory agency – were not present in any meaningful way. First, the subprime crisis also failed to turn asset management regulation into a high salience political issue. This meant that elected politicians, even though they were stability oriented and did pressure the SEC to implement

reforms, did not pursue this issue as seriously as they pursued reforms of other areas of financial regulation. Second, the crisis did not force a change in the SEC's growth orientation. Although there was evidence that some of the SEC commissioners did change their views about the stability of MMFs, they remained a minority of top SEC officials. A stringent reform option, therefore, did not emanate from the SEC.

The next subsection examines the collapse of the Reserve Primary Fund. The sections after that investigate in more detail the political salience of asset management reforms, politicians' policy orientation, the policy orientation of the SEC and bank regulators, and the closing of the critical juncture with the 2014 MMF reforms.

*Permissive Condition.* As Lehman Brothers declared bankruptcy in September 2008, a specter loomed over financial institutions that held investments in Lehman. One of those financial institutions was Reserve Primary Fund. Founded in 1970, Reserve Primary was the oldest MMF and held \$60 billion in assets at its peak in 2008. Beginning in 2006, it began purchasing commercial paper. By August 2008, fully one-fifth of its portfolio consisted of commercial paper issues by investment banks including Lehman Brothers. Reserve Primary was particularly vulnerable to mass exit by its investors because it lacked a parent company that could provide it with liquidity. Over the course of merely two days, investors' demand to withdraw money from Reserve Primary reached over half of its assets. Unable to sell Lehman assets and with no parent company to turn to for liquidity, Reserve Primary was forced to announce a share price of \$0.97, below the \$1 net asset value (Akay, Griffiths, and Winters 2015). "Breaking the buck" among MMFs was exceptionally rare, triggering institutional investors to exit from other MMFs to safe financial assets. Total redemptions across the entire MMF sector were massive, totaling \$114.5 billion during the week of Lehman's collapse, compared to \$7.1 billion in the week before (Anand and Gullapalli 2008). It marked an unprecedented shock to the US asset management industry.

To stem the outflow from MMFs, the government immediately intervened to stabilize short-term markets. The Treasury established the Temporary Guarantee Program to insure investments in MMFs – the first federal insurance for investors in the history of MMFs. The Fed, for its part, created programs to support the purchase of commercial papers from MMFs so as to provide them with desperately needed liquidity (FRB 2008). These measures are widely credited as staunching the outflow of funds from MMFs (Anand and Gullapalli 2008). Yet as we will see below, the collapse of the Reserve Primary Fund

ignited a fierce debate over how to better regulate MMFs to mitigate the systemic implications of their failure.

## **Political Salience of Asset Management Reforms**

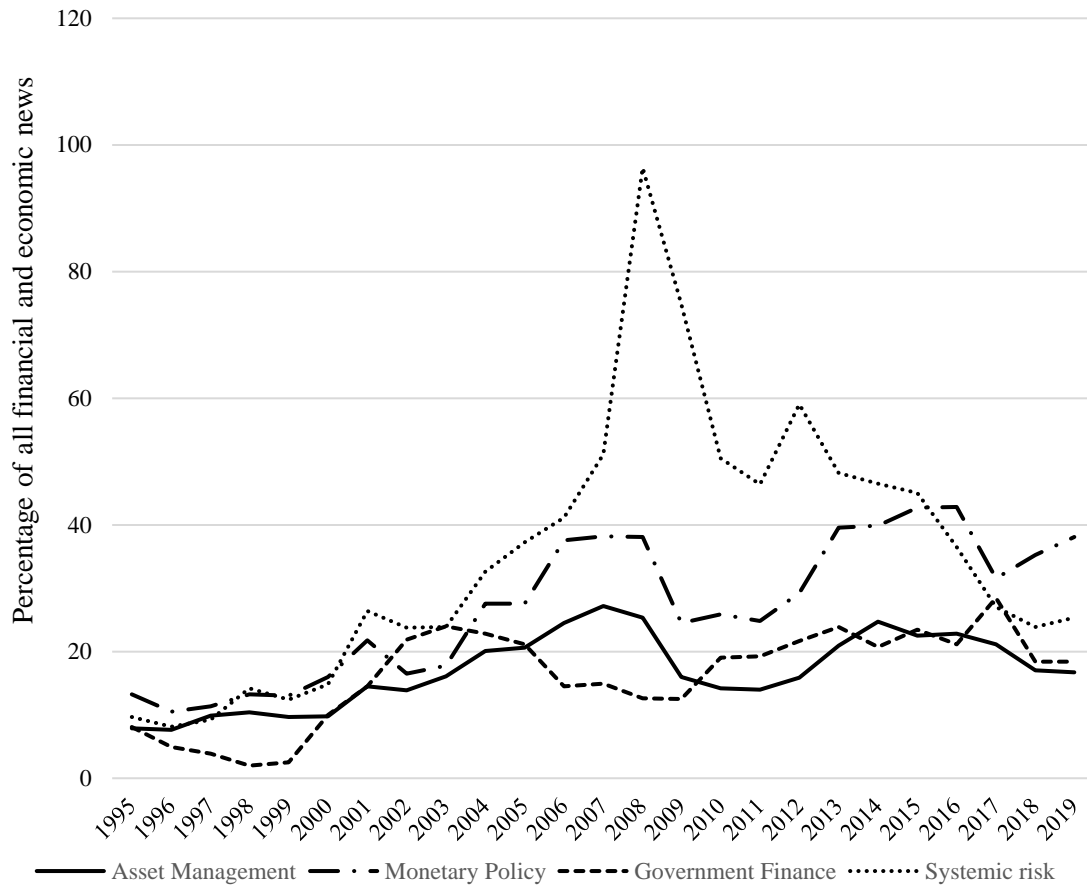
While the failure of Reserve Primary was a major event in the history of the asset management business, it commanded relatively little attention from the broader public in the context of the financial crisis. Figure 6 presents data on newspaper coverage of the asset management industry between 1995 and 2019 and compares it with coverage of issues related to systemic risk in general, government finance and monetary policy.<sup>25</sup>

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<sup>25</sup> The search methods and terms for “Monetary Policy,” “Government Finance,” and “Systemic Risk” are identical to those for Figure 2. For “Asset Management,” I divided the number of newspaper articles from the following search query by the sum of all financial economic news (“Commodity/Financial Market News” and “Economic News”) and converted it into percentages:

"mutual fund" OR "mutual funds" OR "money market fund" OR "money market funds" OR "money market mutual fund" OR "money market mutual funds" OR "index fund" OR "index funds" OR "exchange traded fund" OR "exchange traded funds" OR "exchange-traded fund" OR "exchange-traded funds" OR "Reserve Primary" OR "asset management" OR "investment management"

Figure 6. Political Salience of US Asset Management, 1995-2019



Throughout most of the period under consideration, the asset management sector has been a lower salience issue than systemic risk or monetary policy, and often less than government finance. This was true even in 2006-8, a period that includes a heightened level of coverage related to the failure of the Reserve Primary Fund and the subsequent intense debate over MMF reforms. When the issue of systemic risk accounted for 68% of all financial and economic news, asset management accounted for 25%.

The fact that asset management was a relatively low political salience issue shaped the context of debate over the reform of its regulation. As we will see in the next section, politicians were stability oriented toward the sector, and in particular toward MMFs, but its nicheness as well as the urgency of reforms of other areas of financial regulation meant

that they did not seriously pursue systemic risk policies in asset management. Much of the policy debate, therefore, took place at the level of bureaucratic politics.

## **Elected Political Leaders' Policy Orientation, 2008-2014**

As demonstrated in Chapter 3, Democrats and, to some extent Republicans, were stability oriented with respect to banking regulation during and after the 2008 financial crisis. In keeping with Culpepper's conceptualization of "quiet politics," however, these same politicians did not express much interest in systemic risk reforms of the asset management sector in the context of low political salience of the sector. For about three years after the Reserve Primary Fund's collapse, Congressional hearings in which MMFs were discussed generally highlighted the efficacy of the temporary guarantee measures taken by the Fed and the Treasury to stop the outflows from the industry (U.S. House of Representatives 2008b). When SEC officials were brought in for hearings during this period, politicians questioned them on the Ponzi schemes and other instances of fraud that the SEC failed to detect over the years, and perceived lack of expertise relative to its increasing responsibilities, rarely mentioning Reserve Primary or MMFs (U.S. House of Representatives 2011b, 2011a). In short, for several years after 2008, whether and how to mitigate systemic risks arising from MMFs did not attract politicians' attention.

Starting in 2012, however, congressional committees began to show interest in MMF reforms. Hearings were held to evaluate reform proposals that were put forth by the FSOC and the SEC in 2012, which we will examine in more detail below. The House hearing was largely aimed at politicizing the FSOC proposals, and the Senate hearing was designed to genuinely understand the technical details and potential impacts of the SEC's

proposal (U.S. House of Representatives 2013; U.S. Senate 2012b). In either case, it seems clear that politicians' interest in the issue largely followed the initiatives taken by regulators rather than the other way around. The primary policymaking process played out at the level of regulatory agencies, and the particular force that shaped the MMF reform was the bureaucratic turf tension between the SEC and bank regulators. To see how these tensions manifested, we now turn to the policy orientations of both actors.

## **Regulators' Policy Orientation, 2008-2014**

### ***The SEC's Growth Orientation***

The SEC's tripartite mission, its scope and powers, as well as US securities law more broadly are rooted in a fundamental belief that markets can regulate itself within a robust transparency and legal framework.<sup>26</sup> The Commissioners' speeches and testimonies, as well as the Commission's post-2008 reform agenda show a persistent reliance on information disclosure by financial firms and confidence in investor rationality. Indeed, the discussion of "systemic risk," "too big to fail," "prudential" or "macroprudential" policy rarely surfaces in the rhetoric of SEC officials. When they do, Commissioners' stance toward them are either ambiguous or expressly hostile. For SEC officials, greater information about corporations, their stocks, and all other financial securities would help investors make rational decisions in the aggregate and in the long run. The SEC in the immediate post-2008 period, therefore, can be classified as a growth-oriented regulator.

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<sup>26</sup> "Critical to the model of self-regulation was trust. The regulator was supposed to be able to rely upon the reporting disclosures of the issuer...The SEC intended barebones agency regulation to avoid interference with natural market forces." (Weisman et al., 2014, 1052-3).

In the domain of asset management, the same reasoning applied: if fund managers are transparent about their portfolios, investors can efficiently decide which funds to invest in, thereby both reaping returns and direct capital to the real economy. The essential job of the regulator, then, is to create and enforce a framework that facilitate the provision of that information which would, in turn, allow market mechanisms to reward successful enterprises with capital formation, and punish misjudgment with market discipline. Commissioner Troy Paredes' explanation of this logic is worth quoting in full:

The essence of the disclosure philosophy of securities regulation is that, when armed with information, investors are well-positioned to evaluate investment opportunities and to allocate their capital as they see fit. By ensuring that investors have the information they need to make informed decisions, mandatory disclosure, in turn, leverages market discipline as a means of accountability that stands in contrast to more substantive government oversight of securities-related activities. Through their investment decisions, investors are able to bring pressure to bear on directors, officers, fund managers, and other market participants to serve investor interests. Market participants are incentivized to satisfy investor demands because investors "reward" and "punish" by how they choose to invest (Paredes 2009a).

This fundamental confidence in market forces does not mean that the SEC was naïve to the reality that investors can err. In the same speech, Paredes touched on insights from behavior finance to note that investors are prone to cognitive bias and heuristics. Yet, SEC Commissioners hasten to insist that the same fallibility that can plague investor decisions is also inherent in any regulators' attempts to correct it. Tellingly, Commissioner Paul Atkins invoked Friedrich Hayek to make this point: "Can regulators do the jobs of industry better than industry can? In his last book, *The Fatal Conceit: The Errors of Socialism*, Friedrich Hayek ... labels as the 'fatal conceit' the idea that 'man is able to shape the world around him according to his wishes.' Hayek argues: 'To act on the belief that we possess the knowledge and the power which enable us to shape the processes of society entirely to our liking, knowledge which in fact we do not possess, is likely to make

us do much harm.” Given that “businesses are better than governments at business,” Atkins went on, “the role of regulators is to enforce contracts, protect property rights, and to strive for a transparent marketplace free of fraud” and nothing more (Atkins 2008a).

Remarkably, the SEC’s belief in the rational and self-correcting nature of securities markets was not fundamentally shaken by the GFC. An evaluation of SEC officials’ speeches suggests that the Commission’s diagnosis of the crisis pointed to disparate failures in the financial system rather than to systemic causes, such as the “considerable decline in loan underwriting standards over the past several years (K. Casey 2008b), “market participants’ loss in confidence, especially with complex structures” (Atkins 2008b), “failures of credit ratings and credit rating agencies” (K. Casey 2008a) and “issues in the OTC [over-the-counter] derivatives market” (Aguilar 2008) to name a few. Several of these items became the basis for post-crisis reform. But none of them would shake the SEC’s fundamental belief in the self-correcting dynamics of market forces in the same way, say, that the crisis forced former Fed Chairman Alan Greenspan to admit the error of his confidence in a little-regulated financial system (Grynbaum 2008). To be sure, SEC Chair Mary Schapiro did list “A wide-spread view that markets were almost always self-correcting and an inadequate appreciation of the risks of deregulation” as one of the causes of the crisis in her testimony before the Financial Crisis Inquiry Commission (Schapiro 2010). But she did not elaborate on this statement, and her identification of market ethos as a root cause of the crisis was unique among Commissioners. On the contrary, the above-mentioned causes served to reinforce SEC’s pursuit of its mission to enhance information disclosure to let markets function more efficiently and rationally. “Where unregulated instruments,” Commissioner Casey said in 2008, “can have such an impact on financial

stability or give rise to concerns of market manipulation by potentially driving the market in the underlying security, greater regulatory focus is required. There is no question that greater transparency would go far in helping mitigate these concerns” (Casey 2008a).

The SEC’s ontological assumptions and diagnosis of the crisis directly shaped the third dimension of policy orientation – its policy prescription. The Commission had a full reform agenda in the aftermath of 2008: But for our analysis, two facets of the SEC’s policy prescription are consequential. First, a systemic risk reform of the asset management sector, with the exception of MMFs, was off the table. Second, the SEC viewed with enmity the regulatory changes mandated by the Dodd-Frank Act, particularly anything having to do with macroprudential policy. These two elements of SEC’s regulatory stance, in large part, explain the lax (indeed nearly nonexistent) macroprudential regulation of the US asset management sector.

The second important element of the SEC’s policy prescription was that its leading officials deeply distrusted Dodd-Frank and its emanations. Even before the ink had dried on the new law, commissioners began criticizing its complexity, overreach, hastiness, and the burdens it places on financial firms.<sup>27</sup> The most striking feature of the SEC’s attitude toward Dodd-Frank is the vitriol with which it regarded its macroprudential provisions. In particular, the SEC aimed scathing attacks at the FSOC. A creation of Dodd-Frank, the FSOC is charged with coordinating macroprudential supervision by all ten federal financial regulators. It is also granted the authority to make policy recommendations to regulators

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<sup>27</sup> For example: “...to the degree that Dodd-Frank has overreached in its response to the crisis and increased the overall burden and cost on our financial markets without minimizing or effectively addressing real problems identified in the crisis, our competitiveness may be unduly harmed” (Casey 2011); “I remain troubled that future regulatory initiatives – notably, the regulations implementing Dodd-Frank – will go too far, unduly burdening the financial system at the expense of economic growth” (Paredes 2010).

and to designate large financial institutions as “systemically important,” a label that subject the firms to enhanced supervision by the Fed. To SEC Commissioners, all of these mandates spelled unacceptable regulatory and legal trespassing. In a particularly colorful speech before the American Enterprise Institute in 2014, Commissioner Michael Piwowar rattled off terms of opprobrium aimed at the FSOC: “The Firing Squad on Capitalism. The Vast Left Wing Conspiracy to Hinder Capital Formation. The Bully Pulpit of Failed Prudential Regulators. The Dodd-Frank Politburo. The Modern-Day Star Chamber. You get the point” (Piwowar 2014). Turning to more substantive points, he went on to criticize the macroprudential committee for its alleged lack of accountability, skewed governance structure, lack of expertise, and encroachment into the SEC’s regulatory turf. Commissioner Daniel Gallagher, too, in a speech suggestively titled “The Misguided Quest for Prudential Regulation of Asset Managers,” decried the FSOC’s governance and overreach: “the FSOC that emerged from the final legislation...is a federal bureaucracy dominated by an executive branch cabinet secretary and prudential regulators with unprecedented and extraordinary regulatory powers” (Gallagher 2015).

The persistence of SEC’s growth-orientation also applied to the asset management sector. Asset managers largely eluded immediate post-crisis reform debates because, in the Commission’s view, the asset management sector (especially mutual funds) occupied a special place as a particularly safe segment of the financial sector. For one, mutual funds had recently become a top choice for many ordinary Americans looking to invest their savings. As Commissioner Paredes praised his audience at the Mutual Fund Directors Forum, “It is hard to argue that the mutual fund industry, on the whole has been anything but a success for investors and our capital markets more generally” (Paredes 2009b).

Furthermore, large swaths of the asset management sector weathered the financial crisis relatively unscathed. “In the current environment of the subprime mortgage crisis, a weakened dollar, and rising oil and commodity prices,” Chairman Christopher Cox said in 2008, “the confidence of ordinary investors has been mightily tested...And yet in the midst of these rough seas, many mutual funds have been a relative safe harbor of calm. The funds that are professionally managed, diversified, liquid, free of leverage, and highly transparent have served investors well in these trying times” (Cox 2008).

SEC officials attributed asset managers’ status as a “safe harbor” to their business models, but more importantly to the existing regulatory framework to which they are subject. In 2014, when the issue of extending systemic risk regulation to the asset management industry was becoming more politicized, Commissioner Michael Piwowar said that “asset managers are subject to an existing, robust regulatory regime that already imposes a measure of stability by providing strong investor protections and maintaining fair, orderly, and efficient markets” (Piwowar 2014). SEC Chair Mary Jo White’s exchange with Jeb Hensarling, Chairman of the House Committee on Financial Services, reveal the same belief:

Hensarling: "Many have called the asset management industry part of the shadow banking group, which is obviously a pejorative term. As Chair of the SEC, are asset managers regulated, from your vantage point?"

White: "Yes, they are, and they have been for many years."

Hensarling: "So, they are regulated?"

White: "They are regulated" (U.S. House of Representatives 2014a).

## *Glimpses of Policy Learning by the SEC*

The Reserve Primary Fund's breaking of the buck in September 2008 threatened to disrupt the SEC's persistent growth orientation, causing a schism among SEC officials' policy orientation toward MMFs. SEC Chair Mary Schapiro told the House Financial Services Committee that the MMF market "creates real systemic risk and the potential for the taxpayer to be on the hook again as they were in 2008 when the Reserve Fund broke the buck" (U.S. House of Representatives 2012). Andrew Donohue, director of the Division of Investment Management, also recognized that the massive investor redemptions in 2008 "presented a challenge to the traditional money market fund model" (Donohue 2009). The financial crisis shifted these officials' orientation regarding MMFs. Ontologically, they now believed that these funds cannot absorb large losses without breaking the buck, and once they do, they are vulnerable to investors' proclivity to flee (SEC 2012). As we will see below, the belief that MMFs can cause systemic instability led these officials to prescribe more stringent regulatory reforms.

Other SEC leaders, however, resisted calls for tightening MMF regulation. Norman Champ, director of the Division of Investment Management after Donohue, recalled a meeting in which "a supervisor asked why we should think about making improvement, because after all, 'We didn't do anything wrong.'" The staff at the Commission "perceived the [Reserve Primary's] failure as an isolated, once-in-a-century event, not a systemic problem with the way the SEC did its business" (Champ 2017). Three Commissioners – Tony Paredes, Luis Aguilar, and Daniel Gallagher – publicly opposed further regulating MMFs, arguing that the Reserve Fund was a victim of a broader financial crisis that began in the banking sector and that MMF reforms passed in 2010 was sufficient to ensure their

stability. They proposed permitting MMFs to impose redemption restrictions during market stress (“gating” rules), requiring enhanced disclosures about the risks of investing in MMFs, and conducting further analysis on MMFs’ alleged structural vulnerabilities (Gallagher and Paredes 2012). This divergence in opinions constitutes evidence that policy orientation, as an ideational variable, was exogenous to the underlying material conditions – i.e. the structure and risk profile of the sector under the SEC’s purview (Parsons 2016). But since most commissioners remained growth-oriented toward the asset management sector in general, we cannot interpret this divergence as evidence of an agency-level shift in the SEC’s policy orientation.

### ***Bank Regulators’ Stability Orientation***

The crowded regulatory structure and the sometimes-diverging policy orientations of regulatory agencies paves the way for bureaucratic turf tensions. In the case of the MMF reform debate that acted as a critical juncture after 2008, the turf tensions between the SEC and banking regulators were the productive condition that locked in a particular reform option in 2014.

While the SEC is the only agency responsible for regulating the US asset management industry, its decisions should be understood in the context of the broader US financial regulatory architecture. The FSOC includes all nine regulatory agencies and has broad powers, including issuing recommendations to member agencies which the agency is obliged to implement and, with a two-thirds vote, placing non-bank financial firms under the supervision of the Fed if these firms are perceived to pose a threat to US financial stability. In other words, the FSOC can directly expand the regulatory turf of the Fed at the expense of an agency whose purview encompasses non-bank financial sectors. On top of

this, three of the nine FSOC member agencies are bank regulators – the Fed, the OCC, and the FDIC. The federal committee that coordinates financial stability, then, is skewed toward banking regulators, with the Fed being the most powerful agency among them.

As we saw in the Chapter 3, US bank regulators were strongly in favor of instituting systemic risk reforms in the post-crisis years. Their stability orientation extended to the non-bank sector. Fed Governor Tarullo told the Senate Banking Committee in February 2013 that “additional measures should be taken to reduce the risk of runs on money market mutual funds” and referred to the “set of serious reform options to address the structural vulnerabilities” in that sector proposed by the FSOC (see below) (U.S. Senate 2013b, 45). The Fed warned in 2012, too, that trading activity by leveraged exchange-traded funds (ETFs) during periods of high volatility could trigger a crash in the US stock market (Ricketts 2013). Moreover, the Federal Reserve’s efforts in staving off outflows of funds from MMFs in 2008 heightened the central bank’s prestige relative to that of the SEC.

## **The 2014 MMF Reforms and the End of Critical Juncture**

Alongside this disagreement within the SEC over the systemic threat posed by MMFs, the agency’s regulatory turf was threatened by stability-oriented bank regulators and the FSOC. To preempt such encroachment, the SEC adopted MMF reforms of moderate stringency in 2014, thereby finally closing the debate over MMF reforms. This section examines the process by which this outcome came about.

The SEC’s reputation was suffering even before the 2008 financial crisis. The Commission was regarded as one of the most effective agencies in the federal government in the latter half of the twentieth century. But because of a number of regulatory missteps

in the early 2000s – failure to detect the market timing scandal in 2003 mentioned above, inability to prevent the Ponzi scheme carried out by Bernard Madoff and the collapse of the Reserve Primary Fund in 2008 – “the reputation of the SEC within the industry soured” (Interview 19; Fink 2011, 256). Its reputation had plummeted to such a degree that an expert group called for the SEC to be merged with other financial regulators (Committee on Capital Markets Regulation 2008) and the Dodd-Frank Act mandated the SEC to hire independent consultants to review its organizational structure, operations and funding (Boston Consulting Group 2011).

It was in this context that tensions between the SEC and bank regulators emerged over how to regulate MMFs. As shown in the previous section, US bank regulators were strongly in favor of instituting systemic risk reforms. Moreover, the Fed’s efforts in staving off outflows of funds from MMFs in 2008 heightened the central bank’s prestige relative to that of the SEC. Consistent with their stability orientation, Fed officials and the FSOC proposed two reform alternatives: (1) requiring MMFs to price their shares to reflect the fluctuating value of the securities in their portfolio (“floating NAV”) instead of the traditional stable \$1.00 NAV, and (2) imposing capital buffers tailored to reflect the risk characteristics of the MMF (FSOC 2012; Rosengren 2013).

Seeking a compromise, SEC Chairman Schapiro took the cue from this recommendation in her own proposal (SEC 2012). But the other three SEC commissioners and the investment management industry opposed these proposals. Politically active asset managers argued that a floating NAV would drive away investors and that capital buffers are not compatible with the investment management business model and in fact would backfire by increasing systemic risks (BlackRock 2012; ICI 2013). Overall, the industry

and the growth-oriented Commissioners were united in accusing Chairman Schapiro “of ceding too much control to the Federal Reserve and the Treasury” by aligning with FSOC recommendations (M. Ackerman 2013). Instead, asset managers proposed keeping the MMF business model intact and instead instituting “gating” rules, whereby funds can restrict investor outflows by imposing liquidity fees and temporarily suspending redemptions during market stress (A. Ackerman and Grind 2012).

Faced with two sets of proposals, SEC officials were under pressure to find a compromise that would mitigate the potential of systemic runs while maintaining SEC jurisdiction over MMFs. Schapiro was at a stand-still. As one former SEC official recalled that when Schapiro “was unable to find a majority of the commissioners at the SEC to approve the path forward... She went to FSOC and said ‘we need your help’” (Interview 20). The Treasury, losing patience with the delay in SEC rulemaking caused by the Commissioners’ split, formally requested the FSOC to “take active steps in the event that the SEC is unwilling to act in a timely manner” (Geithner 2012). If the FSOC determined that a MMF posed systemic risk and designed a fund as “systemically important,” that MMF would be moved under the supervisory purview of the Fed. For the SEC, this would constitute an embarrassing affront on its turf.

To avert this outcome, the SEC was under pressure to demonstrate its expertise as a capable regulator of asset managers and investment products. A short exchange during a Senate hearing illustrated this. A senator asked the SEC Chair Schapiro, point-blank, “Should the Fed be the primary regulator of money market funds?” Schapiro replied: “I think the SEC is a fine regulator of money market funds. I think they are at the end of the day ... investment products. And the SEC is truly the Federal Government’s expert on

investment products” (U.S. Senate 2012b, 10). Fed Governor Tarullo agreed. He urged the SEC to move forward with reforms, which he insisted would be “first-best” compared to actions by the FSOC (Tarullo 2012 pp. 25-26).

Faced with this threat to its regulatory turf, SEC worked out a compromise that would preempt bank regulators and preserve the Commission’s autonomy and authority. Finally, after months of negotiations within and outside of the agency, SEC officials reached a compromise proposal that combined the gating rules with the floating NAV. While independent analysts concluded that this proposal “may be less likely to significantly increase global financial stability” than requiring MMFs to hold capital buffers (Hanson, Scharfstein, and Sunderam 2015, 28), the compromise preempted what the SEC and the fund industry considered an encroachment of bank regulation over MMFs (Interview 19). Norm Champ, director of the Division of Investment Management who spearheaded the negotiations that eventually led to the 2014 MMF reform, recounted (perhaps with some hyperbole) the episode in his memoir:

While this was a gratifying victory for American investors in 2014, few of them knew how close FSOC, the Frankensteinish superregulator designed by Dodd-Frank, nearly came a year before to taking the SEC’s place by staging a hostile takeover of the SEC’s role in regulating America’s mutual funds, investment advisers, and other investment management firms. Nothing would have been more disastrous for America’s economic growth and job creation (Champ 2017, 138-9).

Thus the SEC which, despite its internal disagreements over MMF reforms, was still predominantly growth-oriented, was forced into adopting a more stringent reform than most of its commissioners preferred because the agency faced reputational pressure and potential threat to its regulatory autonomy from bank regulators.

## **Regulators' Policy Orientation after 2014**

While the SEC and bank regulators grappled over how to implement MMF reforms, a parallel debate was taking place on how best to regulate other segments of the asset management industry, particularly ETFs. This debate shaped the stringency of systemic risk reforms in the sector after 2014.

The rapidly growing and increasingly complex ETF segment caused the SEC to move toward stability orientation. Yet the SEC's stability orientation had sharp differences with that of the FSOC, and the issue of how to reform mutual funds and ETFs became fodder for a renewed struggle between the two agencies. Ultimately, the contestation between the two agencies left the FSOC's policy prescription discredited, while the SEC's proposals were implemented and its reputation emerged virtually unscathed, even stronger than before.

### ***FSOC's Worries Over ETFs***

ETFs are investment vehicles, often called "baskets of securities," that track a particular index, sector, commodity, or other assets, and can be bought and sold continuously on exchanges. Since being introduced in 1993, ETFs grew into a multitrillion-dollar industry with assets growing by roughly 20% per year between 2005 and 2015, with nearly one in three Americans investing in these funds (Lopez, Markwardt, and Savard 2016; Stein 2015). The dominant type of ETFs is referred to as "plain-vanilla," which replicate an index by simply reconstituting the basket of securities underlying the index. More recently, however, "synthetic" or "swap-based" ETFs have grown in size, which gain higher returns by entering into an asset swap with a counterparty, instead of replicating the

index. The Basel-based FSB, for example, raised concerns that such synthetic ETFs may face liquidity problems if investors demand mass redemptions (FSB 2011).

Faced with an ETF industry's massive expansion, complexity and opacity, the stability oriented FSOC believed that the sector was rife with sources of systemic risks. Its ontology was spelled out in a September 2013 report by its research arm, the Office of Financial Research (OFR). While admitting the paucity of granular data on funds' portfolio holdings, the report identified at least four major sources of systemic risks: "reaching for yield" and herding behaviors by fund managers; redemption risk by investors; excessive leverage that can trigger fire sales; and asset management firms whose size and interconnections make them "systemically important (OFR 2013).

Because FSOC requested this report to inform its decision on whether to designate asset managers as SIFIs, these findings suggested that it would now move on to prescribe such designations. Indeed, Fed Governor Tarullo hinted at this prescription when he called for "the need to broaden the perimeter of prudential regulation, both to certain nonbank financial institutions and to certain activities by all financial actors" (Tarullo 2014). A SIFI designation would require asset managers to conform to bank-like regulation under Fed supervision, including capital requirements and credit limits, which could cost investors hundreds of thousands of dollars over the long-term and impact the structure of the industry (Holtz-Eakin 2014; Rowland 2013). The policy prescription of SIFI designation, therefore, constituted a highly stringent reform option.

### ***The SEC's Stability Orientation***

The SEC, for its part, was undergoing an ideational shift as a result of the alarming growth of mutual funds. To grapple with a systemically important sector, in the words of a

former official in the SEC's Division of Investment Management, "there was a fresh thinking about what [the SEC's] traditional mandate meant" (Interview 21), to the extent that Commissioner Stein worried that "we are starting to see some cracks in the foundation of this framework" established by the 1940 Investment Company Act (Stein 2015). By 2014-15, the SEC's beliefs about asset management were noticeably more stability oriented.

The technocratic expertise that defined the SEC's ontology was housed in its Division of Economic and Risk Analysis (DERA), which published two reports that set the reform agenda for the growing mutual fund sector. The first report raised three reasons why SEC staff are concerned about funds' liquidity risk (i.e., the risk that asset managers do not have enough cash or liquid assets when liabilities are due): large investor withdrawals may force asset managers to quickly sell their portfolio holdings ("fire sales"); investors face a "first-mover advantage," whereby the investors who withdraw early can reap all of their returns while later investors may lose out; and recent events – chiefly the GFC, European sovereign debt crisis, and the growth of funds that invest in emerging market and less liquid assets – highlighted the importance of liquidity risk management practices by asset managers. The second report drew attention to the potential risks that the growing use of derivatives by investment funds may pose, and to the dearth of granular and systematic data on these companies' portfolio holdings (SEC 2015a, 2015b).

Although described in different terms, these concerns resembled those expressed by FSOC, with one crucial exception: nowhere in these reports or SEC officials' speeches do individual asset management firms' systemic importance appear. Accordingly, instead of advocating for SIFI designations, SEC officials advanced four proposals to (1) enhance

data reporting by investment funds and advisers on their use of derivatives, liquidity and valuation of their holdings, and their securities lending practices; (2) require mutual funds and ETFs to implement liquidity risk management programs to mitigate risks of fire sales; (3) require investment advisers to conduct annual stress tests and create transition plans in case of major disruptions in their business; and (4) regulate the use of derivatives by investment funds (White 2014). Unlike in the case of the MMF reform proposal, these proposals gained unanimous approval by SEC commissioners (Grim 2015b).

Because they largely rely on the self-assessment and voluntary compliance by funds, with SEC enforcement only after it detects violation, these proposals constituted moderately stringent reforms. Under the liquidity risk management program requirement, for example, funds would determine a minimum level of liquidity based on an assessment of the fund's liquidity risk. The rules would codify a 15% limit on illiquid assets, consistent with current SEC guidelines (Grim 2015a). Unlike in the case of MMF reform proposal, these proposals gained unanimous approval by SEC commissioners.

## **Dynamics of the ETF Reform Outcome**

Of the proposals put forth by the two agencies, those of the FSOC were roundly defeated. This was because of a tidal wave of criticism against the FSOC that followed the publication of its report. In rare unison, groups from all corners voices their concerns over the expertise, objectivity, and accountability of the report. Five senators from both political parties argued that the “Study mischaracterizes the asset management industry and the risks asset managers pose, makes speculative assertions with little or no empirical evidence, and in some places, predicates claims on misused or faulty information” (Kirk et al. 2014).

Even the progressive advocacy group Better Markets criticized the report for its “inexcusable lack of transparency and disclosure regarding how and why the Report came about as well as how its analysis (such as it is) was conducted and with who’s input and direction” (Better Markets 2013). The SEC added to this chorus of criticism. Particularly egregious to the SEC was FSOC’s apparent disregard for the SEC’s expertise in the domain of asset management regulation. Commissioner Aguilar expressed his dissatisfaction when he said “the Commission’s authority in the mutual fund industry – an industry in which the SEC has capably served as the primary regulator for almost 75 years – has been undercut by the activities of the Financial Stability Oversight Council.” And because only the SEC chairman, and not the four other commissioners, are included in the FSOC deliberations, he decried that “my fellow Commissioners and I have very little control or input over the content and output of projects undertaken by FSOC” (Aguilar 2014). Faced with this barrage of objections, the FSOC agreed to make changes to its SIFI designation process to increase transparency and engagement with asset managers, and later shifted its focus to asset management activities rather than individual firms (US Department of Treasury 2015, 2016).

Proposals put forth by the SEC, on the other hand, were generally well-received. There seemed to be two reasons for this. The first was that the SEC was able to demonstrate its expertise as a mutual funds regulator. Much of this was due to DERA’s sophisticated 2015 reports that compellingly analyzed liquidity in the fund industry (Interview 20). Most of the criticisms it received were over technical minutiae regarding the second proposal to limit investment companies’ use of derivatives. But even here, major asset managers Vanguard and BlackRock, as well as ICI were largely supportive. The president of ICI

characterized “the liquidity risk management rule finalised in October by the US Securities and Exchange Commission ... [is] based on open dialogue informed by data rather than speculation” (Stevens 2016). The liquidity risk management proposal gained enthusiastic support by the Senate Banking Committee and the reform advocacy group Systemic Risk Council.

Another reason for the broad acceptance of the SEC’s rule was that, by this time, financial institutions offering ETFs generally expected and even welcomed closer scrutiny by regulators. Given the growth of the ETF market, proliferation of less liquid and less transparent funds, major asset managers not only anticipated tighter regulation, but they also felt that “it is appropriate for regulators to make sure they fully understand investment vehicles that are becoming more and more popular with investors” (Ricketts 2013).

## **Conclusion**

Until recently, the US asset management sector was not subject to regulations designed to mitigate systemic risks. The legislative and regulatory framework that underlie the sector were shaped in a series of acts related to securities regulation in the wake of the Great Depression, enforced by the SEC and self-regulatory organizations. At the core of this framework were investor disclosure and the enforcement of the fiduciary duty. While these principles still persist today, they are supplemented by measures to limit the potential impact of the failure of investment funds to the rest of the financial system and to the broader economy.

The enactment of these measures took place in two distinct phases. In the first phase, between 2008 and 2014, the SEC adopted a requirement for MMFs to sell and redeem

shares based on a floating NAV and gating rules that allow asset managers to restrict redemptions in times of market stress. In the second phase after 2014, the SEC implemented requirements for asset management firms to establish liquidity risk management programs and enhanced the disclosure requirements of funds' liquidity information. All of these policies were intermediate in their stringency, compared to alternative reform proposals that were considered at the time.

This chapter examined the causal process that led to the enactment of these systemic risk policies. In both cases, the political salience of asset management reforms was low relative to other financial and economic issues at the time. This was particularly true in the first phase, when the problem of bailing out too-big-to-fail banks took center stage. In the context of low salience, politicians in Congress and White House did not seriously pursue the issue of reforming asset management regulation. Instead, the crucial policy contestation occurred between regulatory agencies. Despite the collapse of the Reserve Primary Fund in 2008, the SEC's growth orientation persisted. Officials in the Fed and the FSOC, however, were convinced of the systemic implications of the failure of large and interconnected funds, and advocated for further reforms. Fearing that the reform proposals put forth by the bank regulators would undermine its regulatory turf, the SEC took a preemptive step of adopting rules on floating NAV and redemption gates, which were more stringent than what the SEC originally proposed but were less stringent (and perhaps less appropriate for the investment fund business model) than the FSOC-Fed proposal.

The post-2014 reforms followed a different causal process. This time, the SEC was attentive to the growth and complexity of mutual funds and ETFs, and carefully considered reforms that would help avoid liquidity problems. In other words, the SEC was stability

oriented with respect to these segments of the asset management industry. The FSOC was also stability oriented, but its reform proposal was widely perceived as lacking legitimacy and expertise. Thus, an element of bureaucratic turf tensions was at work, but it was the stability orientation of the SEC that most directly explains the post-2014 reforms.

## **Chapter 6**

# **Japanese Asset Management**

“From savings to investments” has been a slogan of the Japanese government since the 1990s. Part and parcel to its attempt to make Japanese finance more global and competitive has been shifting the bank-based financial system to a more market-based one. Growing the capital markets, in turn, requires incentivizing households to take their savings out of bank deposits and moving them into investments. For Japanese policymakers, the asset management industry has been the strategic bridge that connects untapped household wealth to vibrant capital markets.

In its concerted effort to make the asset management industry more attractive to investors, Japanese policymakers has not implemented any measures designed to limit systemic risk in this sector (IMF 2022). This is in contrast, as we have seen, to the US asset management sector, for which the post-2008 regulatory reform agenda included requirements for MMFs to use floating NAV, permission to restrict investor redemption in times of stress, and regulations around liquidity for mutual funds. This chapter, therefore, asks why systemic risk policies did not happen in the Japanese asset management sector.

In a sense, the absence of systemic risk or macroprudential policies was overdetermined, explained by a combination of two factors. First, the relative underdevelopment of the sector meant that it scarcely posed any systemic risks. Second is the long-standing growth orientation of politicians and regulators with respect to the role of regulation in the sector. Since the inception of the Japanese asset management sector in the 1950s, the government has treated it as a channel through which to stimulate investments in various financial markets. This has meant a gradual liberalization and

diversification of asset management. While the political salience of asset management waxed and waned, there was never been a disruptive event that can be called a critical juncture that shook the way policymakers approached the task of regulating this sector – not even Japan’s banking crisis of the late 1990s or the 2008 global financial crisis. In fact, the pattern of liberalization continued into the twenty-first century and into the post-2008 period.

The next section presents a brief overview of the historical background of this sector, with particular emphasis on the near-constant liberalization and re-regulation that characterized the asset management regulatory framework in Japan. This gradual liberalization demonstrates that there has not been any single event that changed the trajectory of reforms, thus leaving us without a critical juncture. Section 6.3 presents data on the political salience of asset management and shows how the policy agenda of the LDP and DPJ positioned the asset management sector. Without a doubt, the LDP and to a great extent the DPJ sought to stimulate Japan’s financial markets, and they perceived the asset management sector as an important centerpiece of this project. It becomes clear, therefore, that both political parties were growth oriented throughout the entire period under investigation. Section 6.4 offers a similar analysis with respect to the FSA, the sole regulatory body for the Japanese asset management sector. Since its creation in 1998, the FSA has sought to nurture a more market-based financial system, partially by liberalizing and re-regulating the asset management business. This outlook was not shaken either by the NPL crisis or the 2008 GFC. In fact, these crises seem to have reinforced its growth orientation with respect to the sector.

## **Incremental Liberalization**

Banks were the financial engine behind Japan's rapid economic growth. But rebuilding the industrial sector in the immediate postwar years required far more capital than the banking sector could muster. Japan's tax base had diminished, the government issued large amounts of bonds and the corporate sector issued even larger volumes of equity in search of capital. The demand for funds far outstripped its supply. Asset management was among the instruments that the government hoped would channel savings into the equity and bond markets. Whereas the asset management sector's birth in the US had an economic logic, its origins in Japan followed a political logic of the developmental state to allocate funds to breathe life into a struggling economy. To this end, the Act on Investment Trusts and Investment Corporations was passed in 1951 to form the basic framework for the contemporary asset management business in Japan (JITA 2002).

Initially, the regulatory framework was restrictive. Overseen by the MOF in conjunction with the industry's self-regulatory organization, the Japan Investment Trust Association (JITA), asset management could only be offered by securities firms directly to customers and they were mostly focused on domestic securities. Sales commission, trust fees and managers' compensation were capped. The asset classes that each investment product could hold in its portfolio were specified and restricted.

But a gradual process of liberalization began soon after the sector's inception. Unit-type investment trusts were supplemented by open-end investment trusts in 1952, bond investment trusts were introduced in 1961, foreign asset management products could be sold in Japan starting in 1972 (Sugita 2019).

This trend picked up pace once the globalization of Japanese finance began in the 1980s. The aim, both of the MOF and the government, was to stimulate the asset management sector for its own sake and to shift more savings into investments. They not only pursued liberalization continued but also emphasized enhancing investor protection and transparency to attract more investors. Companies entrusted with the management of funds could now sell funds directly to investors. Medium-term government bond trusts were introduced in 1980 and money market funds (MMFs) and exchange-traded funds (ETFs) made their appearance for the first time in the early 1990s. The use of derivatives by investment managers was permitted to increase the amount of funds they managed. The MOF began to address practices by investment managers that were detrimental to investor interests, such as prohibiting unnecessarily frequent short-term trading to maximize management fees (Asahi Shimbun 1994).

The Big Bang financial reforms of the late 1990s further liberalized the sector. The Japanese Investment Trust Association (JITA) called the reform package that was passed as part of the Big Bang reforms in December 1998 as “the most drastic reform of the investment trust system since its establishment in 1951” (JITA 2014, 10). Before these reforms, only securities firms were allowed to sell investment management. Now banks could also offer these products, which intensified the competition between banks and securities firms. At the same time, the Big Bang reforms allowed securities firms to compete more freely by removing the floor on management fees. The reforms of the late 1990s also encouraged foreign financial institutions to enter the Japanese asset management market, directly offering their services to retail investors. This encouraged

several large Japanese financial institutions to partner with American and European banks to introduce asset management services (Asahi Shimbun 1998).

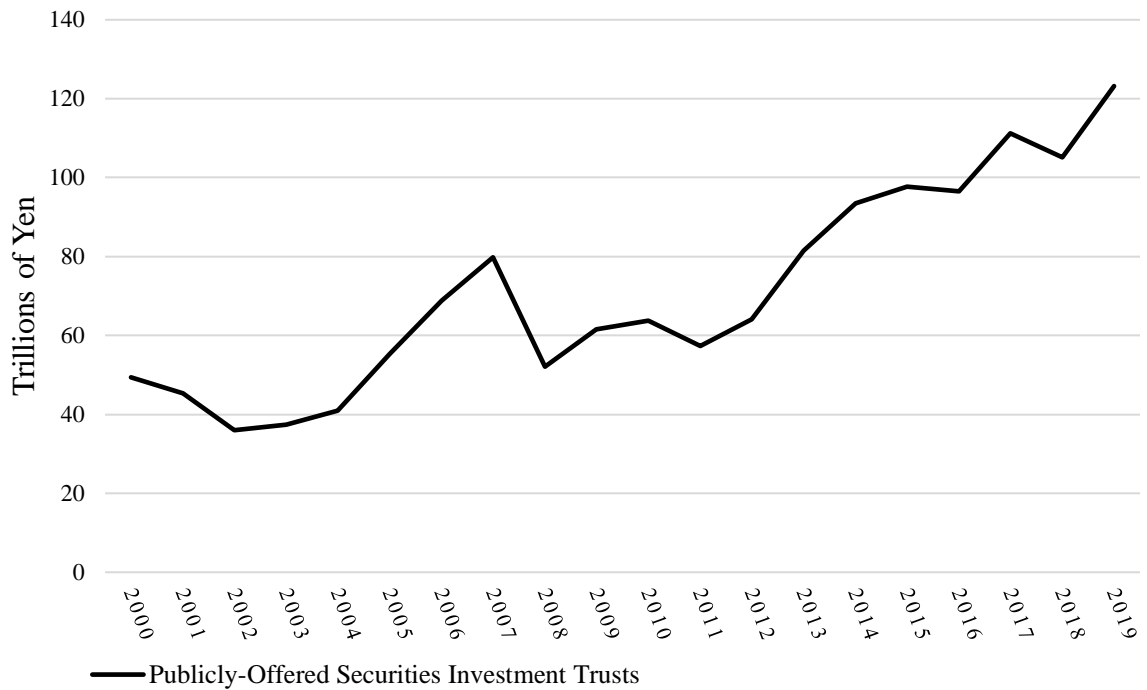
The early 2000s saw further reforms designed to attract investments. In 2000, Exchange-traded funds (ETFs) and Japan Real Estate Investment Trusts (J-REITs) were introduced. Before this, financial institutions could only include financial securities in their investment management portfolios. Now real estate assets could be targets of investments. Taxes on dividends and profits on investment redemption were also cut from 20% to 10% and this tax cut was extended twice. More significantly, the government introduced Nippon Individual Savings Accounts (NISA) in 2014. This was spurred by studies showing that most Japanese citizens had little to no savings for retirement and that most of the savings they did have were in the form of cash rather than investments. NISA was modeled after the British Individual Savings Accounts to nudge people to build up financial assets and to do so by moving assets from savings into investments. Several incentives were built into the scheme, such as the ability for investors to start with small amounts – as low as ¥500 or ¥1,000 (\$4.74 and \$9.49, respectively, at the end of 2014) and the tax exempt status of capital gains and dividends that these investments earned (Otake 2013).

To be sure, liberalization of the sector was far from reckless deregulation. As reforms permitted room for new products and sales avenues, they also strengthened protection for investors and the transparency of investments and trading activities by managers. For example, the Financial Instruments and Exchange Act (FIEA) that was adopted in 2006 had three major aims: (1) to encourage the use of financial services and instruments by extending investor protection and increasing the convenience of financial investments; (2) to increase the perceived reliability in the securities market by enacting

rules to ensure fairness and transparency; and (3) to reform existing laws to conform to international standards in an increasingly globalized market. Between 2009 and 2012, a series of rules were passed that fulfilled these principles (Tamura 2019).

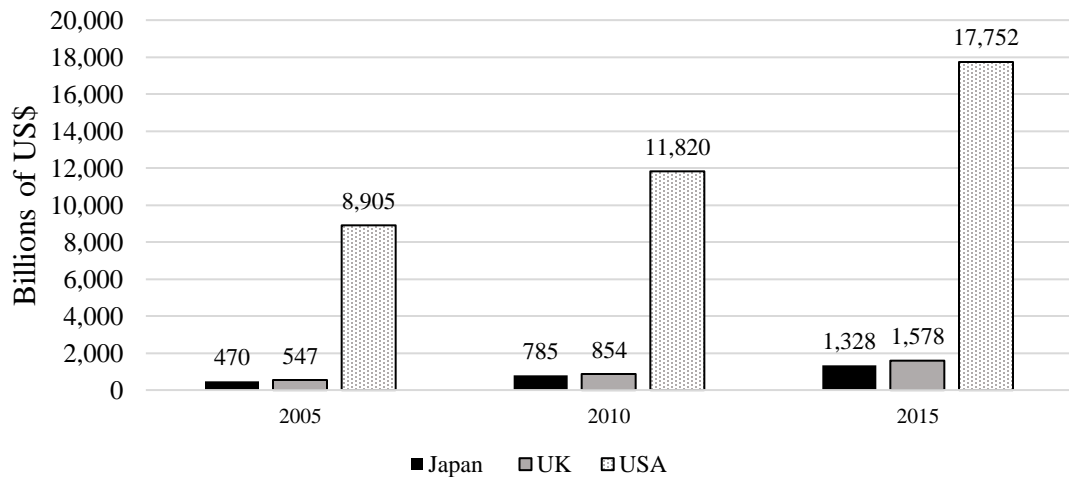
Despite these moves to liberalize the industry, the asset management business consistently struggled to expand. Its total assets under management (AUM) began to rise rapidly in the 1980s, surpassing ¥10 trillion in 1983 and reaching ¥58.64 trillion in 1989. With the collapse of the stock market and real estate bubble in the early 1990s, however, AUM also dropped and remained under ¥50 trillion in most years throughout the 1990s. Perhaps owing to the liberalizing reforms of the late 1990s, investments in asset management slightly rebounded, but still remained around or under ¥50 trillion in 1999 and thereafter (Sugita 2011). A resurgence in stock prices between 2005 and 2007 pushed total AUM upwards again, nearly reaching ¥80 trillion at the end of 2007, highest in the history of Japanese investment management to that point. The disruption of the GFC brought this amount down again to ¥52 trillion in 2008 (Figure 7). Nomura Research Institute called 2008 an “abysmal year” for the asset management business (Nomura Research Institute 2009).

Figure 7. Total Net Assets Under Management of Investment Trusts, 2000-2019



Source: JITA (2019), 2

Figure 8. Assets Under Management in the US, UK and Japan



Note: All figures are for the 4th quarter of that year.

Source: JITA World Investment Trust Statistics, various years

The important point for our analysis is that neither the setbacks in the 1990s nor in 2008 put a brake on the trend toward greater liberalization. In fact, the outflow of funds and the decline in asset values in both periods reinforced policymakers' eagerness to encourage more people to pour funds into investment products. Indeed, unlike the Japanese policymakers' approach to banking regulation, the regulation of the asset management sector had no disruptive moment that can be called a critical juncture. Instead, reforms followed an incremental pattern of liberalization and market-oriented re-regulation designed to make it easier for regular people to shift from savings to investments, and thereby to stimulate Japanese financial markets.

## **Political Salience of Japanese Asset Management**

Judging in terms of the frequency of its coverage in national news, the Japanese asset management sector commanded relatively high political salience throughout the period under investigation. As we will see in this section, this relative salience reflected the attention that politicians in government directed to the sector. For these political leaders, asset management and the investment business more generally constituted a key component of their growth-oriented agenda to jump-start a stagnant economy. Even the left-wing DPJ, when it wrestled power away from the LDP in 2009-12, did not fundamentally deviate from this growth-oriented agenda. In other words, political leaders were consistently growth oriented with respect to asset management regulation. This factor in large part explains the FSA's growth-oriented policy priorities for the asset management sector that we will examine in the next section. Ultimately, the growth orientation of both

the government and the regulator explains why systemic risk regulation did not appear on the asset management regulatory reform agenda in Japan.

Figure 9 shows the political salience of the asset management sector in Japan over the period under consideration.<sup>28</sup> It also plots newspaper coverage of bailout (of banks, securities and insurance companies) and monetary policy for comparison. As these comparisons show, asset management was a higher salience issue than the either bailout or monetary policy throughout most of the period. A significant portion of the coverage during these periods are articles that explain to readers the ins and outs of specific investment products or the policies that the government was considering at that time and their implications for them as investors. These types of articles suggest both a concerted effort by major newspapers to increase buy-in from their readers into the investment business (and perhaps implicit cooperation with the government to increase AUM among asset management companies) as well as a growing interest among the lay public about investing. In this public attention toward the asset management business, many shortcomings and inefficiencies in the sector came to light, including high fees on the sale and management of specific investment products and the lack of transparency regarding the underlying portfolio holdings and trading strategies. These were the concerns that the government sought to address in their reforms in their attempt to stimulate the sector.

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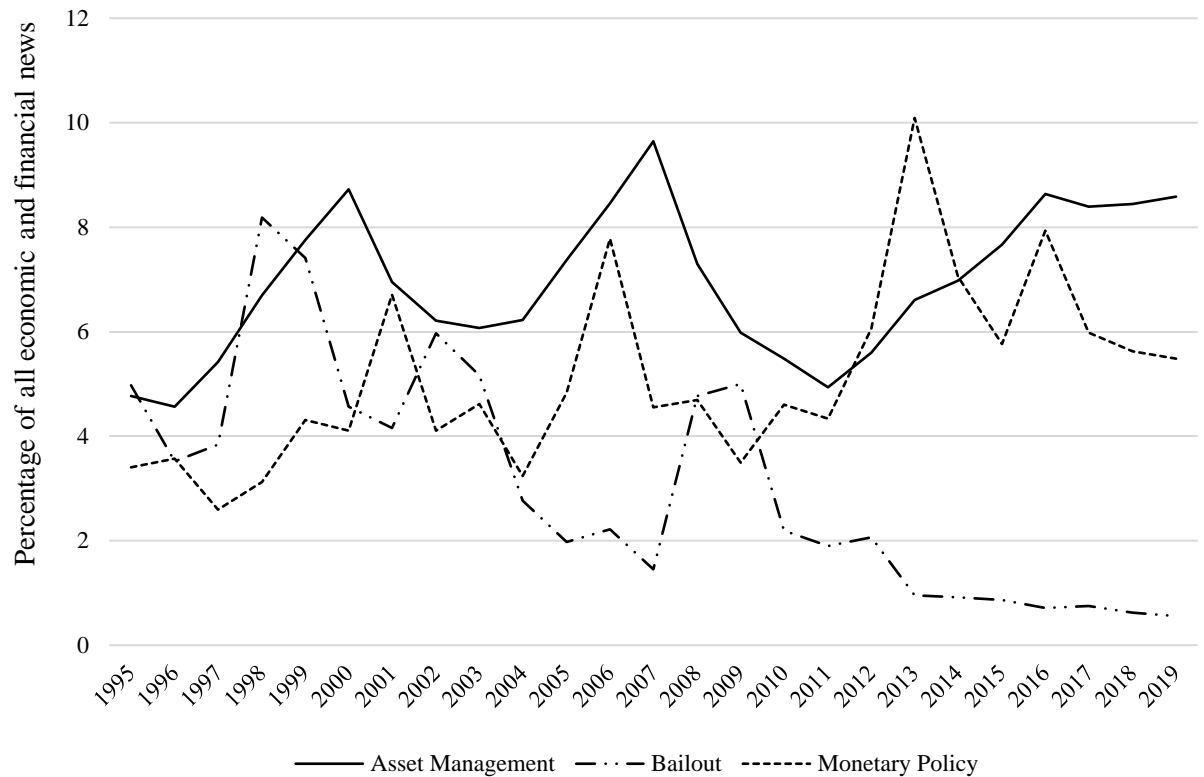
<sup>28</sup> The newspapers and the databases I used are identical to those for Figure 4.2. Here, the search terms I used were the following (English translations are followed by bracketed Japanese original):

“Investment management” [投資信託 and 投信]

“Asset management” [アセットマネージメント and アセットマネジメント]

I divided the sum of the search results from these terms by all economic and financial news to arrive at the proportion.

Figure 9. Political Saliency of Japanese Asset Management, 1995-2019



Within this context of relatively high saliency, the coverage on asset management saw ebbs and flows. Particularly noteworthy are the crescendo in coverage between 1996 and 2000, between 2004 and 2007, and between 2011 and 2016. At the end of each of these intervals, the ruling LDP published key economic reform programs which envisaged the asset management sector as a driver of growth. In other words, LDP politicians paid close attention to the asset management industry and the policies regulating it, attempting to reform them in various ways to increase the assets it managed. We now turn to examine the specific ways in which politicians’ growth orientation manifested itself.

The mid- to late-1990s were a tumultuous era for Japanese finance and financial regulatory architecture. A series of failures of housing loan companies and banks, the

MOF's proposal to use taxpayer money to liquidate these firms, and the wining and dining scandals involving MOF officials enraged the public, severely undermining the ministry's reputation and authority. This public outrage prompted the LDP to break off the inspection and supervision functions from the MOF and transfer it to a newly created agency, which eventually became the FSA. Concurrently, several politicians within the LDP and its coalition partners, as well as key senior MOF officials formulated a drastic financial deregulation package. They were motivated to carry out these reforms in response to the accelerating globalization of finance, and in particular, the liberalizing capital markets in New York, London and Singapore that threatened to attract investments away from the Tokyo market. The so-called Big Bang reforms of 1997-8 were the culmination of these deregulatory measures. The Big Bang reforms were informed by the principles of "free, fair and global": "free" meant liberalization and deregulation to ensure that market principles governed financial markets; "fair" conveyed the value of market transparency and reliability; and "global" pointed to the need to harmonize Japan's standards and supervisory regimes with international best practices with the aim to make Tokyo an international and advanced financial market (Toya 2006, chap. 5). As we saw earlier, these reforms deregulated the asset management industry in significant ways.

Just a few years later, further reforms were enacted in 2000. Until this point, a different set of rules governed each investment product. The 2000 reforms sought to standardize the rules for various products to enhance the convenience for investors. Heizo Takenaka, a renowned economist and Minister of State for Financial Services at the time, explained the Cabinet's thinking behind these legislative reforms:

Our country possesses a very high growth potential. We concentrate household savings and invest in sectors with that high growth potential...By doing this, the

Japanese financial system was able to realize its latent potential for high growth, especially during the rapid growth period [in the 1960s and 70s]. That financial system model functioned effectively as long as growth was rapid and business risk was low. But with the maturing of the economy, the growth potential dropped. Risk factors are also heightened in this context ... Dispersing these risks, securitization, and creating the legal environmental that prioritizes direct financing are tasks demanded of the government (Committee on Financial Affairs 2004).

This sentiment was given formal shape in the “Economic and Fiscal Reform 2007” that Prime Minister Abe Shinzo’s Cabinet published. It spelled out the government’s overarching economic priorities that cut across all relevant ministries for that year. The three high-level goals were: 1) realizing growth amid declining population; 2) departure from post-war regimes; and 3) presenting a new national image (Cabinet Office 2007a). As we will see below, among the many concrete actions it enumerated to increase the economy’s productivity, the Cabinet instructed the FSA to draw up plans for enhancing the competitiveness of financial and capital markets, including the asset management industry.

In a rare historical occurrence, the LDP lost its majority seat in the Diet in 2009. The DPJ government that took power between 2009 and 2012 was less interested in stimulating the capital markets and instead heavily focused on aiding those segments of society whom it considered the economically weak (such as SMEs, children and workers). Yet the DPJ’s overall approach to economic policy was no less growth oriented than the LDP. For example, the “New Growth Strategy” that it published in 2010 asserts a threefold strategy of strong economy, strong public budget, and strong social security. “Strengthening public finance, social security and the safety net, along with creating employment,” read the first chapter of the plan, “will dispel citizens’ uncertainty over the future and serve as the basis for economic growth” (Cabinet Office 2010, 2). Regarding the financial sector, the Cabinet characterized it as a support role for the real economy and

business and itself becoming a growth sector that leads the economy. In more concrete terms, this meant supporting companies of all sizes and investment projects both domestically and abroad, creating a financial sector that can extend loans to all types of borrowers, and enhancing the international competitiveness of the Japanese financial sector. A year after the DPJ published the “New Growth Strategy,” the Great East Japan Earthquake and the ensuing nuclear disaster lent urgency to the economic recovery. In short, while it did not directly prescribe reforms for the asset management sector, the DPJ government did not fundamentally depart from the growth orientation of its LDP predecessor.

When the LDP returned to power in 2013, more concrete measures for the asset management industry was back on the agenda. At the start of his second cabinet in January 2013, Prime Minister Abe stated bluntly that “The greatest issue and indeed an urgent issue for Japan is the revival of the economy” (Prime Minister of Japan and His Cabinet 2013). As the groundwork for the Abenomics policy package, the Cabinet put forth its Emergency Economic Measures for the Revitalization of the Japanese Economy in January 2013. In its plan to revitalize the financial markets, the Cabinet outlined goals of becoming the top financial center in the Asia region and channeling the massive pool of Japan’s household savings toward growth sectors and toward building retirement savings. To these ends, it proposed to stimulate the J-REIT market and to introduce NISAs to facilitate depositors begin investing with small sums (Prime Minister’s Office of Japan 2013).

Accelerating the movement of funds “from savings to investments” through NISAs was a long-term and multi-stage political project. The government’s motivation for initiating it was clear. By 2013, the Japanese population was ageing and began its

seemingly irreversible decline. This made it unlikely that the share of investments from the household sector will grow substantially. Indeed, household funds as a share of total assets managed by the asset management sector dropped from \$721.9 billion in 1990 to \$237.4 billion in 2013, a precipitous 67% decline (Sugita 2014). It was no wonder, then, that the Financial Services Minister Asō encouraged financial institutions to incentivize the remaining household funds, which were laying idle in bank deposits, to be shifted into investments: “Escaping deflation calls for turning ‘sleeping money,’ ‘sedentary money’ into ‘active money,’ ‘working money’” (Asō 2013). The asset management business and the wider investment sector were the portal through which to lure these funds to jumpstart the economy.

Despite the change in the governing party from the LDP to the DPJ in 2009 and the change back to the LDP in 2013, political leaders remained fundamentally growth oriented. The Diet, for its part, did not object to the government’s bullishness. In the early 2000s, when the Japanese asset management industry was experiencing a rise in AUM, the concern that Japanese lawmakers raised were about fiduciary duty and transparency. They worried that individual investors were naïve to the risks of investing, and that investment management companies were selling services without sufficiently explaining the fee structure or the mechanics of investing (Committee on Financial Affairs 2007). In other words, even when the sector was expanding rapidly, the main concerns voiced in the legislature were not regarding systemic risks.

Although their attention to the asset management sector itself waxed and waned, therefore, politicians were consistently growth oriented in their approach to the financial sector and the broader economy. It should be noted again that this growth orientation did

not mean a one-sided push toward deregulation. Indeed, the history of Japan's investment management business has been one of market-making: creating a legal framework in which financial firms can offer a wide range of products and services, and in which investors can trust and easily access those products and services. But as we saw in the previous section, Japan's macroeconomic conditions refused to cooperate with the government's priority to stimulate the sector. Importantly for our purposes, political leaders' push to create a vibrant market and the asset management sector's stubborn stagnation meant that addressing systemic risk did not enter the policy discourse.

## **Regulator Preferences**

The MOF's regulatory authority over securities markets and asset management was transferred to the FSA with the latter's creation in 1998. The FSA has been unambiguously growth oriented with respect to the asset management sector and the larger securities markets ever since. In fact, both the NPL crisis of the late 1990s and the 2008 GFC reinforced the FSA's conviction that the sector needs to be stimulated and expanded through liberalization and re-regulation. Given this policy priority on encouraging the sector's growth, regulatory measures to reign in risks skewed toward risks arising from managing portfolios of particular funds, rather than systemic risks. As was the case with the two political parties we saw above, the relative underdevelopment of Japan's asset management sector and the FSA's growth orientation meant systemic risk regulation had no traction.

To show the FSA's policy approach to the asset management sector, this section describes two policy direction reports that it published and the context surrounding those reports.

***Plan for Strengthening the Competitiveness of Japan's Financial and Capital Markets, 2007***

As discussed in Chapter 4, the FSA published its policy direction titled "Plan for Strengthening the Competitiveness of Japan's Financial and Capital Markets" in 2007. When we examined the reform processes in the Japanese banking sector, this Plan was important because it laid out the FSA's Better Regulation initiative. For the purpose of this chapter, as its title suggests, much of this Plan was concerned with stimulating the financial and capital markets. Its introduction makes this abundantly clear:

In order to sustain growth of Japan's economy as the population is aging, it is essential that the country's financial and capital markets provide good investment opportunities to the financial assets held by Japan's household sector that amount to more than 1,500 trillion yen (about 14 trillion US dollars), and to supply domestic and foreign companies with adequate amount of capital for growth. Given ever intensifying global competition among markets, strengthening the competitiveness of Japan's financial and capital markets has become a pressing policy issue, so that they will be able to serve the needs of both domestic and foreign users and fulfill their roles sufficiently. It is also expected that, with such markets, Japan's financial services industry will be able to generate high value added, thereby contributing to sustainable economic growth (JFSA 2007, 1).

Among the four high level objectives set out in the Plan, the first objective was particularly relevant for the asset management sector. With explicit comparisons with developments in overseas markets, the Plan notes that "it is necessary for Japan's markets to allow the provision of a broad range of opportunities for investment and fund-raising," particularly by diversifying products like exchange-traded funds (ETFs) and J-REITs.

For the FSA, ETFs are a convenient tool for encouraging the participation by retail investors in financial markets. This is because ETFs "enable investors to diversify their

investment easily and effectively at lower costs compared with investment in individual stocks ... [and] enable more flexible trading decisions as they can be traded in a timely manner at market prices in exchanges.” Diversifying J-REITs involved incorporating overseas real estate properties in J-REITs’ portfolios by developing listing rules by securities exchanges and ensuring investor protection measures (JFSA 2007, 3–4).

The proximate cause of the FSA’s Plan was the Cabinet’s “Economic and Fiscal Reform 2007” which instructed the regulator to put together a plan for strengthening the competitiveness of financial and capital markets. But the fundamental ideas embedded in the Plan long preceded the LDP’s instructions. In 2001, Financial Services Minister Yanagisawa brought together an advisory committee composed of academics, think tank experts, journalists, and financial institution professionals to discuss the future of Japan’s financial system.

Much of the committee’ discussion naturally focused on the causes of the NPL crisis, a stock-take of the Big Bang reforms, and the inefficiencies in the financial sector more generally. But in forward-looking discussions, there was a consensus among the participants that Japanese finance has historically been too bank-based and that there needs to be a better balance between direct and indirect financing. Strikingly, there was a sense in which Japan’s banking crisis of the late 1990s reinforced participants’ belief that a shift toward a more market-based financial sector would make it more resilient against banking crises. As the Financial Services Minister himself remarked, “one lesson that countries have learned from their experience of financial crises is that the more reliant the system is on banking, the larger the economic and social cost and impact of crises” (JFSA 2001). To achieve this balance, the participants proposed the creation of exchanges for securitization

and real estate securities (i.e., J-REITs), fostering the framework in which a wider range of financial products tailored for diverse client needs, and requiring disclosures for these products.<sup>29</sup> The FSA's 2007 Plan was one of the ways in which these ideas took concrete shape.

As we saw in Section 6.2, the Japanese asset management sector was heavily impacted by the 2008 GFC. Yet this did not derail the FSA's resolve to pursue its 2007 Plan to shift toward a more market-based financial system. A report by another advisory committee, brought together by the FSA in July 2009, arrived at a nuanced conclusion about the desirability of a more market-based financial system. The report acknowledged that securitized financial products including mortgage-backed securities, over-the-counter derivatives, and other factors related to financial markets were the main triggers of the crisis. It also pointed out that Japan's financial system was able to weather the shock because it was less market-based than the US and Europe, Japanese banks had a stable funding source, and BOJ actions. Yet it also explained that the steep drop in stock prices and the difficulty that companies faced in issuing corporate bonds and commercial papers were results of the lack of depth of the investor base in Japan. So while giving a nod to the "concern that if the weight of market-based finance grows in Japan, the risk of a financial crisis originating in the markets may increase," the report ultimately supported strengthening market-based finance. Its reasons are familiar by now: providing households with investment opportunities to build up financial assets; channeling funds to firms in the context of a stagnant economy and a declining population; bolstering the international competitive of Japan's financial markets; and "the banking and market sectors complement

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<sup>29</sup> The summaries of all ten meetings of the discussion group are available in Japanese at [https://www.fsa.go.jp/singi/singi\\_nihon/si\\_nihon.html](https://www.fsa.go.jp/singi/singi_nihon/si_nihon.html).

each other in withstanding shocks” (JFSA 2009, 7). In short, the GFC did not trigger a change in policy experts’ belief in the need to shore up financial and capital markets in Japan. In fact, by arguing that a financial system that is more evenly balanced between direct and indirect financing can better withstand shocks, these experts doubled down on their conviction.

Lest there be questions that this conviction was confined to this advisory committee, the speeches of the FSA’s top officials show that they also subscribed to a similar belief. As FSA Commissioner Mikuniya told the Japan Securities Dealers Association in September 2010, “For a time, there were very skeptical views toward capital markets because of the aftermath of this financial crisis of a global scale. But even then, the task for the financial system is to provide well-balanced intermediation between both the banking and markets” (Mikuniya 2010).

### ***Strategic Directions and Priorities, 2016-17***

Fast-forward several years, the LDP returned to power in the 2012 general election. With the start of the second Abe administration in December of that year, the Cabinet rolled out its Abenomics economic reform program. According to the Cabinet’s instructions, the FSA and the MOF set up the Panel for Vitalizing Financial and Capital Markets to compile “measures to make Japanese financial and capital markets more attractive” (JFSA 2013). Between 2013 and 2015, this panel issued several statements and reports. These reports, too, attest to the advisory committee’s enduring belief that the financial sector – and the financial markets in particular – is a critical component to stimulating the Japanese economy.

The recommendations contained in the panel's reports remained consistent. With respect to retail investors, like previous FSA and advisory committee reports, the panel emphasized the need to strengthen the asset management business to entice the formidable pool of household savings to shift to investments. Noting that as of March 2014, about 13.7% of total household financial assets were invested in risk assets such as investment trusts and equities, the panel lamented that "This level is extremely low compared with global standards" (JFSA 2015, 12). Its final report recommended several remedies directed at asset management companies themselves, including 1) focusing on nurturing larger-scale investment funds to drive down costs, 2) switching to a business model based on fees, rather than sales commissions, as the primary revenue source, 3) ensuring that investment management professionals are fully independent from the companies that sell investment funds so as to avoid conflicts of interest, and 4) improving the transparency of investment products and disclosure of risks. While acknowledging that the use of NISA (and Junior NISA for people younger than twenty years of age) as a way of building retirement wealth has been moderately successful, the report also recommends that NISA be promoted more aggressively to encourage young people to invest. For institutional investors, perhaps the single most significant recommendation that the report gave was for the Government Pension Investment Fund (GPIF) to diversify its portfolio away from a heavy reliance on Japanese Government Bonds to improve returns for pension recipients and to increase investment in growing firms.

Many of the panel's recommendations were reflected in the FSA's policy priorities a few years later. The FSA began publishing its annual Strategic Directions and Priorities (hereafter referred to as Financial Report) in 2015, which reviews the progress of initiatives

in the previous years and sets out goals and strategies for the next. The Financial Report published for 2016-17 identifies many of the same problems and recommends the same measures as the advisory committee's 2015 report.

In the context of prolonged deflation, aging and shrinking population, and the large share of household financial assets bound up in cash and bank deposits, the FSA professed the need to push households to sustainably build capital through more balanced portfolios. The Financial Report showed that Japanese household financial assets grew by 1.54 times from 1995 to 2016, much lower compared to the 3.32 times in the US in the same period. These divergent patterns are evident in Figure 6.2 above. When comparing the investment fund landscape, the Report found that Japan has a high and growing number of investment funds whose AUM is small and stayed stagnant since 2008. In the US, on the other hand, a much smaller number of large funds dominate.

The FSA attributed these differences to several factors, including the fact that financial institutions tend to prioritize products with high commission fees and that consumers are not effectively notified of the commission fees they pay and the risks of the financial products they buy. In response, the FSA vowed to establish codes and principles for customer-oriented business conducts so that financial institutions fulfill their fiduciary duties, encouraged enhanced disclosure on commission fees and improve explanatory materials on the risks of financial products, and promote voluntary disclosure by financial institutions on their policy on customer-oriented business conducts. Beyond these, the FSA also posed for itself what is now a familiar set of measures: work to improve the NISA tax benefit scheme to promote long-term, regular and diversified investment; promote practical investment education and financial literacy for beginner investors; and ensure that

consumers can make a good comparison and well-informed choices when purchasing investment products (JFSA 2016b, 2016a)

In summary, the FSA viewed the role of policy and regulation of the asset management sector as one of spurring its growth. This was because the FSA saw asset management as one of the drivers of change that could wean Japanese finance away from bank-based toward more market-based. The NPL crisis of the late 1990s convinced experts and regulators that a heavily bank-based financial system is exposed to risks that accrue in the banking sector, and a more balanced system could diffuse these risks. The GFC did not dislodge this belief. In fact, the subprime crisis, to some extent, reinforced this belief among Japanese experts and policymakers. Growing the asset management sector was also desirable to overcome stubborn structural challenges that afflicted Japan. Deflation and stagnant economy, aging and declining population, low profitability and productivity of firms, and the relatively low level of household financial wealth all called for the mobilization of “savings to investments” through asset management. This agenda also played into Japan’s ambition to become a global financial center.

Given these factors, it seems natural that policies to mitigate systemic risks are not mentioned in policy discussions among politicians, regulators, and financial experts. An underdeveloped asset management sector scarcely poses systemic risks. The patterns that alarmed US regulators and international policymakers – rapid growth of certain asset management products and the discrepancy between illiquid assets on funds’ portfolios and the ability of investors to redeem their funds – simply did not exist in Japan. In contrast, the Japanese asset management products are comparatively unpopular and lacks vibrancy.

And when a regulators' and politicians' top priority is to stimulate an economic sector, policies designed to erect safeguards in and around it will seem wholly out of place.

## **Conclusion**

Of the cases compared in this dissertation, the Japanese asset management is the only sector without policies designed to mitigate systemic risks. Once we peer into the evolution of this sector and way politicians and regulators perceive it, this ceases to be a puzzle. In a bank-based financial system, Japan's asset management sector was historically underdeveloped. This is despite the persistent effort to deregulate and liberalize the investment business and the wider financial market since the 1950s and into the 21<sup>st</sup> century. Given this relative lack of popularity and growth, politicians and regulators alike aimed to make asset management and its products more appealing to the broader population. Their reasoning was mainly threefold: a financial system that strikes a balance between bank-based and market-based has a number of advantages; savings should be channeled to investments to increase funding for Japanese firms; and in a country with low interest rates and an ageing population, investing is far more preferable than bank deposits in increase individual and household wealth for retirement. In this context, neither political parties nor regulators discussed macroprudential policy or systemic risks.

## **Chapter 7**

### **Conclusion**

Rising oil prices. Frenzied banking lending from industrialized countries to developing economies. Faced with these global economic risks, international financial policymakers began to articulate the concept underlying the “macroprudential” approach to regulation (Clement 2010). Yet in these early days, mentions of macroprudential policy were confined to internal discussions within the BIS and a handful of central banks. By 2009, however, the term and the conceptual toolkit that it signified seemed to have gained such wide acceptance among central bankers that the BIS’s Head of the Monetary and Economic Department felt bold enough to proclaim “we are all macroprudentialists now” (Borio 2009).

The philosophical underpinnings of macroprudentialism could be called a paradigm shift. It had the potential to save neoliberalism from itself – from the violent booms and busts of financial cycles that seem to be inherent in modern market economies. The global financial crisis of 2008 brought the idea of macroprudentialism to full maturity. The GFC launched the need for macroprudential regulation to the foreground of expert policy discussions. In a perverse way, the crisis served as a petri dish for the sources of systemic risks and their amplification channels that academic economists and analysts in think tanks and regulatory agencies could study. This experience created a valuable bridge between what began as a loosely defined idea in the late 1970s to a set of policies aimed at preempting systemic risks throughout the financial sector.

Yet as many scholars have observed, the practical reality of macroprudential regulation fell shy of this promise. Instead, macroprudential policy has come to refer a set

of financial metrics and policy instruments that seek to anticipate and mitigate system-wide risks lurking in the financial system. In short, it has become a firmly a status-quo regulatory approach and policy toolkit, a technocratic auxiliary mechanism to stabilize neoliberalism. Scholars of political economy have suggested various compelling explanations for why this phenomenon.

What has received far less attention is the different levels of stringency in the macroprudential policy instruments in practice. Policy output, more than broader institutional structures or the economic ideas that prevail throughout financial governance, is arguably what determines the stability of a financial system. What explains the varying levels of stringency in macroprudential policies applied in different countries and in different financial sectors within those countries? This was the central question that motivated this study.

Through a comparative historical analysis of two advanced democracies – the United States and Japan – and the two largest financial sectors in terms of assets – banking and asset management – it attempted to answer this question. In this concluding chapter, we evaluate the explanatory strength of the theoretical framework posed at the outset.

## **Evaluating the Theoretical Framework**

To explain the stringency of the output of macroprudential policy in each case, the theoretical framework developed in Chapter 2 sought to conceptualize the specific actors involved in regulatory policymaking. I termed this set of causal explanations the actor-level framework. Further, these actors are embedded in broader institutional arrangements – political, economic and regulatory – that were also in flux. To analyze these institutional

changes and to explain the actor-level variables, I employed a historical institutionalist lens, specifically drawing on the critical junctures literature.

### ***Actor-Level Framework***

Singer's (2007) elegant model for explaining financial regulators' preferences over bank capital requirements serves as a basis. Political principals delegate the technically complex tasks of regulation to bureaucracies. This act of delegation, by definition, gives regulatory officials some degree of discretion and insulation from their political principals. But when there is a shock to either financial stability or the international competitiveness of the financial sector, politicians threaten to intervene in regulatory matters, effectively shrinking the regulators' discretion. Political intervention is the "bane of regulators' existence" (Singer 2007). Singer demonstrates that when the stability of a country's banking sector is threatened, regulators will prefer to tighten the stringency of capital requirements. When the international competitiveness of the banks in their jurisdiction is under stress, on the other hand, regulators will seek to lower capital requirements.

The actor-level framework in this dissertation modifies Singer's model in three ways. First, it posits that it is high political salience, rather than shocks to financial stability or competitiveness, that prompts political intervention. Second, it places much more emphasis on the contents of regulators' beliefs, closely examining not only their preferences over which policy to implement, but also their interpretation of the causes of financial crises and the role of regulation in that sector. And third, it extends the theory by acknowledging the possibility of inter-bureaucratic conflicts between multiple regulatory agencies. We will now turn to the implications of these modifications, as well as an evaluation of their explanatory strength.

*Political Salience.* When an issue area attracts strong attention from the voting public, the political context surrounding that issue drastically. In periods of high political salience, elected leaders are incentivized to scrutinize the issue. The political influence of organized business interests wanes. The voice of the media, civil society groups, and other stakeholders become louder in the political and policymaking processes. Periods of high political salience, then, is marked by “noisy politics” (Culpepper 2011). Because business interests are sidelined and the public’s voice amplified, we would expect that politicians are more likely to intervene in the affairs of regulatory agencies under these circumstances.

On the other hand, when a technically complex issue area is outside of the limelight, policies that govern it are not high on the political agenda and organized business interests enjoy a broader array of lobbying tactics to sway regulation. During times of “quiet politics,” we would expect less political intervention into regulatory matters. This, in effect, widens regulators’ discretion.

Despite the collapse of the Reserve Primary Fund in 2008, money market fund reform remained a low salience issue in the US. In this context, the Securities and Exchange Commission proposed and adopted a low stringency MMF reform in February 2010 that was, in part, formulated by the fund industry itself. This rule adopted in required MMFs to maintain a portion of their portfolios in instruments that can be readily converted to cash, improve the quality of portfolio securities, report their portfolio holdings monthly to the SEC, and permitted a MMF under threat of “breaking the buck” to suspend redemptions. The formulation of this rule took place with minimal intervention from politicians.

***Regulators' Policy Orientation.*** Regulatory officials often hold policy preferences that are independent of the pressures that political actors exert or the institutional and structural environment in which they operate. A full conceptualization of regulators' policy orientation should distinguish between three dimensions: ontology, or the regulators' beliefs about how a given financial sector functions and the role of regulation in that sector; diagnosis, or their officials' interpretation of why and how shocks affect the financial system and the wider economy; and prescription, or the regulators' preference over the policy solutions to correct for the financial shocks. With these dimensions in mind, policy orientation can be broadly divided into stability and growth orientation. Whereas stability-oriented regulators are likely to hold a macroprudential or systemic perspective when thinking about a financial sector and its regulation, growth-oriented regulators would see a financial sector as being inhabited by atomistic firms and advocate for regulation that would strengthen individual firms.

Since the onset of the 2008 financial crisis until around 2016-17, American banking regulators were clearly stability oriented. Fed chairman Bernanke laid out an astute analysis of the causes of the crisis, which included the prevalence of subprime mortgages, non-bank financial institutions' over-reliance on short-term funding, financial regulators' excessive microprudential focus, among other factors. Janet Yellen, Dan Tarullo, and other Fed Governors, as well as the heads of the other banking regulatory agencies were similarly stability oriented. Their policy orientation made the implementation of the Dodd-Frank Act, Basel III capital requirements, and strict stress testing unproblematic, leading the US banking sector to be subject to macroprudential regulation of high stringency in the years following the crisis.

A decade before the GFC, similar dynamics were at work in Japan. Once large financial institutions began to buckle under the weight of the growing non-performing loans on their balance sheets, the Ministry of Finance and the Bank of Japan began to perceive the banking sector in systemic terms. After the regulatory overhaul brought about by the Big Bang reforms, the BOJ and particularly the FSA took on a policy orientation that was highly stability oriented. This made these agencies proponents of a stringent bank inspection approach that would boost the stability of the banking sector.

In the asset management cases, the regulatory agencies were more growth oriented. In Japan, the MOF until 1998, and the FSA ever since, has been consistently growth oriented with respect to the regulation of securities and asset management. While always keeping investor protection and transparency in view, the FSA has sought to deregulate and liberalize the sector, as well as incentivize more investors to enter the market. In the US, the SEC was similarly growth oriented for much of the latter half of the 20<sup>th</sup> century and into the 21<sup>st</sup>. It saw asset management (particularly mutual funds and money market funds) as fundamentally rational and self-correcting as long as investors have sufficient information. This growth orientation made the SEC prefer less stringent reforms of the MMF segment of the sector even after the collapse of the Reserve Primary Fund. But when it came to the issue of regulating the rapidly growing exchange-traded funds segment, the SEC took on an approach more focused on systemic stability.

This suggests two further points about policy orientation. First is that ascertaining the policy orientation of any actor should be sensitive to context and should be conducted at a fine-grained level. A single regulatory agency may hold different orientations depending on the sector they oversee (e.g., securities, insurance, asset management), and

even on the segments within a sector (e.g., MMFs and ETFs). The specific context of the country and historical period is significant in affecting the contents of policy orientation. For example, the speeches of SEC officials often elaborate on the primacy of investors, the importance of disclosures and information, and the self-correcting forces of the market, while the FSA's rhetoric emphasized the instrumentality of Japanese financial markets and investment funds – as crucial channels that move household savings into the real economy. Both were no doubt growth oriented with respect to financial markets and asset management, but the growth orientation of each regulator need to be understood in the context of their respective time and place.

The second point is that regulators' policy orientation can and do change over time. In every case except reforms in the Japanese asset management sector, the policy orientation at the agency level changed over time, leading to observable shifts in the macroprudential policy stringency. Although this dissertation remains agnostic about the theoretical underpinnings of policy orientation change, we can indulge in some speculation. Changes in the American bank regulators' policy orientation after 2017, for example, can be attributed to organizational or human resources factors. The primary reason why regulators began to endorse the weakening of post-crisis reforms at the margins was the appointment of key officials after the Republicans took control of the White House and both houses of Congress. There was also some evidence that lent support to an ideational account of change. For example, when the Fed was evaluating whether post-crisis reforms should be loosened in response to a largely stabilized banking sector around 2016, a handful of Fed Governors held diverging views. Within the SEC, too, divergent interpretations of risks inherent in the MMF segment existed before 2014. The presence of

diverging interpretations of systemic risk is an indication that policy orientation is not a direct function of underlying material conditions (Jacobs 2014; Parsons 2016). On the other hand, neither documentary sources nor interviews yielded evidence that similar divergence in regulators' diagnosis of financial risks were present in the Japanese cases. Here, the FSA's shift from highly to moderate stability orientation around the year 2007 seemed to reflect prevailing behavior of banks – the (perceived) aversion to any type of risk-taking and the consequent lack of dynamism in bank lending. Similarly, FSA officials seemed to unanimously agree that the growth of the asset management sector should be promoted because of its historical weakness. Of course, this covariation in material conditions and policy prescriptions do not preclude an ideational account. It could be that the diagnosis of risks or lack thereof was so uncontroversial that there was simply no divergence in views among regulatory officials. But in the absence of evidence to this effect, it is impossible to adjudicate between a competing explanation of preference change.

***Bureaucratic Turf Tension.*** In most jurisdictions, financial regulation is conducted by more than one agency. Multiple regulatory agencies, particularly when they have different mandates and whose policy outputs affect different stakeholders, do not always play nice. The theoretical framework developed in Chapter 2 assumes that agencies generally seek to protect their autonomy and regulatory turf. From this assumption follows an expectation that a regulatory agency whose turf is threatened by another is likely to drive up policy stringency when three conditions hold: 1) a country's financial stability committee or other coordinating mechanism is not strong enough to enforce inter-agency coordination; 2) two or more regulatory agencies hold diverging policy orientations; and 3) the political salience of the financial sector in question is low.

In practice, the only case analyzed in this dissertation in which these three conditions prevailed was the US asset management sector. The Financial Stability Oversight Committee (FSOC), created by the 2010 Dodd-Frank Act to serve as a coordinating committee for all nine federal financial regulatory agencies, is by no means a weak institution. It has real authority to recommend – on a “comply or explain” basis – that a member regulatory agency take a specific action, and it has the power to designate non-bank financial institutions as systemically important. Yet on the question of how to regulate MMFs in the post-2008 period, rather than acting as a neutral institution to facilitate coordination, the FSOC aligned with the Fed in suggesting that MMFs should be regulated like banks. SEC officials saw this suggestion as an affront on the SEC's expertise and turf in investment fund regulation. After contentious debate within and outside the SEC, the SEC succeeded in protecting its purview by adopting a compromise rule.

In the other three cases, one or more of the three conditions did not hold, averting a turf tension-driven outcome. In the US banking case, the Fed, the OCC and the FDIC were observably in agreement in both the immediate post-crisis period, as well as the post-2017 period. In the Japanese banking case, the institutional arrangement for inter-agency coordination between the BOJ and the FSA was informal and cannot be categorized as strong. But as was the case with the American bank regulators, there was no meaningful divergence in policy orientation between the FSA and BOJ throughout the period under investigation. Finally, the FSA is the sole regulator of asset managers. Since there is no legislative framework under which the BOJ can intervene into the issue of asset management regulation, precluding any possibility of tensions over the FSA's turf.

### ***Critical Junctures Framework***

Policies to mitigate systemic risks examined in this dissertation were implemented in response to financial crises. These financial crises also affected the institutional and political conditions in which the actor-level variables interact to produce the policy outcomes. To understand the relationship between crises on the one hand and the politico-institutional contexts and the actor-level framework on the other, this dissertation drew on the literature on critical junctures in the historical institutionalism scholarship.

Critical junctures are relatively narrow windows of time during which structural and institutional constraints on actors' choices are loosened, and as a result the possibility that their choices will affect the outcome is acutely heightened. Financial crises often act as critical junctures for the institutional arrangements and policies governing the financial system. Identifying critical antecedents, permissive conditions, and productive conditions to better analyze the causal dynamics at work during critical junctures, this conceptual

framework allow us to draw several conclusions about the relationship between crises and post-crisis macroprudential policymaking.

*Critical Junctures and Political Salience.* First, financial crises often create permissive conditions – the heightened possibility for institutional and policy change – particularly when accompanied by the failure of prominent financial institutions or state-sponsored rescues. One such permissive condition is the heightened political salience of financial regulatory reform, which challenges the prevailing norms of how to regulate a given sector and incentivizes politicians to intervene in regulatory affairs. This was clearly the case in the US banking sector in 2008 and the Japanese banking sector in 1998. Between 2007 and 2008, government bailouts of Citigroup, AIG and Goldman Sachs, government conservatorship of Fannie Mae and Freddie Mac, failed bailout of Bear Sterns, and the bankruptcy of Lehman Brothers spiked the salience of systemic reforms in the US for a brief period of time. A contentious debate over financial reform ensued, accompanied by other permissive conditions including a high level of government intervention in the economy and the Democratic control over the legislative and executive branch. In Japan, the problem of bailing out financial institutions became a high-pitch issue between 1997 and 1998, when Sanyo Securities, Hakkaido Takushoku Bank, Yamaichi Securities and Long-Term Credit Bank of Japan failed and Nippon Credit Bank was bailed out. This again prompted a contentious public debate over the legality of using taxpayer funds to bailout financial firms, which became fused with the much broader agenda of the overhauling financial regulation encapsulated in the Big Bang reforms.

This relationship between crisis and salience was event held in the case of the US asset management sector. Although the mass redemption from and collapse of the Reserve

Primary Fund was eclipsed by the broader calamity of the subprime mortgage crisis and bank failures that, it was no doubt a landmark event in the history of mutual fund regulation that attracted media coverage of the issue and challenged a long-standing norm of the stable net asset value and the ability for investors to easily redeem their funds. This created the permissive condition that allowed the 2014 reforms to occur that limited future systemic risks in the sector.

Yet on the other hand, stress in the financial system is not a necessary condition for the rise in salience. This was clearly demonstrated in the Japanese asset management sector. As relatively underdeveloped investment fund business compared to the United States, it has not experienced a crisis of liquidity since the birth of the industry in the 1950s. Despite the stability of the sector, its salience waxed and waned, reflecting various government initiatives to stimulate the sector.

*Critical Junctures and Policy Orientation.* The critical junctures that financial crises provoke cause regulators to become stability oriented only when it leaves no room for doubt that the shock was endogenous to the financial system under the regulators' purview. As discussed above, this dissertation does not definitively answer the question of how policy orientations change over time. But the case studies presented in the empirical chapters seem to suggest that when the causes of the crisis are sufficiently clear so as to foreclose any disagreements over its diagnosis among regulatory technocrats, these officials quickly become stability oriented. The most high-profile instance of this occurred in the US banking sector in the midst of the 2008 crisis, when former Fed Chair Greenspan told the US House Committee of Government Oversight and Reform that developments directly under the purview of American regulators – securitization of home mortgages,

erosion of lending standards, overconfidence in credit ratings, among other things – were directly responsible for the crisis, and admitted that he “made a mistake in presuming that the self-interest of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in the firms” (U.S. House of Representatives 2008a). Similarly, the problem of non-performing loans that sagged down bank balance sheets in Japan since the early 1990s had long been recognized, and with the onset of the NPL crisis in 1997 and 1998 forced the BOJ and the FSA to incorporate a systemic perspective in their supervisory approaches once.

When a crisis was not seen to be the outgrowth of factors endogenous to the financial sector in the regulators’ jurisdiction, this rapid turn to stability orientation did not take place. This explains why the 2008 global financial crisis did not have a meaningful effect on the policy orientation of Japanese regulators. Like the US regulators themselves, Japanese officials fully realized that the crisis originated in American subprime markets and felt that Japan has been “embroiled” in the knock-on effects of the crisis as “collateral damage” (Interviews 15 and 17) While they proactively participated in Basel III negotiations and dutifully implemented the resulting agreement, the GFC did not change the moderate stability orientation of the FSA and the BOJ.

The US asset management case complicates the link between financial crisis and policy orientation. While SEC officials did not fundamentally disagree about the diagnosis of the Reserve Primary Fund’s collapse – the chain of causes that began with its large exposure to financial institutions’ commercial papers, to its lack of a sponsoring company that could provide liquidity in times of stress, to the failure of Lehman Brothers and the subsequent panic in financial markets, finally leading to massive outflows from Reserve

Primary. What they did disagree about was the ontology and prescription that flowed from this crisis. Several officials, including SEC Chair Schapiro, professed that the Reserve Primary episode demonstrated that the traditional MMF model cannot absorb large losses in portfolio values without breaking the buck, which would make them vulnerable to investor redemptions. The prescription that followed from this would have limited investors to redeeming only 95-97% of their holdings in an MMF at once, required MMFs to adopt floating, rather than stable (at \$1 per share) net asset values, and require MMFs to keep more money on hand to protect against a run on the funds (Wyatt 2012). A majority of top SEC officials, however, saw the failure of Reserve Primary was either an isolated, non-systemic event or a consequence of a broader financial crisis with no further systemic implications. Their prescription was to permit MMFs to impose redemption restrictions in times of market stress and require enhanced investor disclosures about the risks of investing in MMFs (Gallagher and Paredes 2012). What this division between two camps of officials reveals is two-fold: 1) financial crises, even when they are critical junctures with clear permissive conditions, do not necessarily or uniformly change the minds of policymakers about the role of regulation; 2) the three dimensions of policy orientation – diagnosis, ontology and prescription – do not necessarily covary. An agreement on crisis diagnosis can still yield divergent ontologies and prescriptions.

*Critical Junctures and Bureaucratic Turf Tensions.* As a framework often used to analyze changes in formal institutions, the relationship between financial crises and the financial regulatory architecture may be the most conventional object of critical junctures analysis. Recall that in the explanatory framework developed in this dissertation, bureaucratic turf tension is a product of three necessary and sufficient conditions: an

absence of an institutional mechanism for inter-agency coordination, low political salience, and diverging policy orientations held by two or more regulatory agencies. The first of these conditions implies that the bureaucratic turf, in part, has an institutional cause, and the critical junctures analysis presented in this dissertation yields several lessons for changes in the institutions of financial regulation.

Overhauling formal institutions is often a politically difficult proposition. So even if permissive conditions exist, productive conditions need to be aligned toward a deep-seated institutional shift. In the US, despite the severe impact of the subprime crisis, the key productive condition – the willingness of the Democratic Party to adopt the more radical reforms to consolidate the regulatory architecture – was not present. Thus, while the creation of the FSOC as a coordinating committee with significant macroprudential authority was a meaningful change to the regulatory system, the underlying fragmentation among federal agencies and the potential for turf tensions between them remained intact.

Fundamental institutional overhaul, on the other hand, did take place in Japan in the late 1990s. The failures of large financial institutions as a result of NPLs and the ongoing scandals surrounding the MOF and the BOJ created permissive conditions for deep-seated reforms. In this case, a productive condition for carrying through these reforms existed in the form of the “Financial Diet” – an special session of the Diet in the summer of 1998, in which young and junior members focused on legislative measures to resolve the NPL crisis, finalize the ambitious deregulatory Big Bang reforms, and the accompanying legislation that broke up the MOF and created the FSA.

## BIBLIOGRAPHY

- Ackerman, Andrew, and Kristen Grind. 2012. "Money Funds Open to a Deal With SEC." *The Wall Street Journal*.  
<http://online.wsj.com/article/SB10001424052702304065704577424551485891714.html> (December 28, 2022).
- Ackerman, Matt. 2013. "Unfinished Business: Money Fund Reform Lurks in Wake of Financial Crisis." *InvestmentNews*. <https://www.investmentnews.com/unfinished-business-money-fund-reform-lurks-in-wake-of-financial-crisis-53575> (September 24, 2020).
- Admati, Anat, and Martin Hellwig. 2013. *Bankers' New Clothes: What's Wrong with Banking and What to Do about It*. Princeton University Press.
- Adolph, Christopher. 2013. *Bankers, Bureaucrats, and Central Bank Politics: The Myth of Neutrality*. Cambridge: Cambridge University Press.
- Aguilar, Luis A. 2008. "Remarks Before the 14th Annual Securities Litigation and Regulatory Practice Seminar." Presented at the Institute of Continuing Legal Education in Georgia, Georgia, Atlanta.  
<https://www.sec.gov/news/speech/2008/spch1031081aa.htm> (December 29, 2022).
- . 2014. "Taking an Informed Approach to Issues Facing the Mutual Fund Industry." <https://www.sec.gov/news/speech/2014-spch0402141aa> (October 3, 2020).
- Akay, Ozgur, Mark D. Griffiths, and Drew B. Winters. 2015. "Reserve Primary: Fools Rush In Where Wise Men Fear to Tread!" *Journal of Investment Management* 13(1): 17.
- Amyx, Jennifer. 2004. *Japan's Financial Crisis: Institutional Rigidity and Reluctant Change*. Princeton, NJ: Princeton University Press.
- Anand, Shefali, and Diya Gullapalli. 2008. "The Financial Crisis: Bailout of Money Funds Seems to Stanch Outflow." *The Wall Street Journal*: A2.
- Armour, John et al. 2016. *Principles of Financial Regulation*. First edit. Oxford, UK: Oxford University Press.
- Asahi Shimbun. 1994. "Tōshin, Tōshika Hogo Jūshi Torihiki Rūru Hatsusettei Ōkurashō Kenkyūkai Ga Bappon Kaikaku An.": 1.
- . 1998. "Gaishikei Kinyūkikan, Nihon Shijō e No Kōsei Kasoku Kojin Torihiki, Sekkyokuteki Ni.": 11.

- Asō, Tarō. 2013. “Asō Kinyū Tantō Daijin Aisatsu ‘Dai 88 Kai Shintaku Taikai.’” <https://www.fsa.go.jp/common/conference/danwa/2013/20130415-1.html> (October 21, 2022).
- Atkins, Paul S. 2008a. “Remarks.” Presented at the Global Financial Services Centres Conference, Dublin, Ireland. <https://www.sec.gov/news/speech/2008/spch061608psa.htm> (November 13, 2020).
- . 2008b. “Remarks.” Presented at the American Chamber of Commerce, Rio de Janeiro, Brazil. <https://www.sec.gov/news/speech/2008/spch041408psa.htm> (December 29, 2022).
- Baker, Andrew. 2013a. “The Gradual Transformation? The Incremental Dynamics of Macroprudential Regulation: Macroprudential as Gradual Transformation.” *Regulation & Governance* 7(4): 417–34.
- . 2013b. “The New Political Economy of the Macroprudential Ideational Shift.” *New Political Economy* 18(1): 112–39.
- . 2015. “The Bankers’ Paradox : The Political Economy of Macroprudential Regulation.” *SRC Discussion Paper No 37* (37).
- . 2018. “Macroprudential Regimes and the Politics of Social Purpose.” *Review of International Political Economy* 25(3): 293–316.
- Baker, Andrew, and Wesley Widmaier. 2014. “The Institutional Roots of Macroprudential Ideas: Veblen and Galbraith on Regulation, Policy Success and Overconfidence.” *New Political Economy* 19(4): 487–506.
- . 2015. “Macroprudential Ideas and Contested Social Purpose: A Response to Terrence Casey.” *The British Journal of Politics and International Relations* 17(2): 371–80.
- Bank of Japan. 2005. “Measures Taken by the Bank of Japan for Financial System Stability.” *Financial System Report*: 20.
- . 2007. “Financial System Report.” : 52.
- . 2011. “Nihon ginkō no makuropurūdensumen de no torikumi.” : 10.
- . 2012. *Financial System Report*. <https://www.boj.or.jp/en/research/brp/fsr/data/fsr121019a.pdf>.
- Barnett, Michael N., and Martha Finnemore. 1999. “The Politics, Power, and Pathologies of International Organizations.” *International Organization* 53(4): 699–732.

- Barwell, Richard. 2017. "Building on Incomplete Foundations: Financial Stability Policy Since the Crash." *National Institute Economic Review* 24: R33–47.
- Battiston, S. et al. 2016. "Complexity Theory and Financial Regulation." *Science* 351(6275): 818–19.
- Beach, Derek, and Rasmus Brun Pedersen. 2013. *Process-Tracing Methods Foundations and Guidelines*. Ann Arbor: University of Michigan Press.
- Becker, Gary S. 1983. "A Theory of Competition Among Pressure Groups for Political Influence." *The Quarterly Journal of Economics* 98(3): 371.
- Bennett, Andrew, and Jeffrey T Checkel, eds. 2015. *Process Tracing : From Metaphor to Analytic Tool*. New York: Cambridge University Press.
- Berman, Sheri. 2013. "Ideational Theorizing in the Social Sciences since 'Policy Paradigms, Social Learning, and the State': Ideational Theorizing in Political Science." *Governance* 26(2): 217–37.
- Bernanke, Ben S. 2010. "Central Bank Independence, Transparency, and Accountability." *Board of Governors of the Federal Reserve System*. <https://www.federalreserve.gov/newsevents/speech/bernanke20100525a.htm> (December 18, 2022).
- Best, Jacqueline. 2018. "How the 2008 Financial Crisis Helped Fuel Today's Right-Wing Populism." *The Conversation*. <http://theconversation.com/how-the-2008-financial-crisis-helped-fuel-todays-right-wing-populism-103979> (January 29, 2021).
- Better Markets. 2013. "Letter to SEC Secretary Elizabeth M. Murphy." <https://www.sec.gov/comments/am-1/am1-24.pdf>.
- BlackRock. 2012. "FSOC Comment Letter." <https://www.regulations.gov/document?D=FSOC-2012-0003-0012> (September 25, 2020).
- Blinder, Alan S. 2010. "It's Broke, Let's Fix It: Rethinking Financial Regulation." *International Journal of Central Banking* 6(4): 54.
- Blyth, Mark. 2002. *Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century*. Cambridge: Cambridge University Press. <https://www.cambridge.org/core/books/great-transformations/870BE71687305B1E858E49FD3FDD578B>.
- . 2003. "Structures Do Not Come with an Instruction Sheet: Interests, Ideas, and Progress in Political Science." *Perspectives on Politics* 1(4): 695–706.

- Boak, Josh. 2012. “Tim Geithner: ‘no Credible Evidence’ Financial Reform Hurting Recovery.” *POLITICO*. <https://www.politico.com/blogs/politico44/2012/02/tim-geithner-no-credible-evidence-financial-reform-hurting-recovery-113335> (December 18, 2022).
- Borio, Claudio. 2003. “Toward a Macroprudential Framework for Financial Supervision and Regulation?” *CESifo Economic Studies* 49(2): 35.
- . 2009. “The Macroprudential Approach to Regulation and Supervision.” *VoxEU*. <https://cepr.org/voxeu/columns/macroprudential-approach-regulation-and-supervision> (December 30, 2022).
- Boston Consulting Group. 2011. *U.S. Securities and Exchange Commission: Organizational Study and Reform*. <https://www.sec.gov/files/967study.pdf>.
- Brassett, James, and Christopher Holmes. 2016. “Building Resilient Finance? Uncertainty, Complexity, and Resistance.” *The British Journal of Politics and International Relations* 18(2): 370–88.
- Brown, Stewart L. 2016. “Mutual Funds and the Regulatory Capture of the SEC.” *SSRN Electronic Journal*. <http://www.ssrn.com/abstract=2854312> (December 23, 2022).
- Budd, Ted et al. 2019. “Letter from Members of Congress to Financial Regulators.” <https://www.sec.gov/comments/s7-08-12/s70812-5641397-185630.pdf>.
- Cabinet Office. 2007a. *Economic and Fiscal Reform 2007 (“Basic Policies”)*. Tokyo, Japan. [https://www5.cao.go.jp/keizai-shimon/english/publication/pdf/070628\\_basic\\_policies\\_summary.pdf](https://www5.cao.go.jp/keizai-shimon/english/publication/pdf/070628_basic_policies_summary.pdf) (November 9, 2022).
- . 2007b. *Keizaizaisei kaikaku no kihonhōshin 2007 ~ “Utsukushī kuni” no shinario*. <https://www5.cao.go.jp/keizai-shimon/cabinet/2007/decision070620.pdf>.
- . 2010. “Shin seichō senryaku: ‘Genki na Nippon’ fukkatsu no shinario.” <https://www.kantei.go.jp/jp/sinseichousenryaku/sinseichou01.pdf>.
- Campbell, John L. 2010. “Neoliberalism in Crisis: Regulatory Roots of the U.S. Financial Meltdown.” In *Markets on Trial: The Economic Sociology of the U.S. Financial Crisis. Part B*, Bingley: Emerald, 65–101.
- Capoccia, Giovanni, and R Daniel Kelemen. 2007. “The Study of Critical Junctures: Theory, Narrative, and Counterfactuals in Historical Institutionalism.” *World Politics* 59(3): 341–69.
- Carpenter, Daniel. 2010. “Institutional Strangulation: Bureaucratic Politics and Financial Reform in the Obama Administration.” *Perspectives on Politics* 8(3): 825–46.

- Carpenter, Daniel, and David A. Moss, eds. 2013. *Preventing Regulatory Capture*. Cambridge: Cambridge University Press.
- Carpenter, Daniel P. 2001. *The Forging of Bureaucratic Autonomy: Reputation, Networks, and Policy Innovations in Executive Agencies, 1862-1928*. Princeton, N.J.: Princeton University Press.
- . 2010. *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton, N.J.: Princeton University Press.
- Carstensen, Martin B. 2017. “Institutional Bricolage in Times of Crisis.” *European Political Science Review* 9(1): 139–60.
- Casey, Kathleen. 2008a. “Address to the Institute of International Bankers.” Presented at the Institute of International Bankers, New York, NY. <https://www.sec.gov/news/speech/2008/spch111708klc.htm> (December 29, 2022).
- . 2008b. “An Agenda for Europe and the United States.” Presented at the Sixth Annual Symposium on Building the Financial System of the 21st Century, Armonk, New York. <https://www.sec.gov/news/speech/2008/spch040308klc.htm> (December 29, 2022).
- . 2011. “The Regulatory Implementation and Implications of Dodd-Frank.” Presented at the Directors’ Forum, San Diego, California. <https://www.sec.gov/news/speech/2011/spch012311klc.htm> (December 29, 2022).
- Casey, Terrence. 2015a. “How Macroprudential Financial Regulation Can Save Neoliberalism.” *The British Journal of Politics and International Relations* 17(2): 351–70.
- . 2015b. “How Macroprudential Financial Regulation Can Save Neoliberalism.” *British Journal of Politics and International Relations* 17(2): 351–70.
- Cerutti, Eugenio, Stijn Claessens, and Luc Laeven. 2017. “The Use and Effectiveness of Macroprudential Policies: New Evidence.” *Journal of Financial Stability* 28: 203–24.
- Champ, Norm. 2017. *Going Public: My Adventures Inside the SEC and How to Prevent the Next Devastating Crisis*. New York: McGraw-Hill Education.
- Claessens, Stijn. 2015. “An Overview of Macroprudential Policy Tools.” *Annual Review of Financial Economics* 7: 397–422.
- Clement, Piet. 2010. “The Term ‘Macroprudential’: Origins and Evolution.” *BIS Quarterly Review* March.
- Committee on Capital Markets Regulation. 2008. “Recommendations for Reorganizing the U.S. Financial Regulatory Structure.”

<https://www.capmksreg.org/2008/01/14/recommendations-for-reorganizing-the-u-s-financial-regulatory-structure/> (September 24, 2020).

Committee on Financial Affairs. 2004. "Meeting of the 156th Committee on Financial Affairs, House of Representatives of Japan."  
[https://www.shugiin.go.jp/internet/itdb\\_kaigirokua.nsf/html/kaigirokua/009515920040427022.htm](https://www.shugiin.go.jp/internet/itdb_kaigirokua.nsf/html/kaigirokua/009515920040427022.htm) (November 8, 2022).

———. 2007. "Meeting of the 168th Committee on Financial Affairs, House of Representatives."  
[https://www.shugiin.go.jp/internet/itdb\\_kaigirokua.nsf/html/kaigirokua/009516820071102003.htm](https://www.shugiin.go.jp/internet/itdb_kaigirokua.nsf/html/kaigirokua/009516820071102003.htm) (November 10, 2022).

Coombs, Nathan. 2017. "Macroprudential versus Monetary Blueprints for Financial Reform." *Journal of Cultural Economy* 10(2): 207–16.

Correa, Ricardo, Rochelle M. Edge, and Nellie Liang. 2017. "A New Dataset of Macroprudential Policy Governance Structures." *Board of Governors of the Federal Reserve System IFDP Notes* 2017(38): 1–8.

Cox, Christopher. 2008. "Keynote Address." Presented at the Investment Company Institute 4th Annual Mutual Fund Leadership Dinner, Washington, D.C.  
<https://www.sec.gov/news/speech/2008/spch043008cc.htm> (December 29, 2022).

Crapo, Mike et al. 2019. "Letter to Jerome H. Powell, Joseph M. Otting, and Jelena McWilliams."  
<https://www.banking.senate.gov/imo/media/doc/Powell%20Otting%20McWilliams%20Letter%207-30-19.pdf>.

Crockett, Andrew. 2000. "Marrying the Micro- and Macro-Prudential Dimensions of Financial Stability." Presented at the Basel, Switzerland.

Cukierman, Alex, Steven B. Web, and Bilin Neyapti. 1992. "Measuring the Independence of Central Banks and Its Effect on Policy Outcomes." *The World Bank Economic Review* 6(3): 353–98.

Culpepper, Pepper D. 2010. *Quiet Politics and Business Power: Corporate Control in Europe and Japan*. Cambridge: Cambridge University Press.

Culpepper, Pepper D. 2011. *Quiet Politics and Business Power: Corporate Control in Europe and Japan*. Cambridge: Cambridge University Press.

———. 2015. "Structural Power and Political Science in the Post-Crisis Era." *Business and Politics* 17(3): 391–409.

Culpepper, Pepper D., and Raphael Reinke. 2014. "Structural Power and Bank Bailouts in the United Kingdom and the United States." *Politics and Society* 42(4): 427–54.

- Cunha, João Rafael. 2021. "The Advent of a New Banking System in the US: Financial Deregulation in the 1980s." In *Financial Deregulation: A Historical Perspective*, eds. Drach Alexis and Youssef Cassis. Oxford University Press, 24–46.
- Datz, Giselle. 2013. "The Narrative of Complexity in the Crisis of Finance: Epistemological Challenge and Macroprudential Policy Response." *New Political Economy* 18(4): 459–79.
- Deakin, Simon. 2015. "The Evolution of Theory and Method in Law and Finance." In *The Oxford Handbook of Financial Regulation*, eds. Niamh Moloney, Eilís Ferran, and Jennifer Payne. Oxford University Press, 13–40.
- Deeg, Richard. 1999. *Finance Capitalism Unveiled: Banks and the German Political Economy*. University of Michigan Press.
- Deeg, Richard, and Gregory Jackson. 2007. "Towards a More Dynamic Theory of Capitalist Variety." *Socio-Economic Review* 5: 149–79.
- Deeg, Richard, and Susanne Lütz. 1996. "Internationalization and Regulatory Federalism in Financial Systems. The United States and Germany at the Crossroads?" 33(3): 27.
- Diamond Online. 2009. "Moratoriumu hōan ga honenuki de mune o nadeorosu kinyūkikan." *Diamond Online*. <https://diamond.jp/articles/-/992> (September 25, 2022).
- Donohue, Andrew J. 2009. "Keynote Address at the Practising Law Institute's Investment Management Institute 2009; New York, NY." <https://www.sec.gov/news/speech/2009/spch040209ajd.htm> (September 25, 2020).
- Endō, Toshihide. 2020. "Kinyū gyōsei no genjō to kadai." Presented at the Kyoto University Economics Department. <https://www.fsa.go.jp/policy/nisa2/download/02/07.pdf>.
- European Systemic Risk Board. 2016. "A Review of Macroprudential Policy in the EU in 2015." (May): 57.
- Fairfield, Tasha. 2015. *Private Wealth and Public Revenue in Latin America: Business Power and Tax Politics*. Cambridge: Cambridge University Press.
- Fama, Eugene F. 1976. *Foundations of Finance: Portfolio Decisions and Securities Prices*. New York : Basic Books.
- FDIC. 2018. "Remarks by Jelena McWilliams, Chairman Federal Deposit Insurance Corporation at The Office of Financial Research and the University of Michigan's Center on Finance, Law, and Policy Fourth Annual Financial Stability

- Conference, Washington, D.C.” *FDIC*.  
<https://www.fdic.gov/news/speeches/2018/spnov1518.html> (December 18, 2022).
- . 2019. “Principles of Supervision.” *FDIC*.  
<https://www.fdic.gov/news/speeches/2019/spjan1119.html> (December 18, 2022).
- Federal Register. 2017a. “Executive Order 13771 of January 30, 2017: Reducing Regulation and Controlling Regulatory Costs.” *Presidential Documents* 82(22).  
<https://www.govinfo.gov/content/pkg/FR-2017-02-03/pdf/2017-02451.pdf>.
- . 2017b. “Executive Order 13772 of February 3, 2017: Core Principles for Regulating the United States Financial System.”  
<https://www.govinfo.gov/content/pkg/FR-2017-02-08/pdf/2017-02762.pdf>  
 (December 19, 2022).
- Fink, Matthew P. 2011a. *The Rise of Mutual Funds: An Insider’s View*. New York : Oxford University Press.
- . 2011b. *The Rise of Mutual Funds An Insider’s View*. Oxford University Press.
- Fioretos, Orfeo. 2010. “Capitalist Diversity and the International Regulation of Hedge Funds.” *Review of International Political Economy* 17(4): 696–723.
- FRB. 2008. “Press Release: Board Announces Creation of the Commercial Paper Funding Facility (CPFF) to Help Provide Liquidity to Term Funding Markets.” *Board of Governors of the Federal Reserve System*.  
<https://www.federalreserve.gov/newsevents/pressreleases/monetary20081007c.htm>  
 (December 24, 2022).
- . 2019. “Statement by Governor Lael Brainard.” *Board of Governors of the Federal Reserve System*.  
<https://www.federalreserve.gov/newsevents/pressreleases/brainard-statement-20191010.htm> (December 18, 2022).
- Freixas, Xavier, Luc Laeven, and José-Luis Peydró. 2015. *Systemic Risk, Crises, and Macroprudential Regulation*. Cambridge, Massachusetts: MIT Press.
- FSB. 2011. *Potential Financial Stability Issues Arising from Recent Trends in Exchange-Traded Funds (ETFs)*. [https://www.fsb.org/wp-content/uploads/r\\_110412b.pdf](https://www.fsb.org/wp-content/uploads/r_110412b.pdf).
- . 2016. *Peer Review of Japan*.
- FSB, IMF, and BIS. 2011. *Macroprudential Policy Tools and Frameworks: Progress Report to G20*.
- FSOC. 2012. *Proposed Recommendations Regarding Money Market Mutual Fund Reform*.  
<https://www.treasury.gov/initiatives/fsoc/Documents/Proposed%20Recommendat>

ions%20Regarding%20Money%20Market%20Mutual%20Fund%20Reform%20-%20November%202013,%202012.pdf.

- Gallagher, Daniel M. 2015. “Bank Regulators at the Gates: The Misguided Quest for Prudential Regulation of Asset Managers.” Presented at the 2015 Virginia Law and Business Review Symposium, Charlottesville, Virginia.  
<https://www.sec.gov/news/speech/041015-spch-cdmg> (December 29, 2022).
- Gallagher, Daniel M., and Troy A. Paredes. 2012. “Statement on the Regulation of Money Market Funds.” <https://www.sec.gov/news/public-statement/2012-spch082812dmgtaphtm>.
- GAO. 2013. *Financial Regulatory Reform: Financial Crisis Losses and Potential Impacts of the Dodd-Frank Act*. Washington, D.C. Report to Congressional Requesters. <https://www.gao.gov/assets/gao-13-180.pdf>.
- . 2014. *Bank Capital Reforms: Initial Effects of Basel III on Capital, Credit, and International Competitiveness*. <https://www.gao.gov/assets/670/667112.pdf>.
- . 2015. *Dodd-Frank Regulations: Impacts on Community Banks, Credit Unions and Systemically Important Institutions*. <https://www.gao.gov/assets/680/674459.pdf>.
- Geithner, Timothy F. 2012. “Letter to the Financial Stability Oversight Council.” <https://www.treasury.gov/connect/blog/Documents/Sec.Geithner.Letter.To.FSOC.pdf>.
- Gilardi, Fabrizio. 2008. *Delegation in the Regulatory State: Independent Regulatory Agencies in Western Europe*. Edward Elgar Publishing.
- Goodhart, Charles. 2010. “The Changing Role of Central Banks.” *BIS Working Papers* (No. 326).
- Goodhart, Charles, Daniela Gabor, Jakob Vestergaard, and Ismail Ertürk, eds. 2014. *Central Banking at a Crossroads: Europe and Beyond*. New York: Anthem Press.
- Goodhart, Lucy M. 2015. “Brave New World? Macro-Prudential Policy and the New Political Economy of the Federal Reserve.” *Review of International Political Economy* 22(2): 280–310.
- Grim, David. 2015a. “Remarks to the ALI CLE 2015 Conference on Life Insurance Company Products.” <https://www.sec.gov/news/speech/remarks-ali-cle-2015-conf-life-insurance-company-products-grim.html> (October 2, 2020).
- . 2015b. “Remarks to the ICI 2015 Securities Law Development Conference.” <https://www.sec.gov/news/speech/grim-remarks-ici-2015-securities-law-development-conference.html> (October 2, 2020).

- Grynbaum, Michael M. 2008. "Greenspan Concedes Error on Regulation." *The New York Times*. <https://www.nytimes.com/2008/10/23/business/worldbusiness/23iht-24greenspan.17202367.html> (December 29, 2022).
- Haldane, Andrew G. 2013. "Why Institutions Matter (More than Ever)." In , 1–17.
- Hall, Peter A., ed. 1989. *The Political Power of Economic Ideas: Keynesianism Across Nations*. Princeton, N.J.: Princeton University Press.
- Hall, Peter A., and David W. Soskice, eds. 2001. *Varieties of Capitalism the Institutional Foundations of Comparative Advantage*. Oxford, UK: Oxford University Press.
- Hammond, Thomas H. 2003. "Veto Points, Policy Preferences, and Bureaucratic Autonomy in Democratic Systems." In *Politics, Policy, and Organizations: Frontiers in the Scientific Study of Bureaucracy*, eds. George A. Krause and Kenneth J. Meier. Ann Arbor, Michigan: The University of Michigan Press, 31.
- Hanson, Samuel G, David S Scharfstein, and Adi Sunderam. 2015. "An Evaluation of Money Market Fund Reform Proposals." *IMF Economic Review* 63(4): 984–1023.
- Harada, Kimie et al. 2015. "Japan's Financial Regulatory Responses to the Global Financial Crisis." *Journal of Financial Economic Policy* 7(1): 51–67.
- Hardie, Iain, and David Howarth. 2013. *Market-Based Banking and the International Financial Crisis*. Oxford, UK: Oxford University Press.
- Hardie, Iain, and Sylvia Maxfield. 2013. "Market-Based Banking as the Worst of All Worlds: Illustrations from the United States and United Kingdom." In *Market-Based Banking and the International Financial Crisis*, eds. Iain Hardie and David Howarth. Oxford, UK: Oxford University Press, 19.
- Hatanaka, Ryūtarō. 2011. "Kinyū Gyōsei no Shomondai." *Shōken Review* (7). <https://www.jsri.or.jp/publish/review/pdf/5107/01.pdf>.
- Helleiner, Eric. 2011. "Understanding the 2007–2008 Global Financial Crisis: Lessons for Scholars of International Political Economy." *Annual Review of Political Science* 14(1): 67–87.
- . 2014. *The Status Quo Crisis: Global Financial Governance After the 2008 Meltdown*. New York: Oxford University Press.
- Helleiner, Eric, and Stefano Pagliari. 2010. "Between the Storms: Patterns in Global Financial Governance, 2001–2007." In *Global Financial Integration Thirty Years On*, eds. Geoffrey R. D. Underhill, Jasper Blom, and Daniel Mügge. Cambridge University Press, 42–57. [https://www.cambridge.org/core/product/identifier/CBO9780511762680A016/type/book\\_part](https://www.cambridge.org/core/product/identifier/CBO9780511762680A016/type/book_part) (July 14, 2022).

- Hideshima, Hiroataka. 2021. *BCBS From the Inside: How International Financial Standards Are Developed*. Kinyūzaisei jijō kenkyūkai.
- Himino, Ryoza. 2021. *The Japanese Banking Crisis*. Singapore: Springer Singapore.
- Hino, Masaharu. 2000. “On the Establishment of the Financial Services Agency.” Presented at the Bank of England, UK.  
<https://www.fsa.go.jp/en/announce/state/p20000913.html> (August 3, 2022).
- Holtz-Eakin, Douglas. 2014. *The Investor Cost of Designating Investment Funds as Systemically Important Financial Institutions*. American Action Forum.  
<https://www.americanactionforum.org/print/?url=https://www.americanactionforum.org/research/the-investor-cost-of-designating-investment-funds-as-systemically-important/>.
- Hoshi, Takeo, and Anil Kashyap. 1999. “The Japanese Banking Crisis: Where Did It Come from and Where Will It End?” *NBER Working Paper No.7250*: 86.
- Howarth, David, and Lucia Quaglia. 2014. “The Steep Road to European Banking Union: Constructing the Single Resolution Mechanism.” *Journal of Common Market Studies* 52(1): 125–40.
- . 2016. “The Comparative Political Economy of Basel III in Europe.” *Policy and Society* 35(3): 205–14.
- Hsueh, Roselyn. 2012. “China and India in the Age of Globalization: Sectoral Variation in Postliberalization Reregulation.” *Comparative Political Studies* 45(1): 32–61.
- Huber, John D. 2002. *Deliberate Discretion? The Institutional Foundations of Bureaucratic Autonomy*. New York, NY: Cambridge University Press.
- ICI. 2013. “FSOC Comment Letter.” <https://www.regulations.gov/document?D=FSOC-2012-0003-0071> (September 25, 2020).
- IMF. 2011. “Macroprudential Policy: An Organizing Framework.” *Policy Papers* 11(17).  
<https://elibrary.imf.org/view/IMF007/27774-9781498339162/27774-9781498339162/27774-9781498339162.xml> (January 3, 2021).
- . 2012. “Japan: Financial Sector Stability Assessment Update.” *IMF Staff Country Reports* 12(210): 1.
- . 2022. “IMF Macroprudential Database.” <https://www.elibrary-areaer.imf.org/Macroprudential/Pages/Reports.aspx> (November 20, 2022).
- IMF-FSB-BIS. 2016. *Elements of Effective Macroprudential Policies: Lessons from International Experience*.

- Jacobs, Alan M. 2014. "Process Tracing the Effects of Ideas." In *Process Tracing*, eds. Andrew Bennett and Jeffrey T. Checkel. Cambridge: Cambridge University Press, 41–73.
- Japanese Bankers Association. "Organization." *Japanese Bankers Association*. <https://www.zenginkyo.or.jp/en/outline/organization/> (August 26, 2022).
- JFSA. 2001. "Nihongata Kinyū Shisutemu to Gyōsei No Shōrai Bijon Konwakai (Dai Ikkai) Giji Yōshi." [https://www.fsa.go.jp/singi/singi\\_nihon/gijiyosi/f-20011001\\_giji.html](https://www.fsa.go.jp/singi/singi_nihon/gijiyosi/f-20011001_giji.html) (November 13, 2022).
- . 2007. *Plan for Strengthening the Competitiveness of Japan's Financial and Capital Markets*. Tokyo, Japan. <https://www.fsa.go.jp/en/news/2007/20071221/01.pdf>.
- . 2009. *Designing the Japanese Financial System in Light of the Global Financial Crisis*. Tokyo, Japan: Roundtable Committee on Fundamental Issues of the Financial System Council. <https://www.fsa.go.jp/en/news/2009/20091216-2/01.pdf>.
- . 2013. "FSA and MOF Set up the Panel for Vitalizing Financial and Capital Markets." <https://www.fsa.go.jp/en/refer/councils/vitalizing/20131108.html> (November 15, 2022).
- . 2015. *The Statement for Vitalizing Financial and Capital Markets*. Tokyo, Japan: Panel for Vitalizing Financial and Capital Markets. <https://www.fsa.go.jp/en/refer/councils/vitalizing/20150721/01.pdf> (November 16, 2022).
- . 2016a. *Kinyū Repōto*. Tokyo, Japan. <https://www.fsa.go.jp/news/28/20160915-4/01.pdf> (November 17, 2022).
- . 2016b. *Summary Points from Strategic Directions and Priorities 2016-2017*. <https://www.fsa.go.jp/en/news/2016/20161130-1/01.pdf>.
- JITA. 2002. *Tōshi Shintaku 50 nen shi: Gaikyō hen (50 Years of Investment Trust History: An Overview)*. Tokyo, Japan: Nikkei Business Publishing.
- . 2014. *Investment Trusts in Japan 2014*. [https://www.toushin.or.jp/fileadmin/open/kouhou/file/publish/%E6%97%A5%E6%9C%AC%E3%81%AE%E6%8A%95%E8%B3%87%E4%BF%A1%E8%A8%972014\\_%E8%8B%B1%E6%96%87\\_3K.pdf](https://www.toushin.or.jp/fileadmin/open/kouhou/file/publish/%E6%97%A5%E6%9C%AC%E3%81%AE%E6%8A%95%E8%B3%87%E4%BF%A1%E8%A8%972014_%E8%8B%B1%E6%96%87_3K.pdf).
- Johnson, Simon, and James Kwak. 2010. *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*. New York: Pantheon Books.

- Kamikawa, Ryunoskin. 2013. "Market-Based Banking in Japan: From the Avant-Garde to Europe's Future?" In *Market-Based Banking and the International Financial Crisis*, eds. Iain Hardie and David Howarth. Oxford: Oxford University Press.
- Kastner, Lisa. 2017. "Tracing Policy Influence of Diffuse Interests: The Post-Crisis Consumer Finance Protection Politics in the US." *Journal of Civil Society* 13(2): 130–48.
- Kato, Ryo, Shun Kobayashi, and Yumi Saita. 2010. *Calibrating the Level of Capital: The Way We See It*.  
[https://www.boj.or.jp/en/research/wps\\_rev/wps\\_2010/data/wp10e06.pdf](https://www.boj.or.jp/en/research/wps_rev/wps_2010/data/wp10e06.pdf).
- Khademian, Anne M. 1992. *The SEC and Capital Market Regulation: The Politics of Expertise*. Pittsburgh: University of Pittsburgh Press.
- Kirk, Mark et al. 2014. "Letter to FSOC Chairman Jacob Lew."  
<https://www.sec.gov/comments/am-1/am1-36.pdf>.
- Kohn, Donald. 2015. "Implementing Macroprudential and Monetary Policies: The Case for Two Committees." Presented at the Brookings Institution, Washington, D.C.  
<https://www.brookings.edu/wp-content/uploads/2016/06/FRBBoston-finalfinal.pdf>.
- Kranke, Matthias, and David Yarrow. 2018. "The Global Governance of Systemic Risk: How Measurement Practices Tame Macroprudential Politics." *New Political Economy*: 1–17.
- . 2019. "The Global Governance of Systemic Risk: How Measurement Practices Tame Macroprudential Politics." *New Political Economy* 24(6): 816–32.
- Kremers, Jeroen J. M., Dirk Schoenmaker, and Peter J. Wierds. 2003. "Cross-Sector Supervision: Which Model?" *Brookings-Wharton Papers on Financial Services* 2003(1): 225–43.
- Kyodo News. 2005. "Tokyo to Form Team to Study Deregulation of Financial System."  
*Kyodo News*.
- Laffont, Jean-Jacques, and Jean Tirole. 1991. "The Politics of Government Decision-Making - a Theory of Regulatory Capture." *Quarterly Journal of Economics* 106(4): 1089–1128.
- Lall, Ranjit. 2012a. "From Failure to Failure: The Politics of International Banking Regulation." *Review of International Political Economy* 19(4): 609–38.
- . 2012b. "From Failure to Failure: The Politics of International Banking Regulation." *Review of International Political Economy* 19(4): 609–38.

- . 2015. “Timing as a Source of Regulatory Influence: A Technical Elite Network Analysis of Global Finance.” *Regulation and Governance* 9(2): 125–43.
- Langevoort, Donald C. 1992. “Theories, Assumptions, and Securities Regulation: Market Efficiency Revisited.” *University of Pennsylvania Law Review* 140(3): 851.
- Lim, C et al. 2011. “Macroprudential Policy: What Instruments and How to Use Them?” *IMF Working Paper* 11(238).
- Lincoln, Edward J. 2013. “Japan Ongoing Financial Deregulation, Structural Change, and Performance, 1990–2010.” In *How Finance Is Shaping the Economies of China, Japan, and Korea*, eds. Yung Chul Park and Hugh Patrick. New York Chichester, West Sussex: Columbia University Press.
- Lindblom, Charles Edward. 1977. *Politics and Markets : The World’s Political Economic Systems*. New York : Basic Books.
- Llewellyn, David T. 2006. “Institutional Structure of Financial Regulation and Supervision: The Basic Issues.” In World Bank, Washington D.C., 45.
- Lombardi, Domenico, and Manuela Moschella. 2017. “The Symbolic Politics of Delegation: Macroprudential Policy and Independent Regulatory Authorities.” *New Political Economy* 22(1): 92–108.
- Lombardi, Domenico, and Pierre L. Siklos. 2016. “Benchmarking Macroprudential Policies: An Initial Assessment.” *Journal of Financial Stability* 27: 35–49.
- Lopez, Claude, Donald Markwardt, and Keith Savard. 2016. “The Asset Management Industry and Systemic Risk: Is There a Connection?” *SSRN Electronic Journal*. <https://www.ssrn.com/abstract=2801358> (September 16, 2020).
- Lütz, Susanne. 2004. “Convergence within National Diversity: The Regulatory State in Finance.” *Journal of Public Policy* 24(2): 169–97.
- Macartney, Huw, David Howarth, and Scott James. 2020. “Bank Power and Public Policy since the Financial Crisis.” *Business and Politics* 22(1): 1–24.
- Mahoney, James. 2012. “The Logic of Process Tracing Tests in the Social Sciences.” *Sociological Methods and Research* 41(4): 570–97.
- Majone, Giandomenico. 1997. “From the Positive to the Regulatory State: Causes and Consequences of Changes in the Mode of Governance.” *Journal of Public Policy* 17(2): 139–67.
- Maor, Moshe. 2010. “Organizational Reputation and Jurisdictional Claims: The Case of the U.S. Food and Drug Administration.” *Governance* 23(1): 133–59.

- March, James G. 1997. "Administrative Practice, Organization Theory, and Political Philosophy: Ruminations on the Reflections of John M. Gaus." *PS, Political Science & Politics* 30(4): 689–98.
- McCubbins, Mathew D., and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science* 28(1): 165–79.
- McCubbins, Matthew D., Roger G. Noll, and Barry R. Weingast. 1989. "Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies." *Virginia Law Review* 75(2): 431.
- McPhilemy, Samuel. 2016. "Integrating Macro-Prudential Policy: Central Banks as the 'Third Force' in EU Financial Reform." *West European Politics* 39(3): 526–44.
- McPhilemy, Samuel, and Manuela Moschella. 2019. "Central Banks under Stress: Reputation, Accountability and Regulatory Coherence." *Public Administration* 97(3): 489–98.
- "Meeting of the 192th House of Representatives Financial Affairs Committee." 2016. [https://www.shugiin.go.jp/internet/itdb\\_kaigiroku.nsf/html/kaigiroku/009519220161018001.htm](https://www.shugiin.go.jp/internet/itdb_kaigiroku.nsf/html/kaigiroku/009519220161018001.htm) (August 4, 2022).
- Mehta, Jal David. 2010. "The Varied Roles of Ideas in Politics: From 'Whether' to 'How.'" In *Ideas and Politics in Social Science Research*, eds. Daniel Béland and Robert Henry Cox. Oxford University Press.
- Mészáros, George. 2013. "Macroprudential Regulation: A Contradiction in Its Own Terms." *Journal of Banking Regulation* 14(2): 164–82.
- Mian, Atif, Amir Sufi, and Francesco Trebbi. 2014. "Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crises." *American Economic Journal: Macroeconomics* 6(2): 1–28.
- Mikuniya, Katsunori. 2010. "Mikuniya Kinyuchokan Koen 'Waga Kuni Shijo wo Meguru Jokyō to Shomondai.'" Presented at the Japan Securities Dealers Association "2010 Representatives Seminar." <https://www.fsa.go.jp/common/conference/danwa/20100916-2.html> (November 15, 2022).
- Mitchell, Christopher W. 2016. "The Structure of Financial Markets and the Form of State Bailouts, 1974-2009." *Business and Politics* 18(2): 97–122.
- Moe, Terry M. 1987. "An Assessment of the Positive Theory of 'Congressional Dominance.'" *Legislative Studies Quarterly* 12(4): 475–520.
- Nakano, Mitsuhiro. 2016. *Financial Crisis and Bank Management in Japan (1997 to 2016): Building a Stable Banking System*. London, UK.

- Nakaso, Hiroshi. 2022. *Saigo no bōeisen: kiki to nippon ginkō*. Tokyo, Japan: Nihon Keizai Shimbun Shuppan.
- Nelson, Stephen C. 2014. “Playing Favorites: How Shared Beliefs Shape the IMF’s Lending Decisions.” *International Organization* 68(2): 297–328.
- New York State Office of the Attorney General. 2003. “State Investigation Reveals Mutual Fund Fraud.” <https://ag.ny.gov/press-release/2003/state-investigation-reveals-mutual-fund-fraud> (December 22, 2022).
- Nielson, Daniel L., and Michael J. Tierney. 2003. “Delegation to International Organizations: Agency Theory and World Bank Environmental Reform.” *International Organization* 57(2): 241–76.
- Nier, E. W. 2011. “Macroprudential Policy - Taxonomy and Challenges.” *National Institute Economic Review* 216(1).
- Nier, Erlend et al. 2011. “Institutional Models for Macroprudential Policy.” *Staff Discussion Notes* 11(18): 1.
- Nihon Keizai Shimbun. 2010. “Ginkō no jiko shihon uwanose.” : 004.
- Nihon Keizai Shinbun. 2011. “銀行新規制 経営転換迫る.” 日本経済新聞: 007.
- Nishino, Tomohiko. 2019. *Heisei Kinyū-Shi: Baburu Hōkai Kara Abenomikusu Made*. Tokyo, Japan: Chuo Koron Shinsya.
- “Nominations of: Stanley Fischer, Jerome H. Powell, Lael Brainard, Gustavo Velasquez Aguilar, and J. Mark McWatters.” 2014. : 122.  
<https://www.govinfo.gov/content/pkg/CHRG-113shrg90995/pdf/CHRG-113shrg90995.pdf>.
- Nomura Research Institute. 2009. “Japan’s Asset Management Business 2009.” : 18.
- Noreika, Keith A. 2017. “Remarks by Keith A. Noreika, Acting Comptroller of the Currency.” <https://www.occ.gov/news-issuances/speeches/2017/pub-speech-2017-116.pdf>.
- OFR. 2013. *Asset Management and Financial Stability*.  
[https://www.financialresearch.gov/reports/files/ofr\\_asset\\_management\\_and\\_financial\\_stability.pdf](https://www.financialresearch.gov/reports/files/ofr_asset_management_and_financial_stability.pdf).
- Otake, Tomoko. 2013. “Tax-Free Account Seeks to Spur Investment.” *The Japan Times*.  
<https://www.japantimes.co.jp/news/2013/10/15/reference/tax-free-account-seeks-to-spur-investment/> (October 18, 2022).
- Otting, Joseph M. 2018. “Remarks by Joseph M. Otting, Comptroller of the Currency.” <https://www.occ.gov/news-issuances/speeches/2018/pub-speech-2018-120.pdf>.

- Pagliari, Stefano, and Kevin L. Young. 2014. "Leveraged Interests: Financial Industry Power and the Role of Private Sector Coalitions." *Review of International Political Economy* 21(3): 575–610.
- Paredes, Troy A. 2009a. "Remarks." Presented at the Symposium on "The Past, Present, and Future of the SEC," Pittsburgh, PA. <https://www.sec.gov/news/speech/2009/spch101609tap.htm> (November 13, 2020).
- . 2009b. "Remarks." Presented at the Before the Mutual Fund Directors Forum Ninth Annual Policy Conference, Washington, D.C. <https://www.sec.gov/news/speech/2009/spch050409tap.htm> (December 29, 2022).
- . 2010. "Remarks." Presented at the Security Traders Association 77th Annual Conference and Business Meeting, Washington, D.C. <https://www.sec.gov/news/speech/2010/spch092410tap.htm> (December 29, 2022).
- Park, Gene. 2022. "The Bank of Japan: Central Bank Independence and the Politicization of Monetary Policy." In *The Oxford Handbook of Japanese Politics*, eds. Robert J. Pekkanen and Saadia M. Pekkanen. Oxford University Press, 0.
- Parsons, Craig. 2002. "Showing Ideas as Causes: The Origins of the European Union." *International Organization* 56(1): 47–84.
- . 2016. "Ideas and Power: Four Intersections and How to Show Them." *Journal of European Public Policy* 23(3): 446–63.
- Piwowar, Michael S. 2014. "Remarks at AEI Conference on Financial Stability." Presented at the American Enterprise Institute Conference on Financial Stability, Washington, D.C. <https://www.sec.gov/news/speech/2014-spch071514msp> (December 29, 2022).
- Pollack, Mark A. 1997. "Delegation, Agency, and Agenda Setting in the European Community." *International Organization* 51(1): 99–134.
- Porter, Tony. 2001. "The Democratic Deficit in the Institutional Arrangements for Regulating Global Finance." *Global Governance* 7(4): 427–39.
- Poser, Norman S. 2009. "Why the SEC Failed: Regulators Against Regulation." *Brooklyn Journal of Corporate, Financial and Commercial Law* 3(2): 37.
- Pozen, Robert C., and Theresa Hamacher. 2011. *The Fund Industry*. Hoboken, NJ: John Wiley & Sons, Inc.
- Prime Minister of Japan and His Cabinet. 2013. "Policy Speech by Prime Minister Shinzo Abe to the 183rd Session of the Diet." *Prime Minister of Japan and His Cabinet*. [https://japan.kantei.go.jp/96\\_abe/statement/201301/28syosin\\_e.html](https://japan.kantei.go.jp/96_abe/statement/201301/28syosin_e.html) (November 9, 2022).

- Prime Minister's Office of Japan. 2013. *Nihon keizai saisei ni muketa kinkyū taisaku ni tsuite*. [https://www5.cao.go.jp/keizai1/keizaitaisaku/2013/0111\\_01taisaku.pdf](https://www5.cao.go.jp/keizai1/keizaitaisaku/2013/0111_01taisaku.pdf).
- Przeworski, Adam, and Michael Wallerstein. 1988. "Structural Dependence of the State on Capital." *American Political Science Review* 82(4): 11–30.
- Quarles, Randal K. 2018a. "Early Observations on Improving the Effectiveness of Post-Crisis Regulation." <https://www.federalreserve.gov/newsevents/speech/files/quarles20180119a.pdf>.
- . 2018b. "The U.S. Economy after the Global Financial Crisis." <https://www.federalreserve.gov/newsevents/speech/files/quarles20180222a.pdf>.
- Reinicke, Wolfgang. 1995. *Banking, Politics, and Global Finance: American Commercial Banks and Regulatory Change, 1980-1990*. Edward Elgar.
- Reinicke, Wolfgang H. 1995. *Banking, Politics and Global Finance: American Commercial Banks and Regulatory Change, 1980-1990*. Washington, D.C.: Edward Elgar.
- Reisenbichler, Alexander. 2015. "The Domestic Sources and Power Dynamics of Regulatory Networks: Evidence from the Financial Stability Forum." *Review of International Political Economy* 22(5): 996–1024.
- Reuters. 2009. "Kashiire moratoriumu no hōseika wo kentō." *Reuters Japan*. <https://jp.reuters.com/article/idJPJAPAN-11535220090916> (September 23, 2022).
- Ricketts, David. 2013. "Watchdogs on the Scent of the Money." *Financial Times (FT.Com)*.
- Rosengren, Eric S. 2013. "Financial Stability Oversight Council's Proposed Recommendations Regarding Money Market Mutual Fund Reform." <https://www.bostonfed.org/-/media/Documents/Press%20Releases/PDF/pr021213-letter.pdf>.
- Rowland, Gregory S. 2013. "Designation of Asset Managers and Funds As Systemically Important Non-Bank Financial Institutions: Process and Industry Implications: Part 2 of 2." *The Investment Lawyer* 20(4): 8.
- Ryan, Tracey. 2016. "Tarullo: Change Is Afoot for Big Banks." *Wall Street Journal*.
- Satō, Takafumi. 2008. "Strengthening the Competitiveness of Japan's Financial and Capital Markets." Presented at the Third Japan CFO Roundtable, Tokyo, Japan. <https://www.fsa.go.jp/en/announce/state/20080220.html> (August 6, 2022).
- . 2010. *Kinyū gyōsei no zahyōjiku*. Tokyo, Japan: Tōyō Keizai Shinpō Sha.

- Schapiro, Mary L. 2010. "Testimony Concerning the State of the Financial Crisis." Presented at the Financial Crisis Inquiry Commission, Washington, D.C. <https://www.sec.gov/news/testimony/2010/ts011410mls.htm> (December 29, 2022).
- Schwarcz, Steven L. 2009. "Regulating Complexity in Financial Markets." *Washington University Law Review* 87(2).
- Seabrooke, Leonard, and Eleni Tsingou. 2009a. "Revolving Doors and Linked Ecologies in the World Economy: Policy Locations and the Practice of International Financial Reform." *CSGR Working Paper* 260(09): 30.
- . 2009b. "Revolving Doors and Linked Ecologies in the World Economy : Policy Locations and the Practice of International Financial Reform." *CSGR Working Paper* 260/09: 37–41.
- SEC. 2012. "Statement of SEC Chairman Mary L. Schapiro on Money Market Fund Reform." <https://www.sec.gov/news/press-release/2012-2012-166htm> (September 24, 2020).
- . 2015a. *Liquidity and Flows of U.S. Mutual Funds*. Division of Economic and Risk Analysis. <https://www.sec.gov/dera/staff-papers/white-papers/liquidity-white-paper-09-2015.pdf>.
- . 2015b. *Use of Derivatives by Registered Investment Companies*. Division of Economic and Risk Analysis. <https://www.sec.gov/files/derivatives12-2015.pdf>.
- Seok, Young-Hwa, and Hyun Song Shin. 2013. "Banking, Capital Flows, and Financial Cycles: Common Threads in the 2007–2009 Crises." In *How Finance Is Shaping the Economies of China, Japan, and Korea*, ed. Hugh Patrick. Columbia Business School Publishing, 45.
- Shafer, Michael D. 1994. *Winners and Losers: How Sectors Shape the Developmental Prospects of States*. Ithaca, N.Y.: Cornell University Press.
- Sherman, Matthew. 2009. *A Short History of Financial Deregulation in the United States*. Washington, D.C.: Center for Economic and Policy Research.
- Shirakawa, Masaaki. 2018. *Chūō Ginkō: Sentoraru Bankā No Keiken Shita 39 Nen*. Tokyo, Japan: Toyo Keizai Shimpōsha.
- Singer, David Andrew. 2004. "Capital Rules: The Domestic Politics of International Regulatory Harmonization." *International Organization* 58(03).
- . 2007. *Regulating Capital : Setting Standards for the International Financial System*. Ithaca, N.Y.: Cornell University Press.

- Slater, Dan, and Erica Simmons. 2010. 43 *Comparative Political Studies Informative Regress: Critical Antecedents in Comparative Politics*.
- Slater, Dan, and Daniel Ziblatt. 2013. "The Enduring Indispensability of the Controlled Comparison." *Comparative Political Studies* 46(10): 1301–27.
- Smith, Mark A. 2000. *American Business and Political Power: Public Opinion, Elections, and Democracy*. Chicago, IL: University of Chicago Press.
- Soifer, Hillel David. 2012a. "The Causal Logic of Critical Junctures." *Comparative Political Studies* 45(12): 1572–97.
- . 2012b. "The Causal Logic of Critical Junctures." *Comparative Political Studies* 45(12): 1572–97.
- "Statement by Ben S. Bernanke, Chairman, Board of the Federal Reserve System." 2010. : 28.  
<https://www.federalreserve.gov/newsevents/testimony/bernanke20100902a.pdf>.
- Stein, Kara M. 2015. "Mutual Funds - The Next 75 Years."  
<https://www.sec.gov/news/speech/mutual-funds-the-next-75-years-stein.html>  
 (October 2, 2020).
- Stellinga, Bart. 2020. "The Open-Endedness of Macroprudential Policy. Endogenous Risks as an Obstacle to Countercyclical Financial Regulation." *Business and Politics* 22(1): 224–51.
- Stevens, Paul Schott. 2016. "Regulated Funds Meet the Needs of the Market." *Financial Times* (39320): 10.
- Stigler, George. 1971. "The Theory of Economic Regulation." *Bell Journal of Economics and Management Science* 2(1): 3.
- Sugita Koji. 2011. "Hossoku kara man 60 nen o mukaeru Nihon no tōshi shintaku." *Japan Securities Research Institute*: 24.
- . 2014. "Zandaka ga 3,000 chō en wo koeta sekai no tōshi shintaku." *Nihon Shouken Keizai Kenkyujo*: 16.
- . 2019. *Tōshi Shintaku No Sekai*. Ippan Shakaidan Hōjin Kinyū Zaisei Jijō Kenkyūkai.
- Tabuchi, Hiroko. 2010. "Backlash Builds in Japan to New Rules for Banks." *The New York Times*. <https://www.nytimes.com/2010/04/23/business/global/23yen.html>  
 (August 3, 2022).
- Tamura, Takeshi. 2019. *Tōshi Shintaku: Kiso to Jitumu*. 16th ed. Tokyo, Japan: Keizai Hōrei Kenkyūjo.

- Tarullo, Daniel K. 2010a. “Financial Regulatory Reform.” Presented at the U.S. Monetary Policy Forum, New York, NY.  
<https://www.federalreserve.gov/newsevents/speech/tarullo20100226a.pdf>.
- Tarullo, Daniel K. 2010b. “Involving Markets and the Public in Financial Regulation.” Presented at the Council of Institutional Investors Meeting, Washington, D.C.  
<https://www.federalreserve.gov/newsevents/speech/files/tarullo20100413a.pdf>.
- . 2011. “Regulating Systemic Risk.” Presented at the 2011 Credit Markets Symposium, Charlotte, North Carolina.  
<https://www.federalreserve.gov/newsevents/speech/tarullo20110331a.htm>  
 (December 18, 2022).
- . 2012. “Financial Stability Regulation.” Presented at the University of Pennsylvania Law School Distinguished Jurist Lecture, Philadelphia, Pennsylvania.  
[https://fraser.stlouisfed.org/files/docs/historical/federal%20reserve%20history/bo\\_g\\_members\\_statements/tarullo\\_20121010.pdf](https://fraser.stlouisfed.org/files/docs/historical/federal%20reserve%20history/bo_g_members_statements/tarullo_20121010.pdf).
- . 2014. “Rethinking the Aims of Prudential Regulation.” Presented at the Federal Reserve Bank of Chicago Bank Structure Conference, Chicago, Illinois.  
<https://www.federalreserve.gov/newsevents/speech/tarullo20140508a.htm>  
 (October 1, 2020).
- . 2016. “Next Steps in the Evolution of Stress Testing.” Presented at the Yale University School of Management Leaders Forum.  
<https://www.federalreserve.gov/newsevents/speech/files/tarullo20160926a.pdf>  
 (November 13, 2020).
- . 2017. “Departing Thoughts.” Presented at the Woodrow Wilson School, Princeton University, Princeton, New Jersey.  
<https://www.federalreserve.gov/newsevents/speech/tarullo20170404a.htm>  
 (December 18, 2022).
- . 2019. “Taking the Stress Out of Stress Testing.” Presented at the Americans for Financial Reform Conference on Big Bank Regulation under the Trump Administration, Washington, D.C.
- The White House. 2009. “Remarks of the President on Regulatory Reform.” *The White House*. <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-regulatory-reform> (December 18, 2022).
- Thelen, Kathleen, and Sven Steinmo. 1992. “Historical Institutionalism in Comparative Politics.” In *Structuring Politics*, eds. Sven Steinmo, Kathleen Thelen, and Frank Longstreth. Cambridge University Press, 1–32.
- Thiemann, Matthias. 2018. “Is Resilience Enough? The Macro-Prudential Reform Agenda and the Lacking Smoothing of the Cycle.” *Public Administration*.

- . 2019. “Is Resilience Enough? The Macroprudential Reform Agenda and the Lack of Smoothing of the Cycle.” *Public Administration* 97(3): 561–75.
- . 2020. “Macro-Prudential Regulation Post-Crisis and the Resilience of Financialization.” In *The Routledge International Handbook of Financialization*, eds. Philip Mader, Daniel Mertens, and Natascha van der Zwan. Routledge, 468–81.
- Thiemann, Matthias, Mohamed Aldegwy, and Edin Ibrocevic. 2018. “Understanding the Shift from Micro- to Macro-Prudential Thinking: A Discursive Network Analysis.” *Cambridge Journal of Economics* 42(4): 935–62.
- Thiemann, Matthias, Marius Birk, and Jan Friedrich. 2018. “Much Ado About Nothing? Macro-Prudential Ideas and the Post-Crisis Regulation of Shadow Banking.” *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie* 70(S1): 259–86.
- Thiemann, Matthias, and Tobias H. Tröger. 2020. “Detecting Tail Risks to Preclude Regulatory Arbitrage-The Case for a Normatively Charged Approach to Regulating Shadow Banking Based on Multipolar Regulatory Dialogues.” *Accounting, Economics, and Law: A Convivium*.
- Toomey, Pat. 2017. “Letter from Senator Patrick J. Toomey to Janet Yellen.” <https://static.politico.com/7e/e9/9eb3f9594e24a78a0bd2d63df551/toomey-letter-to-yellen-on-ccar.PDF>.
- Toya, Testuro. 2006. *The Political Economy of the Japanese Financial Big Bang: Institutional Change in Finance and Public Policymaking*. ed. Jennifer Amyx. Oxford, UK: Oxford University Press.
- Turner, Adair. 2011. “Reforming Finance: Are We Being Radical Enough?” Presented at the Clare Distinguished Lecture in Economics and Public Policy, FSA, London, UK.
- Underhill, Geoffrey R. D., and Xiaoke Zhang. 2008. “Setting the Rules: Private Power, Political Underpinnings, and Legitimacy in Global Monetary and Financial Governance.” *International Affairs (Royal Institute of International Affairs 1944-)* 84(3): 535–54.
- U.S. Congress. 2018. Public Law 115–174 *Economic Growth, Regulatory Relief, and Consumer Protection Act*. <https://www.congress.gov/115/plaws/publ174/PLAW-115publ174.pdf>.
- U.S. Department of Treasury. 2009. *A New Foundation: Rebuilding Financial Supervision and Regulation*. Washington, D.C.: U.S. Department of the Treasury. [https://www.treasury.gov/initiatives/wsr/Documents/FinalReport\\_web.pdf](https://www.treasury.gov/initiatives/wsr/Documents/FinalReport_web.pdf).

- US Department of Treasury. 2015. “Financial Stability Oversight Council Announces Changes to Nonbank Designations Process.” <https://www.treasury.gov/press-center/press-releases/Pages/j19766.aspx> (October 3, 2020).
- . 2016. “Update on Review of Asset Management Products and Activities.” <https://www.treasury.gov/initiatives/fsoc/news/Documents/FSOC%20Update%20on%20Review%20of%20Asset%20Management%20Products%20and%20Activities.pdf>.
- U.S. Department of Treasury. 2017. *A Financial System That Creates Economic Opportunities: Banks and Credit Unions*. Washington, D.C.: U.S. Department of the Treasury. [https://www.treasury.gov/press-center/press-releases/Documents/A Financial System.pdf](https://www.treasury.gov/press-center/press-releases/Documents/A%20Financial%20System.pdf).
- U.S. House of Representatives. 2008a. “The Financial Crisis and the Role of Federal Regulators.” *Hearing before the Committee on Oversight and Government Reform* 113th cong.(2nd sess). <https://www.govinfo.gov/content/pkg/CHRG-110hhrg55764/html/CHRG-110hhrg55764.htm> (January 5, 2023).
- . 2008b. “The Future of Financial Services: Exploring Solutions for the Market Crisis.” *Hearing before the Committee on Financial Services* 110th cong.(2nd sess).
- . 2011a. “Fixing the Watchdog: Legislative Proposals to Improve and Enhance the Securities and Exchange Commission.” *Hearing before the Committee on Financial Services* 112th cong.(1st sess.). <https://www.govinfo.gov/content/pkg/CHRG-112hhrg72603/pdf/CHRG-112hhrg72603.pdf>.
- . 2011b. “Oversight of the U.S. Securities and Exchange Commission’s Operations, Activities, Challenges, and FY 2012 Budget Request.” *Hearing before the Subcommittee on Capital Markets and Government Sponsored Enterprises of the Committee on Financial Services* 112th cong.(1st sess). <https://www.govinfo.gov/content/pkg/CHRG-112hhrg65674/pdf/CHRG-112hhrg65674.pdf>.
- . 2012. “Oversight of the U.S. Securities and Exchange Commission.” *Hearing before the Subcommittee on Capital Markets and Government Sponsored Enterprises of the Committee on Financial Services* 112th cong.(2nd sess): 85.
- . 2013. “Examining the SEC’s Money Market Fund Rule Proposal.” *Hearing before the Subcommittee on Capital Markets and Government Sponsored Enterprises of the Committee on Financial Services* 113th cong.(1st sess.). <https://www.govinfo.gov/content/pkg/CHRG-113hhrg86679/pdf/CHRG-113hhrg86679.pdf>.

- . 2014a. “Oversight of the SEC’s Agenda, Operations, and FY 2015 Budget Request.” *Hearing before the Committee on Financial Services* 113th cong.(2nd sess.).
- . 2014b. “The Growth of Financial Regulation and Its Impact on International Competitiveness.” *Hearing before the Subcommittee on Oversight and Investigations of the Committee on Financial Services* 113th cong. 2nd session.
- . 2016. “Semi-Annual Testimony on the Federal Reserve’s Supervision and Regulation of the Financial System.” *Hearing before the Committee on Financial Services* 114th cong.,(2nd sess.). <https://www.govinfo.gov/content/pkg/CHRG-114hhr25967/pdf/CHRG-114hhr25967.pdf>.
- . 2018. “Semi-Annual Testimony on the Federal Reserve’s Supervision and Regulation of the Financial System.” *Hearing before the Committee on Financial Services* 115th cong.,(2nd sess.). <https://www.govinfo.gov/content/pkg/CHRG-115hhr31420/pdf/CHRG-115hhr31420.pdf>.
- U.S. Senate. 2012a. “International Harmonization of Wall Street Reform: Orderly Liquidation, Derivatives, and the Volcker Rule.” *Hearing before the Committee on Banking, Housing, and Urban Affairs* 112th cong. <https://www.govinfo.gov/content/pkg/CHRG-112shrg76591/pdf/CHRG-112shrg76591.pdf>.
- . 2012b. “Perspectives on Money Market Mutual Fund Reforms.” *Hearing before the Committee on Banking, Housing, and Urban Affairs* 112th cong.(2nd sess.). <https://www.govinfo.gov/content/pkg/CHRG-112shrg79589/pdf/CHRG-112shrg79589.pdf>.
- . 2013a. “Mitigating Systemic Risk in Financial Markets Through Wall Street Reforms.” *Senate Committee on Banking, Housing, and Urban Affairs* 113th cong. 1st sess.: 66.
- . 2013b. “Wall Street Reform: Oversight of Financial Stability and Consumer and Investor Protections.” *Hearing before the Committee on Banking, Housing, and Urban Affairs* 113th cong.(1st sess.). <https://www.govinfo.gov/content/pkg/CHRG-113shrg80387/pdf/CHRG-113shrg80387.pdf>.
- . 2017. “Fostering Economic Growth: Regulator Perspective.” *Hearing before the Committee on Banking, Housing, and Urban Affairs* 115th cong.,(1st sess.). <https://www.govinfo.gov/content/pkg/CHRG-115shrg26901/pdf/CHRG-115shrg26901.pdf>.
- Verdier, Daniel. 2003. *Moving Money: Banking and Finance in the Industrialized World*. Cambridge: Cambridge University Press.

- Verdun, Amy. 2015. "A Historical Institutional Explanation of the EU's Responses to the Euro Area Financial Crisis." *Journal of European Public Policy* 22(2): 219–37.
- Vogel, David. 1987. "Political Science and the Study of Corporate Power : A Dissent from the New Conventional Wisdom." *British Journal of Political Science* 17(4): 385–408.
- Vogel, Steven K. 1996. *Freer Markets, More Rules*. Ithaca, N.Y.: Cornell University Press.
- Vogel, Steven K. 2006. *Japan Remodeled: How Government and Industry Are Reforming Japanese Capitalism*. Ithaca, NY: Cornell University Press.
- "Wall Street Reform: Assessing and Enhancing the Financial Regulatory System." 2014. *Hearing before the Committee on Banking, Housing, and Urban Affairs* 113th cong., (2nd sess.). <https://www.govinfo.gov/content/pkg/CHRG-113shrg93323/pdf/CHRG-113shrg93323.pdf>.
- Warsh, Kevin. 2010. "An Ode to Independence." Presented at the Shadow Open Market Committee, New York, NY. <https://www.federalreserve.gov/newsevents/speech/warsh20100326a.htm> (December 18, 2022).
- Weber, Max. 1958. *From Max Weber: Essays in Sociology*. 2nd ed. New York, NY: Oxford University Press.
- Weingast, Barry R. 1984. "The Congressional-Bureaucratic System: A Principal Agent Perspective (with Applications to the SEC)." *Public Choice* 44(1): 147–91.
- White, Mary Jo. 2014. "Enhancing Risk Monitoring and Regulatory Safeguards for the Asset Management Industry. New York, NY." Presented at the New York Times DealBook Opportunities for Tomorrow Conference Held at One World Trade Center, New York, NY. <https://www.sec.gov/news/speech/2014-spch121114mjw> (September 30, 2020).
- Wilson, Graham K. 2012. "The United States: The Strange Survival of (Neo)Liberalism." In *The Consequences of the Global Financial Crisis: The Rhetoric of Reform and Regulation*, eds. Wyn Grant and Grant K. Wilson. Oxford, UK: Oxford University Press, 51–66.
- Wilson, James Q. 1989. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York, NY: Basic Books.
- Woll, Cornelia. 2014. *The Power of Inaction: Bank Bailouts in Comparison*. Cornell University Press.

- . 2016. “Politics in the Interest of Capital: A Not-so- Organized Combat.” *Politics and Society* 44(3): 373–91.
- Wyatt, Edward. 2012. “Money Market Funds Still at Risk, SEC Chief Says.” *New York Times*.
- Yamamura, Kozo, and Wolfgang Streeck, eds. 2003. *The End of Diversity? Prospects for German and Japanese Capitalism*. Cornell University Press.
- Yellen, Janet L. 2009. “A Minsky Meltdown: Lessons for Central Bankers.” Presented at the Presentation to the 18th Annual Hyman P. Minsky Conference on the State of the U.S. and World Economies—“Meeting the Challenges of the Financial Crisis,” Bard College, New York, NY. <https://www.frbsf.org/our-district/press/presidents-speeches/yellen-speeches/2009/april/yellen-minsky-meltdown-central-bankers/> (December 18, 2022).
- Young, Kevin. 2013. “Financial Industry Groups’ Adaptation to the Post-Crisis Regulatory Environment: Changing Approaches to the Policy Cycle.” *Regulation and Governance* 7(4): 460–80.
- . 2015. “Not by Structure Alone: Power, Prominence, and Agency in American Finance.” *Business and Politics* 17(3): 443–72.
- Young, Kevin L. 2012. “Transnational Regulatory Capture? An Empirical Examination of the Transnational Lobbying of the Basel Committee on Banking Supervision.” *Review of International Political Economy* 19(4): 663–88.
- Ziegler, J. Nicholas, and John T. Woolley. 2016. “After Dodd-Frank: Ideas and the Post-Enactment Politics of Financial Reform in the United States.” *Politics and Society* 44(2): 249–80.
- Zürn, Michael, and Jeffrey T. Checkel. 2005. “Getting Socialized to Build Bridges: Constructivism and Rationalism, Europe and the Nation-State.” *International Organization* 59(Fall): 35.
- Zysman, John. 1983. *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change*. Ithaca, NY: Cornell University Press.
- . 1984. *Governments, Markets, and Growth: Financial Systems and Politics of Industrial Change*. Cornell University Press.

## APPENDIX

### List of Interviewees

Interview #	Respondent Role	Respondent Type	# of respondent	Month/Year	Duration	Method
1	Americans for Financial Reform official	Civil Society Organization	1	10/2019	1 hr	In-person
2	US Government Accountability Office official	Outside expert	1	10/2019	1 hr	In-person
3	American Bankers' Association official	Financial industry professional	2	10/2019	1 hr	In-person
4	International Monetary Fund	International regulator	1	11/2018	1 hr	Phone
5	Fed Board of Governors, Division of Financial Stability official	Domestic regulator	1	10/2019	1 hr	In-person
6	Former member of the Federal Reserve Board	Domestic regulator	1	12/2020	30 min	Phone
7	US Government Accountability Office official	Outside expert	1	10/2019	1 hr	In-person
8	Officials, Office of the Comptroller of the Currency	Domestic regulator	3	11/2019	30 min	Phone
9	Former official, MOF Securities Bureau	Domestic Regulator	1	1/2022	1 hr	Zoom
10	Former official, FSA General Affairs Planning Bureau	Domestic Regulator	1	2/2022	1 hr	In-person
11	Former CEO, multinational bank in Japan	Industry professional	1	1/2022	1 hr	In-person
12	Former official, FSA Certified Public Accountants and Audit Oversight Board and Department of Strategy Development and Management	Domestic Regulator	1	3/2022	1 hr	Zoom
13	Lobbyist, Multinational bank in Japan	Industry professional	1	5/2022	1.5 hr	In-person
14	Journalist, Nihon Keizai Shimbun	Journalist	1	6/2022	45 min	Phone
15	Official, BOJ Financial System Department	Domestic Regulator	1	2/2022	1 hr	Zoom

<b>16</b>	Former official, BOJ International Department	Domestic Regulator	1	1/2022	1 hr	Zoom
<b>17</b>	Former official, BOJ Financial System and Bank Examination Department	Domestic Regulator	1	5/2022	30 min	In-person
<b>18</b>	Official, Financial Stability Board	International Regulator	1	1/2021	30 min	Zoom
<b>19</b>	Advisory board member, Mutual Fund Directors Forum	Financial industry professional	1	8/2020	1 hr	Zoom
<b>20</b>	Former official, SEC Division of Investment Management	Domestic regulator	1	10/2020	30 min	Phone
<b>21</b>	Former official, SEC Division of Investment Management	Domestic regulator	1	10/2020	30 min	Phone