

**Mastering Uncertainty after the Global Financial Crisis:
The Dynamics of Paradigm Change in Eurozone Financial Regulation**

DISSERTATION

of the University of St.Gallen,
School of Management,
Economics, Law, Social Sciences
and International Affairs
to obtain the title of
Doctor of Philosophy in International
Affairs and Political Economy

submitted by

Timo Gerrit Alexander Blenk

from

Germany

Approved on the application of

Prof. Dr. Patrick Emmenegger

and

Prof. Rawi E. Abdelal, PhD

Dissertation no. 4823

Difo-Druck GmbH, Bamberg 2019

The University of St.Gallen, School of Management, Economics, Law, Social Sciences and International Affairs hereby consents to the printing of the present dissertation, without hereby expressing any opinion on the views herein expressed.

St.Gallen, October 19, 2018

The President:

Prof. Dr. Thomas Bieger

Acknowledgements

I wish to express my gratitude to Prof. Patrick Emmenegger for his great support and excellent guidance over the last four years. I also want to thank Prof. Rawi Abdelal and Prof. Klaus Dingwerth for their support and valuable feedback to this research project. I thank Prof. Thomas Wüstrich for his encouragement and his unyielding cooperation at the Universität der Bundeswehr München. Furthermore, I would like to give a special mention to Cornelia Kappeler for her great spirit and excellent assistance at the University of St. Gallen. I also would like to thank Gina di Maio, Lina Seitzl and all other team members of the Emmenegger research group for their thoughtful comments on this work. My special thanks go to Dr. Lisa Precht and my mother Dr. Edda Blenk-Knocke for the greatest support over all the years.

I thank the German Friedrich-Ebert-Stiftung for funding this dissertation project.

St. Gallen, June 2018

Timo Blenk

Contents

- Tables and Figures V
- Abbrevations VI
- Book Summary VIII
- Buchzusammenfassung IX

- 1. Introduction 1
 - 1.1. Ideas in the International Political Economy 2
 - 1.2. Theoretical foundation 4
 - 1.2.1. Ideas in IPE research 4
 - 1.2.2. State of paradigm change research 5
 - 1.2.3. Open questions 8
 - 1.2.4. My argument in brief 9
 - 1.2.5. Theoretical contributions and limitations 10
 - 1.2.6. Definitions and concepts 11
 - 1.3. Empirical Case: Eurozone financial regulation 17
 - 1.4. Methods 19
 - 1.4.1. Research design 19
 - 1.4.2. Operationalization and data collection 21
 - 1.5. Book structure 23

- 2. Eurozone Financial Regulation Ten Years after the Crisis – Paradigm or Policy Change? 25
 - 2.1. Introduction 26
 - 2.2. The Power of Ideas 27
 - 2.3. Methods 29
 - 2.3.1. Study Design 29
 - 2.3.2. Data collection 30
 - 2.4. Results 31
 - 2.4.1. Financial regulation in the Eurozone from 1992 to 2007 31
 - 2.4.2. Financial regulation in the Eurozone from 2008 to 2016 32
 - 2.5. Discussion 37
 - 2.5.1. First and second order change 37
 - 2.5.2. Third order change 37
 - 2.5.3. Summary and limitations 40
 - 2.6. Conclusion 41

3.	The New Technocracy	43
3.1.	Introduction.....	44
3.2.	Methods	45
3.3.	The New Technocracy	46
3.3.1.	Macroprudential surveillance	47
3.3.2.	Keynesian renaissance.....	47
3.3.3.	Implications	48
3.3.4.	Concept	49
3.4.	Results	51
3.4.1.	Systemic riskification	52
3.4.2.	Quantification.....	54
3.4.3.	Expertization.....	56
3.4.4.	Implementation level.....	58
3.5.	Discussion.....	59
3.5.1.	Systemic riskification	59
3.5.2.	Quantification.....	60
3.5.3.	Expertization.....	60
3.5.4.	Implementation level.....	61
3.5.5.	General implications.....	61
3.6.	Conclusion	62
4.	Elimination of the old paradigm	63
4.1.	Introduction.....	64
4.2.	Paradigm elimination	65
4.2.1.	Existence and institutionalization of alternative ideas	66
4.2.2.	Critical junctures.....	67
4.2.3.	Uncertainty.....	67
4.3.	Methods	68
4.4.	Results	70
4.4.1.	Existence of alternative ideas	70
4.4.2.	Critical Junctures	72
4.4.3.	Uncertainty.....	74
4.5.	Discussion.....	76
4.5.1.	Existence of alternative ideas	76
4.5.2.	Critical Junctures	77

4.5.3.	Uncertainty	78
4.5.4.	General implications	78
4.6.	Conclusion	79
5.	Establishment of the new paradigm	81
5.1.	Introduction	82
5.2.	Paradigm establishment	83
5.2.1.	Paradigm adoption	84
5.2.2.	Redefinition of policy goals and actor expectations	88
5.3.	Methods	89
5.4.	Results	90
5.4.1.	Paradigm adoption phase	90
5.4.2.	Shift of actor expectations and policy goals	93
5.5.	Discussion	95
5.5.1.	Paradigm adoption	96
5.5.2.	Redefinition of policy goals and actor expectations	98
5.5.3.	General implications	99
5.6.	Conclusion	101
6.	Concluding remarks on paradigm change	103
6.1.	Paradigm change of Eurozone financial regulation	103
6.1.1.	Paradigm change after the Crisis	104
6.1.2.	The new technocracy	104
6.1.3.	Paradigm Change Analysis	105
6.1.4.	The role of PCA for expanding ideational IPE scholarship	106
6.2.	Beyond the Eurozone: US financial regulation	107
6.2.1.	The empirical US case	108
6.2.2.	Paradigm change analysis of US financial regulation	108
6.2.3.	Discussion of ideational insights on US financial regulation	109
6.3.	Limitations and open questions	110
	References	113
	Annex	129

Tables and Figures

Tables

Table 1.1: Types of ideas and their effects on policymaking	12
Table 1.2: Hall's typology of policy changes	15
Table 1.3: Overview expert interviews	23
Table 2.1: Major European regulation legislation since 2008.....	35
Table 2.2: Change of financial regulation dimensions	40
Table 3.1: Instruments under the CRD IV / CRR for macroprudential use	53
Table 3.2: Macroprudential instruments and related indicators	55
Table 4.1: Selected joint central bank initiatives: macro-prudential level	71
Table 5.1: Summary of relevant paradigm adoption criteria.....	98

Figures

Figure 2.1: Research Design	30
Figure 2.2: Major European Financial Regulation Legislation during the period 1992 – 2007	31
Figure 2.3: Milestones of Eurozone financial regulation since 2008	33
Figure 2.4: Number of publications per year on macroprudential supervision	33
Figure 3.1: New technocracy concept	50
Figure 3.2: Implementation level of the new technocracy	51
Figure 3.3: Registered financial stability expert groups at EU level 2008 - 2017	57
Figure 3.4: Composition of registered EU financial stability expert groups 2016	58
Figure 4.1: Number of publications per year on Keynesian theory of financial regulation	72
Figure 4.2: Annual real GDP growth rate in the euro area from 2005 to 2016.....	73
Figure 4.3: CISS development in the euro area from 1998 to 2010.....	75
Figure 4.4: BCI development from 1998 to 2017	75
Figure 4.5: Elimination of the old paradigm	79
Figure 5.1: Factors affecting the adoption of Keynesian ideas	85
Figure 5.2: Monthly ECB net purchases under the PSPP in EUR billions.....	95
Figure 5.3: Paradigm Change Analysis (PCA)	100

Abbreviations

ABA	American Bankers Association
ACF	Advocacy Coalition Framework
BCI	Business Confidence Index
BIS	Bank for International Settlements
BRRD	Bank Recovery and Resolution Directive
CBR	Combined Buffer Requirements
CCB	Countercyclical Capital Buffer
CDS	Credit Default Swap
CISS	Composite Indicator of Systemic Stress
CPT	Causal Process Tracing
CRD IV	Capital Requirements Directive IV
CRR	Capital Requirements Regulation
DI	Discursive Institutionalism
DSTI	Debt Service-To-Income
DTI	Debt-To-Income
EBA	European Banking Authority
EBF	European Banking Federation
EBU	European Banking Union
EC	European Commission
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EFSF	European Financial Stability Facility
EFSM	European Financial Stability Mechanism
EIB	European Investment Bank
EIOPA	European Insurance and Occupational Pensions Authority
EMH	Efficient Market Hypothesis
EMIR	European Market Infrastructure Regulation
EMU	European Monetary Union
ESAs	European Supervisory Agencies
ESCB	European System of Central Banks
ESFS	European System of Financial Supervision
ESFS	European System of Financial Supervision
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
FCL	Flexible Credit Line
FDI	Foreign Direct Investment
Fed	American Federal Reserve Bank
FPC	Financial Policy Committee
FSB	Financial Stability Board
FSOC	Financial Stability Oversight Council
G20	Group 20
GDP	Gross Domestic Product

IAD	Institutional Analysis and Development Framework
IMF	International Monetary Fund
IPE	International Political Economy
LCR	Liquidity Coverage Ratio
LTD	Loan-To-Debt
LTI	Loan-To-Income
LTV	Loan-To-Value
MEP	Member European Parliament
MFF	Multiannual Financial Framework
MFI	Monetary Financial Institution
MiFID II	Markets in Financial Instruments Directive II
MiFIR	Markets in Financial Instruments Regulation
MPS	Macroprudential Surveillance
MREL	Minimum Requirements for Eligible Liabilities
NFC	Non-Financial Counterparty
NGO	Nongovernmental Organization
NSFR	Net Stable Funding Ratio
OFI	Other Financial Intermediary
PCA	Paradigm Change Analysis
QE	Quantitative Easing
ROA	Return on Assets
RWA	Risk-weighted Asset
SGP	Stability and Growth Pact
SIFMA	Securities Industry and Financial Markets Association
SII	Systemically Important Institution
SNB	Swiss National Bank
SRB	Systemic Risk Buffer
SREP	Supervisory Review and Evaluation Process
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
TLAC	Total Loss Absorbing Capacity
TSCG	Treaty on Stability, Coordination and Governance in the EMU
UK	United Kingdom
US	United States
VaR	Value at Risk
WTO	World Trade Organization

Book Summary

Ten years after the collapse of global financial markets in 2008, this book investigates the dynamics of paradigm change in Eurozone financial regulation. In the last decade, institutions of financial regulation have changed. However, it remains uncertain how far-reaching these changes have been. Furthermore, the process dynamics of paradigm change are understudied and previous research has not yet conceptualized the new post-Crisis outcome. This book focuses on these three aspects.

Firstly, I analyze the level of ideational and institutional change after the Crisis. Thereby, I define the critical dimensions of financial regulation and specify the time frame over which change in these dimensions has occurred. Different from previous research, results show that the overall Eurozone financial regulation paradigm has indeed changed. The implementation of macroprudential surveillance alters the political discourse, policymaking processes and functioning of the EU.

Secondly, I develop the new technocracy framework to conceptualize the new paradigm. Contrary to the pre-Crisis efficient market hypothesis, the new technocracy is based on the belief of inherent financial market instability. Premised on the idea of macroprudential surveillance and the renaissance of a Keynesian discourse, three constitutive characteristics are identified: systemic riskification, quantification and expertization.

Thirdly, I investigate the process dynamics of paradigm change in Eurozone financial regulation. Building on previous research, I develop the paradigm change analysis (PCA) model. PCA combines the analysis of old paradigm elimination and new paradigm establishment in one coherent model. Furthermore, the PCA model consists of five sequential causal factors. Firstly, before a new paradigm can be established, the prior institutionalization of an alternative paradigm is necessary. Secondly, a critical juncture such as the financial crisis scrutinizes the hitherto dominant paradigm. Thirdly, a phase of collective uncertainty paves the way for ideational influence. Fourthly, uncertainty is followed by a phase of paradigm adoption in which new ideas and propositions influence the formation of a new paradigm. In this respect, I analyze the criteria which influence the adoption of new ideas. Fifthly, once a new 'paradigm candidate' is formed, policy goals and actor expectations have to shift within the new paradigm. Finally, these five steps lead to an overall paradigm change.

The research focus of this volume is highly relevant because previous research on paradigm change is fragmented. Whereas institutionalism neglects the role of ideas, ideational scholarship argues that ideas matter for institutional change, but does not specify how, when and why. This book addresses these issues and contributes to the constructivist debate in the International Political Economy field. In addition, this volume engages in the nascent debates on macroprudential surveillance, renaissance of a Keynesian discourse and the new role of central banks. Finally, this book relates to European financial integration and welfare economics because its results can contribute to a more effective design of EU financial institutions. At a more general level, this book shows that the study of ideas is essential to understand change dynamics during times of high uncertainty. As financial market stability is a prerequisite for economic growth and social stability, this is particularly important in the field of financial regulation.

Buchzusammenfassung

Zehn Jahre nach dem Höhepunkt der weltweiten Finanzkrise im Jahr 2008 hat sich die institutionelle Ausgestaltung und Struktur der Finanzmarktregulierung in der Eurozone stark gewandelt. Bisher bleibt jedoch unklar, wie weitreichend diese regulatorische Neugestaltung ist und inwiefern sich das übergeordnete Paradigma gewandelt hat. Generell ist der gegenwärtige Forschungsstand über den Prozessablauf eines Paradigmenwechsels unzureichend. Auch die veränderte Ausgestaltung der Eurozonenfinanzmarktregulierung wurde bisher nicht konzeptualisiert. Vor diesem Hintergrund betrachte ich in dieser Arbeit drei verschiedene Aspekte.

Zunächst untersuche ich wie bedeutend die ideellen und institutionellen Veränderungen nach der Finanzkrise sind. Dabei definiere ich die konstitutionellen Dimensionen von Finanzmarktregulierung und spezifiziere zudem den Zeitraum, in dem Veränderungen in diesen Dimensionen stattgefunden haben. Im Gegensatz zu früheren Studien wird deutlich, dass sich das übergeordnete Paradigma von Finanzmarktregulierung in der Eurozone fundamental gewandelt hat. Die Implementierung von makroprudentiellen Überwachungsmechanismen verändert sowohl die institutionellen Prozesse als auch den politischen Diskurs.

Um das neue Paradigma zu erfassen, entwickle ich das Konzept der „New Technocracy“. Im Gegensatz zu den Annahmen der Effizienzmarkthypothese, basiert das neue Konzept auf der Annahme der inhärenten Instabilität von Finanzmärkten. Für das Paradigma der „New Technocracy“ erweisen sich drei Eigenschaften als konstitutiv: Systemische Risikofizierung (riskification), Quantifizierung (quantification) und Expertisierung (expertization).

Die vorliegende Arbeit setzt sich auch das Ziel die Prozessdynamik des Paradigmenwechsels in der Finanzmarktregulierung der Eurozone zu untersuchen. Aufbauend auf dem aktuellen Stand der Forschung entwerfe ich das Modell der „Paradigm Change Analysis“ (PCA). Das Modell hat den Anspruch, die Analyse der Eliminierung eines vorherig dominierenden Paradigmas und die Entwicklung eines neuen Paradigmas in einem Modell zu vereinen. Insgesamt umfasst das Modell fünf Kausalfaktoren. Erstens, bevor ein neues Paradigma nach einer Krise etabliert werden kann, ist bereits in der Vorkrisenzeit das Vorhandensein eines möglichen alternativen Paradigmas notwendig. Zweitens muss ein einschneidendes externes Ereignis das bis dato dominierende Paradigma in Frage stellen. Drittens führt eine Phase kollektiver Unsicherheit zu erhöhtem Einfluss ideeller Faktoren. Viertens folgt auf die Zeit kollektiver Unsicherheit eine Phase der Paradigmenanpassung, in der neue Ideen und Vorschläge die Herausbildung eines neuen Paradigmas ermöglichen. Fünftens müssen sich Akteurserwartungen und Politikziele im Rahmen des neuen Paradigmas verändern. Gemeinsam induzieren diese fünf Kausalfaktoren den Wechsel eines Paradigmas.

Diese Arbeit leistet einen wichtigen Beitrag zu der polit-ökonomischen Debatte über den Einfluss von Ideen auf den institutionellen Wandel und unterstreicht deren enorme Bedeutung in diesem Prozess, so auch im Fall der Finanzkrise 2008. Zudem beteiligt sich dieses Buch am keynesianischen Diskurs nach der Finanzkrise. Darüber hinaus werden die Möglichkeiten der makroprudentiellen Überwachung der Finanzmärkte diskutiert, einschließlich der veränderten Rolle der Zentralbanken. Finanzmarktstabilität ist eine Grundvoraussetzung für Wirtschaftswachstum und gesellschaftlichen Zusammenhalt. Daher ist die weitere Untersuchung der Regulierung von Finanzmärkten von hoher Relevanz. Das in dieser Dissertation erarbeitete Konzept der „New Technocracy“ und das entwickelte Modell der „Paradigm Change Analysis“ legen dafür einen wichtigen Grundstein.

1. Introduction

European banking supervision has become widely accepted – both as an idea and as an institution
(Nouy, 2017)

Ten years after the collapse in 2008, financial markets have largely regained stability. Change in the post-Crisis period has been far-reaching and comprehensive. The structure and institutional design of financial markets have fundamentally shifted compared to the pre-Crisis era. Furthermore, new regulatory agencies have been established at the global, regional and national level. Beyond these institutional changes the overall idea of how financial markets function has been reversed. Particularly in the Eurozone, the efficient market hypothesis has been abandoned. Instead, an alternative new policy agenda has shaped Eurozone financial regulation in the post-Crisis era: macroprudential surveillance and the renaissance of a Keynesian discourse.

This volume analyzes financial regulation in the Eurozone after the Crisis in 2008. The research question of this book is which causal factors have led to the paradigm change of Eurozone financial regulation after the financial crisis in 2008. This question implies three distinct subquestions which are separately addressed in different book chapters. The first aspect is whether or not the 2008 financial crisis has even initiated a paradigm change. The second aspect regards the question what the new paradigm is and which key characteristics define it. The third subquestion is which causal factors have led to the process of paradigm change in Eurozone financial regulation. This last question is divided into two different phases: factors which have led to the quick elimination of the old paradigm and factors which have shaped the establishment process of the new paradigm.

The research goals are to analyze the paradigm change after the Crisis, detect its main drivers, conceptualize the new paradigm and develop a coherent paradigm change model. A key element of post-Crisis regulation is the establishment of macroprudential policymaking. As the IMF chief economist puts it “macroprudential tools, that is state-dependent regulations, are the new policy kids on the block” (Blanchard, 2015b). Regarding the analysis of the paradigm change process, a major goal is to find out how the idea of macroprudential surveillance could make such a career.

Thereby, this book makes three important contributions to the research area of the International Political Economy (IPE). Firstly, I investigate the level of ideational and institutional change after the Crisis. Different from previous research, results show that indeed the overall paradigm of Eurozone financial regulation has changed. Secondly, I develop the new technocracy concept to categorize this new paradigm. Thirdly, I use a process-tracing design to analyze the process of paradigm change in Eurozone financial regulation. Building on previous research, I develop the paradigm change analysis (PCA) model. PCA combines the analysis of paradigm elimination and formation in one framework. Therefore, the approach facilitates the formulation of generalizable hypotheses on paradigm change.

At a more general level, I advance the claim that the study of ideas is fundamental to understand the dynamics of institutional change. Following the constructivist assumption that we live in a world of collective uncertainty, humans create the stability that they then take for granted (Abdelal, Blyth, & Parsons, 2010a). In light of a critical juncture like the 2008 Crisis, this stability has been shaken in its very foundation. A window of opportunity for far-reaching ideational and institutional change has been opened. In such a case the overall paradigm is adopted or replaced by an alternative dogma. This new form of stability then again masters the collective uncertainty after a crisis.

This volume should contribute to the debate of constructivist theory in IPE. In addition, this book further engages in the nascent debates on macroprudential surveillance, the new role of central banks and the altered relationship between monetary and fiscal policies. As highlighted by the German Central Bank President, the borders between the former separate fields of monetary, fiscal and macro surveillance policies have progressively blurred since the Crisis (Weidmann, 2015). Finally, this book relates to the debates of European financial integration, welfare economics and the re-emergence of a Keynesian discourse.

In the empirical case of the Eurozone, all critical dimensions of financial regulation have elementarily changed after the Crisis. Overall, financial regulation has become stricter, largely shifted to the European level and internalized the macroprudential perspective. Encompassing institutional changes have taken place. In contrast to the pre-Crisis key assumption of financial market efficiency, financial regulation after the Crisis has been built around the perception of imperfection. Hence, the Eurozone case is a particularly interesting case to study. With respect to the process-tracing analysis of paradigm change, the detection of an underlying causal mechanism is most likely possible in this case. Furthermore, as one of the economically strongest currency areas in the world, which was fundamentally hit by the Crisis, the Eurozone is an utmost relevant case *per se*.

This introductory chapter is structured in five sections. The first part gives a short overview of ideas in the IPE field. The second section presents the theoretical foundation and main argument of this volume. The third part presents the empirical case. The fourth section introduces the methodological approach and data collection of this volume. The final part presents the structure of this book.

1.1. Ideas in the International Political Economy

This section gives a brief overview about the development of ideas in the IPE field with particular regard to the subfield of financial regulation. From the end of the Second World War until the oil crises during 1970s, mainstream economics had largely been based on Keynesian principles (Hirschman, 1989, pp. 347–48). When Keynesianism could not explain stagflation following the oil price shocks, neoclassical and monetarist ideas replaced Keynesian theorizing as dominant paradigm (Hall, 1993, p. 279). At the end of the 20th century, Goodfriend and King (1997) frame the term of the “new neoclassical synthesis” which combines both New Keynesian and New Classical economic theorems. So far, the new neoclassical synthesis is still referred to as general mainstream economics.

Throughout the last decades different schools of Keynesianism have emerged: Neo-Keynesianism, New Keynesianism and Post Keynesianism. Whereas Neo-Keynesianism recombines Keynesian insights with neoclassical economics, New Keynesians focuses on developing a microeconomic foundation for classic Keynesian economics. By contrast, the Post Keynesian approach rejects assumptions from both other Keynesian schools and reinvigorates Keynes’ initial theorems. With respect to this volume, the differences of the various Keynesian schools can largely be neglected. Instead, the term “Keynesian renaissance” refers to post-Crisis Keynesian research from all schools.

In the subfield of financial regulation, financial markets were strictly regulated under the Bretton Woods System during the Keynesian era (Steil, 2014). The Bretton Woods system guaranteed a system of fixed exchange rates and strict monetary policies. However, when monetarism replaced Keynesianism during the 1970s, financial markets were largely liberalized. The main theoretical doctrine of market liberalism is the Efficient Market Hypothesis (EMH) which has emerged at the end

of the Keynesian era (Quiggin, 2010, p. 36). Premised on the works of Fama (1970), financial markets are assumed as the most efficient instrument to value economic assets and make use of information (Armour et al., 2016, pp. 101–117; Malkiel, 2003). Thus, they are seen as the best guide to investment and production decisions. The EMH builds the ideational fundament for deregulation, expansion of the financial industry and removal of capital controls. These trends substantially contributed to the collapse in 2008 (Quiggin, 2010, pp. 37, 242). This volume advances the view that the 2008 Crisis broke with this orthodoxy and created a strong impulse for paradigm change.

The Keynesian understanding of financial markets contrasts sharply with the EMH assumptions. Keynes particularly emphasizes the importance of uncertainty to explain fundamental economic parameters such as investment behavior or individuals' liquidity preference. The reliable calculation of long-term returns on investment is impossible and investment turns into speculation (Keynes, 1936, pp. 148–149, 1937, p. 113; Skidelsky, 2010, pp. 90–91). Additionally, Keynes highlights the aspect of group behavior, particularly with respect to investment. If uncertainty is high, individuals tend to follow the crowd or try to find out which direction the crowd turns to next (Keynes, 1937, p. 114). On that basis, Minsky (1977) developed the financial instability hypothesis which builds the fundament of Post and New Keynesian theory on financial economics. Following Minsky, financial institutions over-speculate in up-phases of business cycles and under-invest in down-phases when investment and credit are most necessary. Thus, financial systems seem most stable when they are actually most vulnerable. During the next decades, New and Post Keynesian research on financial stability has further elaborated on the role of uncertainty and instability of financial markets (Bibow, 2009; Fontana & Gerrard, 2004; Pech & Milan, 2009; van Ees & Garretsen, 1993).

As a consequence of the financial Crisis in 2008, two ideas of financial stability have influenced the post-Crisis outcome of stricter and more macro-based regulation. Firstly, the idea of macroprudential surveillance gained strong support among financial regulation experts, especially in central bank organizations. Secondly, the renaissance of a Keynesian discourse on financial stability received particular attention (Davidson, 2009; Eichengreen, 2008; Krugman, 2009; Stiglitz, 2008; Wray, 2011). Both approaches have a different theoretical focus. However, regarding financial regulation, their core premise rests on the belief in the necessity of public management over inherently instable financial markets (Gersbach, Hahn, & Liu, 2017; Kregel, 2014; Levine & Lima, 2015).

Macroprudential surveillance (MPS) is defined as a “regulatory and supervisory” approach. Its goal is to reduce the risk of system-wide financial imbalances (Borio, 2011, pp. 2–3). MPS has an explicitly preemptive character and aims to actively prevent and mitigate “systemic risks to financial stability” across different sectors (ESRB, 2014a, p. 6). In contrast to micro-based economics, the analytical focus of MPS lies on the systemic macro level (Crockett, 2000; Hirtle & Stiroh, 2009). In the macroprudential perspective, the individual monitoring of financial institutions cannot ensure the safety of the financial system as a whole (Haldane, 2010). Additionally, risks are perceived as endogenous to the financial system because financial distress drivers depend on the aggregate behavior of financial institutions. Thus, financial markets are seen as inherently unstable. MPS breaks with the pre-Crisis belief in the efficient market doctrine (Baker, 2015, p. 345). According to Baker (2012), the most fundamental contribution of macroprudential surveillance is to “spotlight the volatile and inherently unstable nature of contemporary financial systems” (p. 117).

Overall, the financial regulation field has been shaped by fundamentally different ideas throughout the last decades. After the Crisis, macroprudential surveillance and the renaissance of a Keynesian

discourse form a new policy agenda. This book analyzes how this new agenda replaces the previously predominant efficient market hypothesis. The next part discusses the theoretical foundation.

1.2. Theoretical foundation

The power of ideas has increasingly been recognized across different research areas. Yet, the IPE field is traditionally dominated by materialist approaches. In this view, diverging factor endowments and scarcity of resources shape the interests of actors trying to maximize their benefits in a rational economic arena. It all comes down to incentives. Incentives predefine governmental and firm behavior and are derived by actors from the material structure of the economy (Abdelal et al., 2010a, p. 1). In light of the Crisis in 2008, ideational variables have gained importance and challenge the materialist perspective, which has fallen short of a comprehensive crisis explanation.

This section discusses the state of art in research on paradigm change and introduces the constructivist approach to IPE. Furthermore, this section outlines this book's main argument and refers to the theoretical contributions and limitations of this volume. Thereby, this section addresses shortcomings of existing models to advance paradigm change research. So far, research on paradigm change has only concentrated on specific aspects such as ideational change of single economic institutions, but not the whole process. The main objective of previous research has been to show that ideas matter. But questions of how, when and why ideas and paradigms change have not yet been answered (Berman, 2013, p. 223). As will be shown in the next passages of this section, no coherent model of paradigm change with testable hypotheses has yet been developed.

Finally, relevant terms and concepts are defined in this section, i.e. ideas, paradigms, uncertainty and paradigm change. This section further discusses the interrelationships of ideas and institutional change and of ideas and interests. Thereby, it builds the theoretical foundation for the empirical analysis of this volume. This book aims to develop a generalizable paradigm change model which bridges research on ideational and institutional change.

This section is divided into six parts. The first passage summarizes the development of ideas in IPE research. The second part discusses the state of paradigm change research. The third and fourth parts outline open questions and this book's argument in brief. The fifth part presents the theoretical contributions and limitations of this volume. The sixth part defines relevant terms and concepts.

1.2.1. Ideas in IPE research

Although the study of ideas has regained prominence, this research focus is not unprecedented. Scholars have emphasized the influence of ideas before, particularly concerning the analysis of ideational variables, social norms and actor behavior driven by 'logic of appropriateness' rather than 'logic of expected consequences' (March & Olsen, 1998, p. 949-952). In economics, Keynes emphasized the explanatory role of ideas in the first place (1936, p. 383-384):

"Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist [...] it is ideas, not vested interests, which are dangerous for good and evil".

Over the last decades the question of the influential power of ideas, conventions and social norms has been closely related to advancements of constructivist theory (Finnemore, 1996, p. 129; Wendt,

1999, p. 94, 97). Although social constructivism has gained high influence in the theoretical debate of international relations, its influence on IPE has initially been limited. Thanks to contributions of authors who underpin the explanatory power of ideational variables in this field, a collective debate of constructivism in IPE has evolved (Abdelal, 2006, 2007; Best, 2005; Blyth, 2002; Campbell, 1998, 2004; Davidson, 2009; Jabko, 2006; Parsons, 2003; Schmidt, 2010; Skidelsky, 2010, p. 16; Stiglitz, 2012, p. 209; Widmaier, 2003). A more comprehensive list is provided by Béland (2009, p. 704).

This debate is particularly promoted by Abdelal, Blyth and Parsons (2010) and Béland and Cox (2011), who developed a comprehensive approach of constructivism to IPE. Their main objective is to “bring constructivism into conversation with the mainstream of rationalist-materialist theorizing” (Abdelal et al., 2010, p. 6). Overall, in the post-Crisis era, the question whether ideas do matter at all in the international economy has shifted to the question of how they matter (Mehta, 2011). The next passages summarize the state of art in paradigm change research.

1.2.2. State of paradigm change research

The state of art in paradigm change research is structured around four different aspects. Firstly, the key objective of ideational researchers has been to show that ideas actually matter to explain institutional change processes. In this regard, scholars have analyzed different ways in which ideas influence institutions. This research stream has resulted in the four paths to constructivism in IPE research, introduced below in this section. Secondly, after the financial crisis in 2008, a debate has started whether the paradigm of financial governance has actually changed or not. However, this question has still not yet been answered. The second chapter of this volume specifically addresses this question. Thirdly, some ideational researchers have particularly addressed the question of “wearing down” old ideas. In this respect, an overall paradigm change not only necessitates the establishment of a new dominant paradigm, but also the deconstruction of the old one. Yet, this debate has not addressed the issue of how old paradigms are scrutinized. Fourthly, ideational research has repeatedly addressed the question of when the time for a new idea has come. Most relevant in this regard are still the models developed by Hall (1989) and Kingdon (1984). Overall, current ideational research has not yet developed a coherent model of paradigm change. The next passages are structured along the different aspects of paradigm research’s state of the art.

Ideas matter

The works of Blyth have particularly shaped research on ideational change during the last two decades (Blyth, 2001, 2002, 2003, 2006, 2011, 2013; Blyth, Goldstein, Keohane, & Sikkink, 1997). The primary objective of Blyth has been to highlight the “importance of ideas as integral components of institutional construction and change” (Blyth, 2001, p. 23). Blyth (2001) argues that institutional change research implicitly assumes that an external punctuation breaks with an existing institutional equilibrium and leads to a new one (p. 3). Thereby, research on institutional change in IPE only considers structural variables and neglects the role of ideas (Abdelal et al., 2010a; Blyth, 2001). Thus, Blyth conceptualizes economic ideas in three ways to show how they influence institutional change: institutional blueprints, weapons and cognitive locks (Blyth, 2001, pp. 2–5). Firstly, ideas as institutional blueprints are crucial in phases of high uncertainty because they define guidelines for institutional change, provide orientation and give content to interests. Secondly, the deployment of ideas as weapons in distributional struggles allows actors to break with institutional path dependencies and redesign existing institutions. Thirdly, ideas as cognitive locks “explicate how new ideas, once successfully institutionalized, can affect policy outcomes” (Blyth, 2001, p. 4).

The ways in which ideas influence change have become an important research issue (Béland & Cox, 2011). Different scholars have elaborated on Blyth's (2001) propositions. Béland (2009) bridges elements of political science and sociological literature and specifies how ideational processes shape institutional change. Firstly, ideas construct problems which then enter the policy agenda. Secondly, ideas shape the assumptions of reform proposals. Thirdly, ideas become discursive weapons which construct reform imperatives. Abdelal et al. (2010a) finally develop the multiple paths concept of constructivism to IPE (see 1.2.6). Overall, these authors advance the argument that the role of ideas is fundamental to understanding institutional change processes. Blyth emphasizes this research goal:

“Structures do not come with an instruction sheet, and neither do moments of structural change. Ideas are important because they provide agents with that instruction sheet” (Blyth, 2001, p. 26).

Despite the fundamental contributions of these authors to analyze the role of ideas for institutional change, many issues remain open. It is unclear what causal mechanism leads to an overall paradigm change after a major crisis. Furthermore, if ideas are the instruction sheets for institutional change in uncertain times, it remains unclear what happens if ideas change themselves. More work has to be done on the criteria defining which ideas influence institutions and which ones fail to do so. The next passage elaborates on the aspect of post-Crisis paradigm change.

Post-Crisis paradigm change

The financial crisis in 2008 is a major shock for the global economy in many different regards. Thus, the logical question arises whether this shock leads to a paradigm change of financial governance. Different authors address this issue. However, previous research has not given a coherent answer on that matter. Blyth (2013) argues that third order change of economic governance did not take place even though it should have. However, he does not specifically analyze financial regulation although change in this area would have been most likely as states failed to sufficiently regulate financial markets before the Crisis. In contrast, Baker (2012) finds that the establishment of macroprudential surveillance has indeed been a case of third order change in financial regulation after the Crisis. In addition, Berg and Carstensen (2012), Biehling (2011), Buti and Carnot (2013), Copelovitch (2010), Da Rocha Lopes and Quagliariello (2014), De Rynck (2016), Glöckler, Lindner and Salines (2017), Papi, Presbitero and Zazzaro (2013) and Pontusson and Raess (2012) analyze partial aspects of ideational and institutional change after the Crisis. However, they do not give a systemic overview about which financial regulation dimensions and institutions change or persist after the Crisis. Thus, it remains unclear whether the financial regulation paradigm has changed. The second chapter of this volume addresses this issue. The next passage summarizes the aspect of paradigm elimination.

Paradigm elimination

Few scholars have emphasized that ideational research should focus more on the aspect of paradigm elimination. Particularly Mehta (2011) underlines this aspect of “wearing down” old ideas (p. 31). Ideas not only change because new ideas gain importance, but because an older dominant paradigm loses grip (McNamara, 1998, p. 64-65). Mainly, three different possibilities of ideational change exist: first, a new idea emerges and gains gradually more support than the dominant paradigm. Second, a strong rival idea exists and gains more importance than the dominating paradigm due to an external event. Third, a critical juncture fundamentally undermines confidence in a dominant paradigm and leads to a phase of paradigm competition or, as Grabel (2011) puts it, productive incoherence. Yet,

these different ways of ideational change presuppose the most basic premise: a paradigm cannot lose grip if a very basic alternative idea does not at least exist which could replace it.

Overall, it is clear that the elimination of the “old” paradigm has by far not gotten as much attention as the establishment of new ideas. Concerning the pre-Crisis paradigm of the EMH, Quiggin (2010) argues that doubts also existed before the Crisis:

“The evidence for the (...) Efficient Markets Hypothesis was never particularly convincing. Rather, it was an idea that suited both the demands of the times and the intellectual tendencies that were dominant within the economics profession” (Quiggin, 2010, p. 51).

Thus, the elimination of a dominant paradigm is more likely if there have been previous doubts. This is also true when an external event undermines the confidence in this previously dominant paradigm. Berman (2013) talks of a “two stage-process” in this regard (p. 227). In the first stage, old ideas are scrutinized and leave a political vacuum which can be filled by new ideas. This assumption leads to the fourth aspect of paradigm change research: which factors influence, which ideas replace old ones and when has the time for a specific new idea come. The next passages elaborate on this aspect.

New paradigms

Ideational research addresses from different angles the question of when the time for a new idea or paradigm has come. This aspect refers to the question of why some ideas are successfully implemented whereas others fail. Hall (1989) and Kingdon (1984) investigate the dynamics of paradigm change and agenda-setting. Particularly during fundamental crises, views and interpretations of the political and economic world system may radically change. In the 1970s monetarist theory replaced Keynesianism as dominant economic paradigm because Keynesians could not explain stagflation after the oil price shocks (Hall, 1993, p. 279). Hall (1989) defines criteria which explain the establishment or failure of a new paradigm. But, he says little about the elimination of old paradigms. Instead, Kingdon’s (1984) focus on the existence of alternative ideas as prerequisite for institutional and ideational change compensates this shortcoming. However, Kingdon does not further elaborate on where these ideas come from. Instead, he argues that ideas simply float around in a “primeval soup” (1984, p. 134).

Sabatier criticizes that Kingdon’s model only focuses on “agenda-setting and policy formulation” and fails to explain the “entire policy process” (Sabatier, 1993, p. 37). Instead, he proposes the advocacy coalition framework (ACF) as an alternative approach that analyzes policy change and the processes that lead to policy changes. However, the ACF focus on policy subsystems and actor coalitions differs from Kingdon’s analysis of agenda-setting and criteria of survival of ideas. With respect to this volume, the approach by Kingdon is more relevant. Nevertheless, Sabatier’s concept of belief systems is important to better understand the shift of actor expectations and policy goals after a crisis change (1998, p. 103-104). This issue is addressed in the fifth chapter of this book.

Despite the debates during the last two decades, the approaches by Hall (1989) and Kingdon (1984) still build the fundament for research on ideational and institutional change (Ackrill & Kay, 2011, p. 85; Berman, 2013, p. 233). Hall’s research on paradigm change “has become a classic in the social sciences” and many of his premises “remain true of contemporary scholarship” (Berman, 2013, p. 217). Kingdon’s (1984) multiple-stream model analyzes the role of ideas in the policy process. New ideas are successful when policy entrepreneurs link them to problems and political processes (Kingdon, 1984, pp. 205–218; Mehta, 2011, p. 28). Although developed decades ago, the multiple

stream framework has increasingly been applied in the context of EU research (Ackrill & Kay, 2011; Corbett, 2005; Cram, 2001; Peters, 1994; Richardson, 2006; Zahariadis, 2008). Thus, the models of Hall and Kingdon still build the starting point for current analyses of paradigm change.

The next passages summarize the open questions in current paradigm change research. Despite the discussed aspects of paradigm change literature, crucial issues remain understudied. So far, no coherent paradigm change model has been developed.

1.2.3. Open questions

This section outlines key challenges in current ideational scholarship based on the different aspects discussed above. So far, a series of relevant questions has not yet been addressed or remains unanswered by existing research. Berman summarizes these issues as follows:

“a lack of coherence and clarity has certainly hindered the accumulation of knowledge in the ideational field, making it more difficult to figure out precisely when, how and why ideas matter in different political processes and outcomes” (Berman, 2013, p. 223).

Schmidt (2010, 2011) proposes the “umbrella concept” of “discursive institutionalism” to structure the debate on the most relevant issues of ideational change literature. Like Berman, she argues that research should investigate empirically “how, when, where, and why ideas and discourse matter for institutional change” (Schmidt, 2010, p. 21). Although Schmidt draws attention to relevant challenges of ideational research, she does not provide for a research agenda how these questions should be addressed. Blyth (2001) adds that the next steps in ideational research should develop “toward an analysis that takes both ideas and material factors seriously” (p. 26). Hay emphasizes this aspect as well but further specifies that higher attention to ideational factors should not go at the expense of “traditional structural variables” (Hay, 2004, p. 213). In this respect, a key challenge is to bridge the divide between ideas and structures to explain institutional change. Premised on these general considerations, I identify the following concrete open issues in current research.

Firstly, the causal mechanism of paradigm change after a major crisis remains unclear. Although existing research conceptualizes the ways in which ideas influence institutional change, it is an open question which causal factors actually lead to a paradigm change. By now, most researchers accept that ideas matter somehow. But, it is unclear how a paradigm change process proceeds empirically.

Secondly, it is unclear which role the elimination of the previously dominant paradigm plays. When Keynesianism was replaced by Monetarism as the dominant paradigm, this process had taken place for over a decade. After the 2008 Crisis, institutional changes in the Eurozone have occurred relatively fast. It remains unclear how the old paradigm elimination has proceeded and whether this has been a precondition for the establishment of another paradigm.

Thirdly, when a new paradigm is established, different ideas can potentially influence the outcome. Different authors analyze when the time for new ideas comes and which criteria influence this process of ideational formation. Nevertheless, it is still unclear which ideas prevail in the end. More empirical studies on paradigm formation can make significant contributions in this respect.

Fourthly, research on post-Crisis ideational change has not yet analyzed whether the overall financial paradigm has indeed shifted. Previous studies have been contradictory or focused on specific aspects of single institutions. Furthermore, it is unclear how the new normal of financial regulation looks like

beyond “productive incoherence” (Grabel, 2015b). In this regard, more empirical research on assumptions and characteristics of the changed post-Crisis outcome are necessary.

Fifthly, as indicated in the previous section, many ideational scholars have referred to the importance of uncertainty and critical junctures for ideational and institutional change. However, there is no precise concept as to how these issue influence paradigm change. In this regard, it remains vague when ideas change after a critical event and when they do not.

Sixthly, another major open issue in current ideational scholarship is related to the role of agency. Only a few scholars include the role of individual actors for paradigm change, e.g. Kingdon’s (1984) concept of policy entrepreneurs. Still, the particular role of policy entrepreneurs remains ambiguous.

Overall, it becomes clear that important research issues are still to be answered in IPE paradigm change research. Most importantly, no coherent model of paradigm change has yet been developed. However, premised on Sil and Katzenstein's (2010) argument of analytic eclecticism, “widening the scope” of research problems can offer utmost valuable insights which would not be possible otherwise. The next part outlines the argument of this volume.

1.2.4. My argument in brief

The previous passages have shown that existing research on paradigm change is highly fragmented. Whereas institutionalist theories neglect the role of ideas, ideational scholarship argues that ideas matter for institutional change, but does not specify how, when and why. Firstly, no coherent model of paradigm change has yet been developed. Secondly, studies on paradigm change of European financial regulation after the Crisis are inconsistent or only focus on single institutions. Thirdly, the conceptualization of the new institutional outcome after the Crisis does not go beyond the argument of productive incoherence. This refers to an uncertain interregnum phase of ideational pluralism but does not structure the new normal of financial regulation. This volume addresses these aspects.

Firstly, I investigate whether the overall paradigm of Eurozone financial regulation has changed. Thereby, I build on Hall’s (1993) typology of policy changes to measure the level of institutional and ideational change. In line with Campbell's (2004) characterization of institutional change in empirical cases, I specify the critical dimensions of financial regulation. Furthermore, I define the appropriate time frame over which change in these dimensions has occurred. Contrary to existing research I find that the overall paradigm has indeed changed. Secondly, based on this result, I conceptualize the new paradigm. Following Gerring's (2012a) argument of description as independent methodological approach, I develop the “new technocracy” concept. Premised on the idea of macroprudential surveillance and the renaissance of a Keynesian discourse, three constitutive characteristics are identified: systemic riskification, quantification and expertization. Contrary to the pre-Crisis efficient market hypothesis, the new technocracy is based on the belief of financial market instability.

Thirdly, I develop the paradigm change analysis (PCA) which combines the most plausible causal factors of paradigm change from existing theories. Hypotheses on paradigm change are empirically tested and further developed in the case study of post-Crisis Eurozone financial regulation. Thereby, this book follows Sil and Katzenstein's (2010) argument of analytical eclecticism, which emphasizes the selective utilization of theoretical constructs across different research traditions. Thus, it becomes possible to problematize complex phenomena which are otherwise sliced in smaller puzzles by specific research traditions (Sil & Katzenstein, 2010, p. 426). Sil and Katzenstein define analytic

eclecticism as “intellectual stance” which addresses research problems of “wide scope” (p. 412). I adopt this pragmatic approach to focus on the ‘big picture’ of paradigm change.

The PCA approach consists of five sequential causal factors. Firstly, before a new paradigm can be established, I argue that the prior institutionalization of an alternative paradigm is necessary. Secondly, a critical juncture such as the financial crisis scrutinizes the hitherto dominant paradigm. Thirdly, a phase of collective uncertainty paves the way for the influential power of ideas. Fourthly, collective uncertainty is followed by a phase of paradigm adoption in which new ideas and propositions influence the formation process of a new paradigm. To investigate the criteria which influence the adoption of new ideas, this book draws from Hall’s (1989) three-viability concept. Fifthly, once a new ‘paradigm candidate’ has been formed, policy goals and actor expectations have to shift within the new paradigm. The different integral parts of the overall causal mechanism are insufficient but necessary conditions of an unnecessary but sufficient condition (INUS). Yet, only because the most plausible causal mechanism is investigated in this volume, other potential causal conditions are not denied but assumed as less probable. This concern addresses the issue of equifinality which means that different causal pathways can lead to the same outcome (Checkel, 2015, pp. 74–75). In this regard, the approach of this book is also relevant because it reduces the number of possible alternatives (Gerring, 2007a, p. 179).

Overall, the different research aspects of this volume are closely interrelated and draw a complex picture of paradigm change from different angles. I argue that the focus on this ‘big picture’ of paradigm change advances current IPE ideational scholarship. The next passages present the contributions of this volume to current debates in ideational scholarship.

1.2.5. Theoretical contributions and limitations

This section presents the theoretical contributions and limitations of this volume. This volume can only focus on some of the open issues in current ideational scholarship and makes three main contributions to the IPE research field. Firstly, I investigate the level of ideational and institutional change after the Crisis. Therefore, this book exceeds the argument of productive incoherence and contributes to the debate on post-Crisis paradigm change. Secondly, I develop the new technocracy framework to conceptualize the new paradigm of Eurozone financial regulation. Thirdly, I analyze the process of paradigm change after the Crisis and develop the paradigm change analysis (PCA).

The main research objective of PCA is the development of a coherent paradigm change model with testable hypotheses. Based on theory-testing process tracing of financial regulation in the Eurozone, PCA theorizes the most plausible causal mechanism of paradigm change after the Crisis. Thereby, PCA is focused on the ‘big picture’ of paradigm change and aims to include the most relevant causal factors. Thus, premised on Sil and Katzenstein’s (2010) argument of analytic eclecticism, PCA combines elements from different theoretical models and tests them empirically. Following Berman (2013), PCA combines the analysis of paradigm elimination and formation in a single framework. Furthermore, PCA includes elements of agency and accounts for the role of policy entrepreneurs. In addition, PCA theorizes the shift of actor expectations and policy goals once a new paradigm has been established. Furthermore, in line with Blyth’s call for an integrated structural and ideational approach, PCA builds on Hall’s (1989) three viabilities to investigate why some ideas are more successfully implemented than others. If ideas are the instruction sheets for institutional change during times of high uncertainty, then PCA explains which instruction sheet is used in the end.

The contributions of this volume are also subject to limitations. Firstly, this book does only focus on a paradigm change after a critical juncture. Hence, incremental ideational and institutional changes are not investigated. Secondly, the PCA approach is based on the arguably most plausible causal factors of paradigm change in Eurozone financial regulation. Yet, in line with the argument of equifinality, other potential causal mechanisms are not denied but only assumed as less probable. Thirdly, although PCA leaves space for the role of policy entrepreneurs, the inclusion of agency is limited. Other approaches like the Advocacy Coalition Framework (ACF) or the Institutional Analysis and Development Framework (IAD) model the behavior of agents in detail (Crawford & Ostrom, 1995; Jenkins-Smith, Nohrstedt, Weible, & Sabatier, 2014; Ostrom, 2007; Ostrom, Cox, & Schlager, 2014; Sabatier, 1998; Sabatier & Jenkins-Smith, 1993; Weible et al., 2011). Instead, the focus of this volume lies on the overall process of paradigm change. In the same way, this book does not analyze institutional change of single organizations in great depth. Fourthly, the main focus of this book lies on ideational variables. Although Hall's three-viability concept includes structural variables, the PCA approach cannot fully integrate ideational and institutional variables. In addition to these general considerations, each chapter of this volume discusses more specific limitations. The next section introduces relevant definitions and concepts of this volume.

1.2.6. Definitions and concepts

Ideas

Béland and Cox (2011) define ideas as “causal beliefs” which result from cognitive processes (p. 3). The authors argue that ideas interlink different subjects and draw causal connections between them. Furthermore, they reason that ideas frame the way that actors perceive problems. Thus, ideas provide guidelines for future actions (Béland & Cox, 2011, p. 4). Jacobsen (1995) adds that ideas also have to be shared by others to exert influence in the public sphere (p. 287). Goldstein and Keohane (1993) likewise define ideas as causal beliefs but further differentiate ideas in “principled beliefs” and “worldviews” (pp. 8-10). Principled beliefs include normative ideas that refer to conceptions of right and wrong or just and unjust. By contrast, causal beliefs are “cause-effect relationships which derive authority from the shared consensus of recognized elites” (p. 11). Ideas defined as causal and principled beliefs influence public policy in three ways. Firstly, they may provide for a clear agenda about future actions. Secondly, they may become focal points that offer cooperative solutions among coalitions. Thirdly, in case they become integrated in overall institutions.

Mehta (2011) defines ideas as “policy solutions”, “problem definitions” and “public philosophies or zeitgeist” (pp. 27-45). The category of public philosophies or zeitgeist corresponds to Goldstein and Keohane's ideational cluster of worldviews. Public philosophy refers to a concept first introduced by Hecló (1986). Hecló defines public philosophy as “dominant framework for defining the field of political argument and interpreting events” (p. 33). By contrast, Mehta's other categories differ from Goldstein and Keohane's assumptions because he does not distinguish ideas by normative content or supportive actors. Instead, Mehta differentiates ideas by function. In this respect, policy solutions are ideas that provide the necessary tools to solve a problem and reach a given set of objectives. Yet, ideas which identify a problem or frame the way of understanding it are “problem definitions”.

The previous passages make clear that the ways how scholars approach the definition of ideas are diverse. Whereas some authors determine ideas in distinction from interests, other authors define them by their function, content, character or actors supporting them. Campbell (1998) systematizes the categorization of ideas and proposes two conceptual dimensions (pp. 384-398). On the one hand,

he discerns underlying implicit ideas (background assumptions) from ideas that are explicitly articulated within a discourse (foreground assumptions). On the other hand, Campbell classifies ideas whether they have either a cognitive or a normative character.

Cognitive ideas include “descriptions and theoretical analyses that specify cause-and-effect relationships” (p. 384). In contrast, the opposite pole of normative ideas comprehends “values and attitudes” (p. 384). By combining these categories, Campbell formulates four ideal types of ideas: programs, paradigms, frames and public sentiments. Thus, the author proposes an overall conceptual framework that integrates the different facets of ideas mentioned by other authors. Goldstein and Keohane’s “principal beliefs” correspond to Campbell’s normative level whereas “causal beliefs” belong to the cognitive side. Campbell’s category of “world views” broadly matches similar clusters of “public philosophies”. Finally, Mehta’s “policy solutions” partly correspond to the “program” category. However, “policy definitions” include elements of both the “frame” and “paradigms” class.

Table 1.1: Types of ideas and their effects on policymaking

	Foreground assumptions	Background assumptions
Cognitive level	Programs Elite policy prescriptions that help policy makers to chart a clear and specific course of policy action	Paradigms Elite assumptions that constrain the cognitive range of solutions available to policy makers
Normative level	Frames Symbols and concepts that help policy makers to legitimize policy solutions to the public	Public sentiments Public assumptions that constrain the normative range of legitimate solutions available to policy makers

Source: Campbell, 1998, p.385

Regarding these assumptions, ideas shall be defined as a coherent set of implicit or explicit beliefs and assumptions, shared by different actors. Ideas have a cognitive character and imply some kind of causality. They do not directly refer to concrete measures or applied policy instruments, but have a more general character. However, concrete policy measures or action plans can be derived from ideas. The following passage elaborates on the interrelationship of ideas and institutional change.

Ideas and institutional change

This section elaborates on the interrelationship of ideas and institutional change. Firstly, I briefly summarize institutionalist literature concerning this matter. Secondly, I discuss how these ideas affect institutional change. Thirdly, I shortly outline the assumptions of this volume in this regard.

Firstly, the primary objective of institutionalist literature in the IPE research field is to explain the „process whereby institutions originate or change“ (Hall & Taylor, 1996, p. 937). Historical, rational choice and sociological institutionalism each theorize different mechanisms of institutional evolution. However, the question of change in particular “is a weak spot in the literature as a whole and indeed across all varieties of institutionalism” (Thelen, 2009, p. 474). Much institutional research focuses on institutional persistence and gradual reproduction (Lewis & Steinmo, 2012; Mahoney & Thelen, 2010). Thereby, the traditional new institutionalisms in political science mainly focus on materialist, structural and path dependency variables. Thus, these approaches neglect the role of ideas. As a

result, discursive institutionalism (DI) as a fourth new institutionalist approach has been developed (Schmidt, 2010, 2011). The research goal of DI scholars is to go beyond the limits of “traditional institutionalisms on questions of interests and uncertainty, critical junctures and incremental change, norms and culture” (Schmidt, 2010, p. 1). Despite this important pioneer work on institutions and ideas, Schmidt does not formulate a research agenda on how these questions should be addressed.

Secondly, ideational scholarship identifies different ways in which ideas influence institutional change. Ideas and paradigms determine the set of policy options for policymakers and shape agents’ view of reality in complex societies (Hall, 1989, p. 361). Thus, ideas frame the development of action plans and guidelines, shape societal institutions and thereby actor behavior. As outlined in the next sections, Abdelal et al., (2010) and Blyth (2011) emphasizes the key role of uncertainty as driving force behind ideas. Additionally, the authors identify three other paths to constructivism in IPE.

The paths to constructivism in IPE emphasize different facets of ideational influence on institutions and actor behavior (Abdelal et al., 2010, p. 8-15). Firstly, the path of meaning relies on ‘pure’ constructivism and presupposes that actions and actor views vary with respect to “myths, identities, symbols, norms and conventions” (Abdelal et al., 2010, p. 9). For example, an identity such as ‘central banker’ is constituted through the relationship between agents and narrows down the choice of possible actions by its role definition (Bukovansky, 2009). Secondly, the path of cognition assumes that there is less human search for normative content matters to initiate actions, but different ways for agents to filter information (Widmaier, 2005). This implies that members of a social group share cognitive frames and that cognitive constructions are most influential the more they become a public philosophy. Thirdly, the path of subjectivity denies the existence of pre-constituted agents. Instead, the position of subjects within a structure defined by discourses and roles within these discourses, prevails the socialization of agents (MacKenzie, Muniesa, & Siu, 2007). For example, if a model of financial economics is used by an increasing number of actors, then markets themselves will start behaving more like the model predictions (MacKenzie, 2006, p. 263-268).

Thirdly, this book does not specifically focus on questions of institutional change. Instead, the primary objective of this volume is to understand the overall paradigm change process after a critical juncture. The research approach is based on Hall’s (1993) typology of policy changes introduced below. The radical change “of the overarching terms of policy discourse” necessitates first, second and third order change (Hall, 1993, p. 279). Thus, institutional change is understood as a logical consequence of paradigm change. In other words, the change of ideas implies institutional change. That is why I often refer in this volume to both ideational and institutional change. The next part elaborates on the interrelationship of ideas and interests.

Ideas and interests

The role of ideas is closely related to the definition of interests. However, previous research has not reached a consensus on how ideas and interests interconnect or whether ideas predetermine interests or vice versa. As economic theory typically assumes rational interest-driven actors, ideas have been often treated as subordinate to interests (Goldstein & Keohane, 1993, p. 4). Interests are generally defined as a consistent set of preferences determining actor behavior. Actors assign their preferences to potential outcomes by the relative value to them. Thus, the complete formulation of an actor’s self-interests requires full information about all possible results (Connolly, 1972). The formulation of the complete set of an actor’s interests remains a theoretical ideal conception.

Ikenberry (1993) further argues that ideas can grow out of interests or in fact be intentionally used to enforce specific interests (p. 84). On the other hand, ideas also predetermine actor preferences, e.g. the Keynesian design of market economies, the idea of economic protectionism or the establishment of the human rights' regime (Goldstein, 1993 p. 243; Sikkink, 1993, p.140). Alternatively, the implementation of an idea often requires an action program that prescribes the framework in which interests are defined. An example from the international relations' field illustrates this argument: one of the main reasons for the decolonization process in the 20th Century was "an international change of ideas about legitimate and illegitimate rule (...) not power or (...) economic utilities" (Jackson, 1993, p. 130). An action program to pursue this end grew out of the idea of decolonization and defined the framework for interests of involved actors. To put it simply, both ideas and interests have causal explanatory power to explain institutional change (Goldstein & Keohane, 1993, p. 4).

The conception of uncertainty is elementary to understanding the different scope of interests and ideas. In a situation of collective uncertainty, interests are vague and cannot explain policy choices or institutional change. By contrast, ideas may structure uncertainty, provide for stability and guidance to overcome crises and reshape interests (Abdelal et al., 2010, p. 11-12; Campbell, 1998, p. 381; Goldstein, 1993, p. 23; March & Olsen, 1996). The more complex a society becomes, the higher information asymmetries grow and thus, the more important the role of ideas becomes (Jacobsen, 1995, p. 293). With reference to Campbell's typology of ideas, public sentiments become highly relevant in uncertainty phases (1998, p. 394). In such a situation, change of institutional settings tends to reflect agent's deeply held beliefs and interpretations of the world.

Finally, a further component of the ideas and interests' interrelationship lies in their direct interaction (Campbell, 1998, p. 400). The reason why some ideas become more influential than rival ones depends on distinct factors. Relevant variables are, among others, their institutional fit to existing structures, support by influential actors, backup by organizational resources and whether they meet the needs of their time or not (Hall, 1989; Kingdon, 1984). Interests of involved actors influence these variables. For example, agents are more likely to support ideas that meet their interests or correspond to their interpretation of reality. Hence, interests could be an important analytical category to understanding why some ideas prevail over others or not.

With respect to the analytical focus of this volume, it is important to recognize the potential explanatory power of interests for institutional change. In the same way, it should be noticed that interests influence the process in which an idea prevails out of a pool of many ideas. Overall, the interaction of ideas and interests is relevant and both conceptions depend on each other. However, the key research objective of this book lies on the explanation of paradigm change. The following passages elaborate on the definition of paradigms and paradigm change.

Paradigms

The definition of paradigms goes further than the conceptualization of ideas and has a more comprehensive character. The theoretical prerequisites of paradigms and paradigm change go back to Kuhn. Kuhn distinguishes two main phases of science: normal science and scientific revolutions (Kuhn, 1962). Whereas the former refers to "puzzle-solving" of problems within the same paradigm, the latter consists of a complete paradigm change. Paradigm change goes deeper than the explanation of anomalies in phases of normal science and implies a change of how researchers view the world (Kuhn, 2012, p.111). Changes most likely occur in times of crisis or, alternatively, in the case that the dominant paradigm fails to explain too many anomalies. Kuhn specifies:

“Confronted with anomaly or with crisis, scientists take a different attitude toward existing paradigms, and the nature of their research changes accordingly. The proliferation of competing articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals, all these are symptoms of a transition from normal to extraordinary research” (2012, p. 91).

Kuhn’s understanding of science stands in contrast to Popper’s argument of scientific falsification (Schnell et al., 2013, p. 80 - 82). However, even if a crisis or anomalies exist, the complete change of a dominant paradigm also depends on possible alternatives (Gerring, 2012b, p. 36; Kingdon, 1984; Schnell et al., 2013, pp. 84–87). Alternative theoretical approaches must offer convincing rival explanations to precipitate a paradigm change. Concerning the Eurozone case, macroprudential surveillance and the renaissance of a Keynesian discourse represent such an alternative.

Campbell’s definition of paradigms on the basis of the key characteristics “background assumptions” and “cognitive level” reveals two other important paradigm features (1998, p. 385). He argues that paradigms “constitute broad cognitive constraints on the range of solutions that actors perceive and deem useful for solving problems” (p. 389). This definition emphasizes paradigms as overall educational dogma that sets the scene for policy-making and institutional design in a certain period. These deliberations correspond to Kuhn’s understanding of paradigms as universal achievements.

Like Kuhn, Hall’s research interest lies in the question of ideational change. Yet, Hall’s concept is more nuanced than Kuhn’s argument of scientific revolutions. Hall (1993) describes paradigms as a “prism” through which actors see the economy and interpret their personal role in it (p. 279). Furthermore, he defines paradigms as overall “frameworks of ideas and standards”. These frameworks determine policymaking goals and predefine the instruments to accomplish these goals. In addition, paradigms determine how problems are framed respectively and which problems are important or negligible (p. 279). Hall defines paradigm shifts as “radical changes of the overarching terms of policy discourse” (p. 279). Paradigm shifts belong to the category of third order change and distinguish themselves from slighter changes of policy instruments (first and second order change).

Table 1.2: Hall’s typology of policy changes

	Subject-Matter	Description	Empirical Example
First Order Change	Shift of basic policy instruments	Overall policy goals and instruments remain constant, only precise instrument settings are adapted to new situations	Minimum lending rate, small tax increases
Second Order Change	Shift of techniques and instruments	Overall policy goals remain similar, but policy instruments and their settings to attain these goals are adapted as response to lessons from past experiences	Introduction of a new system of monetary control (Britain, 1971), cash limits as means for public spending controls
Third Order Change	Paradigm shift	Change of the overall policy discourse	Radical shift from the Keynesian paradigm to monetarism during the 1970s and 1980s in the UK

Source: Hall, 1993, p. 278-279

The institutional implementation of dominant paradigms is comprehensive and includes a strong entrenchment in university doctrines, scientific journals and further academic and political organizations. During the 1970s, the leading US economic faculties and journals adopted the paradigm of neoclassical economics and abandoned previous Keynesian assumptions. As the power of an ideational framework depends particularly on the supporting institutions, the neoclassical paradigm greatly assured its position (Campbell, 1998, p. 390). At least in the United States, rival economic paradigms did not successfully challenge the core principles of neoclassical theory. However, the Financial Crisis presumably sows the seeds for a challenge by rival approaches.

In brief, with respect to the previous deliberations, paradigms shall be defined as a comprehensive framework of ideas, which predefines the policy discourse and determines goals, instruments and framing of the political and economic process. A paradigm becomes dominant if it reaches a level of stronger entrenchment than rival theories in society, economics and academia.

Uncertainty

The power of ideas and paradigm change dynamics are fundamental to understanding economic and social phenomenon. Uncertainty constitutes the driving force behind ideas and paradigms. The uncertainty assumption is crucial for this book because it enables the constructivist IPE approach and forms the fundament of Keynesianism (Abdelal et al., 2010, p. 11-13; Skidelsky, 2010, p. 83-85).

“Ideas are critical in the monetary realm because of continuing uncertainty over the basic workings of the macroeconomy, the difficulties of collecting and interpreting signals from macroeconomic data about the effect of policy, and the lack of agreement over what constitutes ‘correct’ macroeconomic policy” (McNamara, 1998, p. 57).

Generally, uncertainty refers to collective ignorance about future outcomes. The greater the level of collective uncertainty, the greater becomes the influential power of ideas (Jacobsen, 1995, p. 293). If a dominant paradigm is scrutinized due to an external shock like the Crisis or any other reason, a phase of competition among rival explanatory approaches is likely to follow (Grabel, 2011). At that stage actors are uncertain about ‘right’ policy choices and consequences of institutional change. In the end, the paradigm which seems to fit empirical changes at best and which gains the greatest actor support wins over its competitors. During high uncertainty, actors are insecure about their interests. Thus, interest-maximizing actors most likely do not influence policy choices at that stage (Goldstein, 1993, p. 23). Instead, as Campbell (1998) specifies, public sentiments and convictions gain importance during these collective “knowledge vacuums” (p. 394).

Blyth (2011) argues that conventional non-ideational theories in the field of IPE are based on four fundamental principles. First, we live in a world of equilibrium and thus, stability is the natural state. Second, causation is rather linear than nonlinear. Third, institutional change results from exogenous and not endogenous events. Finally, outcomes in the world are normally distributed. However, Blyth shows that these assumptions are misleading. Whereas the equilibrium assumption seems to be true for some cases, it fails in many others. For example, many countries suffer from high political and economic instability and uncertainty while others do not. Concerning linear causality, the assumption is valuable for most natural sciences explanations but does not meet complex realities of the social world. The same is true for the assumption of normal outcome distributions. Finally, with respect to institutional change the distinction of exogenous and endogenous events is rather ambiguous.

For these reasons, Blyth concludes that it is not possible to conceive the world by probabilistic risk calculation. Instead, outcomes are often purely uncertain. As generators for empirical outcomes are mostly hidden, only the outcome is visible. For example, in a stock market, stock fluctuations are observable but not the reasons why shares move. Yet, in other cases, both outcome and generators are not visible. A distinction in three worlds illustrates the problem of hidden generators and risk calculation under uncertainty (Abdelal et al., 2010a; Blyth, 2006, 2011; Taleb & Pipel, 2004):

- **Type1-world:** Observable generators create outcomes with calculable probabilities. Models based on past data produce reliable prognoses about future outcomes, e.g. dice numbers.
- **Type2-world:** Generators are not or are only partially observable and interdependent with actor interpretations. Models based on past data hardly predict future outcomes. Hence, outcomes become uncertain. For example, after general elections, one can only observe voters decisions but not the driving forces behind their decision to vote for or against a party.
- **Type3-world:** Generators are not observable and produce unexpected outcomes, e.g. the 2008 Financial Crisis or the end of the Cold War. Theories based on past data offer no predictability. Systems seem to be stable for a certain period and then radically change.

The uncertainty path to constructivism draws on this segmentation and offers a way to understand the power of ideas (Abdelal et al., 2010a, p. 11). Classical materialist economic approaches mainly interpret the world as one of type 1, whereas constructivists rather understand the world as located in the type 3 scheme. In the constructivist understanding, agents create institutions, norms and cultures to master the uncertainty in which they live (March & Olsen, 1996). To put it briefly, “human agents create the stability that they take for granted” (Blyth, 2011, p. 96). Ideas, in turn, are at the heart of the institutions that agents create to overcome uncertainty. Blyth frames ideas in this respect as “fundamental media through which agents interpret the world and construct stability in it” (2011, p. 96). In an overwhelming crisis situation such as 2008, the ideational foundation of the system begins to totter and the change of the dominating paradigm becomes a conceivable option.

Overall, this section has outlined this book’s theoretical foundation. Furthermore, each chapter discusses respective theoretical premises in more detail. The next part introduces the empirical case.

1.3. Empirical Case: Eurozone financial regulation

This book analyzes financial regulation in the Eurozone. Primarily, the investigation is focused on institutional and ideational change during the period after the financial crisis in 2008. Furthermore, the second chapter of this volume compares the time periods before and after the Crisis. The first phase starts with the establishment of the Euro currency in 1992 and lasts until the end of 2007. The second phase starts at the beginning of 2008 and is analyzed until the end of 2016. This section briefly introduces the key features and most relevant actors of the empirical case under study.

Since the Crisis, a high level of institutional change has taken place in the Eurozone. Firstly, many new institutions have been established. Secondly, the role of existing organizations like the ECB has changed. Thus, the detection of an underlying causal mechanism of paradigm change is most likely in the Eurozone case. Furthermore, the Eurozone is among the economically strongest global currency areas and was critically hit by the Crisis. Thus, it is an utmost relevant case *per se*. Besides, it should

be noted that financial regulation in the Eurozone and in the EU is nearly identical. But, to be as precise as possible and account for small differences, this book's analysis refers to the Eurozone only.

The majority of newly established institutions include macroprudential instruments and policy tools. Most prominent are the European System of Financial Supervision (ESFS) and the European Banking Union (EBU). Firstly, the ESFS consists of the European Supervisory Agencies (ESAs), which are the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA). The ESFS further comprehends the Joint Committee of the ESAs and establishes the European Systemic Risk Board (ESRB). Its primary responsibilities are macroprudential oversight and cross-sectoral financial stability. Secondly, the EBU establishes a single European Rulebook. Its two main pillars are the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM). The SSM empowers the ECB to directly monitor the largest banks in the Eurozone, whereas national institutions supervise smaller banks. Non-Eurozone EU member states can join the SSM on a voluntary basis. The SRM establishes an effective European bank resolution procedure if banks which are monitored under the SSM fail.

In addition to the establishment of new institutions at European level, new global initiatives are also established. These developments at a global level are relevant because they significantly influence European legislation and standard-setting. In respect thereof, the Bank for International Settlements (BIS) introduces the comprehensive Basel III banking regulation and surveillance framework. Basel III is implemented in the EU via the CRD IV/CRR legal acts. Additionally, the G20 installs the Financial Stability Board (FSB) as a permanent organization. The FSB coordinates financial supervision at global level and develops regulatory and supervisory standards. Finally, the International Monetary Fund (IMF) also actively engages in debates about macroprudential surveillance and financial risk control. Thereby, the IMF influences European debates on the use and development of macroprudential instruments (Blanchard, 2015b; Copelovitch, 2010; Papi et al., 2013).

Furthermore, the role of existing organizations changes too. The most influential European financial actor is the ECB which has significantly gained responsibilities throughout the post-Crisis period. On top of the ECB's task to maintain price stability, the ECB declares its responsibility is to ensure the "safety and soundness of the banking system and the stability of the financial system within the EU" (European Central Bank, 2018b). Micossi shows how the ECB changes its way of monetary policy-making towards more active monetary intervention and prioritizing financial stability over price stability (Micossi, 2015a, 2015b, pp. 1–5). The ECB de facto adapts the role as a lender of last resort. The fight against inflation becomes only one central bank goal among others (Buiter & Rahbari, 2012; De Grauwe, 2011; Le Maux & Scialom, 2013; Micossi, 2015b; Wyplosz, 2012).

The interventionist shift of the ECB and its role as a lender of last resort becomes apparent in its daily policymaking actions. Under the expanded Asset Purchase Program (APP), the ECB injects huge amounts of cash in the financial market. Since January 2015, the ECB has re-launched an expanded asset purchase program of government bonds in the amount of up to 80 € billion per month (European Central Bank, 2018a). In addition to the Public Sector Purchase Program (PSPP), the ECB still pursues its third Covered Bond Purchase Program (CBPP3) and further started a Corporate Sector Purchase Program (CSPP) in June 2016. The vast extent of these actions has been unprecedented and indicates the shifting role of the ECB towards a more active part to boost economic growth. In total, Eurosystem holdings under the APP in January 2018 add up to 2.3 trillion €, of which 1.9 trillion stem from government bonds (European Central Bank, 2018a).

Another relevant actor of Eurozone financial regulation is the European Commission (EC). Whereas the ECB holds the necessary tools of monetary policy interventions, the EC defines the broad pillars of European economic governance in the common market. Thereby, the EC monitors budgetary policies of EU member states, detects macroeconomic imbalances in the Eurozone and examines relevant economic indicators. Furthermore, the EC recommends specific policies (including warnings) to member states if necessary and assesses specific country stability and convergence programs. The EC's 2020 strategy envisages sustainable economic growth and innovation in Europe. It directly addresses the need for a stronger regulatory framework, including financial market regulation (European Commission, 2015a, 2015b). This development reflects the break with neoclassical *laissez-faire* tradition towards a more interventionist approach in the post-Crisis era.

Finally, further initiatives play an important role in Eurozone financial regulation after the Crisis. These are the Van Rompuy Task Force, six legislative proposals by the EC (Six Pack), two additional legislative drafts by the EC to strengthen rigorous budgetary control (Two Pack) and further actions. Up to now, the EC has initiated more than 40 measures to strengthen financial oversight and stability in the EU (European Commission, 2018a). Besides, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union TSCG (also Fiscal Compact) introduces a stronger version of the Stability and Growth Pact. The TSCG includes strict rules for national budgets and fines in case of faulty performance (European Parliament, 2012). In addition, the Compact for Growth and Jobs explicitly focuses on the creation of jobs, investment, economic growth and the establishment of a comprehensive regulatory framework. Finally, the European Stability Mechanism (ESM) is established to ensure the provision of loans to member states with payment difficulties (ESM, 2015).

Overall, Eurozone financial regulation significantly changes after the Crisis. Both a large number of new institutions are established and pre-existing institutions adapted. The next section introduces the methodological approach and gives information about data collection and operationalization.

1.4. Methods

This section introduces the mixed-method approach of this volume. The first part elaborates on the study design of this book. The second part presents the operationalization and data collection.

1.4.1. Research design

This volume is premised on three different methodological approaches. The second chapter is based on a co-variational case study approach using an intertemporal within-case comparison. The third chapter follows Gerring's argument of description as independent methodological approach (Gerring, 2012a). Furthermore, it builds on conceptualization strategies by Collier and Gerring (2009), Gerring (2012b), Goertz (2006) and Schaffer (2016). The fourth and fifth chapters are based on causal process-tracing (CPT). The next passages elaborate on the different approaches in more detail.

Second chapter

The second chapter investigates whether the 2008 financial crisis has initiated a paradigm change in Eurozone financial regulation. Therefore, it is premised on a co-variational case study using an intertemporal within-case comparison (Blatter & Haverland, 2012, pp. 33-78; Lange, 2013, pp. 58-60). This design builds on Mill's method of differences (Blatter & Haverland, 2012, p. 42). The research focus lies on the effect of the independent variable: the effect of the Crisis on institutional

change. To hold variables, which may influence institutional change in Eurozone financial regulation, as constant as possible, an internal comparison over time is applied. The 2008 Crisis marks the critical juncture which separates the two time periods. As pointed out by Blatter & Haverland (2012), “intertemporal comparisons, particularly those that compare situations shortly before and shortly after the change in the independent variable, potentially yield compelling evidence” (p. 46-47).

Third chapter

The third chapter investigates the new financial regulation paradigm and the key characteristics which define it. Thereby, it builds the basis for the causal process-tracing analysis in the subsequent chapters. According to Gerring, causal and descriptive approaches should be understood as different “forms of argumentations” rather than as “characterizations of the sort of evidence available for causal inference” (Gerring, 2012a, p. 724). He calls for an independent status for descriptive arguments within social sciences. This claim has repeatedly been discussed in the social sciences community (King, Keohane, & Verba, 1994, p. 34). Methodologically, description entails the goals of conceptualization and measurement (Gerring, 2012a, p. 735). The conceptualization strategy follows Gerring’s seven criteria of empirical concept formation (Gerring, 2012b, pp. 116–131). Furthermore, the concept belongs to the ontological category of concept-building (Goertz, 2006, pp. 14–15). This means that the different dimensions of a concept constitute what the phenomenon is.

In addition, the third chapter’s approach of concept formation is premised on Goertz’ three-level concept-building framework (Goertz, 2006, pp. 30–67). Firstly, the basic level denotes the phenomenon of interest. Secondly, the secondary level comprises the constitutive dimensions defining the basic-level concept. Often these constitutive dimensions are defined in terms of sufficient and necessary conditions. Finally, the data or indicator level refers to the operationalization of the secondary level. The development of the new technocracy concept is premised on these recommendations. The next passage presents the design of the fourth and fifth chapter.

Fourth and fifth chapter

The fourth and fifth chapters are based on CPT of Eurozone financial regulation. This research design is explicitly recommended as a powerful analytical tool for an analysis of ideational change after a crisis (Hay, 2015, p. 23; Jacobs, 2015, p. 41). The fourth chapter investigates which causal factors led to the quick elimination of the EMH in the Eurozone after the Crisis. The fifth chapter analyzes which causal factors led to the establishment of the new technocracy paradigm in Eurozone financial regulation. Both chapters together develop a model of paradigm change which includes both old paradigm elimination and new paradigm establishment. The research design is primarily based on theory-testing process tracing. However, elements of theory-building process-tracing are included, too (Beach & Pedersen, 2013, pp. 11–17). In the Eurozone case, the outcome in terms of the new technocracy paradigm is known, but it is unclear which factors have led to it. The methodological approach follows the recommendation by Blatter and Haverland (2012).

The fifth chapter’s research design differs from the fourth chapter’s design in one particular aspect. To analyze the causal factors which favor or prevent the implementation of new institutions and ideas, the fifth chapter compares two different initiatives. One initiative has been successfully implemented whereas the other one failed. Whereas major macroprudential premises have been implemented in European legislation on the basis of the CRR/CRD IV, the European banking structure reform has failed. Although the CRR/CRD IV legislation has been more relevant in terms of size and

impact, the banking structure reform would have been an important step to a more solid EU banking system. With respect to the models by Hall and Kingdon, one or more criteria are supposed to be absent in the banking structure reform process but present in the CRR/CRD IV process. The following passage elaborates on this volume's understanding of causal factors as part of a causal mechanism.

Causal Mechanism

Chapters four and five are premised on “configurational thinking” of causality (Blatter & Haverland, 2012, pp. 80–96). The research goal is to investigate the combination of conditions which make the outcome possible. Thereby, this book's understanding of a causal mechanism is more specific than its definition as “causal pathway, process, mediator, or intermediate variable” which somehow transmits a causal effect from X to Y (Gerring, 2012b, p. 215). Instead, the key premises of configurational thinking are that a “plurality of causal factors work together to create the outcome” and that “causality works out in time and space” (Blatter & Haverland, 2012, p. 81). The process analysis of causal factors in temporal order is fundamental for this book's CPT understanding. However, the concept of a causal mechanism is still contested (Blatter & Haverland, 2012, p. 90; Gerring, 2007b). In this volume, a causal mechanism shall be defined as configuration of causal conditions in a sequential causal chain that together are sufficient for the outcome.

In this regard, a causal factor (X) is defined as a necessary condition if the outcome (Y) only occurs if X exists. But Y does not always occur even if X is present. By contrast, a causal factor (X) is defined as a sufficient condition if the outcome (Y) always occurs if X is given. But Y can also occur when X is not present (Blatter & Haverland, 2012, pp. 92–93). The different integral parts of the overall causal mechanism should be understood as insufficient but necessary conditions of an unnecessary but sufficient condition (INUS). Each factor of a causal mechanism is itself insufficient to produce the outcome, but the combination of these different parts leads to the outcome. So, each single factor of the mechanism cannot solely produce the outcome and, with one part being absent, the causal mechanism does not apply (Beach & Pedersen, 2013, pp. 30–31). Furthermore, the term of a ‘causal chain’ specifies that the different factors of the causal mechanism are hypothesized as a sequential combination of INUS conditions (Blatter & Haverland, 2012, pp. 94–95, 97).

The CPT analysis of this volume investigates the most plausible parts of a causal mechanism, which could be deductively considered in theories of institutional and ideational change. Yet, only because the most plausible causal mechanism is investigated in this volume, other potential causal conditions are not denied but assumed as less probable. This concern addresses the issue of equifinality which means that different causal pathways can lead to the same outcome (Checkel, 2015, pp. 74–75). The approach of this book is relevant because it also reduces the number of possible alternatives (Gerring, 2007a, p. 179). The next part presents the operationalization and data collection.

1.4.2. Operationalization and data collection

Following the triangulation concept, this book uses data from disparate types of sources and applies mixed-method data collection techniques (Gläser & Laudel, 2010, p. 105; Mosley, 2013, p. 22, 25). The specific operationalization form depends on the research focus of each chapter. In each book section, different indicators are developed and evaluated. The different indicators include both qualitative and quantitative variables. In general, the data collection of this volume is based on two different pillars. Firstly, this book is premised on a data analysis of primary sources of the most important institutional actors in Eurozone financial regulation. Complementary information is

provided by international economic or financial organizations such as the BIS, FSB, IMF and OECD. Secondly, this volume's data collection is premised on qualitative expert interviews with senior staff from both the public and private sector. The following passages summarize this approach.

Primary sources

Following Jacobs (2015), the operationalization includes a primary source legislation and communication analysis of the most important actors in Eurozone financial regulation (p. 51). This includes reports, minutes, speeches, press statements and applied policy measures by the ECB, EC, ESRB, ESAs and national central banks. Furthermore, chapters four and five follow the best practices in process-tracing proposed by Bennett & Checkel (2015, pp. 20–31). Thus, these chapters use data from mutually independent sources. Chapter five further applies a content analysis of the positions of the European Banking Federation (EBF) to investigate the interests of the financial industry. The EBF is the major banking lobbying association in Brussels and represents 32 national banking associations with more than two million employees.

Expert interviews

In addition to the analysis of primary sources, this volume is based on qualitative expert interviews with senior management from European and national authorities and the financial industry. Expert interviews provide the utmost valuable information about changes after the Crisis, about the ideational shift of how regulation should optimally be designed and about changed financial market incentives. Following Mosley, interviews “can serve to identify causal mechanisms that are not evident in other forms of data” (Mosley, 2013b, p. 5). So, the chosen approach is adequate to answer the research question.

The expert interview analysis is based on an anonymized semi-structured questionnaire. All questions are formulated as simple, neutral, open and as clear as possible (Gläser & Laudel, 2010, p. 131-142). Interviewees are given much time to answer the questions and always have the opportunity to come up with their own alternatives. Furthermore, the experts are explicitly informed that they do not have to answer the question if they do not feel comfortable with it. In the same way, it is explicitly pointed out that interviewees can terminate the interviews before the end. Nevertheless, all interviews have been completed in an open and constructive atmosphere. Finally, interview partners were provided with access to the guideline before the appointment.

The questionnaire structure consists of two main blocks, whereby the former asks for changes in financial regulation before and after the Crisis. The latter specifically asks about the process of institutional change. Additionally the questionnaire includes a short introductory and closing section. In the final section, interview partners are given the opportunity to add anything which they feel to be important. Following Bleich & Pekkanen (2013, p. 96), all interviews are conducted in person to ensure the highest interview standard. Only interview C2 is conducted via phone due to an explicit request. Interview records are created through live recording or, on request, simultaneous note-taking. In total, 15 interviews are conducted during the period from October 2016 to June 2017.

The expert selection combines different perspectives on financial regulation to ensure the best possible level of objectivity. Similarly to Bleich & Pekkanen (2013, p. 99-103), experts are grouped in different categories. The seniority level of interview partners is exceptional with at least ten (in most cases more) years of relevant professional experience. All interviewees are senior managers, at least head of division level or equivalent. Among them are also four board members and one CEO. In total,

French, Italian, Polish, German, Greek, British, Portuguese and Irish nationalities are included. Table 1.3 gives detailed information on the conducted interviews including date, length and categorization.

Table 1.3: Overview expert interviews

	Function	Date	Length in min
Category A	Senior staff ECB / ESRB		
Interview A1	Senior staff ECB	12/2016	77.20
Interview A2	Senior staff ESRB	02/2017	48.17
Interview A3	Senior staff ESRB	02/2017	33.05
Category B	Senior staff EU financial institution but ECB/ESRB		
Interview B1	Senior staff European RA	10/2016	72.58
Interview B2	Senior staff EC	04/2017	60.40
Interview B3	Senior staff European RA	03/2017	65.00
Interview B4	Senior staff European RA	03/2017	45.00
Interview B5	Senior staff EU financial institution	12/2016	59.41
Category C	Senior staff competent national regulatory authorities		
Interview C1	Senior staff Eurozone financial stability authority	05/2017	47.00
Interview C2	Senior staff Eurozone financial stability authority	05/2017	41.00
Interview C3	Senior staff Eurozone national central bank	06/2017	44.00
Category D	Private sector / Expert regulatory research		
Interview D1	Senior staff member financial NGO	03/2017	42.09
Interview D2	CEO international investment company	06/2017	30.00
Interview D3	Board member major global investment bank	06/2017	37.00
Interview D4	Senior staff member global private bank	06/2017	49.17

The empirical analysis of each chapter evaluates different questionnaire items which have not been assessed in another book section. The next section gives an overview about the book structure.

1.5. Book structure

This volume consists of six different parts. After this introductory chapter, four main book sections investigate the research questions of this book. Each chapter stands on its own and follows a similar structure. After a brief introduction, the concept and theoretical part are presented. This section is then followed by the method and the result section. Finally, the discussion section interprets the results in light of the theoretical approach. A brief conclusion summarizes the key insights of each chapter. The final chapter discusses the key findings of this book in the context of current debates in the IPE research field. Furthermore, it gives an outlook on the comparative case of US financial regulation. The next passages briefly present the key elements of the next chapters.

The second chapter investigates whether an overall paradigm change or only minor policy changes take place in Eurozone financial regulation after the Crisis. Therefore, the chapter is based on a co-variational case study design using a within-case comparison over time. Furthermore, it refers to Hall's policy change typology to categorize changes in the post-Crisis era (Hall, 1993). Following Campbell's (2004) characterization of institutional change in empirical cases, the chapter defines the critical dimensions of financial regulation. Additionally, it specifies the time frame over which change in these dimensions occurs. Findings suggest that, contrary to previous research, first, second and

third order change indeed takes place. Particularly, the macroprudential turn changes the political discourse and functioning of the Eurozone. As a paradigm change has indeed occurred, the question arises regarding what the characteristics of this new paradigm are. The next chapter takes up on this issue.

The third chapter analyzes the characteristics of the new Eurozone financial regulation paradigm. Thereby, the chapter follows the argument by Gerring (2012a) of description as an independent methodological approach. Ten years after the Crisis, the chapter proposes the “new technocracy” framework to conceptualize the new paradigm of financial regulation. Following the macroprudential idea and the renaissance of a Keynesian discourse, three characteristics of the new technocracy are identified: systemic riskification, quantification and expertization. Thus, the conceptualization of the new paradigm complements previous research which has characterized the post-Crisis state of financial regulation as “productive incoherence” (Gabel, 2011, 2015b). The chapter not only argues that pre-Crisis regulation has been replaced, but develops a three-level concept to structure the new outcome. Thereby, this chapter builds the fundament for the CPT analysis in chapters four and five.

The fourth chapter focuses on the first phase of the paradigm change process in Eurozone financial regulation. Whereas many authors investigate the establishment of new ideas, less attention is paid to the elimination of the previously dominant paradigm. Based on CPT, this chapter investigates the causal mechanism which led to the quick elimination of the Efficient Market Hypothesis. Findings suggest that mainly three causal factors have been substantial. Firstly, macroprudential surveillance has provided a sufficiently alternative policy agenda of financial regulation. Secondly, the Crisis in 2008 has been a critical juncture which opened a window of opportunity for paradigm change. Thirdly, collective uncertainty of monetary and regulatory policymaking after the Crisis formed the basis for the successful implementation of an alternative paradigm. The fifth chapter complements the analysis of paradigm elimination and focuses on the process of paradigm establishment.

The fifth chapter analyzes the factors which determine the establishment of the new technocracy as new financial regulation paradigm. Based on theory-testing causal process-tracing, the chapter shows that two causal factors are substantial. Firstly, dependent upon certain criteria, new ideas and propositions influence the process of paradigm adoption. Particularly, the fit of a new initiative with the overall theoretical framework and the support of political parties are essential. Secondly, policy goals and actor expectations are re-defined within the new paradigm. Policy goals of the ECB and other EU financial entities significantly change. At a more general level, this chapter shows that the elimination of an old paradigm does not necessarily lead to paradigm competition. Instead, rivalry can be limited to the institutional level. Together chapters four and five develop a model of paradigm change.

The final chapter concludes on the key findings of this volume and discusses them in the context of current debates in the IPE research field. Furthermore, with respect to the comparative case of US financial regulation, the last chapter gives an outlook about the developed paradigm change model’s generalizability. Finally, the last chapter points to relevant issues which could not be addressed in this volume and could serve as a starting point for future research.

2. Eurozone Financial Regulation Ten Years after the Crisis – Paradigm or Policy Change?

Abstract

Ten years after the financial crisis in 2008, institutions of financial regulation in the Eurozone have changed. However, it remains uncertain how far-reaching these changes have been. Based on a co-variational case study, this chapter investigates first, second and third order change of financial regulation in the post-Crisis period. Following Campbell's (2004) characterization of institutional change in empirical cases, this chapter firstly defines the critical dimensions of financial regulation. Secondly, it specifies the time frame over which change in these dimensions has occurred. Thirdly, this chapter uses an analysis of primary sources and new expert interview data from high-level senior staff members of EU authorities and the financial industry to investigate the level of institutional change. The findings suggest that, contrary to previous research, first, second and third order change has indeed taken place. The macroprudential turn of financial regulation has changed the political discourse in the Eurozone and altered political processes, policymaking and the functioning of the EU. At a more general level, this chapter shows that the study of ideas is essential to understand the dynamics of change during times of high uncertainty.

2.1. Introduction

Times of great crises are times of great change. In such windows of opportunity, policymakers look for alternative explanations and new theoretical approaches. Their views and interpretations of the political and economic world system may radically change. For instance, when Keynesianism could not explain stagflation following the oil price shocks in the 1970s, neoclassical and monetarist ideas replaced Keynesian theorizing as dominant economic and financial paradigm (Hall, 1993, p. 279). In this volume, I argue that the Financial Crisis in 2008 broke with the hitherto unquestioned orthodoxy of financial market efficiency and created another strong momentum for institutional change.

This chapter investigates whether the impetus for institutional change after the 2008 Crisis in Eurozone financial regulation has been strong enough to create a paradigm change. Following Hall (1993), a paradigm refers to a comprehensive framework of ideas, which predefines the policy discourse and determines goals, instruments and framing of the political and economic process. Research differentiates between day-to-day policies shifts (first order), changes of policy instruments and techniques (second order) and paradigm shifts (third order).

Previous work on paradigm change after the Crisis has been inconsistent. Blyth (2013) argues that third order change of economic governance did not take place even though it should have. However, he does not specifically analyze financial regulation although change in this area would have been most likely as states failed to sufficiently regulate financial markets before the Crisis. In contrast, Baker (2012) finds that the establishment of macroprudential surveillance has indeed been a case of third order change in financial regulation after the Crisis. However, due to the short time frame of analysis, institutional change processes had still continued. So, Baker does not find first and second order change. So far it remains unclear whether a paradigm change has in fact taken place.

Ten years after the Crisis, the picture may have become clearer as many institutional changes of Eurozone financial regulation have been implemented. Following Campbell's (2004) characterization of institutional change in empirical cases, this chapter specifies the critical dimensions of financial regulation. Furthermore, it defines the appropriate time frame over which change in these dimensions has occurred. Contrary to Baker (2012) and Blyth (2013), this chapter finds that first, second and third order change has indeed taken place. In fact, two different patterns of institutional change seem to have emerged. Whereas fundamental changes took place until six years after the Crisis, an incremental consolidation phase has evolved following the European elections in 2014. Finally, this chapter also characterizes the new normal of financial regulation in the Eurozone.

The research design is based on a co-variational case study approach using an intertemporal within-case comparison. I compare two phases of financial regulation in the Eurozone. The first phase starts with the Maastricht Treaty in 1992 and lasts until the outbreak of the financial crisis in 2007. The second phase lasts from 2008 to 2016. The data collection includes a legislation analysis and draws from primary sources. Furthermore, 15 expert interviews with high-level senior staff members from the ECB, European and national regulatory agencies and the private sector were conducted.

Rather than in the theoretical discussion of the conceptualization of ideas (Abdelal, 2006, 2007; Blyth, 2002; Campbell, 1998, 2004; Jacobsen, 1995; Schäfer, 2016; Skidelsky, 2010), this chapter's epistemic interest lies in the empirical analysis of paradigm change after the Crisis. Thereby, this chapter contributes to the literature on institutional change in the international political economy (IPE) and to the debates of European macroprudential surveillance and the new role of central banks.

Contrary to previous studies, this chapter takes an overall perspective on the post-Crisis European financial architecture. So far, research has strongly focused on partial institutional changes of single actors, particularly the European Commission (Biehling, 2011; Buti & Carnot, 2013), the European Central Bank (Berg & Carstensen, 2012; De Rynck, 2016) and the International Monetary Fund (Copelovitch, 2010; Papi et al., 2013). Hennessy (2014) has shown how the normative structure of European financial supervision has moved from soft law to hard law. Furthermore, Glöckler, Lindner, & Salines (2017) have found that the establishment of the Single Supervisory Mechanism (SSM) breaks with pre-Crisis incremental developments but represents a case of punctuated change. Yet, an overall analysis of the Eurozone is still missing.

Different from current macroprudential debates, this chapter goes beyond the design of regulatory policy instruments. Instead, this chapter investigates the overall impact of the macroprudential debate. So far, macroprudential publications are mainly issued by financial organizations, e.g. national central banks, the ECB, the IMF and the BIS (Borio, 2011; Galati & Moessner, 2013; Haldane, 2010). Academia has only little by little taken up the discussion. Current debates primarily refer to the character and implications of macroprudential policy tools, the relationship of monetary and fiscal policies and the changing tasks of central banks (Blanchard, 2015a; Yellen, 2010). A consensus has evolved that macroprudential measures are necessary for a stable financial and economic structure on both the national and global level: “macro prudential tools, that is state-dependent regulations, are the new policy kids on the block” (Blanchard, 2015b).

This chapter is structured in five sections. The first part defines ideational concepts and specifies time frame and constitutive dimensions of financial regulation. The second part includes the methods. The third part presents the results. The fourth part discusses the findings on first, second and third order change. The final part concludes on the main arguments.

2.2. The Power of Ideas

Building on previous conceptualizations of ideas by Béland and Cox (2011), Jacobsen (1995), Mehta (2011), and particularly Campbell (1998, pp. 384-398), ideas shall be defined as a coherent set of implicit or explicit beliefs and assumptions, shared by different actors. Ideas are part of cognitive processes and imply causality. They do not directly refer to applied policy instruments, but have a more general character. However, concrete policy measures or action plans can develop from ideas.

Based on Hall (1993), paradigms are defined as comprehensive frameworks of ideas, which predefine the policy discourse and determine goals, instruments and framing of the political and economic process (p. 279). In Hall’s words, a paradigm shift is the radical change “of the overarching terms of policy discourse” (p. 279). As summarized in table 1.2 in the first chapter, Hall defines three different categories to specify the process of institutional change (1993, p. 278-279). Whereas first and second order changes belong to the category of “normal policymaking (...) without changing the overall terms of a given policy paradigm”, third order change encompasses a paradigm change.

A paradigm becomes dominant if it reaches a level of stronger entrenchment than rival theories in the academic community and among societal elites, i.e. university doctrines, scientific journals and further academic and political organizations. The power of an ideational framework depends particularly on the supporting institutions (Campbell, 1998, p. 390).

Campbell (2004) differentiates three patterns of institutional change in empirical cases (p. 31-35). Whereas continuous or evolutionary change describes incremental institutional evolvments over time, two patterns refer to discontinuous change: punctuated equilibrium and punctuated evolution. A punctuated equilibrium or revolutionary change concerns simultaneous changes in almost all critical dimensions of an institution over a well-defined time period. A punctuated evolution contains changes in only some dimensions over time. To specify the pattern of institutional change, Campbell claims that the most essential premises are 'to unpack the critical dimensions of an institution and track them over time' (p. 57). He recommends to consider the 'analyst's theoretical perspective', 'salience' and 'level of analysis' of the defined dimensions (p. 37-38). However, it is up to the researcher of a given empirical case to define the critical dimensions and the appropriate time frame.

In this volume, financial regulation is defined as "applying the analytical tools of economics to determine the legal and regulatory framework best suited to correcting the failures of a financial system" (Armour et al., 2016, p. 51). The design of a regulatory system needs to address potential market failures with a set of "possible regulatory interventions" to re-incentivize market participant behavior (p. 52). With regard to Campbell, the "analytical tools of economics" correspond to the level of analysis. Furthermore, the theoretical perspective is reflected in design and intensity of the "legal and regulatory framework". Finally, the issue most "salient" in financial regulation is the key goal of financial stability. The globalization of finance challenges national regulation regimes and domestic financial stability (Armour et al., 2016, p. 6). Hence, the implementation of regulatory norms has to adapt. Based on these assumptions, I define the following dimensions of financial regulation.

Analytical dimension: The analytical dimension of financial supervision and regulation can be differentiated in a micro- and a macro- based approach. Whereas microprudential supervision is premised on the individual analysis of single institutions (e.g. Basel I and II), macroprudential surveillance focuses on the analysis of aggregated systemic risks. As the European financial market supervision is sector-based, i.e. separate supervision of banking, securities and insurances, financial oversight is highly fragmented. Macro-based regulation takes cross-sectional interlinkages into account. Depending on the analytical approach of the prevailing paradigm, the institutional design of financial regulation fundamentally differs.

Intensity dimension: Depending on the general belief in the stability of financial markets, regulation is rather low or strict. If financial markets are conceived as vulnerable to imbalances, public authorities will have a high interest in counterbalancing these failures by stricter regulation and supervision. On the downside, in a liberalization era, financial markets will rather be deregulated. Broadly speaking, the market is more powerful than the supervisory side – as could be seen in the period before the Financial Crisis. As public attention on regulatory issues is much higher during times of crises, politicians have an incentive to overregulate during crises and to be too lax when the financial market is perceived as stable (Armour et al., 2016, p. 13).

Implementation dimension: The implementation dimension refers to the responsibilities of competent authorities and the legislative level of regulatory standard-setting. Regulatory norms could be embedded in national, regional (e.g. European) or global legislations. Despite efforts at global level to strengthen international cooperation of banking regulation, for example, the Basel Accords, the implementation of international standards in national legislation may highly vary across different countries. Furthermore, regulatory authorities could be at national or regional level. In the post-Crisis era, significant changes and competency enhancements at European level have occurred.

Time frame of financial regulation

According to Campbell, the selection of an appropriate time frame depends on historical insight, theoretical orientation, level of analysis, pragmatic methodological considerations and critical events (2004, pp. 44–47). Clearly, the financial crisis in 2008 is such a critical event to study. Regarding the Eurozone, the Maastricht Treaty signing in 1992 marks the start of a new era. For the first time in history, different European states agreed to join a common European Monetary Union (EMU). This decision has entailed huge implications on economic and financial policymaking to date. Monetary policies had to be synchronized by a large extent which had implications on the whole European financial sector. Several efforts have been undertaken to harmonize regulatory policymaking, even though no elementary changes had been implemented. This fundamentally changed with the critical event in 2008. Hence, the period from 1992 to the end of 2007 is a highly appropriate time frame to analyze financial regulation before the Crisis.

Since 2008, many institutional changes in Eurozone financial regulation have been implemented. For pragmatic reasons of this chapter's data collection, I analyze the period until the end of 2016. Until then, most elementary institutional changes related to the ESFS and the EBU had been completed. Furthermore, a nine-year period after a major Crisis is sufficiently appropriate to offer valuable insights on institutional change. In line with Campbell's main premises of an appropriate time frame and the critical dimensions of the institution under study, I analyze the change of financial regulation over time. The following methods section presents the research design of this book section.

2.3. Methods

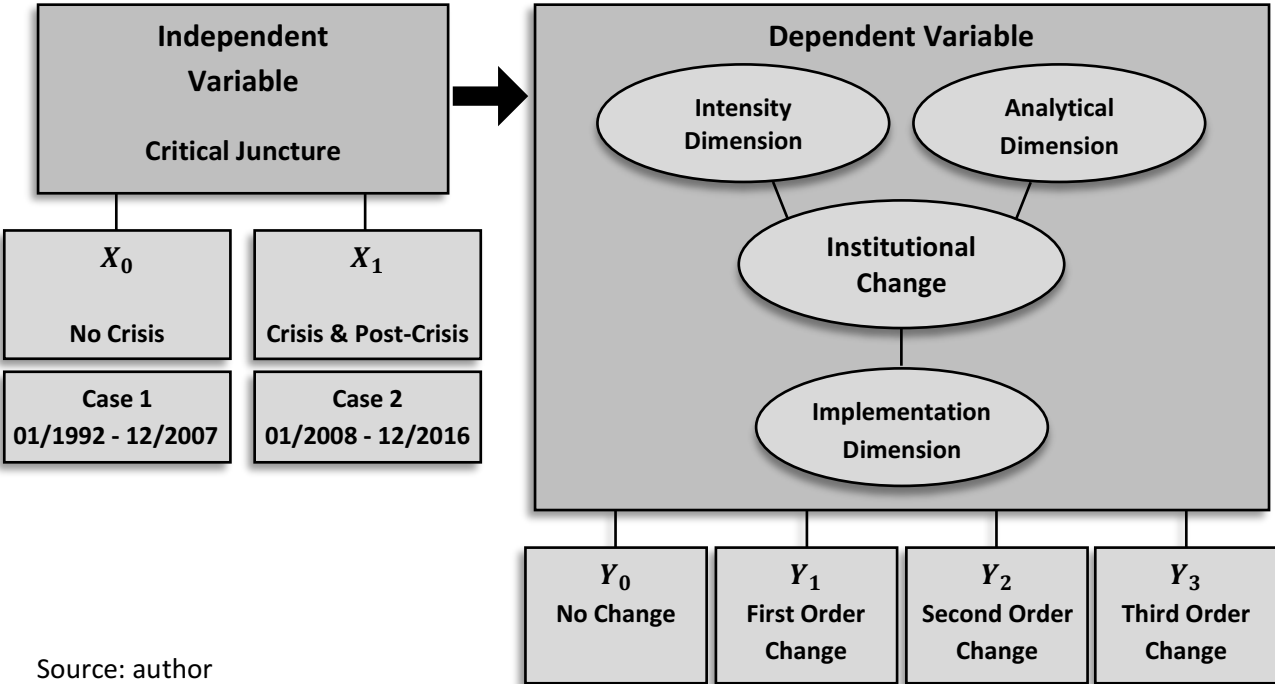
2.3.1. Study Design

To answer the research question whether or not the 2008 financial crisis has initiated a paradigm change in Eurozone financial regulation, this chapter is based on a co-variational case study approach using an intertemporal within-case comparison (Blatter & Haverland, 2012, pp. 33-78; Lange, 2013, pp. 58-60). With regard to Gerring (2007), a case is a 'spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time' (p.19). The case of the Eurozone is limited in space by its participating countries, in time by its establishment via the Maastricht Treaty in 1992 and inherently defined by its common currency. At this point it should be noted that financial regulation in the Eurozone and financial regulation in the European Union are nearly identical. However, to be as precise as possible and to account for small differences, this volume's analysis refers to the Eurozone only. As one of the strongest currency areas in the world in terms of economic output, which was fundamentally hit by the Crisis, the Eurozone is an utmost relevant case per se.

The co-variational intertemporal within-case comparison builds on Mill's method of differences (Blatter & Haverland, 2012, p. 42). The research focus lies on the effect of the independent variable: the effect of the Crisis on institutional change. To hold all variables, which may influence institutional change in Eurozone financial regulation as constant as possible, an internal comparison over time was applied. The financial crisis in 2008 marks the critical juncture which separates the two time periods. As pointed out by Blatter & Haverland (2012), "intertemporal comparisons, particularly those that compare situations shortly before and shortly after the change in the independent variable, potentially yield compelling evidence" (p. 46-47).

Figure 2.1 outlines the research design. The independent variable (X) is the *critical juncture* in form of the Crisis in 2008. The x-variable is dichotomous with variance in *crisis & post crisis* and *no crisis*. The dependent variable (Y) on the right of the diagram is *institutional change* composed of the critical dimensions of financial regulation. An overall paradigm change requires a fundamental change ‘of the overarching terms of policy discourse’ (Hall 1993, p. 279). Hence, to accept the result of a paradigm change in Eurozone financial regulation, we would expect first, second and third order change in each critical dimension. This chapter’s lead hypothesis is that the Crisis has initiated a paradigm change in Eurozone financial regulation. The null hypothesis is that the Crisis has not initiated a paradigm change in Eurozone financial regulation. The lead hypothesis has to be accepted when x_0 does not lead to y_3 and x_1 leads to y_3 in all critical dimensions of financial regulation. Logic inference implies that, if x_1 leads to y_3 , x_1 also leads to y_1 and y_2 . So, the lead hypothesis has to be rejected, if x_0 leads to y_3 or if x_1 leads not to y_3 or if x_1 leads not to y_2 or if x_1 leads not to y_1 .

Figure 2.1: Research Design



Source: author

2.3.2. Data collection

Following the triangulation concept, this chapter uses data from disparate types of sources and applies mixed-method data collection techniques (Gläser & Laudel, 2010, p. 105; Mosley, 2013, p. 22, 25). Firstly, primary source analyses of Eurozone legislation and communication include reports, minutes, speeches, press statements and applied policy measures by the ECB, EC, ESRB, ESAs, IMF, BIS and national central banks. Secondly, this investigation is based on qualitative expert interviews with high-level senior staff from European and national authorities and the financial industry. Expert interviews provide utmost valuable information about the severity of changes after the Crisis, about the ideational shift of how regulation should optimally be designed and about changed financial market incentives. So, the chosen approach is adequate to answer the research question.

The expert interview analysis is based on an anonymized semi-structured questionnaire. All questions have been formulated as simple, neutral, open and clear as possible (Gläser & Laudel,

2010, p. 131-142). The questionnaire consists of two main blocks, whereby the former asks for changes in financial regulation before and after the Crisis. The latter specifically asks about the process of institutional change. In this chapter primarily data of the first block is relevant. Following Bleich & Pekkanen (2013, p. 96), all interviews were conducted in person to ensure the highest interview standard. Only interview C2 was conducted via phone due to an explicit request. Furthermore, interview partners have been provided with access to the guideline before. Interview records have been created through live recording or, on request, simultaneous note-taking. In total, 15 expert interviews were conducted during the period from October 2016 to June 2017.

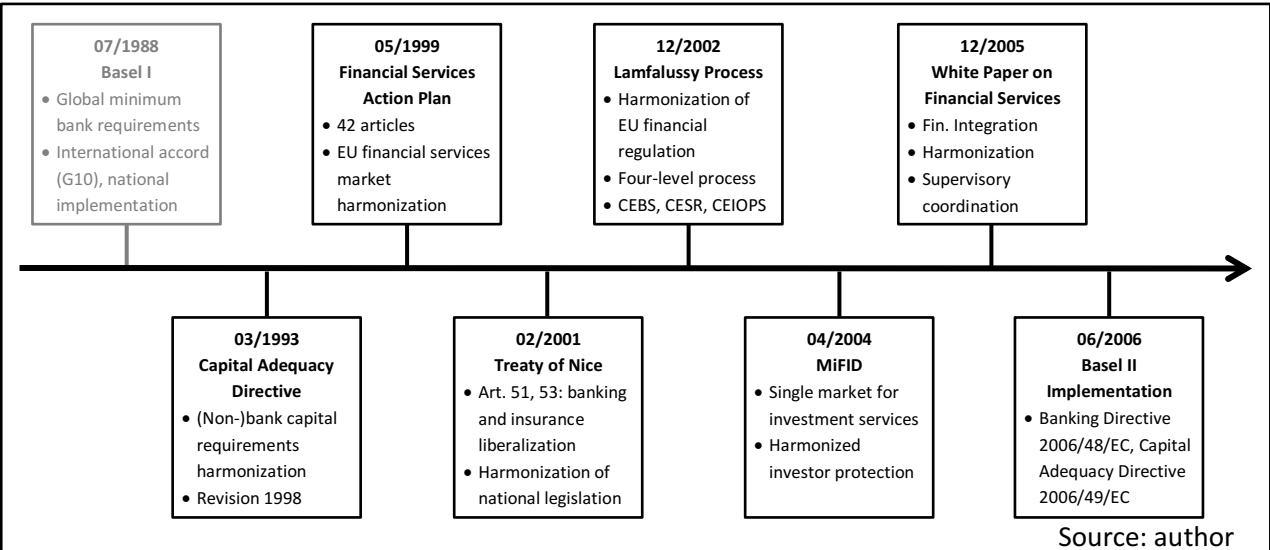
The selection of interview partners combines different perspectives on financial regulation to ensure the best possible level of objectivity. Similarly to Bleich & Pekkanen (2013, p. 99-103), experts have been grouped in different categories (see annex). The seniority level of interview partners has been exceptional with at least ten (in most cases more) years of relevant professional experience. All interviewees are senior staff members, at least head of division level or equivalent. Among them have also been four board members and one CEO. In total, the following nationalities have been included: French, Italian, Polish, German, Greek, British, Portuguese and Irish. Table 1 in the annex contains detailed information on the conducted interviews including date, length and categorization.

2.4. Results

2.4.1. Financial regulation in the Eurozone from 1992 to 2007

Fourteen out of 15 expert interview partners characterized the period before the Crisis as an era of deregulation. Following the mainstream economic paradigm of the new neoclassical synthesis, financial regulation before the Crisis has been limited (Marques-Ibanez & Leuvensteijn, 2017). Pre-Crisis economic DSGE modeling has assumed financial markets to be stable under almost all conditions. Shocks to the economy were considered to be external, e.g. supply or demand shocks. Financial regulation in the Eurozone was only poorly integrated and dominated by national prerogatives. Figure 2 shows the key regulatory initiatives from 1992 to the end of 2007. The Basel I accords are included in this figure because they have strongly influenced this time period.

Figure 2.2: Major European Financial Regulation Legislation during the period 1992 – 2007



Analytical dimension

Financial regulation and supervision were entirely based on microprudential principles, i.e. the macroprudential systemic risk view was missing (Claessens, 2014). Financial markets were generally considered to be stable. Twelve out of 15 experts implied that improving financial stability via a macro-based approach was irrelevant. In line with the Basel I and II accords, regulatory incentives were only targeted at the individual level of banks. Cross-sectional and system-wide risk analyses were non-existent. Macroprudential policy tools, e.g. countercyclical capital buffers, were not yet developed nor employed. The micro-based approach has been dominant, not only in the banking field, but in all areas of the financial sector, including insurance and securities regulation.

Intensity dimension

Regulation intensity before the Crisis has been low. As shown in figure 2, initiatives before the Crisis were limited in both quantity and scope. Regulatory proposals have rested on a level of increased harmonization and only include minor institutional changes. The general perception prevailed that the banking and finance sector was doing well due to a long period of financial stability and a perceived high success in terms of profitability of financial intermediaries. Public regulators faced high resistance in case they sought to change or implement further regulations. The pre-Crisis period has also been marked by efforts of national policymakers to reduce regulatory burdens on the financial industry for the benefit of economic growth (Interview C2). These efforts partly resulted in a deregulation competition with countries like Ireland creating financial sectors larger than their domestic economies. Overall, the pre-Crisis period could be characterized as an era of unquestioned belief in the impeccability of financial markets resulting in very light regulatory legislation.

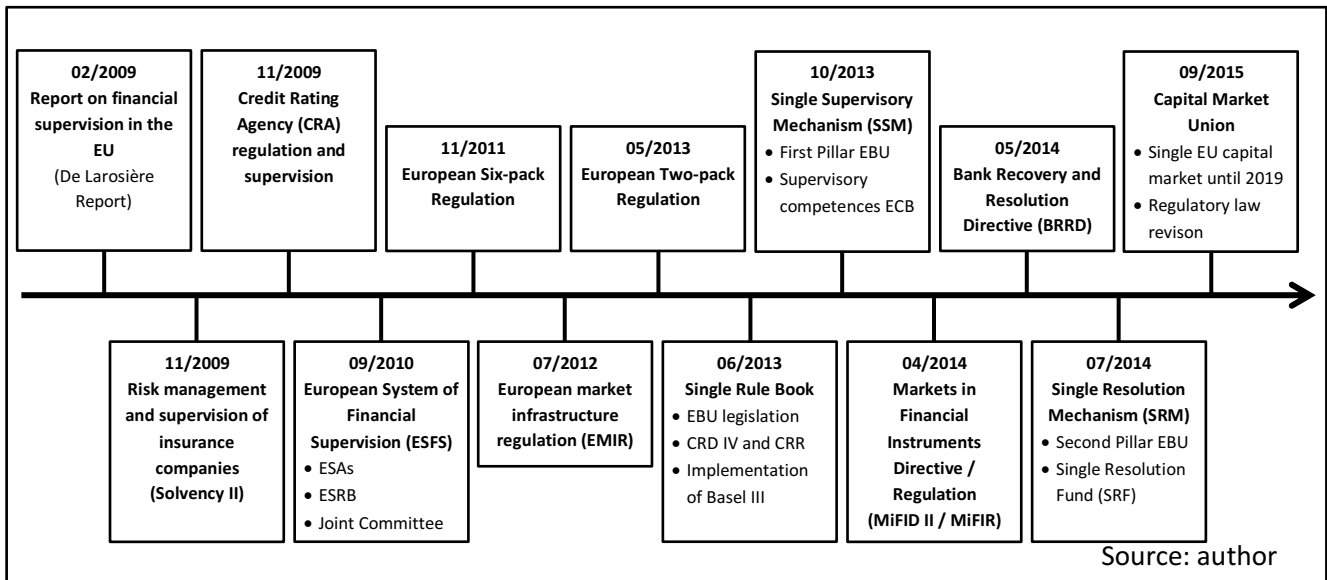
Implementation dimension

The implementation of regulatory rules in the pre-Crisis period was carried out by national authorities. At European level, the Basel regulations were mostly transformed in EU legislation in the form of EU directives. Thus, the level of financial supervision and regulations strongly differed among EU member states. Furthermore, financial oversight and regulation at European level was highly fragmented. Intergovernmental European coordination only dealt with parts of the market, such as banking, securities or insurances. Policymaking processes were based on loose committee meetings. The institutionalization level was low and formal decision-making procedures were not in place.

2.4.2. Financial regulation in the Eurozone from 2008 to 2016

The financial crisis in 2008 has fundamentally shocked the global economy. Similar to the economic crises in the 1970s, the dominating paradigm of economic and financial policymaking failed to foresee and explain the Crisis leaving economists and policymakers in collective uncertainty about 'right' policy decisions. Since 2008, major institutional and ideational changes have taken place in the Eurozone. Surprisingly, during the period from 2008 to the end of 2016, two different patterns seem to have emerged. The first pattern lasts until the European elections in 2014, which led to significant changes of the EC composition. Most fundamental new regulatory legislative proposals had been completed until the 2014 elections. In the second phase, starting after the European elections, a pattern of incremental change within the new institutional framework seems to have developed. Figure 3 shows the key developments from 2008 to 2016. The most far-reaching changes relate to the EBU and EFSF establishment. It becomes evident that both quantity and scope of the implemented measures in the post-Crisis era are much higher compared to the pre-Crisis era.

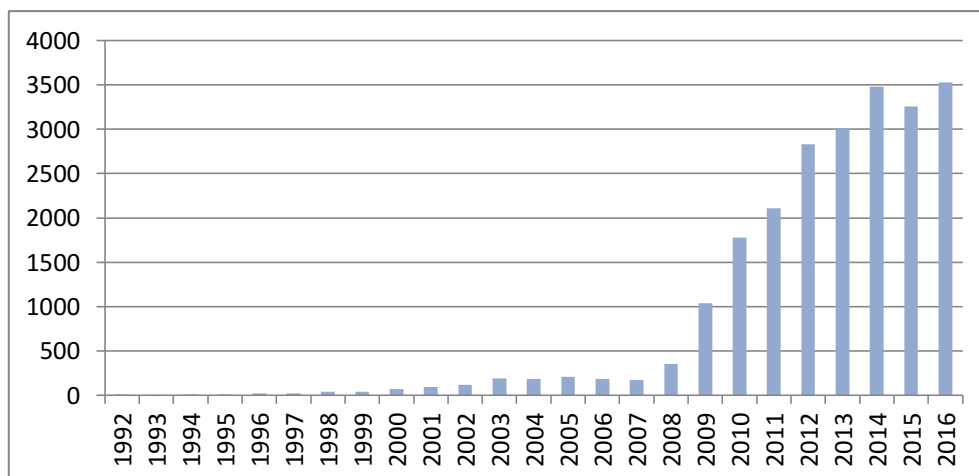
Figure 2.3: Milestones of Eurozone financial regulation since 2008



Analytical dimension

The establishment of macro- in addition to micro- prudential surveillance as second pillar of financial stability is the most crucial ideational change after the Crisis. Macroprudential instruments include regulatory and supervisory tools to directly target financial intermediaries, activities or the infrastructure of the financial system. The ultimate goal of MPS is to prevent and mitigate ‘systemic risks to financial stability’ (European Systemic Risk Board, 2014, p. 6). Whereas microprudential policies focus on the stability of individual institutions, e.g. via bank stress tests, the macroprudential perspective lies on the limitation of ‘system-wide distress’ (Galati & Moessner, 2013, p. 849). Different from pre-Crisis regulation, macroprudential policymaking has a *pre-emptive* character (Constâncio, 2016; Yellen, 2010). To initiate interventionist actions in advance and not as a response after a crisis, macroprudential policymaking requires trustworthy indicators and data sources. Overall, MPS focuses on the aggregate level and proclaims the public responsibility for market interventions to counterbalance disequilibria (Baker, 2012, p. 115). Figure 4 shows the number of publications per year which include the keyword ‘macroprudential’.

Figure 2.4: Number of publications per year on macroprudential supervision



Source: Google Scholar

The data in figure 2.4 sharply reflects the growing importance of macroprudential supervision. Whereas MPS did not play any role before the Crisis, publications have boomed since 2009. Furthermore, 13 out of 15 expert interview partners stressed the establishment of macroprudential system-wide risk analysis as highly important. When asked about key changes and main trends of financial regulation after the Crisis, most interviewees directly referred to MPS. However, there has been much less consensus about the use, design and character of macroprudential policy tools. Several experts argued that the macroprudential level builds on the microprudential one (Interviews A2, B1, B4). Still, all experts stated that the macroprudential toolbox is still a work in progress. So far, this toolbox covers a broad range of policy instruments and indicators (Claessens, 2014, pp. 13–20, 36; ESRB, 2014b; European Central Bank, 2016b, p. 6). The policy instrument most often considered as purely macroprudential are countercyclical capital buffers.

When directly asked about the role of MPS after the Crisis, interviewees referred to the assessment of risks as the most important characteristic. Most interview partners stressed that financial regulation in the Eurozone had always been highly fragmented due to a strong sector-limited focus on banking, insurances and securities. The assessment of cross-sectoral risks and interactions between financial markets and the real economy have become key challenges for the macroprudential approach (Interview B2). Whether or not macroprudential tools will largely be applied in the future is still under debate although the institutional prerequisites have been established (Interview D3). Overall, the analytical dimension of Eurozone financial regulation has significantly changed.

Intensity dimension

The intensity level of financial regulation in the Eurozone has tremendously increased after the Crisis in both micro- and macroprudential terms. Banking regulation has significantly shifted from *laissez-faire* deregulation to a strong regulation regime. Also shadow-banking and derivatives have become more regulated. Although the latter is still work in progress, the general perception of a self-regulating private market has vanished. When interviewees were asked to rate the general changes of financial regulation on a five-point Likert scale from one to five, whereby the answer choices corresponded to ‘not at all’, ‘little’, ‘moderately’, ‘strongly’ and ‘extremely’, 12 out of 15 experts chose strongly (4) or extremely (5). The results are even clearer with regard to the same rating question specifically on banking regulation. Fourteen out of 15 interviewed experts evaluated changes of banking regulation after the Crisis as strongly (4) or extremely (5). The only exception has been a NGO expert with a critical view on European financial policymaking in general.

As reasons for their ratings, interviewed experts primarily indicated the increased bindingness of European legislation, the establishment of macroprudential institutions and the new European organizational framework. To overcome the Crisis, EU agencies have almost entirely rewritten the financial rulebook. Table 2.1 gives a detailed overview of European legislation on financial regulation from 2008 to 2016. Fourteen out of 15 experts referred to the establishment of the EBU, particularly the SSM, as the main regulatory instrument, changing the way in which financial regulation is conducted. The shift from national to European regulation has been of utmost importance.

Table 2.1: Major European regulation legislation since 2008

Legal Basis	Content
EFSF Regulation (EU) No 1093/2010 Regulation (EU) No 1094/2010 Regulation (EU) No 1095/2010 Regulation (EU) No 1092/2010 Directive 2010/78/EU, Council Regulation (EU) No 1096/2010	<ul style="list-style-type: none"> ▪ Multi-layered system of European micro- and macro-prudential authorities ▪ Establishment of independent European Supervisory Authorities (EBA / ESMA/ EIOPA), Joint Committee of ESAs, ESRB ▪ Drafting and implementation of technical regulatory standards ▪ Effective and consistent regulation / supervision ▪ Prevention of regulatory arbitrage and international supervisory coordination ▪ Prevention and mitigation of systemic financial stability risks
Credit Rating Agency Regulation Regulation EC No 1060/2009 Regulation EU No 513/2011 Regulation EU No 462/2013 Directive 2013/14/EU	<ul style="list-style-type: none"> ▪ Regulatory and supervisory institutional framework of credit rating agencies (CRAs) ▪ Increased transparency requirements for sovereign ratings ▪ Definition of guidelines and technical standards under ESMA authority
European Market Infrastructure Regulation (EMIR) EU No 648/2012	<ul style="list-style-type: none"> ▪ Regulation of OTC derivatives, central counterparties and trade repositories ▪ Reporting requirements and central clearing obligations
Markets in financial instruments directive/regulation (MiFID/MiFIR) Directive 2014/65/EU	<ul style="list-style-type: none"> ▪ Increased efficiency, resilience and transparency of financial markets ▪ Improved investor protection ▪ Shift of financial instruments to multilateral and regulated trading platforms
EBU: Bank Recovery and Resolution Directive (BRRD) 2014/59/EU	<ul style="list-style-type: none"> ▪ Harmonization of banking resolution instruments, also cross-border institutes ▪ Bail-in instead of bail-out resolution principle for bank failures
EBU: Single Supervisory Mechanism Regulation (EU) No 1024/2013 Regulation (EU) No 1022/2013	<ul style="list-style-type: none"> ▪ ECB as prudential supervisor of Eurozone financial institutions (6000 banks) ▪ Direct ECB supervision of the largest banking groups in the Eurozone (about 120) ▪ Stress tests and assurance of bank compliance with EU financial legislation
EBU: Single Rulebook Directive 2014/59/EU Directive 2013/36/EU Regulation (EU) No 575/2013 Directive 2014/49/EU	<ul style="list-style-type: none"> ▪ Unified regulatory framework for the financial sector ▪ Implementation of the Basel III regime: CRD IV /CRR ▪ Compulsory rules set for financial institutions in EU member states (8300 banks) ▪ Capital requirements for banks and bank recovery and resolution ▪ Deposit guarantee schemes (i.e. 100.000 € for depositors EU-wide)
EBU: Single Resolution Mechanism Regulation (EU) No 806/2014 Regulation (EU) 2015/81	<ul style="list-style-type: none"> ▪ Establishment of Single Resolution Board as self-financed agency of the EU ▪ Direct banking resolution via the SRB in case of bank failures ▪ Single Resolution Fund (SRF) financed by all financial institutions in the Eurozone
Solvency II Directives 2009/138/EC, 2014/51/EU Delegated Regulation (EU) 2015/35 Delegated Regulation 2016/467	<ul style="list-style-type: none"> ▪ Risk management and supervision of insurance companies ▪ Harmonized prudential framework for insurances (equivalent to EBU for banks) ▪ Definition of common technical standards regarding supervisory approval procedures under EIOPA responsibility

Source: author, data retrieved from European Commission (2018b)

Almost all interview partners pointed to the shift of policy instruments. Striking examples are the increasing frequency and more rigorous design of stress tests, countercyclical capital buffers, increased equity ratios and minimum lending rates, stricter definitions of risk-weighted assets (RWAs), harmonization of total loss absorbing capacities (TLAC), minimum requirements for eligible liabilities (MREL), and other policy measures. Experts from the private sector further stressed that day-to-day business of investment banking has also totally shifted by becoming much more risk-averse, mainly due to severe restrictions on propriety trading (Interviews D2, D3, D4). Additionally, the objectives behind applied policy measures have shifted, too. One of the most commonly named objectives is the prevention of public money use to bail out system relevant banks. Over the last two years, the focus of regulatory policies has slightly shifted to the strengthening of job and growth.

When interview partners were directly asked whether they would use the term “paradigm change” to describe changes of financial regulation after the Crisis, the picture is less straightforward. Still, ten out of 15 experts explicitly assessed the changes after the Crisis as paradigmatic, whereby half of them referred to a paradigm change without the question even being asked. As main reasons they pointed to the establishment MPS, much higher intrusiveness of regulation and the massive increase of ‘intensity and power of supervision relative to the market’ (Interview A1). On the other side, interviewees argued that the microprudential regulatory framework has been massively intensified as well. So, the ‘old’ regulatory approach has likewise been reinforced. Furthermore, several interview partners explicitly indicated that the intensity of regulatory legislation has varied in the post-Crisis period. After a boom of regulatory initiatives, largely established until the European election in 2014 with Barnier as EU Commissioner for Internal Market and Services, the implementation of new regulatory changes has decreased since 2014 and passed to a phase of incremental institutional change of the newly established framework (Interviews A3, B2, D1).

Implementation dimension

The implementation dimension of regulatory legislation has fundamentally changed (see figure 3 and table 2). Whereas the creation of a Eurozone-wide regulation and financial stability framework has played no role in the pre-Crisis architecture, the stabilization of financial markets has become the top priority of European institutions (Vives, 2012). Since 2008, the EC has proposed more than 40 legislative and non-legislative measures to implement a fundamental European financial sector reform (European Commission, 2018a). To find a quick crisis response at European level, the EC published the so-called Report on financial supervision in the EU (De Larosière Report) at the beginning of 2009 (European Commission, 2018b). This report built the basis for many subsequent initiatives, e.g. six legislative proposals by the EC (Six Pack), two additional legislative drafts by the EC to strengthen rigorous budgetary control (Two Pack) and further actions.

Furthermore, the bindingness of European legislation has mostly changed from directives to regulations. In this regard, EU regulations leave much less space than directives for national deviations from the common law. When asked whether and how the overall institutional framework of financial regulation had changed after the Crisis, 14 out of 15 experts pointed to the competency enlargement of regulatory legislation at European level and the increased harmonization across Eurozone member states (c.f. table 2). Furthermore, a strong ‘spirit of European achievement’ has evolved in the post-Crisis era (Interview B1).

In addition to the establishment of new institutions at European level, the competencies of existing organizations have likewise increased. Particularly, the ECB has significantly gained influence by assuming responsibility from national authorities for banking supervision and resolution under the SSM and SRM (European Commission, 2015c). The German central bank president talks of paradigm change in monetary policymaking in this regard (Weidmann, 2015). In addition to the new supervisory responsibilities, the ECB has also gained macroprudential competencies via the newly founded ESRB. Overall, it has become evident that the implementation dimension of regulatory legislation has decisively shifted.

2.5. Discussion

This section particularly analyzes whether the underlying ideas of financial regulation have changed after the Crisis. Thereby, this chapter rejects Blyth' (2013) argument that third order change has not taken place. The implementation of macroprudential policy goals, instruments and mechanisms breaks with pre-Crisis theorems of the new neoclassical synthesis. The unquestioned belief in the impeccability of financial markets has been abandoned. Instead, the macroprudential approach seriously takes systemic risks into account, has an explicit preemptive character and promotes active interventionism to mitigate financial imbalances. The result section has shown that significant changes in all dimensions of financial regulation have occurred since the Crisis. However, in the pre-Crisis period, only incremental first order changes have happened.

2.5.1. First and second order change

Figure 3 and table 2 illustrate the post-Crisis changes in the Eurozone financial regulation framework, particularly on banking regulation. Unlike Baker's (2012, p.112) argument that third order change has occurred before first and second order changes in the MPS case, a comprehensive new institutional framework has been established. This new institutional framework includes first and second order changes. Precise policy instruments, overall policy goals and general procedures have changed. Regarding the analytical dimension, the Crisis has led to first order changes without any doubt. Day-to-day policymaking has fundamentally changed in every respect. Striking examples are the long list of new detailed policy measures included in the single rule book, the use of countercyclical capital buffers or the drafting and implementation of technical regulatory standards. Furthermore, the establishment of a whole new macroprudential framework clearly corresponds to a shift of overall policy instruments and incorporates the lessons learned from the Crisis.

Concerning the intensity dimension, almost all policy measures in the post-Crisis period include much more severe requirements for financial market participants. For example, banks have to fulfill higher equity capital ratios, stress test scenarios have become much more severe and the Single Rulebook introduces a set of compulsory legislative rules for financial institutions in all EU member states. A prime example of first and second order change in securities regulation is over-the-counter derivatives trade (OTC). EU regulations have been immediately binding for member states (EMIR, MiFID II, MiFIR). Furthermore, the implemented rules are very advanced and far-reaching, e.g. regarding central clearing obligations and enhanced transparency.

Regarding the implementation dimension, an increased European harmonization of national legislation has taken place. The bindingness level of EU legislation has decisively risen, as new rules on financial regulation and supervision are increasingly implemented as regulations and not directives. This stronger legal instrument nearly rules out national deviations from European legal practice. Additionally, the overall goal of European decision-making in the financial regulation field has changed. After the Crisis, a strong will to European solutions has developed and EU member state representatives do not further insist on national prerogatives at all costs (Interview B1). Also, the intensity of interactions among EU officials has tremendously risen.

2.5.2. Third order change

This chapter's results have shown that the pre-emptive character of macroprudential policymaking has changed the policy discourse of Eurozone financial regulation. These findings differ from Blyth

(2013), who argued that the Crisis has led to a situation in which third order change was supposed to appear, but did not (p. 206). Blyth's arguments were firstly, that the time period since the Crisis has been too short for a third order change; secondly, that no rival paradigm has been strong enough to replace the dominant neoliberal framework; thirdly, that disciplinary incentives to stick to the former paradigm have been too strong; fourthly, that actors stick to their old ideas before the Crisis because perception and framing of the facts matter and the Crisis has been framed as crisis of the "profligate state"; and fifthly, that the locus of authority has not changed (Blyth, 2013, p. 210).

Analytical dimension

The way that financial regulation was conceptualized and constructed in the decades before the Crisis has changed. A large majority of experts directly pointed to the establishment of the macroprudential idea as cutting in change compared to pre-Crisis regulatory practice. MPS fundamentally differs from microprudential supervision in terms of analytical scope, systemic risk assessment, preemptive and interventionist claim. Although the development of macroprudential tools is still in progress, MPS has been established as a second pillar of Eurozone financial regulation.

Hence Blyth's argument of too *weak rival approaches* does not hold. The most basic premise of a paradigm change is the existence of alternative ideas. Particularly in rather technocratic domains, e.g. financial regulation, ideas do not fall out of the blue but require prior institutionalization, research and technical collaboration (Kingdon, 1984, p. 134; Porter, 2003, p. 547). Baker (2012) has shown that MPS developed 'quietly in the background' for decades within the Bank for International Settlements (BIS). After the Crisis, MPS could provide for a comprehensive policy agenda to political decision-makers (Borio, 2011, p. 1). Baker concludes that the 'prior institutional and intellectual presence' of the MPS idea was an essential advantage in terms of 'institutional access' emphasizing the inadequacy of the neoclassical markets orthodoxy before the Crisis (2012, p. 122). Although the number of macroprudential publications had risen to 2110 in 2011 and 2930 in 2012 (see figure 4), Blyth (2013) failed to mention the macroprudential approach and underestimated the importance of MPS as a rival approach to the pre-Crisis deregulation dogma.

Intensity dimension

The lessons from the Crisis have led to the establishment of an exceptional new European regulatory framework. Both micro- and macro- prudential requirements have largely been increased after the Crisis. Particularly the establishment of a European banking resolution framework based on the bail-in instead of the bail-out principle is unprecedented. Furthermore, the ECB has fundamentally gained importance. Additionally, the expert interview analysis has shown that 'soft' aspects of financial regulation have been reversed. The trust of supervisors in the private sector has decreased, which has led to a much closer monitoring of financial institutions (Interviews A2, B2, B5, C2). Also, contrary to the post-Crisis era, banks often were not aware of their own risk exposures and could not provide appropriate data information to supervisory authorities (Interview C1). Similarly, the Crisis has led to a stronger European spirit of achievement (Interviews B1, B4).

It follows that Blyth's argument on the *persistence of old ideas* has fallen short. Blyth's observation that the Crisis had been constructed as a crisis of the 'profligate state' (p. 210) might be true for some countries, e.g. the UK, but does not hold for the Eurozone. Certainly, depending on the framing of a crisis, policymaking consequences highly vary. Whether an economic crisis is, for example, understood as a banking crisis, a currency crisis or a sovereign debt crisis entails different policy

answers (Laeven & Valencia, 2012, p. 4-15). However, in the Eurozone, measures to overcome the sovereign debt crisis differed from measures to address the financial Crisis in 2008. The macroprudential regulatory framework has primarily addressed the private, not the public, sector. The EBU, in particular, provides for strong mechanisms which directly allow for the unwinding of insolvent banks.

Implementation dimension

As pointed out before, the ECB has remarkably gained in importance and a new European regulatory organizational framework has been established entailing a significant transfer of competencies from the national to the European level. As most expert interview partners have highlighted, regulation in the Eurozone has been highly fragmented across its member states before the Crisis and partly led to a deregulation competition. After the Crisis, the picture in the Eurozone has become entirely different with European responsibilities for key regulatory aspects. Although key components as insolvency law harmonization and the establishment of a European deposit insurance scheme (EDIS) are still work in progress, the EBU and the ESFS have led to a major shift in financial regulation.

Hence, Blyth's argument on the *locus of authority* is not accurate concerning the Eurozone. According to him, many different institutions were bound up in the pre-Crisis neoclassical paradigm. However, the results have shown that most European financial organizations have actively engaged in the design and use of macroprudential surveillance, e.g. the ECB, the ESRB and national central banks. The financial stability reports and other publications issued by these institutions are crucial to raise awareness on financial stability and develop the macroprudential toolbox. Same is true for the IMF, which also has influenced Eurozone financial governance. Despite Blyth's reasoning, the locus of authority in the macroprudential debate has increasingly shifted to the European expert level.

Disciplinary incentives and time

Blyth (2013) has argued that *disciplinary incentives* are persistent and academic careers are rarely successful against the prevailing opinion (Blyth, 2013, p. 209). Still, the debate of financial regulation after the Crisis is mainly driven by policy institutions as national central banks, the ECB, the IMF and the BIS (Borio, 2011; European Central Bank, 2016b; Galati & Moessner, 2013; Haldane, 2010). Academia has only little by little discovered changes in this research field. Contrary to other economic fields, post-Crisis financial regulation has less been driven by an overall theoretic approach, but concrete policymaking initiatives. Ongoing debates still refer to the character, design and implications of macroprudential policy tools and the changing tasks of central banks (Blanchard, 2015a; Yellen, 2010). Furthermore, the publication outcome on macroprudential supervision has boomed after the Crisis (c.f. figure 4). This debate challenges pre-Crisis theorems, i.e. the borders between fields of monetary, fiscal and macro surveillance policies have progressively blurred (Weidmann, 2015). Hence, Blyth's argument of disciplinary incentives does not apply to the particular field of financial regulation.

Furthermore, Blyth (2013) has claimed that the *time* period had been too short for a third order change. Admittedly, the shift of a paradigm does not happen overnight. When monetarism replaced Keynesianism during the 1970s and 80s, the change process took about ten to 15 years. Still, certain key events, such as Thatcher's election as British prime minister in 1979, significantly accelerated the process (Hall, 1993, p. 283). In case of the macroprudential shift many key events had already happened before Blyth's (2013) publication. The Basel III regulation framework, which explicitly

contains macroprudential policy tools, was published at the end of 2010 (Bank for International Settlements, 2018). Similarly, the establishment of the ESFS, the US Financial Stability and Oversight Council (FSOC) or the British Financial Policy Committee (FPC) began shortly after the Crisis. At global level, the establishment of the FSB took place in 2009. In addition, intensive debates about design and necessity of macroprudential policies started quickly (Agresti, Baudino, & Poloni, 2008; Baker, 2012; Bank for International Settlements, 2010b; Bank of England, 2011). Baker (2012) finds that third order change became evident shortly after the Crisis.

2.5.3. Summary and limitations

Although MPS is still in the process of formation, the idea of public control over financial transactions differs to the pre-Crisis period. Blyth’s (2013) argumentation has been premature. The macroprudential turn has been visible in the early post-Crisis phase. The results of this chapter suggest that simultaneous changes in almost all critical dimensions of financial regulation have taken place in the period from January 2008 to the end of 2016. The expert interview analysis further indicates that the post-Crisis period can be split up into two different phases: a phase of a discontinuous punctuated equilibrium until the European elections in 2014 and a phase of continuous change within the new paradigm of Eurozone financial regulation from 2014 to this day. Since 2014, institutional evolvments have occurred as rather incremental than revolutionary. A more detailed analysis of this finding in further studies would certainly be highly desirable. Table 2.2 summarizes the results of institutional change in the financial regulation dimensions.

Table 2.2: Change of financial regulation dimensions

	Pre-Crisis Paradigm	Post-Crisis Paradigm
Analytical Dimension	Microprudential Regulation based on individual analyses of institutions, no systemic risk analyses	Micro- and macroprudential Regulation still based on microprudential analyses, but complemented by in-depth macroprudential systemic risk analyses
Intensity Dimension	Low Deregulation of financial markets, minimum requirements for banks and financial institutions	High High regulation of banks and securities, moderate changes in insurance and occupational pensions regulation
Implementation Dimension	National Only limited European and global coordination and harmonization, national authorities have main responsibility	European Key responsibilities shifted to the European level, limited national responsibilities, stronger global coordination

Source: author

Table 2.2 further points to an important limitation of paradigm change research. As there are only a few paradigm change cases in economics and social sciences, it is difficult to define an appropriate significance level of institutional change. Instead, the measurability of change is case-related and must be applied as plausible and transparent as possible. In this chapter, changes have been analyzed by the altered scope and depth of indicators before and after the Crisis. Thus, it has become evident how far-reaching changes after the Crisis have been. However, in light of other potential cases in the future it is likely that these findings will have to be reevaluated. The next section briefly concludes the main argument of this chapter.

2.6. Conclusion

Ten years after the beginning of the Crisis, the paradigm of Eurozone financial regulation has changed. This chapter has shown that, contrary to previous research, first, second and third order change has indeed taken place. In fact, the implementation of macroprudential ideas has altered financial regulation in every dimension. The analytical dimension has been complemented by macroprudential systemic risk analysis, the intensity dimension has significantly shifted from pre-Crisis deregulation to a strict post-Crisis regulation regime and the implementation dimension has largely been transferred from the national to the European level. The results further suggest that two different patterns of institutional change have emerged after the Crisis: a discontinuous punctuated equilibrium up to 2014 and a successive phase of continuous change.

At a more general level, this chapter has once again shown that the analysis of ideas is essential to understand the dynamics of institutional change during times of high uncertainty after a critical event. In the case under study, the macroprudential turn of financial regulation in the Eurozone shapes political processes, policymaking and the institutional design of the Eurozone. However, these findings could also be investigated in a broader context of post-Crisis financial and economic policymaking. The next chapter conceptualizes the new post-Crisis financial regulation paradigm.

3. The New Technocracy

Abstract:

The financial crisis in 2008 has sharply increased financial market instability in the Eurozone. Ten years later the paradigm of financial regulation has changed. However, the constitutive characteristics of the new paradigm are still unclear. This chapter develops the three-level “new technocracy” framework to conceptualize this paradigm. Premised on the idea of macroprudential surveillance and the renaissance of a Keynesian discourse, three constitutive characteristics are identified: systemic riskification, quantification and expertization. These characteristics are then tested in the empirical Eurozone case. The data collection includes primary source indicators and new expert interview data from public and private senior management. Results show that the identified characteristics accurately capture the new paradigm. Firstly, the risk assessment of cross-sectoral systemic financial distress becomes crucial for Eurozone financial regulation. Secondly, the quantification of regulatory policymaking highly increases compared to the pre-Crisis level. Thirdly, the complexity of the new regulatory institutions poses high entry barriers for elected policymakers and entails a high expertise level. Overall, this chapter argues that, contrary to the pre-Crisis efficient market hypothesis, the new technocracy is based on the belief of financial market instability.

3.1. Introduction

The financial crisis in 2008 reveals the fallibility of financial markets. Premised on the pre-Crisis efficient market hypothesis (EMH), financial markets are built around the general belief of impeccability. This belief results in very light regulation of financial markets and deep trust in the stability of the financial sector (Marques-Ibanez & Leuvensteijn, 2017). As shown in the previous chapter, the paradigm of Eurozone financial regulation has changed in all critical dimensions after the Crisis. Financial regulation becomes stricter, largely shifts to the European level and internalizes the macroprudential perspective. In this chapter, I argue that the post-Crisis outcome of financial regulation is built around the belief of financial market instability.

To structure the Eurozone financial regulation paradigm after the Crisis, I propose the three-level concept of the “new technocracy”. Thereby this chapter follows the argument by Gerring (2012a) of a description as an independent methodological approach. Furthermore, the development of the new technocracy framework draws from concept-building strategies by Collier & Gerring (2009), Gerring (2012b), Goertz (2006), Sartori (2009) and Schaffer (2016). The main goal of this chapter is to investigate the constitutive characteristics of the new paradigm. Furthermore, this chapter adds to previous research which has characterized the post-Crisis state of financial regulation as “productive incoherence” (Gabel, 2011, 2015b). In this respect, this chapter not only argues that pre-Crisis regulation has been replaced, but develops a concept to structure the new outcome.

The post-Crisis outcome of stricter and more macro-based regulation is influenced by two distinct approaches. Firstly, as shown in the previous chapter, the idea of macroprudential surveillance becomes very prominent throughout the Crisis. Secondly, the renaissance of a Keynesian discourse on financial stability takes place after the Crisis. Premised on the theoretical implications of macroprudential and Keynesian literature, I argue that most plausibly three characteristics constitute the new technocracy paradigm: systemic riskification, quantification and expertization.

The three constitutive characteristics of the new technocracy relate to the critical dimensions of financial regulation introduced in the last chapter. In this regard, systemic riskification and quantification particularly follow from the macroprudential shift of the regulatory analytical dimension. This shift entails the need for more data information, better data processing capabilities and the analysis of more indicators and indices. Macroprudential surveillance (MPS) has a preemptive character and aims at actively preventing and mitigating “systemic risks to financial stability” across different sectors (ESRB, 2014a, p. 6). Preemptive market interventions necessitate trustworthy indicators and data sources. Thus, the collection of nearly real time data sets becomes even more important than in the pre-crisis period.

Furthermore, the expertization characteristic partly follows from the shift of the intensity dimension. The shift from pre-Crisis deregulation to a stricter financial regulation regime after the Crisis includes the establishment of new institutions and instruments. Along with the quantification characteristic, financial regulation becomes increasingly complex. Hence, policymakers face difficulties to catch up with its requirements, design and functioning. This leads to a growing expertization of financial regulation. In the Eurozone, the financial regulation competency transfer from the national to the European level strengthens this trend as the EU is strongly expert-driven in the policymaking process.

In addition to the constitutive characteristics of the new technocracy, the concept can be further specified by the implementation level of financial regulation. In this respect, financial regulation

encompasses the national, regional or global level. To specifically address the new financial regulation paradigm in the Eurozone the term “European new technocracy” is most accurate. Furthermore, efficient policy solutions depend on global cooperation. Financial market globalization leads to “particular regulatory challenges because global spillovers and linkages mean that states can no longer authoritatively regulate even their own financial system” (Armour et al., 2016, p. 6). This fact is *inter alia* reflected in the macroprudential IMF agenda and the Basel III accords.

The research design of this chapter is based on the case study of Eurozone financial regulation in the post-Crisis period. To investigate the key characteristics of the new technocracy paradigm, this book section follows Goertz’ strategy of three-level concept-building (Goertz, 2006, pp. 50–53). Thereby, this book section builds the basis for the causal process-tracing analysis in the third and fourth chapter. The data collection includes primary sources of European and global financial regulation institutions. Furthermore, 15 expert interviews with high-level senior staff of the ECB, European and national regulatory agencies and the private sector have been conducted.

This chapter is structured in five sections. The first part presents the method section. The second passage theorizes the new technocracy concept by analyzing macroprudential and new Keynesian implications. The third part presents the results of the indicator analysis, followed by the discussion of the new technocracy characteristics in the fourth part. The last part concludes the main argument.

3.2. Methods

This section presents the study design and methodological approach of this chapter. The research question of this chapter is about the new paradigm and the key characteristics which define it. To answer this question, the study design is based on a case study of Eurozone financial regulation. The conceptualization of the new paradigm is relevant to better understand policymaking dynamics after the Crisis. Furthermore, it builds the basis for the process-tracing analysis of the paradigm change process in the following chapters. The next passages introduce the methodological approach, outline the conceptualization strategy of this chapter and present the data collection.

This chapter follows Gerring’s argument of description as an independent methodological approach (Gerring, 2012a). In this regard, causal and descriptive approaches should be understood as different “forms of argumentations” (Gerring, 2012a, p. 724). Descriptive arguments are about relationships, which “may or may not have causal implications” (p.724). The claim for an independent status of descriptive arguments within social sciences has repeatedly been discussed in the social sciences community (King et al., 1994, p. 34). As causal relationships often remain uncertain, it could be more promising to investigate variables initially as “descriptive phenomena” rather than as dependent or independent causal variables (Gerring, 2012a, p. 734). This approach would be more efficient than an initial causal analysis. Methodologically, description entails the main goals of conceptualization and measurement (Gerring, 2012a, p. 735). The next passage presents the conceptualization strategy.

The conceptualization of the new technocracy framework is premised on a conventional concept-building approach (Gerring, 2012b, p. 116). A concept includes a phenomenon which is to be defined, the term which linguistically labels the phenomenon, the attributes which define it and indicators which locate the concept empirically. Furthermore, the new technocracy concept meets Gerring’s seven criteria of empirical concept formation in social sciences (Gerring, 2012b, pp. 116–131). Firstly, the resonance criterion requires the fit of the concept with the established understanding of a

phenomenon or term. Secondly, the domain criterion requires a concept to meet the logic and clarity of the language community and the empirical field. Thirdly, a concept should meet the criterion of consistency. Fourthly, fecundity means that the defining attributes of a concept should belong to one another in a logical or functional manner. Fifthly, the criterion of differentiation necessitates that a new concept is distinguishable from other concepts. Sixthly, a concept requires causal utility, which means that a concept has to be useful within a causal theory or research design. Finally, the criterion of operationalization presupposes that a concept should be measurable. The following passage further explains the ontological character of the new technocracy concept.

The new technocracy is an ontological concept because the three characteristics of systemic riskification, quantification and expertization actually constitute what the new paradigm is (Goertz, 2006, pp. 14–15). Ontological concepts are defined in contrast to causal concepts which imply a causal relationship between the different levels of a concept. In a causal concept, the latent variable causes the indicator like a disease causes different symptoms and not vice-versa. The next passage explains the different levels of the new technocracy concept.

The new technocracy encompasses three different concept levels: the term which denotes the new financial regulation paradigm, the constitutive characteristics which define this term and the indicators which operationalize the characteristics. Thereby, it follows Goertz (2006) three-level concept-building approach (p. 30-67). Goertz (2006) recommends to analyze the negative pole of each dimension and to elaborate on the relationship of the different concept elements. In this regard, constitutive dimensions can be defined as sufficient and necessary conditions. In addition, the new technocracy concept can be further specified by the implementation level of financial regulation. In that regard, regulatory legislation can be implemented at national, regional or global level. The next passage sets out the data collection of this chapter.

The data collection is based on the data triangulation concept and uses primary sources of the ECB, the EC, the European Systemic Risk Board (ESRB), the European Supervisory Agencies (ESAs) and further European organizations. Additional sources come from the IMF, the OECD, national central banks, the BIS and the Financial Stability Board (FSB). Furthermore, 15 expert interviews with high-level senior management of Eurozone financial regulation institutions have been conducted. For a detailed overview on interview partners, please refer to table 1.3 in chapter one. It is important to note that all questionnaire items investigated in these passages have not been included in the previous chapter's data analysis. The next section develops the new technocracy concept.

3.3. The New Technocracy

This section presents the new technocracy concept. Firstly, the ideas of macroprudential surveillance and Keynesian renaissance are outlined. Both ideas shape the post-Crisis outcome of stricter and more macro-based regulation. The strong rise of macroprudential and post and new Keynesian publications on financial regulation since 2008 reflects this development (compare figures 2.4 and 4.1). Secondly, I draw implications from these ideas for the new financial regulation policy agenda. The Keynesian debate is partly coupled with the macroprudential discourse throughout the Crisis (Gersbach et al., 2017; Kregel, 2014; Levine & Lima, 2015). Although the approaches have a different theoretical focus, they share the claim to intervene in financial markets and outweigh imbalances. As outlined in the first and second chapter, especially the macroprudential idea rests on the core belief

of public management of inherently instable financial markets. Thirdly, based on these implications, the new technocracy concept is developed. The next passage introduces the macroprudential idea.

3.3.1. Macroprudential surveillance

Macroprudential surveillance (MPS) is focused on the aggregate level and entails public responsibility for interventions in the economy to prevent imbalances (Baker, 2012, p. 115). Contrary to microprudential policies, not micro-level outcomes are decisive, but a system-wide view on the macro level (Crockett, 2000; Hirtle & Stiroh, 2009). From the macroprudential perspective, the individual monitoring of financial institutions does not ensure the safety of the financial system as a whole (Haldane, 2010). Borio (2011) defines MPS briefly as “regulatory and supervisory” approach (p. 2-3). Its objective is to reduce the risk of system-wide financial imbalances and offset the costs of financial distress for the real economy. Risks are perceived as endogenous to the financial system because financial distress drivers depend on the aggregate behavior of financial institutions. So, in analytical terms, MPS includes correlations and common exposures across financial entities.

According to Baker (2012), the most fundamental MPS contribution is to “spotlight the volatile and inherently unstable nature of contemporary financial systems” (p. 117). MPS breaks with the pre-Crisis belief in the efficient market doctrine (Baker, 2015, p. 345). Instead, MPS recognizes four features common to complex financial systems: procyclicality, investment herding behavior, externalities and the incalculability of financial risks (Baker, 2012, p. 115-118). Following Minsky's (1977) financial instability hypothesis, financial entities over-speculate in up-phases of business cycles and under-invest in down-phases when investment and credit are most necessary. So, financial systems seem most stable in times when they are actually most vulnerable (Minsky, 1977; Tavasci & Toporowski, 2010, pp. 2–5). Macroprudential policymaking is designed to offset these procyclicality effects with systemic countermeasures.

Persaud (2000) shows that banks tend to follow similar value at risk (VaR) models. If probabilities of losses in certain asset classes increase too strongly and exceed certain limits, banks quickly reduce their exposures in this asset class. As many banks share similar VaR models, they sell these assets at very similar points in time and herd in a new ‘safe’ asset class. This herding effect is not sustainable and ends up in the creation of speculative bubbles. Finally, the high complexity of financial systems leads to unexpected consequences and externalities. Even small events can cause chain reactions and heavily affect the real economy. Likewise, it is impossible to calculate risks based on past events as complex financial systems are inherently uncertain (Best, 2010; Haldane, 2010; Turner, 2011).

Although macroprudential surveillance is still in a consolidation period, its far-reaching influence on the post-Crisis financial regulation framework has become evident. Despite its specific design to increase the stability of financial markets, MPS shares similarities with the Keynesian school of thought in macroeconomics. To some extent the boundaries of monetary, fiscal and macroprudential policy fields have merged into one another in the post-Crisis era (Weidmann, 2015). The following passage summarizes the Keynesian implications on regulatory policymaking.

3.3.2. Keynesian renaissance

Literature on the 2008 Financial Crisis covers a broad area. However, looking at publications during the Crisis on how to overcome most urgent economic challenges, a tendency towards a recall of Keynesian theorems emerges. Many well-known economists like Davidson (2009), Eichengreen

(2008), Krugman (2009), Stiglitz (2008), and others reinvigorate a Keynesian discourse. The main theoretical argument of Keynesianism is the emphasis on the importance of aggregate demand and state intervention to cope with unemployment by government spending (Blanchard & Illing, 2006, p. 785; Hall, 1989, pp. 6–8; Mankiw, 2000, pp. 289–297). During and after the crisis' peak, New and Post Keynesian literature experienced a strong rise (compare figure 4.1).

One of the most influential works on Keynesianism after the Crisis stems from Skidelsky (2010). Skidelsky not only recites Keynesian crisis response mechanisms such as deficit spending, but also emphasizes Keynes' analysis of ideational variables on the economy. The renaissance of a Keynesian discourse is important because it partially builds the theoretical foundation for the call of a strong regulative financial markets regime (Wray, 2011). In this regard, the debate on Keynesian resurgence throughout the Financial Crisis relates to literature on macroprudential surveillance and influences regulatory policymaking in the post-Crisis era (Crotty, 2011; Kregel, 2014; Wray, 2011).

It seems that the shared focus on the aggregate level, particularly the macroprudential perception of incalculable risks, uncertain expectations and anticyclical counteractions, stands in the tradition of Keynesian scholarship. However, MPS theorems are in no way limited to Keynesian ascendancy. As pointed out by White, former BIS Chief Economist, MPS also shares insights from the Austrian school insofar as "the creation of money and credit by the financial system can often lead to cumulative imbalances over time" (White, 2009, p. 16). Overall, macroprudential policymaking may build bridges between different economic schools of thought and thereby gain support by a broad coalition of actors. The following passages derive the main implications of this new financial regulation agenda.

3.3.3. Implications

In this section, the main implications of the macroprudential idea and renaissance of Keynesian discourse on financial regulation are drawn. Firstly, the key assumption of financial market instability is essential for the post-Crisis financial regulation regime. Instability implies the need for public financial market management. The main goals are the analysis of systemic risks and the active counterbalancing of financial disequilibria. I refer to this characteristic as "systemic riskification". Before the 2008 Crisis, risks have been addressed within the same sector or asset class, not across sectors. The main indicator of systemic riskification is the establishment of macroprudential policy instruments. As indicated in table 3.3, macroprudential policy instruments in the banking sector can be differentiated in capital-, asset- and liquidity-based measures (European Central Bank, 2016b, p. 6). Despite the banking focus, these indicators also include potential risks to system-wide financial stability from contiguous financial sectors, e.g. insurances, pensions, financial infrastructures and shadow banking (ESRB, 2014a, p. 5). Systemic riskification encompasses the risk assessment of financial distress across different sectors.

Secondly, the post-Crisis macroprudential claim increasingly requires the use of numerous indicators and indices of financial distress (Claessens, 2014; ESRB, 2014a; Evans et al., 2000). In order to actively counterbalance financial instabilities, large data evaluations are required to detect potential economic bubbles. The most often used instruments are countercyclical capital buffers, minimum lending rates, changed equity ratios and the much more rigorous design of stress tests. Furthermore, definitions of risk-weighted assets (RWAs), the total loss absorbing capacity (TLAC) and minimum requirements for eligible liabilities (MREL) have become stricter. Almost all of these newly established instruments and indicators are technical and based on quantitative data. So, the growing

use of macroprudential policy tools entails the need for big data analysis capacities and implies an increased quantification process.

Thirdly, the macroprudential shift does not only entail stronger dependence on quantitative instruments, but also leads to an even more complex multi-layered financial regulation system. So, the required level of expertise to engage in regulatory policymaking is necessarily high. During and after the Crisis, new expert institutions have been implemented at national, European and global level. These institutions share a certain level of institutional independency and regulatory standard-setting capacities. This expertization of financial regulation may reflect a process of depolitization and responsibility-shifting to expert committees (Flinders, 2004, p. 537-539; Ossege, 2014, p. 401). Regulatory agencies and independent organizations like the ECB could benefit from information asymmetries towards democratically elected public institutions. Usually, regulatory agencies have a higher level of technical expertise and thus influence policies to a large extent. The expertization of financial regulation is a significant characteristic of the new technocracy paradigm.

Finally, in the Eurozone case, the implementation dimension of financial regulation has remarkably shifted in the post-Crisis era. As shown in the previous chapter, significant regulatory competencies have been shifted to the European level. Financial globalization leads to functional pressure to not only internationalize capital movements, but also regulatory governance (Armour et al., 2016, p. 6). Hence, efficient policy solutions at national or European level often highly depend on an intensified global cooperation. This process is reflected in the establishment of the macroprudential IMF agenda, the G20 Pittsburgh agreement, the Basel III accords and the Financial Stability Board (FSB) foundation in the post-Crisis era. The macroprudential analysis of systemic risks entails policy transfers to and intensified cooperation at an institutional level superior to national entities. Thus, the new technocracy encompasses different implementation levels of financial regulation.

Overall, the new technocracy is built around the macroprudential ideational shift and the renaissance of a Keynesian discourse after the Crisis. Three fundamental characteristics have emerged in the last decade: a process of systemic riskification, an increased necessity for quantitative indicator-based analyses and the expertization of financial policymaking. Furthermore, the new technocracy applies to different regulatory implementation levels. The next part specifies the new technocracy concept.

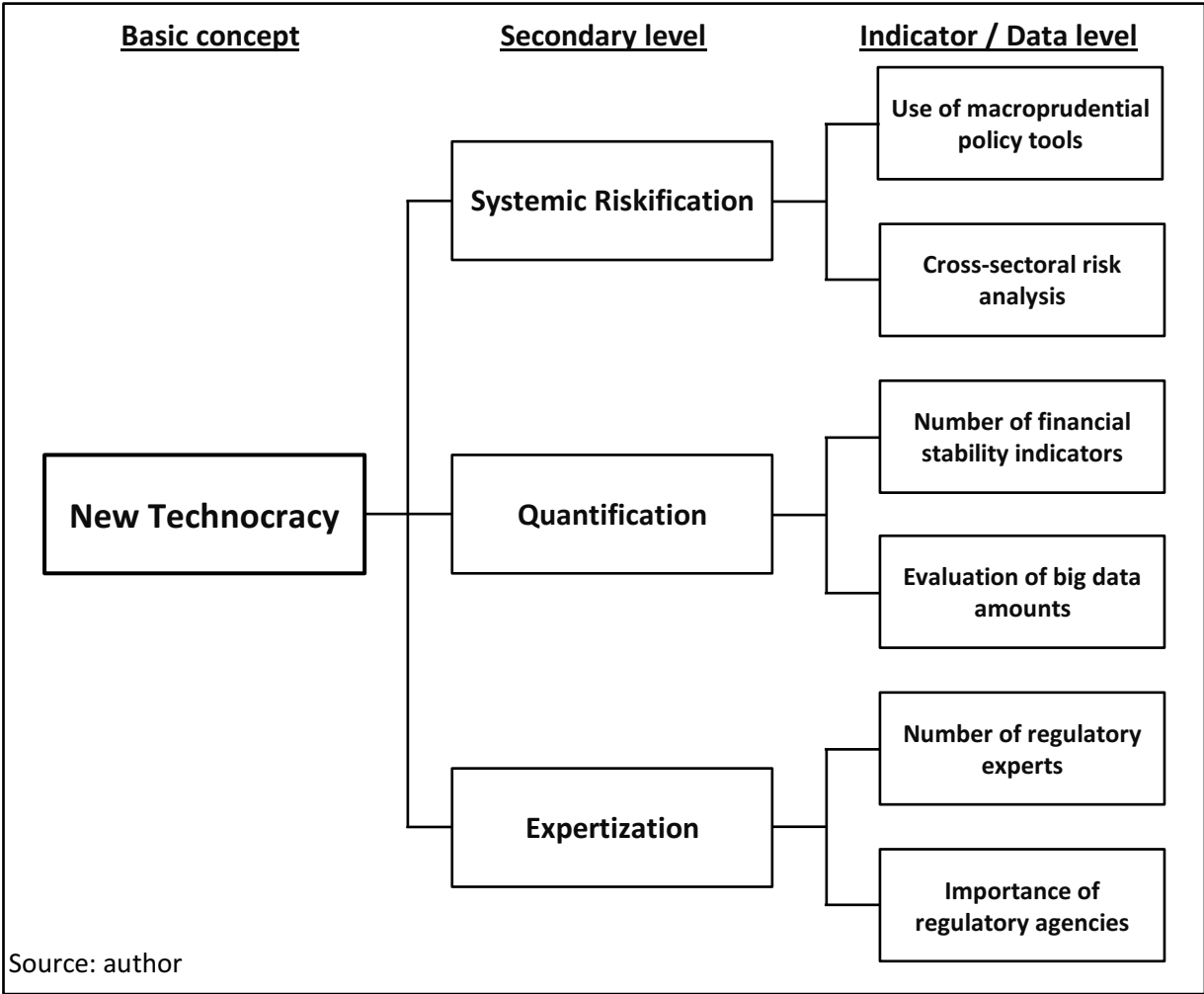
3.3.4. Concept

This section introduces the new technocracy concept. Following Gerring (2012b), a concept includes a phenomenon which is to be defined, the term which linguistically labels the phenomenon, the attributes which define it and indicators which locate the concept empirically. The new financial regulation paradigm is the phenomenon which should be explained. The linguistic term is the “new technocracy”. The attributes which define the new technocracy are systemic riskification, quantification and expertization. Finally, the indicators which locate the concept empirically are outlined in the following passages. The next passage refers to the criteria of empirical concept formation in social sciences (Gerring, 2012b, pp. 116–131).

The new technocracy meets Gerring’s criteria of concept formation. Firstly, the new technocracy term fits the general understanding of expert-driven and technical indicator-based policymaking. Secondly, the concept meets the logic and clarity of the academic language community in IPE research. Thirdly, as outlined below, the concept terms and levels are clearly defined and fulfill the consistency criterion (compare figure 3.1). Fourthly, the defining attributes of the new technocracy

belong to one another in a logical or functional manner. Thus, they meet the fecundity criterion. Fifthly, the concept formulates clear requirements and indicators. Thus, it is distinguishable from other concepts. Sixthly, the new technocracy meets the causal utility criterion because it structures the new outcome after the Crisis. Furthermore, it builds the fundament for the causal process-tracing analysis in the next chapters. Finally, the new technocracy is premised on measurable indicators and fulfills the operationalization criterion. The following figure outlines the concept.

Figure 3.1: New technocracy concept



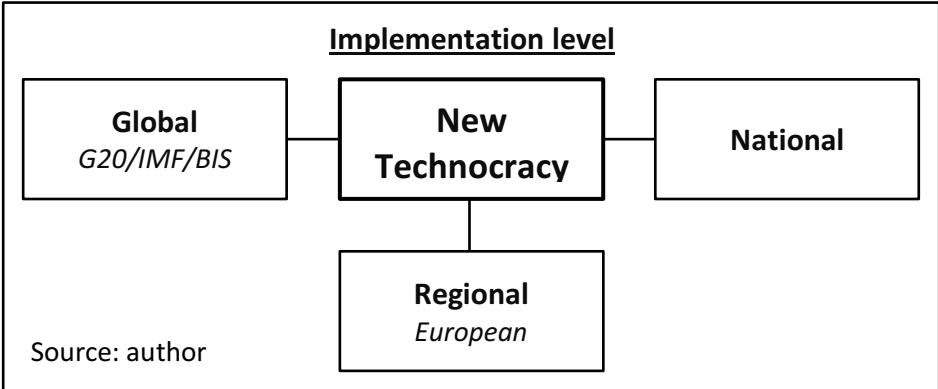
The new technocracy concept encompasses three levels. Following Goertz (2006), the basic level names the phenomenon of interest. The secondary level comprises the attributes which define the basic-level term. The data or indicator level defines the operationalization of the secondary level. At the basic level of this concept is the term of the “new technocracy” which encompasses the new financial regulation paradigm. The secondary level includes the constitutive characteristics derived from macroprudential and Keynesian implications in the previous section: systemic riskification, quantification and expertization. At the indicator/data level, each characteristic is measured by two main indicators which can be split up further in sub-indicators. Systemic riskification is measured by the legal establishment of specific macroprudential policy tools and a cross-sectoral risk analysis. The quantification characteristic is measured by the number of financial stability indicators and the use of

big data. Finally, expertization is measured by the number of regulatory experts and the importance of regulatory agencies. The next passage explains the relationship of the different concept attributes.

Premised on Goertz (2006), this passage defines the relationship and negative pole of the concept attributes. The constitutive characteristics are equivalent at the same level. As the new technocracy is an ontological concept, the secondary level characteristics constitute, not cause, the new technocracy paradigm (Goertz, 2006, pp. 14–15). As indicated before, the new technocracy is based on the assumption of inherently unstable financial markets. The negative pole of this key assumption is the idea of inherent financial market stability. As outlined in chapter one, the belief in financial market stability builds the core of the EMH. Furthermore, the secondary level characteristics are conceptualized as insufficient but necessary conditions of an unnecessary but sufficient condition. Only if all characteristics are fulfilled, they jointly constitute the new technocracy. The characteristics are fulfilled if the indicators of each characteristic have a high value depending on its respective scale. So, the negative pole of each characteristic presupposes low scores of its indicators.

Finally, the new technocracy concept can be further specified by the implementation level of financial regulation. As indicated in the method section, regulatory legislation can be implemented at national, regional or global level. Yet, the macroprudential analysis of systemic and cross-sectoral risks necessitates increasing policy transfers to and intensified cooperation at an institutional level superior to national entities. To be specific, in the case of the Eurozone, it is accurate to speak of the European new technocracy. To address post-Crisis financial regulation at global level, the term of global new technocracy is applicable. The following figure presents the implementation level.

Figure 3.2: Implementation level of the new technocracy



3.4. Results

This section presents the study results. The new technocracy has been evaluated in 15 expert interviews with high-level senior management from the public and private sector. Furthermore, the indicators introduced in the concept’s indicator/data level are analyzed in the empirical Eurozone case. A detailed list of expert interview partners can be found in table 1.3. This section is structured in four parts which correspond to the implementation level and constitutive characteristics of the new technocracy. The next paragraph gives more information on the expert interviews.

The expert interviews have been conducted to evaluate the developed concept and to capture the new financial regulation paradigm. Initially, interviewees were asked to evaluate whether the propositions “technocratization”, “scientification” and “internationalization” characterize the new

status quo of financial regulation after 2008. Furthermore, experts were explicitly asked to propose alternative terms in case they consider these propositions as not applicable. In addition, interviewees were given time to answer the questions without any follow-up questions.

In the next step to evaluate the concept, interviewees were asked about specific indicators. For example, whether responsibility shifts to expert committees have taken place after the Crisis. On the basis of this inquiry, the initial terms have been slightly reframed in this chapter to describe the constitutive characteristics of post-Crisis financial regulation more accurately. The proposition of scientification has been adapted to quantification and the technocratization term has been changed to expertization. The next passages present the results in more detail.

3.4.1. Systemic riskification

This passage presents the results on the systemic riskification characteristic. Systemic riskification is an integral part of the new technocracy concept and refers to the risk assessment of systemic financial distress across different sectors. This characteristic sharply differentiates new technocracy from the pre-Crisis paradigm of financial regulation. In this regard, the EMH assumed financial markets to be stable under almost all conditions in the pre-Crisis era. This assumption has decisively changed after the Crisis. The previous chapter has shown that the analytical dimension of financial regulation has shifted from the microprudential level to a micro- and macro- prudential regulatory regime. However, the general idea of macroprudential oversight had to be transferred in concrete juridical norms. The EBU has implemented a single European rulebook for all member states. Core of this rule book are the Capital Requirements Directive IV (CRD IV) and the Capital Requirements Regulation (CRR) which implement the Basel III accords into European law. Table 3.1 summarizes the instruments under these regulations for macroprudential use.

The implemented regulatory framework of macroprudential policy tools is comprehensive. Yet, the macroprudential toolbox is still under development and not all macroprudential policy tools are designed to specifically analyze cross-sectoral risks. Hence, it is important to further examine if the adapted policy measures account for the analysis of systemic risks across different sectors. In the EU, several institutions are commissioned to ensure the analysis of systemic risks. The European Supervisory Agencies (ESAs) collect data from their particular oversight sectors. This information is then channeled and analyzed across sectors by the Joint Committee. Thereby, the Joint Committee “ensures adequate coverage of cross-sectoral developments, risks and vulnerabilities, in accordance with Article 32 (4) of the ESAs Regulations” (Joint Committee, 2018).

Furthermore, the ESRB applies a detailed analysis of cross-sectoral and systemic risks of the financial sector. The ESRB risk dashboard is published on a quarterly basis and comprises a set of qualitative and quantitative financial systemic risk indicators. In addition to the publication of current data, the ESRB issues warnings in case of critical developments. Table 3 in the annex of this volume summarizes the ESRB systemic risk indicators. In total, the ESRB applies a systemic risk analysis of 59 indicators from seven different categories. Further, data on cross-sectoral risk indicators is provided by the ECB statistical warehouse. Before the Crisis, most indicators were not analyzed and the ESRB did not exist. In addition to the use of macroprudential policy tools, the number of systemic risk indicators across sectors and countries illustrates the importance of systemic riskification as characteristic of the new technocracy paradigm. The following table summarizes the regulatory instruments which have been implemented by the CRR/CRD IV.

Table 3.1: Instruments under the CRD IV / CRR for macroprudential use

Instruments under the CRD IV	
Countercyclical capital buffer (CCB) CRD 130, 135-140	<ul style="list-style-type: none"> ▪ Mandatory buffer ▪ Member states decide on a buffer rate based on credit-to-GDP gap / other variables
Systemically important institution (SII) buffer CRD 131	<ul style="list-style-type: none"> ▪ Mandatory surcharge of 1% - 3.5% of RWAs for global systemically important banks (G-SII) ▪ Optional surcharge up to 2% of RWAs for other SIFIs (O-SII) ▪ Combination rules between G-SII and O-SII buffers and the SRB ensure floor/cap on buffers
Systemic risk buffer (SRB) CRD 133, 134	<ul style="list-style-type: none"> ▪ Optional buffer on all or a subset of institutions ▪ Authority can set a buffer between 1% and 3% subject to notification to the EC, EBA and ESRB, SRB above 3% requires authorization
Liquidity requirements under Pillar 2 CRD 105	<ul style="list-style-type: none"> ▪ Optional: authorities may impose specific requirements to address systemic liquidity risks ▪ administrative penalties, including prudential charges that relate to the disparity between the actual liquidity position and any liquidity and stable funding requirements
Other macro-prudential use of Pillar 2 CRD 103	<ul style="list-style-type: none"> ▪ Optional: authorities may impose additional requirements on institutions with similar risk profiles in a similar manner if – <i>inter alia</i> – they pose similar risks to the financial system ▪ Requirements include own funds and additional disclosures.
Instruments under the CRR	
Higher requirements on capital/ liquidity/ large exposures/ risk weights CRR 458	<ul style="list-style-type: none"> ▪ Optional: stricter rules by national authorities for selected EU measures ▪ Measures have to be necessary, effective and proportionate, and other specified measures cannot adequately address the systemic risk ▪ Council has final decision power
Higher real estate risk weights/ stricter lending criteria CRR 124	<ul style="list-style-type: none"> ▪ Optional: authorities can set higher risk weights up to 150% based on financial stability considerations
Higher minimum exposure-weighted average LGDs CRR 164	<ul style="list-style-type: none"> ▪ Optional: competent authorities can set higher minimum exposure-weighted average LGDs (no upper limit) based on financial stability considerations
Other	
LTV/LTI/DSTI, LTD limits and a leverage ratio	<ul style="list-style-type: none"> ▪ Optional: member states can assign macroprudential instruments that are not covered by the scope of EU legislation, e.g. LTV/LTI/DSTI limits (e.g. to dampen a boom in real estate mortgage lending or to curb excessive consumption lending), liquidity instruments, such as LTD limits, and a leverage ratio. These instruments are based on national law.

Source: adapted from European Systemic Risk Board, 2014, p. 21

3.4.2. Quantification

This section presents the results of the quantification characteristic. Firstly, expert interview partners have been asked whether financial regulation has become more indicator-driven than before the Crisis. Secondly, interviewees have been asked whether the analysis of big data amounts has become more important than before the Crisis. The large majority of experts from all fields stated that financial regulation has indeed become more indicator-driven than before the Crisis. Only two interview partners from the private field had no opinion on this matter (D3) or stated that developments were not far-reaching (D1). Additionally, particularly experts from EU institutions directly specified that financial regulation analyses have become more “quantitative” (B1, B3, B5).

An ESRB senior staff member further elaborated that complex mathematical models for risk analyses, which initially originate from the insurance field, have increasingly been applied to the banking sector (A2). This was necessary because the closeness of national supervisors and banks had created conflicts of interests before the Crisis. Supervisors had developed too much empathy for certain banks (A2). So, after 2008, banking supervision has become more distant. This higher distance required the intensive use of more indicators. Thus, indicators have strongly gained importance. This claim was also highlighted by an expert from a European financial institution (B5). He reported that extensive data analyses are required to capture the “right” moment to intervene in the market.

Additionally, a senior management member from a European regulatory agency (B1) specified the main reasons for higher indicator reliance after the Crisis beyond macroprudential necessities. Firstly, available financial resources on both the macro- and micro- prudential level have considerably grown. Secondly, European authorities have gained much more data collection powers to derive risk models in banking regulation. Thirdly, the use of indicators has become likely to continue in the next years because most of the collected data has still to be evaluated. However, a senior staff member of the European Commission also pointed to some elements of over-regulation in primary law (B2).

The senior staff member of another European regulatory agency (B3) has explicitly highlighted the Supervisory Review and Evaluation Process (SREP) as illustrative case for increased reliance on quantitative data. Based on large data sets, supervisors assess and measure risk exposures of banks on a regularly basis (European Central Bank, 2016d). As banks are individually scored by the same criteria, the comparability of institutions has enhanced. Generally, the SREP process is based on the assessment of bank business models, risk management, risks to capital and risks to liquidity and funding (European Central Bank, 2016c, p. 14, 2017, p. 14). Each category contains different indicators and indices. The assessment of business models comprises indicators such as the aggregated return on assets (ROA), cost-to-income ratios or stress test data (European Central Bank, 2016c, p. 18). Recommendations to banks comprehend a broad range of requirements like minimum own fund requirements, combined buffer requirements (CBR) or institution-specific quantitative liquidity requirements (p. 36). The following table gives an overview of the relationship of macroprudential instruments and potential indicators which also influences the SREP approach.

Table 3.2: Macroprudential instruments and related indicators

Policy Instrument	Indicators
Capital-based instruments	
Countercyclical capital buffers	<ul style="list-style-type: none"> ▪ Measures of the aggregate credit cycle
Dynamic provisions	<ul style="list-style-type: none"> ▪ Bank-specific credit growth and specific provisions
Sectoral capital requirements	<ul style="list-style-type: none"> ▪ Measures of the price and quantity of different credit aggregates (stock and new loans) on a sectoral basis: interbank credit, other financial institutions, non-financial corporate sector and households ▪ Measures of sectoral concentrations ▪ Distribution of borrowing within and across sectors ▪ Real estate prices ▪ Price-to-rent ratios
Liquidity-based instruments	
Countercyclical liquidity requirements	<ul style="list-style-type: none"> ▪ Liquidity Coverage Ratio (LCR) ▪ Net Stable Funding Ratio (NSFR) ▪ Liquid assets to total assets or short-term liabilities ▪ Loans and other long-term assets to long-term funding ▪ Loan-to-deposit ratios ▪ Libor-OIS spreads ▪ Lending spreads
Margins and haircuts in markets	<ul style="list-style-type: none"> ▪ Margins and haircuts ▪ Bid-ask spreads ▪ Liquidity premia ▪ Shadow banking leverage and valuation ▪ Market depth measures
Asset-based instruments	
Loan-To-Value (LTV) Ratio and Debt-To-Income Ratio (DTI)	<ul style="list-style-type: none"> ▪ Real estate prices ▪ Price-to-rent ratios ▪ Mortgage credit growth ▪ Underwriting standards ▪ Indicators related to household vulnerabilities ▪ Indicators of cash-out refinancing

Source: adapted from Gadanez & Jayaram, 2015, p. 9.

The previous table visualizes how the use of macroprudential policy instruments has been based on a broad range of indicators and variables. The list is not exclusive and most indicators can be divided in to sub-categories. A more detailed list including particular indicators of financial stability and systemic risks used by the IMF and the ECB is provided by Agresti, Baudino, & Poloni 2008 (pp. 26–30, 39). Still, it becomes clear that the analysis of large data sets has become more significant.

Furthermore, expert interview partners were asked whether the analysis of big data amounts had become more important after the Crisis. Nearly all experts reported that such a development has happened. Only one expert from a financial NGO (D1) pointed out that this process might be less true for the public field than for the private sector. Additionally, several experts pointed to the technological progress of data processing and collection techniques during the last decade. This development has significantly contributed to the increasing big data dependence regardless of the Crisis (A1, B3, C1, D1). In this context, an ECB expert referred to automatic machine-learning

approaches for early warning systems of systemic risks in the Eurozone (A1). Another interview partner reported that even the obligation for financial institutions to report more data has increased financial stability (B2). Whereas banks had often been unaware of their own risk exposures before the Crisis, they have been forced to engage with their risk structure in the post-Crisis period.

Another interesting finding has been the increased transparency effort by European financial institutions (B3). Supervisory criteria of the SREP process, banking regulation data and ECB policy decisions and procedures have been published. In 2016, 42 speeches and 18 interviews were given by representatives of the ECB supervisory board. Furthermore, the Chair's and Vice-Chair's meetings calendars have been disclosed on a regular basis. Additionally, seven public consultations have been launched and 1,295 public enquiries have been received. In total, 608 of these enquiries were on general banking supervision issues, 619 were complaints about banks and 68 enquiries have concerned supervised entities. Finally, 34 replies to questions from MEPs on supervisory matters have been published (European Central Bank, 2017, pp. 63–64). Hence, different from the pre-Crisis period, European financial regulation institutions have increased policymaking transparency.

3.4.3. Expertization

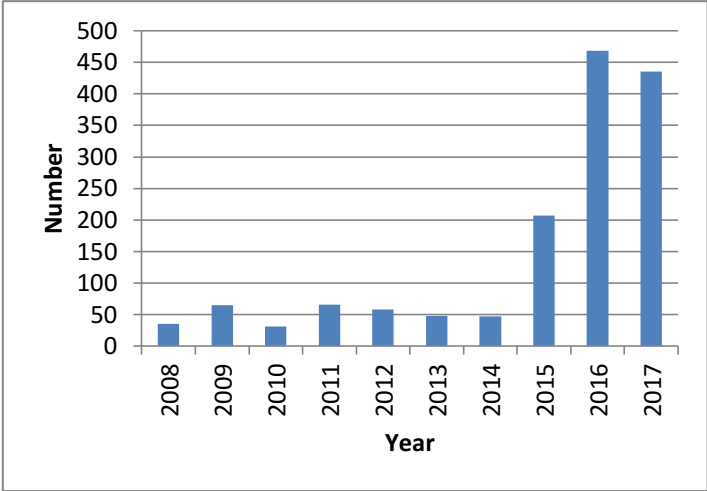
This section presents the results of the expertization characteristic. Interview partners were firstly asked if a responsibility shift to expert committees has taken place since the Crisis. Secondly, they were asked whether the importance of European regulatory agencies has grown. Response behavior to the second question has been surprisingly consistent. All experts stated that the importance of European regulatory agencies had grown after the Crisis. Regarding the first question, nine out of 15 experts reported that a responsibility shift to expert committees had indeed taken place. Five interviewed experts were uncertain or had no opinion on that matter (A1, B1, B2, D1, D3). One national regulatory expert claimed in this regard that competency definitions at European level are vague because too many players are involved in Eurozone financial regulation (C2).

Many interviewed experts further highlighted that the complexity of financial regulation had grown and thus required very high levels of specific knowledge (A2, B1, B2, B3, B5). Additionally, an EC expert interview partner specified two different dynamics of a responsibility shift to experts after the Crisis (B2). On the one hand, the political trust in the technical side has been very high before the Crisis. Elected policymakers had tended to outsource financial regulation to experts. Yet, after the Crisis, political trust in the technical side has declined. On the other hand, the tasks and workload for regulatory experts has sharply increased after the Crisis. Even though political trust has declined, experts have even more influence on agenda-setting processes, framing of regulatory norms and regulatory policymaking. A senior staff member of a European regulatory agency made a similar argument. He pointed out that many issues, such as the clearing obligations of OTC derivatives, are too complex to be discussed in parliament (B1). But whether policy recommendations of European agencies are transformed into European regulatory standards is a political decision.

Furthermore, another expert from a European financial institution referred to the Basel Committee to illustrate the global character of banking regulation and an increasing technocratization process (B5). The Basel standards entail large implications on the national level and all stakeholders. So, a friction between democratic institutions and technocratic actors might occur (B5). This issue was also taken up in a different way by a national central bank expert (C3). He argued that technocratization had often been falsely associated with de-democratization. Instead, he highlighted that a

macroprudential paradigm change had led to more sophisticated expertise requirements. In case of Eurozone financial regulation, the number of experts has significantly grown after the Crisis. This rise of regulatory policymaking experts at European level is also shown in the following table which presents data from the European transparency register in the post-Crisis period.

Figure 3.3: Registered financial stability expert groups at EU level 2008 - 2017



Source: European Transparency Register, data accessed 23/10/2017

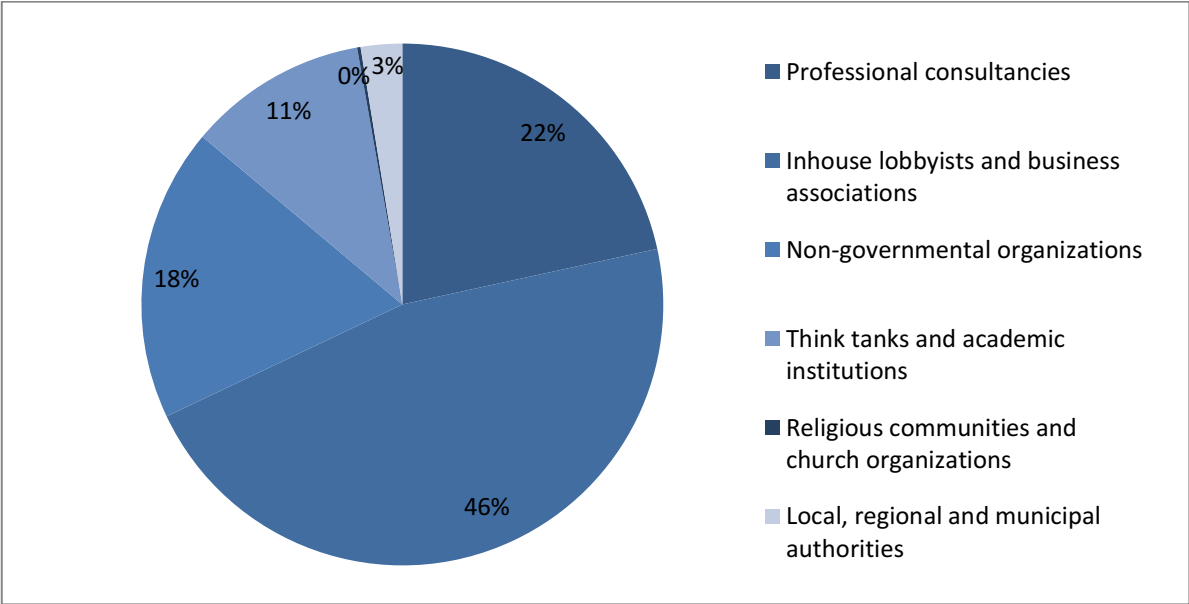
The data includes all expert groups in the joint EC/ EP transparency register, which have been registered annually since 2008. The data value for 2017 has been estimated based on the average value per month in 2017 from January to September. The growth rates in 2014 (98%) and especially 2015 (440%) and 2016 (226%) are extraordinarily high. This development has probably been boosted by the establishment of the European Banking Union (EBU) and its macroprudential implications. But one could also make the argument that the number of experts has generally increased because the register had gained in importance and more and more experts get registered for different reasons.

However, growth rates in other policy fields would be expected to have similar expert growth rates as well. That is why the growth of financial stability expert groups has been compared to five other randomly selected policy fields: home affairs, fisheries and aquaculture, climate action, economic and financial affairs, research and technology. Results show that indeed the number of expert groups has increased in these policy fields as well. However, the growth rates are much smaller than in the financial stability policy field. The next highest value showed an increase of 204% in 2015 in the economic and financial affairs policy field. Other values from 2014 to 2017 are usually in the range of 85% to 160% annual increases. Overall, a strong trend of increasing expertization in the financial regulation policy field has become visible. This trend is further strengthened by the significantly growing influence of European regulatory agencies which is not included in this graph.

This data matches the expert interview information. The macroprudential shift requires an increasing level of expertization. Furthermore the results correspond to results of previous studies, which found that the number of all experts consulting the European Commission, has almost doubled over the last 30 years (Metz, 2015, p. 62-63). Faced with a broad range of highly specialized tasks, the EC, in particular, has largely relied on external experts.

This finding is also reflected in the following graph which exemplarily shows the composition of expert groups advising the EC/EP in the field of financial stability, financial services and capital markets union in 2016.

Figure 3.4: Composition of registered EU financial stability expert groups 2016



Source: European transparency register, data accessed 23/10/2016

The highest numbers of expert groups in the financial sector are professional consulting firms (22% or 101), in-house lobbyists and business associations (46% or 217). Apparently, the EC increasingly relies on external expert group advice. An interviewed private bank expert highlighted in this regard that this growing technocratization leads to a professionalization of financial regulation (D4).

Concerning the growing importance of regulatory agencies at European level, which has been highlighted by all expert interview partners, particularly banking regulation has been enforced. Although European policy competencies have also been strengthened in the field of insurances and occupational pensions, the main focus has been on the banking sector (B4). This particular banking focus has also been reported by the senior staff member of a global private bank (D4). According to him, the EBA and the ECB regularly interact with big banks. Compared to the pre-Crisis period, the interaction with national regulatory agencies has partly been replaced by European agencies. This development reflects the competency-shifting to the European level. Overall, expertization of financial regulation is an important characteristic of the new paradigm.

3.4.4. Implementation level

This section presents the study results regarding the implementation level. In this regard, expert interview partners have firstly been asked whether *financial policymaking* is increasingly influenced by the European or global level after the Crisis. As pointed out in the previous chapter, interviewees were also asked if *relevant competencies* had shifted from the national to the European level. The large majority of 14 out of 15 experts from all categories reported that competencies have indeed significantly shifted. Similarly, the same experts reported that financial policymaking has indeed become more European following the Crisis. Only one respondent was unsure about this development (D1). However, the picture is less clear regarding the global level.

An ECB expert explicitly argued that the global importance of the IMF, FSB and BIS has hugely grown concerning global standard-setting and surveillance (A1). This development has been further advanced by the G20, mainly at the Pittsburgh Summit in 2009. However, global financial regulatory policy is still distant. Only a few interviewees reported that regulatory policymaking has become more global. Eight out of 15 experts were unsure about this development or did not answer the question. Although a strong political momentum for increased international cooperation opened after the Crisis, it has been difficult to bring countries together for a common regulatory solution (B1, B3). The changes in the Eurozone have been by far more pervasive than at the global level.

According to an EC expert, the Crisis has at least led to the G20 acknowledgment of a globalized financial system (B2). Initially started in the US, the subprime crisis led to severe consequences in Europe and other world regions. The crisis was spread through internationally acting banks and the financial market itself (B2). So, the need for at least basic global regulation standards has risen. As specified by two experts from distinct Eurozone financial stability authorities, such an agreement has been reached with the establishment of Basel III (C1, C2). Whereas the Basel II accords have not been fully implemented in all countries as for example by the US, Basel III is widely accepted among the G20. Furthermore, the harmonization of regulatory norms at European or global level is welcomed by international banks which must no longer deal with different national regulatory requirements (D4).

Overall, financial regulation at global level seems to have slightly improved in terms of common standard-setting and increased coordination among the G20 group. However, these changes are by far not comparable to the far-reaching competency shifts of regulatory policymaking in the EU. Nevertheless, the globalization of finance increasingly strengthens the need for enhanced regulation coordination at global level. For the Eurozone case the term of a “European new technocracy” is most precise to describe the post-Crisis outcome. The next part discusses the results.

3.5. Discussion

Financial markets have been loosely integrated since the end of the Keynesian paradigm in the 1970s. Since the 2008 Crisis, financial oversight has again moved up high on the public agenda. The main goal of this chapter was to conceptualize the new paradigm of financial regulation. To structure the new outcome, the new technocracy framework has been developed in this chapter. The concept has strongly been influenced by the macroprudential idea and renaissance of a post-Crisis Keynesian discourse. The characteristics of systemic riskification, quantification and expertization constitute the new technocracy. In addition, the concept applies to different levels of legislative implementation. In the Eurozone case, most regulatory competences have been shifted to the regional EU level.

Overall, the level of regulation after the Crisis has considerably increased. However, the comeback of financial regulation does not mainly target democratically elected national institutions, but favors expert committees and regulatory agencies. The next passages discuss the results in light of institutional and ideational change. This section further presents general implications of this chapter.

3.5.1. Systemic riskification

The result section has presented data on macroprudential policy instruments for the management of financial distress. Additionally, it has listed 59 indicators used by the ESRB to identify systemic risks across different financial sectors. In contrast to the EMH assumptions before the Crisis, systemic

riskification is premised on the fundamental belief in inherent instability of financial markets. Its main goal is to manage the endogenous risks which emerge from this instability. This component is crucial for the new technocracy outcome because it characterizes the shift to active risk management which was non-existent before the Crisis. Most institutional changes in the European regulatory framework, analyzed in the previous chapter, relate to systemic riskification. The new technocracy paradigm is not given without this characteristic.

3.5.2. Quantification

Both the expert interview data and the analysis of primary sources have shown that the analysis of particularly quantitative data has sharply increased. As pointed out, this development has partly resulted from technological progress in financial technology and data processing capacities. Still, the establishment of many new and revised macroprudential policy instruments and indicators requires large aggregate data set calculations. Thus, it adds a new constitutive characteristic to the new technocracy paradigm. As the macroprudential toolbox is still work in progress, this quantification process is likely to continue in the near future.

Particularly two findings of the quantification analysis have stood out. Firstly, the SREP process appears to have become a key element in the euro area to enhance banks' comparability across countries. Furthermore, the SREP evaluates potential risks of individual banks with a harmonized tool set. Thereby, SREP serves as a prime example of the financial regulation quantification (European Central Bank, 2016c). Secondly, regulatory policymaking transparency at European level has grown since the Crisis. Data obtained via the macroprudential policy shift is largely provided to the public, including SREP criteria and other banking supervisory statistics. Overall, quantification has proven to be an important characteristic of the new technocracy.

3.5.3. Expertization

The result section has shown that expertization has become an integral part of the new technocracy paradigm. Firstly, interviewed experts unanimously reported that the role of independent European regulatory agencies has significantly increased after the Crisis. Regulatory agencies usually share a sophisticated technical expertise level and thus, influence policies to a large extent. Secondly, the total number of experts in the financial regulation policy field has remarkably risen. This rise is stronger than in other policy fields and presumably partly results from the establishment of the macroprudential pillar in financial regulation. The results confirm previous research on European "agencification" and increasing significance of expert committees (Flinders, 2004, p. 541; Ossege, 2014, p. 393). Furthermore, the large expert group shares of professional consultancies, inhouse lobbyists and business associations (compare figure 3.3) meet the findings by Metz (2014, p. 264).

Furthermore, the result section has presented another interesting finding. On the one hand, experts reported that the required expertise level for macroprudential regulatory standard-setting has increased since the Crisis. On the other hand, they pointed out that the final decision to transform policy recommendations into European law is taken by political representatives. This leads to a paradoxical situation. Despite the grown workload for the technical expertise side, the political trust in regulatory experts and officials has decreased since the Crisis. In the end, regulatory experts gain more power in the policymaking process but face the risk that necessary reforms are not implemented by political institutions. In this regard, the EU banking structure reform has repeatedly

failed due to a lack in support from the political side. The fifth chapter presents a process-tracing analysis of this case. Overall, expertization is a key characteristic of the new technocracy paradigm.

3.5.4. Implementation level

This chapter has primarily focused on the Eurozone. Results have shown that this case is exceptional in terms of regulatory competency-shifting to regional institutions and common standard-setting and legislation. To be specific, the term of a “European new technocracy” is most accurate to frame the new normal in Eurozone financial regulation. Beyond the European new technocracy, one could make the case for primary elements of a global new technocracy framework. Regarding the global level, expert interview answers have been contested. Still, compared to the pre-Crisis era, significant global efforts have been undertaken, e.g. the FSB establishment, the Basel III regime and the G20 Pittsburgh resolutions. Although changes at global level are not as far-reaching as in the EU, it has become clear that the globalization of financial markets entails the need for global regulatory efforts. With regard to the new technocracy, the concept encompasses different implementation levels.

3.5.5. General implications

The new paradigm of financial regulation has been built on the assumption of financial market instability. The previous chapter has revealed that financial regulation before the Crisis had been based on the efficient market hypothesis (EMH). The EMH led to very light regulation of financial markets and deep trust in the stability of the financial sector (Marques-Ibanez & Leuvensteijn, 2017). After the Crisis, financial regulation changed on every dimension by becoming stricter, largely shifting to the European level and internalizing the macroprudential perspective. Based on these severe multidimensional institutional changes, a new paradigm of financial regulation has been established. In this chapter, this new paradigm has been conceptualized as the “new technocracy”.

The conceptualization of the new technocracy paradigm complements previous research which has characterized the post-Crisis state of financial regulation as “productive incoherence” (Gabel, 2011, 2015b). This chapter not only argued that pre-Crisis regulation has been replaced, but developed a three-level concept to structure the new outcome. Furthermore, this chapter has shown that macroprudential tools have not only been the “new policy kids on the block”, but have entailed far-reaching changes in different dimensions (Blanchard, 2015b).

Baker (2015) argues that a main task of political economy after the Crisis is to analyze “patterns of ideational change and the conditions that produce such change” (Baker, 2015, p. 342). This chapter has contributed to this debate by analyzing the overall outcome of financial regulation after the Crisis. Therefore, this chapter has built a basis for subsequent analyses of models of paradigm change in the regulatory policy field. The new technocracy conceptualizes the main characteristics of post-Crisis financial regulation and thereby, offers researchers a framework to investigate patterns of change. The conceptualization of the new financial regulation paradigm builds the fundament for the process-tracing approach of the fourth and fifth chapter in this volume. A key question is how the new technocracy has been established and which norm entrepreneurs have influenced it.

Furthermore, the new technocracy implies consequences for regulatory policy recommendations. The focus on key characteristics of the new paradigm may increase both effectiveness and efficiency of regulatory solutions. As the toolbox of macroprudential instruments is still work in progress, a key challenge for future research will be to analyze which instruments best accomplish more solid

financial market regulation. The analytical focus of the new technocracy offers a way to define more concisely what the main goals of financial regulation are and how they could be achieved. Finally, the interdisciplinary character of the new technocracy approach could build a bridge between macroeconomic and political science literature on institutional change after the Crisis. The presented framework facilitates the inclusion of variables from both disciplinary perspectives.

3.6. Conclusion

This chapter has brought forward two fundamental contributions. Firstly, following the argument by Gerring (2012a) of description as an independent methodological approach, the three-level concept of the “new technocracy” has been developed. This development has been premised on concept-building strategies by Collier & Gerring (2009), Gerring (2012b), Goertz (2006) and Schaffer (2016). The new technocracy structures the new paradigm of financial regulation after the Crisis in 2008. Contrary to pre-Crisis regulation, the new paradigm has been built around the key assumption that financial markets are not inherently stable. Secondly, based on a case study of Eurozone financial regulation after the Crisis, the constitutive characteristics of systemic riskification, quantification and expertization have been analyzed empirically in the post-Crisis era. Selected indicators have scored high values and highlight the paradigm change of Eurozone financial regulation.

Overall, dramatic changes in the financial regulation field have occurred during the last decade. A key task remains to track these developments and analyze whether the new technocracy paradigm irreversibly establishes itself as a long-standing political setting defining regulatory legislation.

4. Elimination of the old paradigm

Abstract

Process dynamics of paradigm change are unpredictable. Whereas previous research mostly focuses on the establishment of new ideas, less attention is paid to the elimination process of previously dominant paradigms. Based on a process-tracing analysis of post-Crisis Eurozone financial regulation, this chapter investigates the causal mechanism of the quick Efficient Market Hypothesis elimination. Findings suggest that mainly three causal factors are substantial. Firstly, macroprudential surveillance and the renaissance of a Keynesian discourse constitute an alternative policy agenda for financial regulation. Secondly, as critical juncture the financial crisis in 2008 opens a window of opportunity for institutional change. Thirdly, collective uncertainty of monetary and regulatory policymaking builds the basis for the implementation of an alternative paradigm. At a more general level, this chapter contributes to the development of a coherent paradigm change model. This is relevant to better understand policymaking dynamics after crises. As financial market stability is a prerequisite for economic growth and social stability, this is even more important in the financial regulation field.

4.1. Introduction

The dynamics of ideational and institutional change are most often unpredictable. Like an immediate free fall of stock prices, causes may remain unclear and timing unanticipated. The previous chapters have shown that the paradigm of Eurozone financial regulation has changed in all critical dimensions after the Crisis in 2008. The new technocracy, influenced by the idea of macroprudential supervision and Keynesian renaissance, has replaced the Efficient Market Hypothesis (EMH) as dominant financial regulation paradigm. This paradigm change process is unprecedented. Firstly, the pre-Crisis paradigm had largely been unchallenged until the Crisis outbreak. Secondly, the elimination process of the EMH has been remarkably fast. When monetarism replaced Keynesianism in the 1970s, the old paradigm's deconstruction gradually proceeded for over a decade. In this chapter, I argue that a three-part causal mechanism explains the quick elimination of the EMH.

Based on a causal process tracing analysis of Eurozone financial regulation, this chapter investigates the most plausible causal factors that explain the quick paradigm elimination after the Crisis. Thereby, a causal mechanism is understood as a configuration of causal conditions in sequential order that together are sufficient for the outcome. The different parts of the causal mechanism are modeled as insufficient but necessary conditions of an unnecessary but sufficient condition (INUS). This chapter builds the basis for the next book section which analyzes paradigm establishment.

This chapter adds to the argument by Abdelal, Blyth and Parsons that "old ideas (...) are difficult to abandon" (2010, p. 236). It further shows that paradigm elimination proceeds quickly despite Blyth's arguments of a too short time frame and unchanged locus of authority (2013, pp. 208-210). So far, research on post-Crisis change mainly focuses on single actors or policy tools. Following Sil and Katzenstein's (2010) argument of analytic eclecticism (compare chapter five), this chapter takes a broader perspective on the paradigm change process. Thereby, it combines previous research and contributes to the development of a coherent paradigm change model with testable hypotheses.

Developing a coherent paradigm change model is highly relevant to better understand policymaking dynamics after crises. This is particularly important in the financial regulation policy field, as financial market stability is a prerequisite for solid economic growth and social stability. Furthermore, the fundamental role of uncertainty after crises for institutional and ideational change seems to be underestimated. As shown in the first chapter of this volume, many authors focus on factors favoring the establishment of new ideas. But, less attention is paid to the wearing down process of the "old" paradigm. Besides, existing research widely ignores where alternative ideas come from. Especially in rather technical domains, e.g. financial regulation and oversight, these alternative ideas do not fall out of the blue but sometimes evolve over decades.

The deductive approach of this chapter builds on arguments by Hall (1989), Grabel (2011, 2015), Kingdon (1984) and historical institutionalism. Hypotheses on the elimination of the old financial regulation paradigm are empirically tested and further developed in the Eurozone case study. Findings suggest that three causal factors led to the EMH elimination after the Crisis. Firstly, macroprudential surveillance and Keynesian renaissance can provide for an alternative policy agenda of financial regulation. Secondly, the financial crisis in 2008 is indeed a critical juncture which opens a window of opportunity for paradigm change. Thirdly, collective uncertainty of monetary and regulatory policymaking follows the Crisis and scrutinizes the previously dominant EMH.

The research design is primarily based on theory-testing process tracing (Beach & Pedersen, 2013, pp. 11–17). However, also some elements of theory-building are included as the hypothesized causal factors are further developed following the empirical exposure to the Eurozone case. The causal mechanism analyzed in the Eurozone case study should then allow for the formulation of testable hypotheses in other cases as well. Furthermore, this chapter is premised on the best practices in process tracing. Thus, the data collection carefully ensures data triangulation by using data from mutually independent sources (Bennett & Checkel, 2015, pp. 20–21). Thereby, data includes different primary sources of Eurozone and global financial regulation institutions. Furthermore, information has been gathered in 15 expert interviews with high-level senior management from the ECB, European and national regulatory agencies and the private sector. Finally, the analysis is based on different indicators to measure uncertainty and economic output.

This chapter is structured in five sections. The first part presents the theoretical argument. The second section includes methods, research design and testable hypotheses of the process tracing approach. The third part presents the results of the primary sources and expert interview analysis. The fourth section discusses the results in light of the theoretical argument of this chapter. The final part concludes on the main contributions of this book section.

4.2. Paradigm elimination

This section presents the theoretical argument of this chapter. I deductively derive the most plausible causal factors of the recent paradigm change from different theoretical approaches. Contrary to the quick paradigm change of Eurozone financial regulation after 2008, the change “from Keynesian to monetarist modes of macroeconomic regulation” during the 1970s and 80s was an incremental process (Hall, 1993, p. 279). The paradigm change to Monetarism was not caused by one major crisis. Instead, a series of events, crises and challenges led to this outcome (Pontusson & Raess, 2012, p. 14). Most influential were the two oil crisis during the 1970s, the election of Thatcher as British Prime Minister and simultaneous high unemployment and inflation rates (Hall, 1993, pp. 283–285). By contrast, the paradigm change from the efficient market hypothesis to the New Technocracy has proceeded faster and more abruptly. As indicated in the previous chapters, the pre-Crisis paradigm was largely unchallenged and followed the doctrine of efficient financial markets, deregulation and privatization. Although some doubts on the EMH had existed before the Crisis (compare section 1.2.2), no rival idea had emerged as challenger of the dominant paradigm. By contrast, after the outbreak of the Crisis in 2008, the EMH has rapidly been scrutinized.

The fast paradigm elimination after a major critical juncture differs from the gradual paradigm deconstruction process in the 1970s. The impact of the 2008 Crisis on the pre-Crisis paradigm has been too strong and encompassing to be ignored. Furthermore, Hall’s finding that the “monetarist paradigm soon became the principal challenger to Keynesian doctrine (...) because it was the most coherent and highly developed alternative” is also valid for the current paradigm change. The faster the elimination of the former paradigm proceeds, the more important becomes the pre-existence of alternative ideas and approaches. So, independently from the way a new paradigm gains institutional influence, paradigm change depends on the strength or weakness of rival approaches, too.

Mehta (2011) underlines this aspect of “wearing down” old ideas (p. 31). Ideas not only change because new ideas gain importance, but because an older dominant paradigm loses grip (McNamara,

1998, p. 64-65). Three different possibilities of ideational change exist: first a new idea emerges and gains gradually more support than the dominant paradigm. Second, a strong rival idea exists and gains more importance than the dominating paradigm due to an external event. Third, a critical juncture fundamentally undermines confidence in a dominant paradigm and leads to a phase of paradigm competition or, as Grabel (2011) puts it, productive incoherence. Yet, these different ways of ideational change presuppose the most basic premise: a paradigm cannot lose grip if not at least a basic alternative idea exists which could replace it. The next part elaborates on this issue.

4.2.1. Existence and institutionalization of alternative ideas

Paradigm change after a crisis necessitates the pre-existence and pre-institutionalization of alternative ideas. This requirement is less trivial than one might initially think. Alternative ideas require prior conceptualization, research and technical collaboration to become potential challengers of the mainstream paradigm (Porter, 2003, p. 547). As outlined below, Kingdon (1984) defines “criteria of survival” which must be fulfilled for a new idea to become a potential challenger of the dominant paradigm. Furthermore, policy entrepreneurs play an important role in promoting their preferred ideas. In addition, rival ideas must be ready to start their career in a favorable moment for institutional change. Particularly in technocratic domains, such as financial regulation and oversight, ideas do not fall out of the blue but sometimes evolve over decades.

According to Kingdon, expert communities of researchers, administrative staff, policymakers and other specialists produce different ideas and approaches. These ideas do not appear suddenly but agents recombine familiar elements and thus, form new approaches (Kingdon, 1984, pp. 123, 131). Analogous to the biological picture of molecules in a “primeval soup” before the existence of life, ideas are floating around in policy communities (p. 123). However, only very few ideas ever become potential challengers of the dominant paradigm. Kingdon argues that not the origin of ideas is important, but the agenda-setting process by which ideas make it from the primeval soup to the short list (Kingdon, 1984, p. 134). Successful new ideas require backup by policy entrepreneurs, who aim at “softening up” the public and policy communities which tend to oppose major institutional changes. Whether an idea could gain the backup by policy entrepreneurs and become a credible alternative of the dominant paradigm depends on different “criteria for survival”.

The “criteria for survival” include technical feasibility, value acceptability and the anticipation of future constraints (Kingdon, 1984, pp. 138–146, 209–210). Technical feasibility means that ideas are elaborated and capable of implementation. Value acceptability means that ideas have to be acceptable given the overall values of the policy community members. Finally, members of the policy community may anticipate which future constraints ideas might face. Among these constraints are budgetary concerns, acquiescence or antagonism by the mass media and approval or disapproval by elected government officials. Only ideas that most widely fulfill these criteria might make it to the top of the short list of proposals for the governmental agenda.

Overall, Kingdon argues that new ideas not appear suddenly but as a result of recoupling processes of previous elements. Whether an idea is further promoted depends on different criteria and the policy entrepreneurs. But even if these conditions are present, a dominant paradigm is not yet challenged. Incredibly important is the elimination of the “old” paradigm in a crucial moment of institutional formation, particularly after a critical event. The next section elaborates on this issue.

4.2.2. Critical junctures

This section elaborates on the concept of critical junctures. Institutional change does not necessarily occur because rival ideas which are different to the dominating paradigm exist. Instead, further conditions have to be fulfilled. Ikenberry (1994), Thelen (1999) and Capoccia and Kelemen (2007) define two ways of institutional formation that predefine subsequent decisions: developmental pathways and critical junctures. Both approaches are based on the concept of path dependency, which assumes that former decisions or events set the frame of later institutional developments. Developmental pathways progress gradually over time and reflect changing surrounding conditions. They limit the set of future policy choices, e.g. integration processes in the EU (Pierson, 1996). Kingdon emphasizes that change related to the softening-up process of ideas could take place slowly.

Critical junctures are crucial moments of institutional formation at a specific point in time. Capoccia and Kelemen (2007) in particular, emphasize the short duration of critical junctures and highlight the “substantially heightened probability that agents’ choices will affect the outcome of interest” (p. 348). Critical junctures send states or national economies on different institutional pathways that set the frame of later institutional developments (Ikenberry, 1994, p. 16-18). Both Hall and Kingdon refer to external events that make a change of paradigms and ideas possible. What Hall calls “historic events” largely corresponds to Kingdon’s category of “policy windows”. Cutting-in events such as national crises create those moments of institutional formation (Hall, 1989, p. 389-391; Kingdon, 1984, p. 173; Widmaier, Blyth, & Seabrooke, 2007, p. 756-757). At such a moment future outcomes are perceived as extremely uncertain and paradigms can change.

However, the critical juncture concept does not fully explain why critical events sometimes lead to major institutional changes and sometimes not. Soifer (2012) introduces the distinction in permissive and productive conditions to elaborate on the causal logic of critical junctures. Permissive conditions can be defined as the factors which change the underlying structural context and make change possible. So, they act as scope conditions which define the length of a critical juncture. Thereby, they set the window of opportunity during which the productive conditions produce a new institutional outcome (Soifer, 2012, pp. 1573–1575). Productive conditions are defined as the conditions which shape the new outcome after a critical juncture (Soifer, 2012, pp. 1573, 1576–1577). Thus, they produce the outcome that continues persisting when the window of opportunity closes and permissive conditions disappear. The distinction of productive and permissive conditions leads to a more concise understanding when junctures are critical and when not.

Overall, the study of critical junctures is most relevant because institutional change can be analyzed at a specific moment in time. In that sense, compared to the normal state of stability or constrained adaptive change, critical junctures are “rare events in the development of an institution” (Capoccia & Kelemen, 2007, p. 368). Events are critical if they create a strong window of opportunity for change. This change momentum largely depends on the uncertainty level resulting from a cutting-in event.

4.2.3. Uncertainty

This section elaborates on the concept of uncertainty. Uncertainty is defined as collective ignorance about future outcomes. This assumption particularly holds for the field of monetary policy (McNamara, 1998, p. 57). The first chapter of this volume has already introduced the importance of the uncertainty assumption for the study of ideational change. The uncertainty assumption builds the fundament for the constructivist approach to the IPE field and is at the core of Keynesian economics

(Abdelal et al., 2010, p. 11-13; Skidelsky, 2010, p. 83-85). If a paradigm becomes scrutinized after a crisis, actors are uncertain about 'right' policy choices. The greater the level of collective uncertainty, the greater becomes the influential power of ideas (Jacobsen, 1995, p. 293). In that respect, the conceptualization of uncertainty as independent causal factor for paradigm elimination is important because crises do not always lead to high uncertainty (Hay, 2015, pp. 209–210; Soifer, 2012).

Following Blyth (2011), it is not possible to conceive the world by probabilistic risk calculation. Instead, outcomes are often purely uncertain. As generators for empirical outcomes are hidden in most cases, only the outcome becomes evident. In other cases, both the outcome and the generators are not visible. A distinction in three worlds illustrates the problem of hidden generators and risk calculation under the assumption of uncertainty (Abdelal et al., 2010a; Blyth, 2011; Taleb & Pipel, 2004). Firstly, in a type1-world, directly observable generators produce outcomes with calculable probabilities and models based on past data produce reliable prognoses about future outcomes, e.g. dice numbers. Secondly, in a type2-world, generators are not or only partially observable and interdependent with actor interpretations. Thus, outcomes become uncertain and models based on past data hardly predict them. For example, in a stock market, stock fluctuations are observable but not the reasons why shares move. Thirdly, in a type-3 world, generators are not observable and produce unexpected outcomes, e.g. the end of the Cold War. Theories based on past data offer no predictability. Systems seem to be stable for a certain period and then radically change.

Whereas classical materialist economic approaches mainly interpret the world as one of type 1, constructivists rather understand the world as located in the type 3 scheme. In the constructivist understanding, agents create institutions, norms and cultures to master the uncertainty in which they live (March & Olsen, 1996). To put it briefly, "human agents create the stability that they take for granted" (Blyth, 2011, p. 96). Ideas are again at the heart of the institutions that agents create to overcome uncertainty. Blyth frames ideas in this respect as "fundamental media through which agents interpret the world and construct stability in it" (2011, p. 96). During a crisis like 2008, the ideational foundation of a system begins to totter and dominating paradigms can change.

Overall, uncertainty is an elementary causal factor for the elimination of a dominant paradigm. The paradigm elimination phase is followed by the establishment of a new paradigm. The fifth chapter of this volume theorizes this process. The next section presents the methods and study design.

4.3. Methods

The research question of this chapter reads which causal factors have led to the quick elimination of the EMH paradigm in Eurozone financial regulation. At a more general level, the research goal is to investigate the causal mechanism which led to the overall paradigm change of financial regulation after the 2008 financial crisis. The previous chapters have shown that indeed a paradigm change has taken place and further analyzed the key characteristics of the new technocracy paradigm after the Crisis. In this and the next chapter, the process of how the paradigm has changed is analyzed. For this purpose, the research design is based on a causal process-tracing (CPT) analysis of Eurozone financial regulation. Thereby, the Eurozone case is well chosen because large institutional changes have taken place in the aftermath of the Crisis. So, the detection of an underlying causal mechanism would most likely be possible in this case. Furthermore, as one of the economically strongest currency areas in the world, which was fundamentally hit by the Crisis, the Eurozone is an utmost relevant case *per se*.

The research design is primarily based on theory-testing process tracing. However, elements of theory-building process-tracing are also included (Beach & Pedersen, 2013, pp. 11–17). In the present case, the outcome (y) in terms of the new technocracy paradigm is known, but it is unclear which causal factors of a configurative causal mechanism have led to this outcome. Firstly, hypotheses on the elimination of the dominant financial regulation paradigm have deductively been derived through the recombination of existing theorems. Secondly, these hypotheses have then been tested and further specified in the Eurozone case. Thirdly, in the last book section, the causal mechanism detected in this chapter is tested on a different case. This methodological approach follows the recommendation by Blatter and Haverland (2012). The authors refer to Kingdon’s “window of opportunity” concept as well-suited case where causal process-tracing is the “adequate analytical approach to develop and test configurational theories and hypotheses” (p. 85).

The first chapter has discussed the state of CPT research and elaborated on its ontological and epistemic foundations. This research design is premised on ‘configurational thinking’ of causality, i.e. the research goal is to investigate the combination of conditions which make the outcome possible (Blatter & Haverland, 2012, pp. 80–96). The key premises of configurational thinking are that a “plurality of causal factors work together to create the outcome” and that “causality works out in time and space” (Blatter & Haverland, 2012, p. 81). Hence, the process analysis of causal factors in temporal order is the fundament of the CPT understanding in this book. Yet, the concept of a causal mechanism is still highly contested (Blatter & Haverland, 2012, p. 90; Gerring, 2007b). In this volume, a causal mechanism shall be defined as a configuration of causal conditions in a sequential causal chain that together are sufficient for the outcome.

The different integral parts of the overall causal mechanism should be understood as insufficient but necessary conditions of an unnecessary but sufficient condition (INUS). Each part of the causal mechanism is itself insufficient to produce the paradigm elimination outcome, but the combination of these different parts leads to the outcome. So, each single part of the mechanism cannot solely produce the outcome and, with one part being absent, the causal mechanism does not apply (Beach & Pedersen, 2013, pp. 30–31). Furthermore, the term of a ‘causal chain’ specifies that the different parts of the causal mechanism are hypothesized as a sequential combination of INUS conditions (Blatter & Haverland, 2012, pp. 94–95, 97).

The investigated parts of the causal mechanism are the most plausible conditions which could be deductively considered in theories on institutional and ideational change to have been involved in pre-Crisis paradigm elimination. However, only because the most presumable causal mechanism is investigated in this volume, other potential causal conditions are not denied but only assumed to be less probable. Based on the theoretical discussion in the previous section, the following hypotheses on paradigm elimination in Eurozone financial regulation before the Crisis can be derived:

- H1: Ideational elements of the new technocracy paradigm in Eurozone financial regulation have a) existed before the 2008 Crisis, b) attained already a basic institutionalization level and c) have been backed up by at least one significant policy entrepreneur.
- H2: The financial crisis in 2008 has indeed been a critical juncture and opened a window of opportunity for ideational and institutional change.
- H3: The level of uncertainty in Eurozone financial regulation has significantly risen during or at least shortly after the Crisis.

To investigate the hypotheses, I follow the best practices in process-tracing proposed by Bennett & Checkel (2015, pp. 20–31). In line with their claim for gathering diverse data and triangulation, this chapter uses data from mutually independent sources. The operationalization includes a primary source legislation and communication analysis of the most important actors in Eurozone financial regulation (Jacobs, 2015, p. 51). This includes reports, minutes, speeches, press statements and policy measures by the ECB, EC, ESRB, ESAs, IMF, BIS, and national central banks.

Furthermore, information has been gathered in 15 expert interviews with high-level senior staff members from the ECB, European and national regulatory agencies and the private sector. For a detailed overview on interview partners, please refer to table 1.3 in chapter one. As described in the first chapter, expert interview partners have been chosen from different professional branches and entities. So, different perspectives were included in this work as far as possible. The questionnaire has included two main blocks. Whereas the former asks for changes in financial regulation before and after the Crisis, the latter specifically asks about the process of institutional change. In this and the next chapter, primarily data of the second block is relevant. The next section presents the results.

4.4. Results

4.4.1. Existence of alternative ideas

To investigate whether ideational elements of the New Technocracy paradigm have existed and been institutionalized before the 2008 Crisis, firstly an analysis of primary sources has been conducted. This primary source analysis includes a systemic key word analysis of the annual reports published by the BIS from 1997 to 2008, sporadically published BIS reports before 1997 and relevant BIS speeches, minutes, working papers and press statements. The BIS sources are complemented by an analysis of supplementary material provided by the IMF and EU institutions. Secondly, the study of primary sources is supplemented by a literature analysis of the Keynesian schools of thought on financial regulation published since 1990 until the Crisis.

An historical analysis published in the BIS Quarterly Review of March 2010 has shown that the term “macroprudential” was firstly applied 1979 in an international meeting of the Cooke Committee, the BIS predecessor organization (Clement, 2010). Defined in opposition to “microprudential” economics, the macroprudential approach was established as systemic financial market risk analysis. The assessment of systemic risk could not be provided by the microprudential analysis of banks at individual level. The principal goal of macroprudential policymaking was then, as it is now, the stability and soundness of the financial system. In the 1980s, the macroprudential idea was mentioned in several reports, most prominently in the Cross Report in 1986 (Bank for International Settlements, 1986). The authors explicitly recommended in a special section on macroprudential policymaking “substantial adjustments (...) to financial regulation” (p. 2). Still, apart from these report appearances, macroprudential did not start a major career during that time.

During the 1990s, the macroprudential idea developed further and was increasingly included in reports, minutes, settlements and policy proposals. Results show that macroprudential policymaking was primarily institutionalized within the BIS. The following table 4.1 summarizes the main references during that decade. The data was provided by the annual BIS report 1997.

Table 4.1: Selected joint central bank initiatives: macro-prudential level

Year	Area	Summary
1990	Interbank netting	Report of the Committee on Interbank Netting Schemes of the central banks of the Group of Ten countries (Lamfalussy Report). Recommends a set of minimum standards for the operation of cross-border multicurrency netting schemes and sets out the principles of cooperative central bank oversight.
1992	Securities settlement	Delivery versus payment in securities settlement systems (G-10). Defines and analyses the types and sources of risk associated with securities settlement between participants in a single settlement system.
1993	LVTS	Minimum common features for domestic payment systems (EU). Sets out minimum standards for LVTS and recommends the adoption as soon as possible of an RTGS system into which as many large-value payments as possible should be channelled.
1994	Electronic money	Report on prepaid cards (EU). Analyses this new payments technology and recommends that only credit institutions (banks) should be allowed to issue multipurpose prepaid cards.
1996	Forex settlement	Settlement risk in foreign exchange transactions (G-10). Provides a clear definition of foreign exchange settlement risk, a corresponding method for its measurement and a strategy for reducing it by encouraging action by individual banks, industry groups and central banks.
1996	Derivatives markets	Proposal for improving global derivatives market statistics (G-10). Sets out a detailed proposal for the regular (semi-annual) collection and publication of statistics on OTC derivatives.
1996	Electronic money	Implications for central banks of the development of electronic money (BIS). Analyses the policy issues of particular concern to central banks, including those related to the oversight of payment systems, seigniorage, monetary policy and banking regulation and supervision.
1997	Securities settlement	Disclosure framework for securities settlement systems (G-10 and IOSCO). Encourages transparency in the operation of securities settlement systems.
1997	LVTS	Real-time gross settlement systems (G-10). Addresses the risks involved in, and the design of, RTGS systems.
1997	Derivatives settlement	Clearing arrangements for exchange-traded derivatives (G-10). Describes the structure of existing clearing arrangements and identifies potential weaknesses.

Source: Data adapted from Bank for International Settlements (1997, p.150)

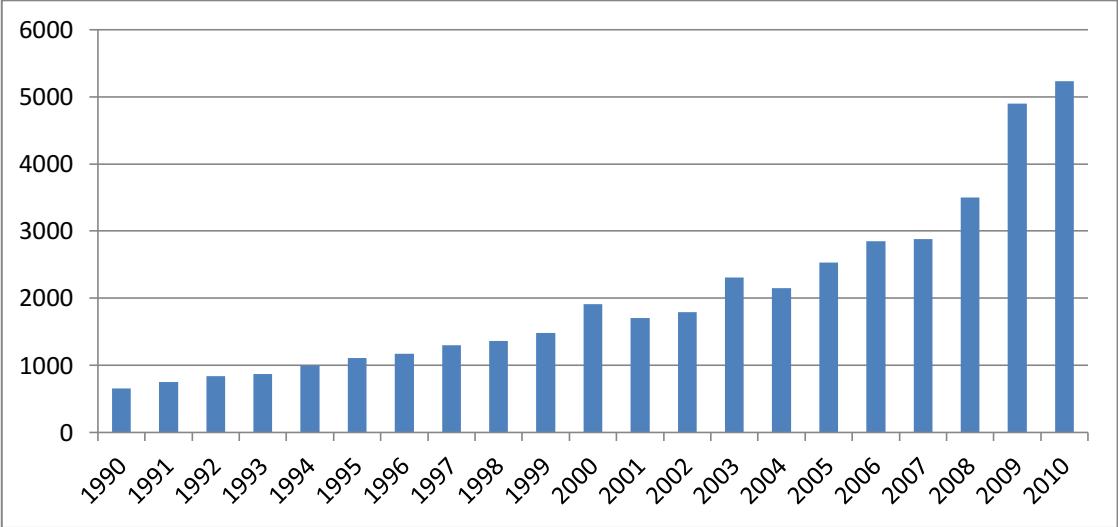
Whereas the macroprudential idea appeared prominently in the 1997 report, it was not mentioned in the following three BIS annual reports. Only the general term prudential was referred to in brief passages. However, following the Asian financial crisis at the end of the 1990s, the macroprudential term was partly adapted by the IMF in the context of improved macroeconomic statistical indicators to measure financial vulnerabilities (International Monetary Fund, 1998, p. 13).

In the 2000s, before the outbreak of the Crisis, the idea of macroprudential supervision increasingly became institutionalized and gained importance. The term “macroprudential” was included in all BIS annual reports, except for 2006 when only the general term “prudential” was used. In 2001, the Monetary and Economic Department of the BIS held a special Governors’ seminar for central bank senior officials on the micro- and macro- prudential dimensions of financial regulation (BIS, 2001, pp. 158–159). In the next year’s report, different exclusive sections on macroprudential policymaking are included, i.e. two main sections on the measurement of macroprudential regulation and macroprudential policy reform recommendations (BIS, 2002). Another main section “towards a more operational macroprudential framework” was included in the 2005 annual report (BIS, 2005, pp. 135–139). The macroprudential institutionalization at the BIS was also reflected in a number of

senior management speeches, such as the remarks on “marrying the micro- and macro-prudential dimensions of financial stability” by Crockett, former BIS General Manager, at the Eleventh International Conference of Banking Supervisors (Crockett, 2000). So, the idea of macroprudential surveillance existed before the Crisis and became primarily institutionalized within the BIS.

As a major school of modern macroeconomics, Keynesianism was well-known and institutionalized before the Crisis. However, of particular interest for the financial regulation field are the theoretical extensions of Keynesianism by Minsky (1977). He derived the financial instability hypothesis from general Keynesian theory and thus, specified the theoretical foundations of Post and New Keynesian theory on financial economics. According to him, financial institutions over-speculate in up-phases of business cycles and under-invest in down-phases when investment and credit are most necessary. So, financial systems seem most stable in times when they are basically most vulnerable. During the last decades, New and Post Keynesian research on financial stability has further developed and provided a theoretical alternative to mainstream economics. The following table presents data on publications from 1990 to 2010 which include the terms “Keynes” and “financial regulation”.

Figure 4.1: Number of publications per year on Keynesian theory of financial regulation



Source: Google Scholar, data on publications only (patents and citations excluded)

The data shows that annual publication numbers on Keynesian financial regulation have constantly grown. So, Keynesian theory was a permanent alternative approach to the EMH, even though its influence on policymaking had been limited before the Crisis in 2008. Publication data after the Crisis reflects the Keynesian renaissance in practically all domains of macroeconomics. Overall, it has become evident that the ideational elements of the new technocracy were developed before the Crisis and provided an alternative agenda. The next part presents the critical juncture analysis.

4.4.2. Critical Junctures

To investigate whether the Crisis has indeed been a critical juncture and opened a window of opportunity for ideational and institutional change, expert interview partners were asked to think back to the peak of the Financial Crisis and then answer the question whether they or their colleagues did question the paradigm of mainstream economics by that time. Ten out of 15 experts reported that this had clearly been the case. In addition, two experts from a European regulatory agency and a competent national authority argued that the questioning of the mainstream paradigm

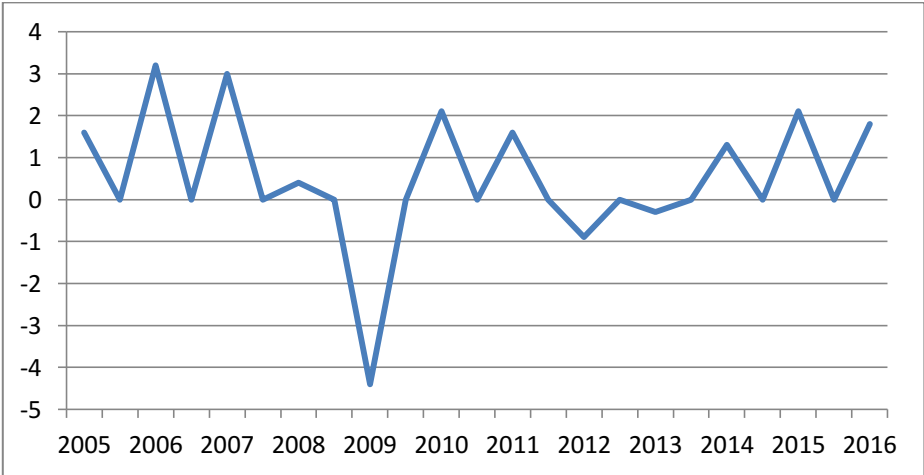
rather took place in the post-Crisis years than at its peak (B1, C1). Only two interviewees reported that the mainstream paradigm had not been questioned (C3, D3) or were unsure about this development (C2). Overall, the expert interview data suggests that the Crisis had been a dramatic moment which broke with pre-Crisis economic assumptions. This finding is also reflected in the large number of institutional reforms and policy initiatives immediately established during and directly after the Crisis (compare table 2.3 in chapter two).

As particularly underlined by a highly experienced EC senior staff member, the paradigm of mainstream economics in the financial regulation field had also been questioned before the Crisis. However, people were not loud enough with their criticism (B2). Similarly, two senior staff members from other EU financial institutions pointed out that the Crisis clearly led to the recognition of the deficits of mainstream economics (B4, B5). The questioned expert of a European regulatory agency explicitly reported that he had wondered whether the theoretical assumptions he learned at university were actually accurate (B4). The strongest doubts on the mainstream paradigm in the pre-Crisis era were stated by a NGO senior staff member and former investment banker by pointing out that the Crisis led the efficient market assumption *ad absurdum* (D1).

A high-level ECB senior staff member particularly highlighted that risks to financial stability were not perceived as relevant in the decades before the Crisis. Additionally, the belief in the efficiency of the financial market was remarkably strong (A1). The same expert further noted that macroeconomic DSGE models ignored potential financial sector instabilities. Thus, central bank forecasting models were useless in the moments of Crisis. This perspective changed after the Crisis, partly because members of the ECB research department left the organization or were transferred to other departments in the years after the crash. These findings were also supported by ESRB senior staff members who underlined that the importance of the financial sector for the economy had been fundamentally underestimated before the Crisis (A2, A3).

These findings are reflected as well in the following graph. The figure shows the annual growth rates of real GDP in the euro area from 2005 to 2016. Differences are expressed as percentage change on the previous year. The collapse of annual growth rates into negative values clearly reflects the critical loss of economic output in the euro area. The collapse of the financial markets had a large impact on the real economy. The severity of the Crisis has been unprecedented in the last decades.

Figure 4.2: Annual real GDP growth rate in the euro area from 2005 to 2016



Source: Eurostat, Real GDP growth rate - volume, Code: tec00115

Overall, the analysis in this section has shown that the 2008 Crisis has indeed been a critical juncture with an enormous effect on subsequent institutional developments. The next section analyzes the uncertainty level during the Crisis.

4.4.3. Uncertainty

To analyze whether the level of uncertainty had significantly risen during the Crisis, interviewed experts were directly asked whether they remembered a kind of institutional uncertainty during or after the Crisis. Responses to this question have been very concise with 12 out of 15 experts from all categories reporting that uncertainty has been high during and after the Crisis. Particularly the senior staff members of the ECB and the ESRB strongly emphasized that uncertainty had been enormous at all possible levels and policy choices could not be made on the basis of pre-Crisis models (A1, A2). A high-level expert from a European regulatory agency even declared that the whole financial system had been questioned (B4). In the same way, a senior staff member of a competent national regulatory authority pointed to high uncertainty in the decision-making process (C1). Similarly, an EC senior staff member explicitly highlighted the huge Crisis impact on the uncertainty level due to undermined confidence in the financial system (B2). These findings are also confirmed by the OECD Business Confidence Index (BCI) (see figure 4.4). Additionally, the Crisis had revealed an unclear distribution of responsibilities across different EU institutions. Apparently no organization or agency had clear responsibilities for the stability of financial markets (B2).

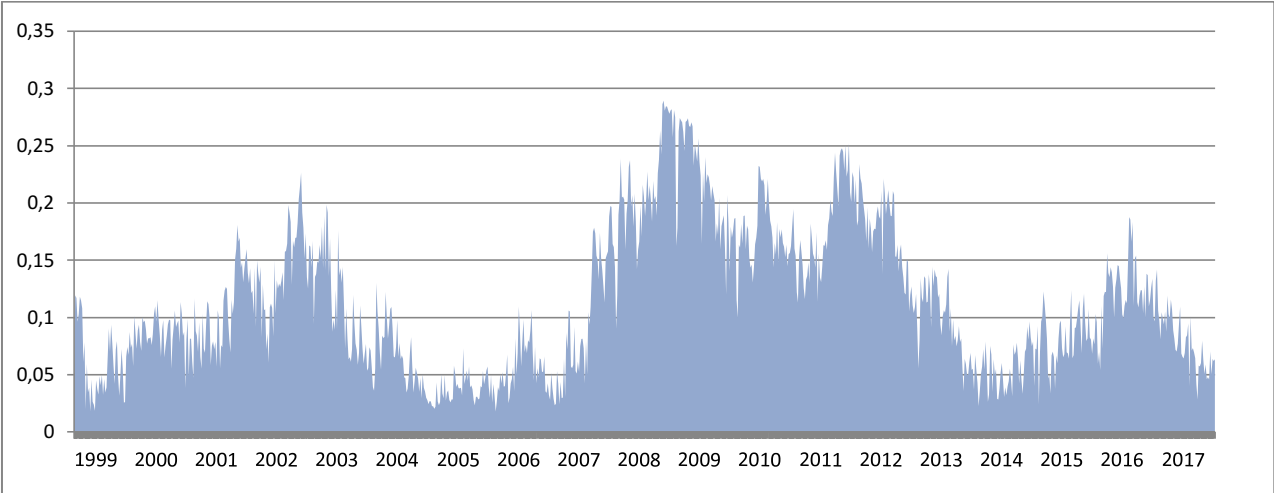
Among the expert interview partners who were unsure about increased uncertainty during the Crisis, two experts argued that reforms were quickly established after the Crisis and uncertainty had therefore been limited (B1, C2). Nevertheless, strong debates about policy choices had taken place (B1). As pointed out by the expert of a competent national authority, the FSB quickly provided a clear guideline to re-establish financial stability (C2). Apparently, the FSB was one of the main actors during and after the Crisis. The expert from a national central bank further highlighted that uncertainty particularly increased regarding the euro currency development. Two years after the Crisis there were still fundamental doubts about the institutional design of the Eurozone (C3).

Experts from the private sector further stressed another aspect of institutional uncertainty after the Crisis. The questioned CEO of a private investment company highlighted that it became evident during the Crisis that financial regulation inherently runs behind dynamic market developments. The interviewee had been frequently approached by regulatory authorities for advice on crisis dynamics and specialized financial products during and after the Crisis (D2). A global investment bank board member further reported in this regard that the main challenge had been to overcome uncertainty about how to prevent contagion effects (D3). Finally, another questioned international private bank senior staff member highlighted the enormous uncertainty after the Crisis and figuratively compared the situation to the collective helplessness after the 9/11 terror attacks (D4). Overall, the expert interview analysis points to a high level of institutional uncertainty during and after the Crisis.

The results of the expert interview analysis largely correspond to indicator-based empirical findings. The following figure shows the development of the Composite Indicator of Systemic Stress (CISS) provided by the ECB on a daily basis. The CISS measures systemic stress nearly in real time and is comprised of “five market-specific subindices created from a total of 15 individual financial stress measures” (Hollo, Kremer, & Lo Duca, 2012, p. 1). These subindices relate to the five most important sectors of a financial system: bank and non-bank financial intermediaries, money markets, securities

markets and foreign exchange markets. Furthermore, the CISS stronger emphasizes situations in which stress prevails in more than one market segment at the same moment (Hollo et al., 2012, pp. 2–3). So far, the CISS could be considered as the most comprehensive indicator of financial stress.

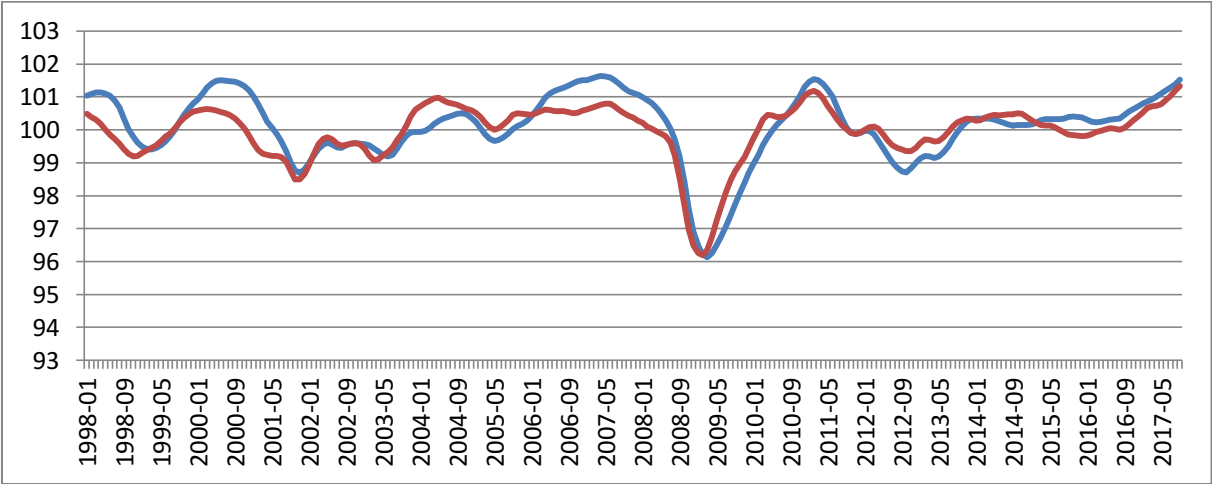
Figure 4.3: CISS development in the euro area from 1998 to 2010



Source: ECB, euro area (changing composition), CISS, index, series Key: CISS.D.U2.Z0Z.4F.EC.SS_CI.IDX

The data reflects the expert interview information with a sharp increase around the peak of the financial Crisis in 2008 and the subsequent years. The sovereign debt crisis 2010/2011 following the 2008 banking crisis is reflected by a second peak. Evidently, the financial Crisis has led to high uncertainty and systemic stress in the market. These results also correspond to data information of the Business Confidence Index (BCI), provided by the OECD. The BCI complements the CISS index as a qualitative index on economic conditions. Thereby, the BCI is based on firms’ evaluations of production, orders and stocks and their current positions and expectations for the near future. The following figure presents the BCI index for the euro area (blue) and all OECD states (red) from 1998 to 2017 on a monthly basis. The amplitude is adjusted and the long-term average sums up to 100.

Figure 4.4: BCI development from 1998 to 2017



Source: OECD (2017), Business confidence index (BCI) (indicator)

The BCI shows a dramatic confidence loss in the business climate around the Crisis peak in 2008/09. The sharp decrease has been stronger in the euro area than in the total of OECD states. It seems that

uncertainty about the future of economic and financial developments has been extraordinary. Overall, this section has shown that uncertainty has been extremely high during and shortly after the Crisis. The next section discusses the results in light of the paradigm elimination argument.

4.5. Discussion

Ten years after the Crisis, the new outcome and the far-reaching consequences of the paradigm change in the Eurozone financial regulation policy field have become evident. However, the process dynamics of institutional change in the post-Crisis era have remained unclear. The result section of this chapter has shown that three hypothesized causal factors have been relevant in the Eurozone case and led to the fast elimination of the pre-Crisis economic paradigm. This finding is particularly interesting because the process dynamics are fundamentally different from the earlier paradigm change from Keynesianism to Monetarism. Premised on the incremental paradigm deconstruction process of Keynesianism during the 1970s, the gradual deconstruction of the EMH paradigm after 2008 would have been most likely. Instead, three sequential causal factors have rapidly eliminated the old paradigm. Apparently, the external shock of the biggest financial and economic crisis since the Second World War has been too strong for the pre-Crisis paradigm to continue. The following passages briefly discuss the results in light of the theoretical argument of this chapter.

4.5.1. Existence of alternative ideas

Following Kingdon's (1984) argument on the existence of alternative ideas, this chapter started from the hypothesis that ideational elements of the new technocracy paradigm in Eurozone financial regulation have a) existed before the 2008 Crisis, b) attained a basic institutionalization level and c) have been backed up by at least one significant policy entrepreneur. The findings have shown that these criteria have indeed been met. The macroprudential idea has been developed within the BIS for decades and its origins go back to the 1970s. This evolution has been reflected by the growing inclusion of the macroprudential term in annual reports and other publications of the BIS. However, despite the steadily growing importance of the idea, macroprudential surveillance never had a major breakthrough until the Crisis.

Table 4.1 has revealed that the macroprudential idea did not "only" exist similar to other approaches, but reached a sufficient level of institutionalization during the 1990s. As a policy entrepreneur, the BIS promoted the macroprudential idea among national central bankers and pushed for stronger anchoring of macroprudential principles. Other international organizations like the IMF also adopted the terminology. So, MPS provided for a coherent alternative policy agenda to re-establish financial stability when the Crisis fundamentally hit the global markets in 2008. Same is true for New and Post Keynesian literature. Although the particular influence of Keynesian theorizing on financial regulation had been limited in the decades before the Crisis, figure 4.1 has shown that this school of thought has constantly developed further. During and after the Crisis, many economists re-engaged in a Keynesian discourse. Whereas the macroprudential approach was driven by international economic organizations and only gradually taken up by academia, the revival of a Keynesian discourse after the Crisis rather happened in the academic world.

Both the macroprudential approach and the newly evolved Keynesian discourse largely meet Kingdon's criteria for the survival of ideas (Kingdon, 1984, pp. 138–146, 209–210). However, the prior institutionalization and policy entrepreneurs backup of the macroprudential idea was stronger

compared to the Keynesian argument in the financial regulation policy field. Especially, the ideational fit of both ideas corresponded to the overall values of the policy community members after the Crisis. In the same way, the technical feasibility criteria were given in both the macroprudential and Keynesian approach. Both ideas have offered an applicable policy solution to re-establish financial stability. Still, the MPS policy agenda was more coherent and precise concerning financial regulation as it had mainly been developed within central bank organizations. Overall, the core elements of the New Technocracy paradigm were developed before the Crisis and built the fundament of a potential paradigm change in Eurozone financial regulation.

4.5.2. Critical Junctures

The result section started from the hypothesis that the financial Crisis in 2008 has indeed been a critical juncture and opened a window of opportunity for ideational and institutional change. As presented in figure 4.2, the loss of economic output during and shortly after the Crisis was enormous. Furthermore, the expert interview analysis has shown how far-reaching the consequences of the Crisis were considered at that time. The belief in the stability of financial markets in the pre-Crisis era had never been clearly challenged. Yet, this belief was abandoned quickly during the Crisis. Overall, the findings conclusively suggest that the severity of the 2008 Crisis corresponded to the largest cutting-in economic and financial event during the last decades. So, the Crisis largely fulfills the criteria of a critical juncture. As shown in chapter two of this volume, the window of opportunity for institutional change in the post-Crisis years has been wide open.

The analysis of paradigm change in the third chapter has revealed that institutional change after the Crisis could broadly be divided in two different phases. The first pattern lasts until the European elections in 2014, which led to significant EC composition changes. Most new fundamental regulatory legislative proposals were completed by then. In the second phase, starting after the European elections, a pattern of incremental change within the new institutional framework has developed. These surprising findings could be explained by Soifer's argument on the distinction of permissive and productive conditions (Soifer, 2012, pp. 1573–1576).

As indicated in the first section of this chapter, permissive conditions act as scope conditions and define the length of a critical juncture. By contrast, productive conditions are the factors which shape the new outcome after a critical juncture. Following the paradigm conceptualization in chapter three, the productive conditions which shape the New Technocracy paradigm correspond to the key characteristics of systemic riskification, quantification and expertization. These three trends are the constitutive elements which have shaped the post-Crisis outcome of Eurozone financial regulation.

This chapter's result section has pointed to the collapse of economic output and massive financial instability during the Crisis. These factors can be interpreted as permissive conditions. Additionally, expert interview results presented in chapter two indicate that the institutional composition of the EC and the EP can be interpreted as permissive conditions, too. The European elections were a turning point in the paradigm change process. Since 2014, the window of opportunity for radical institutional change seems to have been closed again. Further studies on the configuration of productive and permissive conditions of the 2008 Crisis would be highly relevant in this regard.

4.5.3. Uncertainty

In this chapter it was hypothesized that the level of uncertainty in Eurozone financial regulation has significantly risen during the Crisis. The findings presented in this chapter strongly suggest this has indeed been the case. As shown in the result section above, business confidence has crashed whereas systemic financial stress has enormously grown. Furthermore, the expert interview analysis has highlighted that pre-Crisis models failed to predict the crisis resulting in large uncertainty about “right” policy choices at all levels. Thus, fundamental doubts about the pre-Crisis mainstream paradigm in the financial regulation policy field arose.

Following the categorization in three different worlds, financial regulation during and after the Crisis most likely belonged to the type3-scheme (Abdelal et al., 2010a; Blyth, 2011; Taleb & Pipel, 2004). Generators of financial stability were uncertain and the extreme financial systemic stress was unforeseeable. As highlighted by the interviewed senior staff members of the ECB and the ESRB, theories based on past data did not offer predictability of the Crisis outcome (A1, A2). Overall, these findings are crucial because a high uncertainty level increases the influential power of ideas (Jacobsen, 1995, p. 293). Therefore, the uncertainty assumption is a necessary condition for the establishment process of a new paradigm. The next chapter specifies this process.

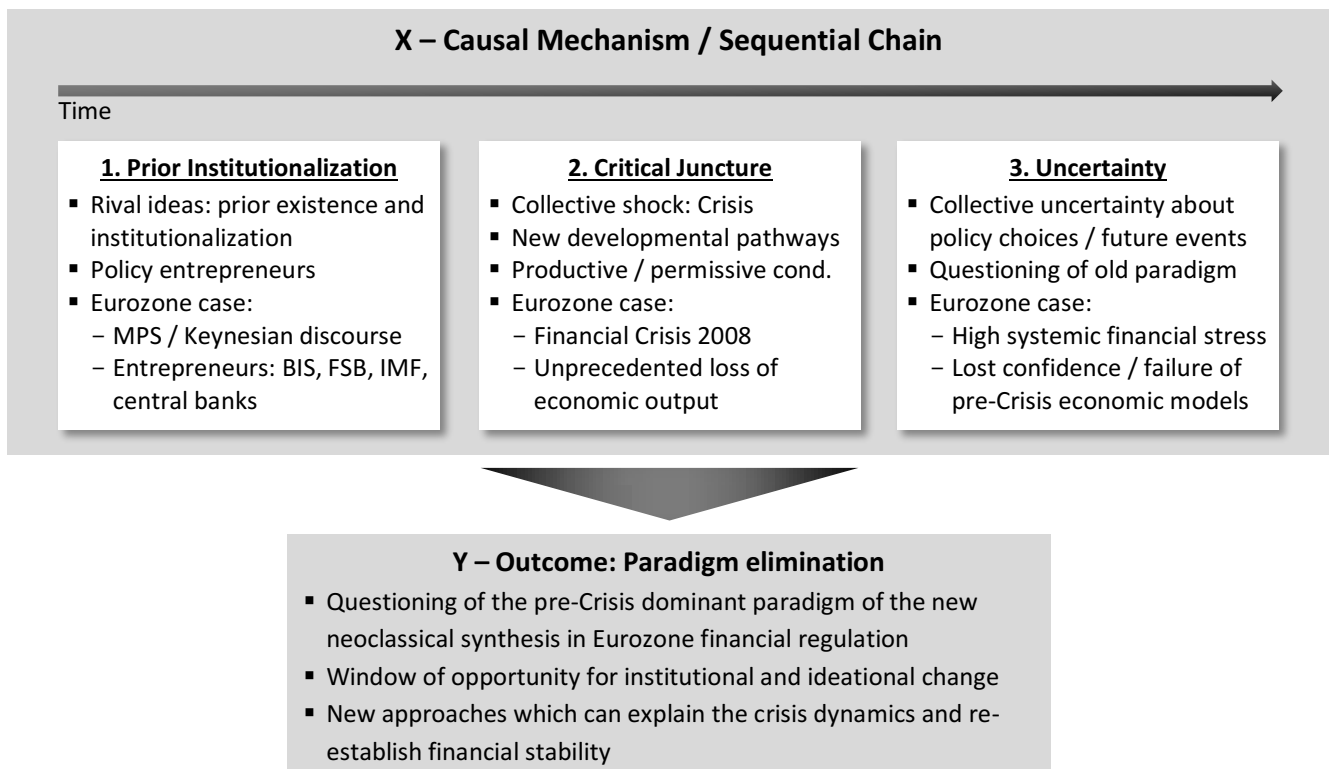
Furthermore, particularly interesting is the statement by a senior expert from a national competent regulatory authority, that the FSB quickly provided for a plan and guidelines on what to do to re-establish financial stability. This result points to the elementary role of the FSB in shaping policymaking choices during the Crisis. It further indicates the advantageous starting position of the macroprudential approach to challenge the pre-Crisis paradigm due to its prior institutionalization within the BIS and the FSB. Overall, the uncertainty level has significantly risen during the Crisis.

4.5.4. General implications

Mehta (2011) and others claimed that most attention in institutional change literature lies on the establishment of new ideas and less on the wearing down process of the old idea. This chapter has made a contribution to more concisely investigate the wearing down dynamics of paradigm change. For this purpose, in this book section, arguments by Hall (1989), Kingdon (1984) and historical institutionalism have been combined to develop a paradigm elimination model. This model has been tested and fine-tuned in the case of Eurozone financial regulation after the 2008 Crisis. Despite Blyth's arguments that the time frame was too short and the locus of authority had not shifted, the old Eurozone financial regulation paradigm has been abandoned quickly (2013, pp. 208-210). Hence, if the impact of a crisis is as massive as in 2008, the previously dominant paradigm can be eliminated even if the locus of authority had not gradually shifted before. Furthermore, the old paradigm abandonment does not necessarily require an incremental process of deconstruction as in the 1970s and 80s, but can proceed extraordinarily fast if the critical juncture is strong enough.

The goal of this chapter has been to develop an approach which should offer a starting point for future research on other cases as well. Results from the Eurozone case have shown that the pre-existence of alternative ideas, a critical juncture and collective uncertainty are INUS conditions for paradigm elimination. However, the investigated model of paradigm elimination does not deny other potential explanations or causal process dynamics. But, based on previous theoretical arguments, this approach is arguably the most plausible configurational causal mechanism of paradigm change in the Eurozone case. The following figure summarizes the main results.

Figure 4.5: Elimination of the old paradigm



Source: author

In line with the theoretical argument on the wearing down process of the “old” idea, the developed mechanism builds the fundament for the evolution of a new paradigm (McNamara, 1998, pp. 64–65; Mehta, 2011, p. 31). With special consideration of collective uncertainty after the Crisis, it has become clear how fragile previously perceived stability could be. Following Blyth’s assumption that “human agents create the stability that they take for granted”, in phases of high uncertainty the construction of new institutions is likely (Blyth, 2011, p. 96).

4.6. Conclusion

This chapter has brought forward two main contributions. Firstly, different theoretical arguments on institutional and ideational change have been combined to derive a model of paradigm elimination. This is particularly important as existing research has neglected the wearing down aspect of the old paradigm. Secondly, this chapter has tested and fine-tuned the paradigm elimination model in the extraordinary case of Eurozone financial regulation after the 2008 financial Crisis.

Following the common theme of this volume, this chapter has partly answered the question how the Eurozone financial regulation paradigm has changed so quickly after the Crisis. Thereby, this book section builds on the previous chapters, which have shown that indeed a paradigm change has taken place and have further conceptualized the new paradigm. At a more general level, this chapter has shown that the paradigm change of Eurozone financial regulation is extraordinary. The elimination of a formerly dominant paradigm can proceed quickly and without a locus of authority shift. To master the uncertainty of the world in which they live, humans create the stability which they then take for granted. In times of uncertainty, this construction can be fundamentally shocked and replaced by a new overall paradigm. The following chapter investigates this process of paradigm establishment.

5. Establishment of the new paradigm

Abstract

The new technocracy quickly replaced the efficient market hypothesis as the dominant paradigm of Eurozone financial regulation after the financial crisis in 2008. But the causal factors which lead to this change remain unclear. This chapter develops a coherent paradigm change model. Building on the paradigm elimination mechanism, the research approach of this book section is twofold. Firstly, this chapter analyzes the causal mechanism of paradigm establishment. Thereby, I argue that two causal factors can most plausibly be derived from ideational change theory: paradigm adoption and re-definition of actor expectations and policy goals. Secondly, this chapter investigates the criteria which influence the successful implementation of new ideas during the paradigm adoption phase. The methodological approach is based on theory-testing causal process-tracing of Eurozone financial regulation after the Crisis. Following the argument of analytic eclecticism, this chapter combines different theoretical approaches. Findings suggest that the fit of a new initiative with the overall theoretical framework and the support of political parties are the most relevant criteria of paradigm adoption. Furthermore, policy goals of European financial institutions significantly shift after the Crisis. Thereby, it becomes evident that the elimination of an old paradigm does not necessarily lead to paradigm competition. Instead, rivalry can be limited to the institutional level.

5.1. Introduction

“The king is dead, long live the king!” The new technocracy, influenced by the idea of MPS and Keynesian renaissance, has replaced the efficient market hypothesis (EMH) as the dominant financial regulation paradigm. As shown in the previous chapter, the EMH was quickly eliminated at the peak of the 2008 financial crisis. Subsequently, Eurozone financial regulation enters an uncertainty phase. In this situation, previously firm beliefs are scrutinized. So far, the causal factors which then lead to the establishment of a new paradigm are unclear.

The research approach of this chapter is twofold. Firstly, this chapter analyzes the causal mechanism of paradigm establishment after the Crisis. I argue that two causal factors are crucial: a paradigm adoption phase and the re-definition of actor expectations and policy goals. Secondly, this chapter analyzes the key criteria which influence the implementation of new ideas during the paradigm adoption phase. Along with chapter four, this chapter develops a coherent paradigm change model.

Premised on theory-testing causal process-tracing, hypothesis on the establishment of the new paradigm are derived and tested from institutional and ideational change literature. This chapter draws mainly from Hall's (1989) paradigm change model. Additional theoretical insights are taken from Kingdon (1984) and Sabatier (1998). Therefore, this chapter follows Sil and Katzenstein's (2010) argument of analytical eclecticism in the study of world politics. In this regard, analytical eclecticism refers to the selective utilization of theoretical constructs across different research traditions. Thus, it becomes possible to problematize complex phenomena which are otherwise sliced into smaller puzzles by specific research traditions (Sil & Katzenstein, 2010, p. 426). Besides, analytic eclecticism investigates links between different types of mechanisms which are otherwise treated separately. This chapter bridges gaps between different models of institutional and ideational change.

In the paradigm adoption phase, new ideas and propositions influence the formation process of a new paradigm. Yet, it is a key challenge to examine why some ideas are successfully implemented whereas others fail (Berman, 2013, p. 229). Hall (1989) defines three categories of criteria which influence the implementation of new ideas: economic, political and administrative viability. Kingdon (1984) further specifies the role of policy entrepreneurs and the recoupling process of different ideational elements. This chapter analyzes these criteria in a comparison of two Eurozone financial regulation initiatives. Whereas the CRR/CRD IV reform has been implemented, the banking structure reform has failed. Findings suggest that political actor support and “ideational fit” of new initiatives with overall economic theories are the most important criteria for paradigm adoption. The paradigm adoption phase is followed by the re-definition of actor expectations and policy goals.

Furthermore, the establishment process of a new paradigm requires the re-definition of actor expectations and policy goals. Once a new paradigm emerges from the paradigm adoption phase, it again predefines policymaking actions. Thus, previously existing actor expectations and policy goals are re-defined. Premised on Sabatier's (1998) belief system differentiation, this chapter analyzes the shift of deep core, policy core and secondary beliefs of Eurozone financial regulation actors. Additionally, this chapter analyzes the policy goal change of the ECB as the most relevant Eurozone financial organization. Additional insights are provided by other EU regulatory agencies. Results show that the shift from the bail-out to the bail-in principle is highly relevant. Furthermore, goals and expectations of the ECB are fundamentally changed compared to the pre-Crisis era.

The research design builds on the previous chapter. The focus is based on theory-testing process tracing of paradigm establishment (Beach & Pedersen, 2013, pp. 11–17). Additionally, elements of theory-building are also included as the hypothesized causal factors are further developed following the empirical exposure to the Eurozone case. Thereby, a causal mechanism is understood as a configuration of causal conditions in sequential order that together are sufficient for the outcome. The different parts of the overall causal mechanism are modeled as insufficient but necessary conditions of an unnecessary but sufficient condition (INUS). Following the best practices in process tracing, this chapter's data collection carefully considers data triangulation and uses data from mutually independent sources (Bennett & Checkel, 2015, pp. 20–21). The data collection includes different indicators and primary sources of Eurozone and global financial regulation institutions. Furthermore, information has been gathered in 15 expert interviews with high-level senior management from the ECB, European and national regulatory agencies and the private sector.

The chapter is divided in five different parts. The first section presents the theoretical argument. The second part includes methods, research design and hypotheses of the process tracing approach. The third section presents the results. The fourth part discusses the results in light of this chapter's theoretical argument. The final section concludes on the main contributions of this book section.

5.2. Paradigm establishment

The previous chapter has elaborated on the wearing down process of the 'old' paradigm. Contrary to the shift from Keynesianism to Monetarism during the 1970s, the paradigm elimination after the 2008 Crisis proceeds quickly without a long deconstruction process. Analogous to the quick paradigm elimination, the establishment of the new technocracy in the Eurozone takes place relatively fast. But only because the previously dominant paradigm is eliminated, a new paradigm is not automatically established. So far, the causal mechanism which leads to the establishment of the new technocracy remains unclear. In this section, I derive the most plausible causal factors of paradigm establishment from theoretical models of ideational and institutional change. Furthermore, following the argument of analytical eclecticism, the combination of elements from different theoretical models is discussed.

Firstly, following the argument of productive incoherence, the elimination of a dominant paradigm is followed by an in-between stage of new evolution opportunities and ideational pluralism (Grabel, 2011, p. 828). In this chapter, this interregnum phase is referred to as 'paradigm adoption', which opens a window for encompassing structural and ideational changes. However, whereas some ideas are successfully implemented, others fail (Berman, 2013, p. 229). To investigate the criteria which influence the adoption of new ideas, this chapter builds on Hall's (1989) three-viability concept. However, Hall focuses only on structural criteria and says little about agenda-setting of ideas or institutional actors which specifically back up certain ideas. In this regard, additional insights can be drawn from Kingdon's (1984) three-stream model. Kingdon explicitly theorizes the role of policy entrepreneurs and elaborates on agenda-setting and recoupling processes of ideas.

Secondly, this chapter analyzes the re-definition of actor expectations and policy goals once a new paradigm emerges from the paradigm adoption phase. In this regard, the analysis is premised on assumptions of the advocacy coalition framework (ACF). Based on the ACF, individuals face limits of processing stimuli and simplify the world via belief systems. Belief systems are implicitly reflected in policies and can be differentiated in three levels depending on their frequency of change: deep core,

policy core and secondary beliefs (Sabatier, 1998, p. 103-104). This distinction is relevant to analyze whether a new paradigm translates into changed institutional policy output. The next passages discuss the combination of assumptions from different research traditions in a single model.

The combination of assumptions from different institutional and ideational change models is premised on Sil and Katzenstein's (2010) argument of analytical eclecticism in the study of world politics. In this regard, they define analytical eclecticism as follows:

Analytic eclecticism is not an alternative model of research or a means to displace or subsume existing modes of scholarship. It is an intellectual stance that supports efforts to complement, engage, and selectively utilize theoretical constructs embedded in contending research traditions to build complex arguments that bear on substantive problems of interest (2010, p. 411).

According to Sil and Katzenstein, analytic eclecticism is characterized by three features (p. 416-421). Firstly, analytic eclecticism follows an "ethos of pragmatism" (p. 411). In this respect, it engages with concrete policy problems and downplays the supposed unresolvable incommensurability from different research schools. Secondly, analytic eclecticism focuses on the 'big picture' of problems. Thereby, it exceeds narrowly defined questions within a particular research tradition and addresses the high complexity of real world problems. Thirdly, due to this wider scope problem focus, analytic eclecticism generates complex causal stories. These stories consider possible interactions among "different types of causal mechanisms" which are otherwise analyzed in isolation from each other (Sil & Katzenstein, 2010, p. 412). Thus, this chapter's research approach generates fruitful insights on paradigm change which could not be made by focusing on only one theoretical model.

This chapter aims to contribute to current debates on ideational and institutional change by the development of a coherent paradigm change model. Together with chapter four, this model includes both the elimination process of the old and the establishment of the new paradigm. Furthermore, the paradigm establishment process includes criteria for the adoption of new ideas. Thus, this chapter's research approach meets Sil and Katzenstein's (2010) requirement of a wide-scope research focus. In addition, it combines elements from different research approaches and detects a complex causal mechanism. Hence, it fulfills the features of the analytic eclecticism approach.

Overall, I argue that the recombination of paradigm change models by Hall (1989) and Kingdon (1984) and the ACF is complementary. Whereas Hall focuses on structural criteria, Kingdon adds insights on ideational recoupling, policy entrepreneurs and agenda-setting. Furthermore, an overall paradigm change not only necessitates new paradigm adoption but also the re-definition of policy goals and actor expectations within the new paradigm. In this regard, the ACF theorizes the change of belief systems and actor expectations. The next part elaborates on the paradigm adoption phase.

5.2.1. Paradigm adoption

Starting from Grabel's productive incoherence argument, this section theorizes the phase of paradigm adoption. Based on an analysis of IMF policy changes before and after the Crisis, Grabel analyzes productive incoherence in opposition to neoliberal coherence (Grabel, 2011, 2015a, 2015b). Productive incoherence means the "proliferation of responses to the crisis (...) that to date have not congealed into any sort of consistent strategy or regime" (2011, p. 807). This "interregnum" is marked by uncertainty about future outcomes and aperture of economic ideas. Thus, it opens a window for encompassing structural and ideational changes (2011, p. 805, 825). However, contrary

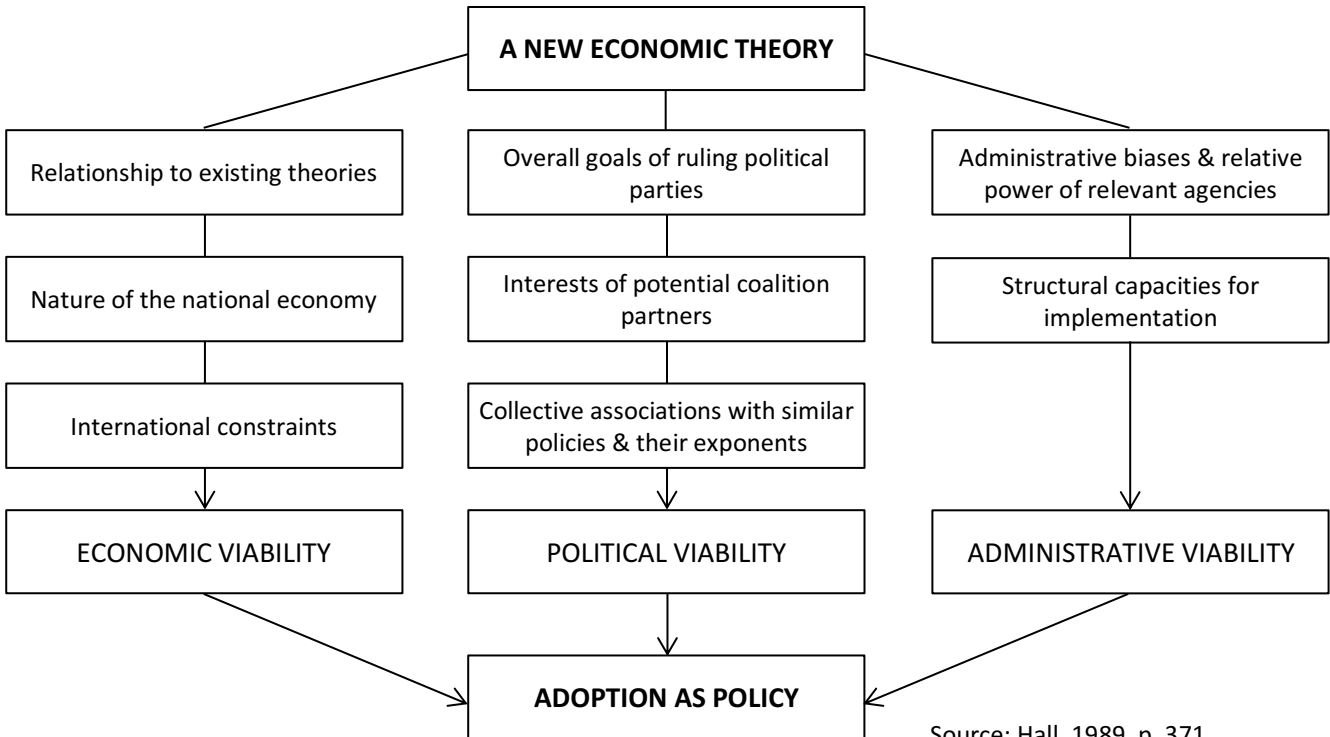
to incoherent post-Crisis IMF policymaking, the new technocracy has quickly been established as the new paradigm of Eurozone financial regulation. Thus, to not only include post-Crisis incoherence but further emphasize the paradigm formation aspect, I refer to this interregnum as paradigm adoption.

This section builds on Hall’s (1989) three viabilities model to analyze which criteria influence the implementation of new ideas during the paradigm adoption phase. Complementary insights on agenda-setting and the role of policy entrepreneurs are taken from Kingdon’s (1984) three-stream model. Although developed decades ago, the approaches by Hall (1989) and Kingdon (1984) still build the fundament for research on ideational and institutional change (Ackrill & Kay, 2011, p. 85; Berman, 2013, p. 233). Hall’s research on paradigm change “has become a classic in the social sciences” and many of his premises “remain true of contemporary scholarship” (Berman, 2013, p. 217). Furthermore, Kingdon’s multiple stream framework is particularly relevant concerning EU research (Ackrill & Kay, 2011; Corbett, 2005; Cram, 2001; Peters, 1994; Richardson, 2006; Zahariadis, 2008). The next part presents the key insights of Hall’s three-viability model.

Three viabilities

How and why some ideas become more important than rival ones is a key question in ideational research (Berman, 2013, p. 229; Lieberman, 2002; Mehta, 2011). Driven by the question why Keynesianism comes to prominence only in some states and times but not in others, Hall (1989) identifies criteria influencing the implementation of ideas. First, conformity of ideas and institutional conditions is important. The persuasiveness of ideas depends on their fit to current political and economic debates. Second, the interpretation of the same ideas highly varies in different historical experiences. Finally, ideas must come to the attention of decision-makers to unfold causal influence. Hall differentiates his argument in three sub-categories: economic, political and administrative viability. Each category contains different explanatory variables. The implementation of new ideas requires a minimum viability level in each category. The following figure illustrates the assumptions.

Figure 5.1: Factors affecting the adoption of Keynesian ideas



Source: Hall, 1989, p. 371

Economic Viability relates to the content of an economic theory, i.e. its persuasive power and the ability to master urging economic challenges. For example, countries facing high unemployment rates are more likely to implement Keynesian policies than countries fighting high rates of inflation. The main aspects of economic viability are not exclusive, but provide the basis for an analysis of economic structural conditions that facilitate or prohibit the implementation of economic ideas. The main aspects of economic viability are the following:

- *Relationship of new ideas towards existing theories*: in case a dominant paradigm is strong and offers convincing solutions, rival theoretical approaches hardly gain approval
- *Nature of the national economy*: whereas some theories fit better to small open economies, others are better suited for closed industrial countries with well-developed financial systems, e.g. Keynesianism, as financial demand stimuli run the risk of deflagrating in open economies
- *International constraints*: obligations of international treaties may limit the set of available policy options, e.g. criteria of the Stability and Growth Pact (SGP) in the Eurozone

Political viability is important to explain which structural and institutional preconditions favor the implementation of new ideas. In this respect, it refers to the relationship of ideas and interests of political groups that can implement them in the political agenda. According to Hall, the aspect of overall goals of political parties is among the most powerful variables (Hall, 1989, pp. 376–377). Particularly important for the successful implementation of Keynesianism has been the structure of the political discourse. A national political discourse can favor or prevent new ideas by the meaning that it attributes to these ideas. For example, during the 1950s, the UK perceived Keynesianism as a non-interventionist doctrine compared to socialism in Eastern Europe. By contrast, the US framed Keynesian policies as a pathway to communism. Further criteria are interests of coalition partners and the collective association with similar policies and their exponents. For example, in countries where broad societal coalitions in favor of Keynesian policies came to existence, the implementation of Keynesianism is more likely. Furthermore, if an idea is associated with topics being high in the political agenda, e.g. the fight against unemployment, their implementation is more probable.

Administrative Viability contains factors as preferences or prejudices of civil servants and the relative power of significant agencies. The two main criteria are administrative biases and relative power of relevant agencies and structural implementation capacities. In countries where civil servants are rather reluctant towards the implementation of new ideas, their implementation is less likely (Hall, 1989, p. 373). Furthermore, public administrations have to be able to implement new policies or the implementation of new approaches is impossible. In addition, administrative viability comprehends the subordinated aspects of state-society relations and state structure. Various factors influence the institutional arena in which politicians make policy-choices:

- *Permeability of civil services*: institutional frameworks with a high influence from outside economists and public commissions adopt new ideas rather than closed civil servants corps
- *Concentration of macroeconomic management*: countercyclical demand management is easier to implement in countries with a high spending and taxing policy power concentration
- *Power of central banks*: institutional frameworks with weaker central banks tend to adopt Keynesian approaches more often. Central bankers are institutionally concerned about inflation and thus reluctant towards fiscal stimuli

Hall singles out a specific set of conditions for the successful implementation of Keynesian ideas and not economic ideas in general (Hall, 1989, p. 375 - 391). The text above outlines most of the explicit conditions in favor of the adoption of Keynesian policymaking: overall goals of ruling political parties, structure of the political discourse within a country and eventually state structure and state-society relations. Furthermore, Hall highlights the importance of new historic events, as for example, the impact of the Second World War on the rise of Keynesianism. Hirschman (1989) emphasizes in this regard that the success of future economic ideas depends on new cutting events.

The viability model is relevant to explain the adoption of new ideas. However, these criteria say little about the recoupling of elements from different ideational approaches. Furthermore, Hall's model neglects the role of policy entrepreneurs and agenda-setting processes of which ideas make it to the top list. The next part adds to these issues by drawing from Kingdon's (1984) three-stream model.

Three streams

Kingdon (1984) theorizes three streams which together make the time of an idea come: problems, policies and politics. Their coincidence is most likely when a policy window opens, i.e. "an opportunity for advocates of proposals to push their pet solutions, or to push attention to their special problems" (Kingdon, 1984, p. 173). Policy windows result from radical internal changes or external shocks, e.g. government changes after general elections or economic crises. In such situations, the overall policy discourse changes and new ideas arrive on top of the political agenda (Kingdon, 1984, p. 204; Zahariadis, 2014). This section briefly introduces the three-stream model with a special focus on agenda-setting and policy entrepreneurs.

Kingdon differentiates two processes predetermining which ideas or proposals become more successful than their rivals do: agenda setting and alternative specification. Whereas the former is associated with both the problem and the political stream, the domain of alternative specification relates to the policy stream (Kingdon, 1984, p. 204; Zahariadis, 2014, p. 31). The previous chapter has elaborated on the policy stream and alternative specification. The "criteria of survival" by which ideas make it from the primeval soup to the short list have been introduced. However, agenda-setting refers to the process which narrows down the list of important topics to the top priorities which require most attention by the government. The next passages introduce the streams.

Regarding the problem stream, different factors determine why some problems receive considerable attention by policymakers whereas others do not. Main determinants are indicators, external events and feedback about performance or unintended consequences of ideas. Furthermore, the framing of problems is relevant, too (Kingdon, 1984, pp. 119–121, 206–207). For example, the lack in public infrastructure for handicapped people could either be framed as a technical transportation problem or as a civil rights issue. Problem recognition is crucial for agenda-setting processes. If a new idea or a concrete proposal is connected to a severe problem, its chances of rising up in the governmental agenda are high (Kingdon, 1984, p. 121). Hence, the more an idea becomes associated as a solution for a problem, the higher its chances to surpass rival approaches become. Policy entrepreneurs play a crucial role in this context. Their main objective is to bring problems to public attention. They actively engage in feedback processes and mobilize resources in favor of certain ideas.

The political stream can push items high on the governmental agenda or block them. It defines factors of the successful implementation of new ideas: national mood, interest groups, elections, administration changes and orientation of elected representatives (Zahariadis, 2014, p. 34). The most

powerful agenda-setter is the combination of election implications and national mood. If an idea fits well with the national mood, it raises high on the agenda. Election implications influence the political orientation of decision-making organs, such as parliaments or the government. The political stream only influences which order items take on the agenda or whether subjects gain governmental attention. Which alternative ideas or proposals come to existence depends on the policy stream.

The policy stream refers to the agenda specification mechanism. Policy entrepreneurs try to push their pet proposals in many ways. Most important is not the development of completely new proposals, but the recombination and coupling of already-known ideas with elements of other proposals (Ackrill & Kay, 2011, pp. 77–79). As indicated in the previous chapter, only ideas that fulfill certain “criteria for survival” rank high on governmental agendas. Communities of specialists, such as academics, bureaucrats, consultants, lobbyists and researchers generate and recouple alternative proposals (Kingdon, 1984, p. 209; Zahariadis, 2014, pp. 33–34). The next part elaborates on the redefinition of policy goals and actor expectations shifts.

5.2.2. Redefinition of policy goals and actor expectations

This section introduces the three-tiered structure of belief systems in the advocacy coalition framework (ACF) (Jenkins-Smith et al., 2014, pp. 190–191). This differentiation is important to analyze the shift of policy goals and actor expectations following the paradigm adoption phase. Even if the previously dominant paradigm is abandoned and a new one emerges as a potential successor, a new paradigm cannot be permanently established unless policy goals and actor expectations are redefined within its premises. For example, financial stability could be expected to prevail over financial market growth as a primary policy goal after a major crisis. It is important to note that the ACF analytical focus on policy subsystems and actor coalitions differs from Kingdon’s focus on agenda-setting and Hall’s criteria on the adoption of ideas. This section only refers to the narrow field of ACF belief systems. The next passages elaborate on this concept.

The ACF theorizes changing policy goals and actor expectations and is based on the assumption of “a modified version of methodological individualism” (Jenkins-Smith et al., 2014, p. 190). In this understanding, institutional change is rather driven by individuals than organizations (Sabatier, 1987, p. 685). In this regard, individuals face limits of processing stimuli such as an infinite amount of information and experiences (Munro et al., 2002). Thus, humans have to simplify the world via belief systems. Belief systems refer to value priorities, assumptions of empirical causal relationships, varying beliefs in the efficacy of different policy instruments and general perceptions of the world states (Sabatier, 1998, p.99). These belief systems are implicitly reflected in policies and can be differentiated on three levels depending on their frequency of change (Sabatier, 1998, p. 103-104).

Deep core beliefs are basic normative and ontological values, e.g. the relative valuation of individual freedom versus social equality. They are very resistant to changes. Policy core beliefs are fundamental normative commitments and causal beliefs (empirical assumptions), e.g. value priorities such as environmental protection versus economic development. They are less rigid than deep core beliefs but still unlikely to change. Secondary beliefs concern less fundamental assumptions, as for example, the specific means of how to achieve a policy goal, the relative importance of potential causal variables or the specific design of institutions. Different from deep core and policy core beliefs, secondary beliefs are most likely to be adapted in the light of new empirical findings or experiences.

The belief differentiation facilitates the classification of major and minor policy changes. We speak of major policy changes only in case fundamental policy or deep core beliefs alter. Otherwise the category of minor policy changes applies (Jenkins-Smith et al., 2014, p. 203). With regard to an overall paradigm change, I argue that lasting change requires the shift of all three levels of belief systems, including deep core beliefs. If this condition is fulfilled, then new policy outcomes would be produced within the dominant paradigm. The next section presents the methods and study design.

5.3. Methods

The research question of this chapter reads which causal factors have led to the establishment of the new technocracy paradigm in Eurozone financial regulation. In this respect, this chapter's research approach is twofold. Firstly, this chapter analyzes the causal mechanism of paradigm establishment after the Crisis. Secondly, this chapter analyzes the key criteria which influence the implementation of new ideas during the paradigm adoption phase. Analogous to the previous chapter, the broader research goal is to investigate the causal mechanism which led to the overall paradigm change of financial regulation after the Crisis. The research design is based on a process-tracing analysis of Eurozone financial regulation. As profound transformations have taken place in the Eurozone, the detection of an underlying causal mechanism would most likely be possible in this case.

The process-tracing design is theory-testing oriented, as the explanatory power of the theoretical implications derived in the previous passages is tested (Beach & Pedersen, 2013, pp. 11–17). Furthermore, the process-tracing analysis is premised on a configurational understanding of causality (Blatter & Haverland, 2012, pp. 80–96). In this volume, a causal mechanism is defined as configuration of causal conditions in a sequential causal chain that together are sufficient for the outcome. Each part of the causal mechanism should be understood as insufficient but necessary conditions of an unnecessary but sufficient condition (INUS). This means that the single parts of the causal mechanism cannot solely produce the outcome and, with one part being absent, the causal mechanism does not apply (Beach & Pedersen, 2013, pp. 30–31).

Unlike the preceding book section, this chapter compares two different processes regarding the paradigm adoption phase. Whereas the major premises of macroprudential surveillance have been implemented with the CRR / CRD IV in European legislation, the European banking structure reform has failed. Although the CRR / CRD IV legislation has been more relevant in terms of size and impact, the banking structure reform would have been an important step to a more solid European banking system. Regarding the three-viabilities and the three-stream concept, one or more criteria must have been absent in the banking structure reform process but present in the CRR / CRD IV process.

The deduced factors of the causal mechanism are the most plausible conditions for paradigm formation which could be hypothesized from previous models of paradigm change and theories of the policy process. However, only because the most presumable causal mechanism is investigated in this volume, other potential causal conditions are not denied but only assumed to be less probable. Following the theoretical discussion in the previous book section, the following hypotheses on paradigm establishment in the Eurozone case are analyzed:

- H1: The new technocracy paradigm is formed during a paradigm adoption phase. Proposals with high political, economic and administrative viability are adopted, whereas others fail.
- H2: Actor expectations and policy goals change according to new technocracy premises.

Concerning the first hypothesis, it is expected that initiatives which closely relate to new technocracy core premises better meet the three viabilities than other initiatives. The CRR/CRD IV basically implements macroprudential surveillance in European legislation. Thus, it is closely related to the new technocracy paradigm. By contrast, the banking structure reform is not explicitly related to macroprudential surveillance and systemic risk control. With regard to the three-viability model, Hall states that high viability in one category can offset a low one in another. But he neither differentiates how viability is measured, nor defines a specific significance level. For this reason, the comparison is relatively case-related. Hence, it is expected that the banking structure reform meets certain criteria of the three-viability concept to a considerably less extent than the CRR/CRD IV. Furthermore, the role of policy entrepreneurs is expected to be more active in the CRR/CRD IV case.

Concerning the second hypothesis, three conditions have to be fulfilled. Firstly, concerning the ACF, deep core, policy core and secondary beliefs of individual actors in the Eurozone financial regulation field must change. Secondly, the policy goals of the most relevant organizations in Eurozone financial regulation have to change. This includes primarily the ECB and to a lesser extent other EU financial regulatory agencies. Thirdly, changes of actor expectations and policy goals have to be in accordance with premises of the new technocracy. As conceptualized in the second chapter, the constitutive characteristics are systemic riskification, quantification and expertization. The core assumption of the new technocracy paradigm builds on the belief in the inherent instability of financial markets.

To investigate the hypotheses, this approach follows the best practices in process-tracing proposed by Bennett & Checkel (2015, pp. 20–31). In line with their claim for gathering diverse data and triangulation, this chapter uses data from mutually independent sources. Following Jacobs (2015), the operationalization includes a primary source legislation and communication analysis of Eurozone financial regulation actors (p. 51). This includes reports, minutes, speeches, press statements and applied policy measures by the ECB, the EC, the European Systemic Risk Board (ESRB), the European Supervisory Agencies (ESAs), the IMF, national central banks and the BIS. In addition, this chapter uses a content analysis of the positions of the European Banking Federation (EBF) on the respective policy propositions to investigate the interests of the financial industry. The EBF is the major banking lobbying association in Brussels and represents 32 national banking associations with more than two million employees. Its main goal is to serve the interests of the financial industry.

Furthermore, information is gathered in 15 expert interviews with high-level management from the ECB, European and national regulatory agencies and the private sector. For a detailed overview on interview partners, please refer to table 1.3. As described in the first chapter, expert interview partners are chosen from different professional branches and entities. So, different perspectives are included as far as possible. Additionally, the questionnaire consists of two main blocks. Whereas the former asks for changes in financial regulation before and after the Crisis, the latter specifically asks about the process of institutional change. The next section presents the results.

5.4. Results

5.4.1. Paradigm adoption phase

The most fundamental precondition for a paradigm change process is the existence and prior institutionalization of alternative ideas. In the Eurozone case, this was primarily the idea of macroprudential surveillance (MPS). Additionally, and to a lesser extent, the renaissance of a

Keynesian discourse throughout the Crisis has influenced the agenda of post-Crisis policymaking (see chapters three and four). Following the critical juncture of the 2008 Crisis and extraordinary high post-Crisis uncertainty, the new macroprudential and Keynesian agenda evolved as aspirant for the new Eurozone financial regulation paradigm. Starting from Grabel's argument on productive incoherence, this section analyzes the 'interregnum stage' in which the macroprudential and Keynesian agenda has been adapted into a new dominant ideational framework. This interregnum is marked by new evolution opportunities and ideational pluralism (Grabel, 2011, p. 828).

Surprisingly, no rival ideas came up to challenge the macroprudential and Keynesian claim as "first aspirant" for the dominant paradigm succession in the Eurozone. So, ideational rivalry was limited in the Eurozone. Instead, different from Grabel's empirical IMF case results, competition in the paradigm adoption phase was limited to the institutional design of the new paradigm. This chapter compares two initiatives to identify the criteria with the highest explanatory power during the paradigm adoption phase. The first part of this section analyzes the implementation process of the CRR/CRD IV which implements the Basel III agreements into European legislation. The second part analyzes the European banking structure reform which aimed at the separation of investment banking from 'traditional banking' like retail and deposit management. Whereas the CRR/CRD IV was successfully implemented, the banking structure reform repeatedly failed.

CRR/CRD IV implementation

The CRR/CRD IV regulations comprehend a far-reaching regulatory framework on liquidity risk measurement, standards and monitoring. The rule system is based on micro- and macro- prudential elements. Characterized as "landmark achievement" to protect financial stability by former BIS chairman and Head of the Netherlands Bank, Nout Wellink, Basel III has been widely recognized as a milestone of prudential regulation (Bank for International Settlements, 2010a). In the EU, the CRR/CRD IV was adopted by the EP in April 2013, by the European Council in June 2013 and implemented in January 2014. EP voting results were very clear: the CRR was approved by 595 votes to 40 against, with 76 abstentions and the CRD IV by 608 votes to 33 against, with 67 abstentions (European Parliament, 2013). Since 2016, a review process of these regulations has taken place.

The European Banking Federation (EBF), major banking industry interest group at European level, took a positive stance on CRR/CRD IV. The EBF generally considered that "the CRR and the CRD IV have had in general a positive impact on banks' balance sheets, making them stronger by increasing their capital positions and the composition of capital" (European Banking Federation, 2015, p. 1). Although a few other voices from the financial industry expressed some concerns about Basel III and the CRR/CRD IV, the regulations were broadly supported from a broad coalition of EU agencies, economic, societal and national actors (Bafin, 2013; CFA Institute, 2013, p. 4).

Expert interview partners were not directly asked about the CRR/CRD IV or Basel III regulations, but more general questions about key changes and main trends of financial regulation after the Crisis. Furthermore, they were asked about post-Crisis changes of the overall institutional framework of financial regulation change after the Crisis, policy instruments and potential policy options to overcome the Crisis in 2008. All experts referred to different macroprudential aspects, which have been implemented with these regulations. Furthermore, the majority of experts from all categories directly named the CRR/CRD IV or Basel III regulatory framework in the context of major reforms (A1, A3, B3, B4, B5, C2, D1, D3, D4).

The senior staff member of European financial regulatory institution (B5) underlined the particular macroprudential character of the CRR/CRD IV. Furthermore, a leading senior staff member of a national competent authority explicitly highlighted that the CRR/CRD IV, which builds the core of the Single Rulebook (EBU), had been crucial to harmonize prudential legislation across EU member states (C2). In addition, the senior staff of a financial NGO, who had particularly criticized the EBU as insufficient, very positively referred to CRR/CRD IV as an important step in harmonizing European regulatory legislation (D1). In addition, the CEO of an investment company highlighted the regulatory claim to not only regulate markets and instruments, but participants as well (D2). In many interviews the high level of detailed specifications included in the regulations were further positively referred to. Overall, the CRR/CRD IV implementation process has proceeded quickly and was largely supported by a broad range of actors. The following part outlines the EU banking structure reform.

EU banking structure reform

Contrary to the successful implementation of the CRR/CRD IV, the banking structure reform failed. Despite many reforms in the EU financial sector, particularly regarding banking policies, some banks still pose a systemic risk in case of bankruptcy. To mitigate this too-big-to-fail issue, the EC set up a high-level expert group on structural bank reforms in February 2012. The group was chaired by Erkki Liikanen, Governor of the Finnish Central Bank and ECB council member. In October 2012, the final report of this expert group (Liikanen Report) presented five core recommendations to reform the European banking system (High-level Expert Group, 2012). The most far-reaching proposition referred to the separation of investment banking (mainly propriety trading) and classical deposit banking (High-level Expert Group, 2012, p. iii). Following the Liikanen report, the EC opened a six-week stakeholder consultation process, in which 89 answers were received from financial entities (European Commission, 2012). The follow-up process continued with an EC stakeholder discussion meeting on the banking structure reform in May 2013 (European Commission, 2013).

Based on the Liikanen Report, the EC submitted a proposal for a regulation on structural measures improving the resilience of EU credit institutions in January 2014 (European Parliament, 2018). In the sequel, Gunnar Hökmark, member of the conservative EPP parliamentary group, was appointed the European Parliament's Rapporteur for banking structural reform. Hökmark proposed 92 amendments to the original EC proposal, diluting the original idea of separating investment from deposit banking. In May 2015, the draft was rejected in a vote in the European Parliament's Committee on Economic and Monetary Affairs (ECON) with 29 in favor, 30 against and no abstentions (Committee on Economic and Monetary Affairs, 2015, p. 3). Although the Council agreed its negotiating stance in June 2015, discussions between the major EP parliamentary groups have remained fruitless (European Council, 2015; European Parliament, 2018). Finally, in the EC Working Program 2018, the banking structure reform was withdrawn as no agreement has been foreseeable.

Contrary to the CRR/CRD IV, the banking industry strongly opposed the banking structure reform. The EBF warned that "the Liikanen group's recommendations may weaken banks' ability to fund the real economy" (Malhère, 2012, p. 2). The EBF further questioned the Liikanen Report's argumentation line and saw no compelling evidence for the obligatory separation of trading from deposit banking (SNR Denton, 2012, p. 7). Other financial interest groups took an even firmer stance on the banking structure reform. The German banking association talked about dramatic dangers for German financial centers and the World Savings Banks Institute (WSBI) warned against 'an excess of financial regulation' (Bankenverband, 2012; World Savings Bank Institute, 2012, p. 2).

Regarding the expert interview analysis, no direct questions on the banking structure reform or the Liikanen Report were asked. As questions have mainly referred to the process of institutional change and changes compared to the pre-Crisis era, interviewees had no incentive to talk about the failed banking structure reform. However, when asked about possible policy options to overcome the Crisis, an ESRB senior staff member (A3) and a leading senior staff member of a competent national regulatory agency (C2) referred to the banking structure reform. The ESRB expert reported that it would have been an important step to solve the too-big-to-fail problem. He further underlined that the political will to implement this reform diminished after the European elections in 2014, which changed the EP composition. Similarly, an expert from a competent national authority reported that political will was missing. Political decision-makers were afraid of transaction costs and believed in the necessity of global financial players as complements for big companies which require many financial services. Overall, the banking structure reform faced much resistance from different actors and failed. The next part analyzes the shift of actor expectations and policy goals after the Crisis.

5.4.2. Shift of actor expectations and policy goals

This section analyzes the shift of policy goals and actor expectations. Thereby, this section is primarily based on data from the expert interview analysis. In this respect, experts were directly asked whether or not financial regulation policy goals and actor expectations had changed after the Crisis. Response behavior to this question has been remarkably coherent compared to other issues. The vast majority of experts reported that indeed policy goals and actor expectations had changed. Only one expert from a financial NGO said that this shift has not been the case (D1). The first part of this section analyzes the shift of actor expectations in the field of Eurozone financial regulation. The second part investigates the shift of ECB and other financial regulatory agencies policy goals.

Actor expectations

This section summarizes three main findings of the expert interview analysis on the change of actor expectations. Firstly, interviewed experts who answered that policy goals and actor expectations had shifted, mostly referred to the shift from bail-out to bail-in. In this respect, bail-in means rescuing an insolvent financial institution using money from its creditors and deposit holders. In opposition, bail-out refers to rescuing an insolvent financial institution with external funds, usually taxpayer money. Expert interview partners from all categories particularly highlighted that the main post-Crisis goal has become to never use tax payer money for insolvent banks rescue (A1, A2, B2, B4, B5, C1, C2, D2, D4). The CEO of an international investment company particularly referred to the Bank Recovery and Resolution Directive (BRRD) to illustrate how policy goals had changed after the Crisis (D2). The BRRD defines the key rules for the unwinding of banks in the EU, among others the bail-in principle. Similarly, the head of a competent national regulatory authority highlighted the clear expectation on supervisory authorities to shut down banks, if necessary (C2).

Secondly, another debate among financial regulation policymakers was on the potential impulses of financial markets on economic growth (A2, A3, B1, B5). Although it remains unclear whether financial markets can contribute to economic growth, the debate has changed throughout the post-Crisis period. The senior staff member of a European regulatory agency reported that shortly after the Crisis the focus lied on the question “how to tame the beast”. But, this question had then shifted to how finance could better contribute to the economy (B1). Similarly, an ESRB senior staff member reported that the policy goal of regulating finance shifted after the European elections in 2014 (A3) due to strong political influence expectations shifting to strengthen economic growth. This finding

was also reported by another ESRB senior staff member (A2). However, the expert likewise expressed doubts whether financial markets could actually create growth in the medium run and highlighted the importance of other variables, e.g. cost-income factors. The focus shift towards economic growth was further found in official speeches by ECB board members, e.g. Lautenschläger (2015) on how prudential regulation fosters growth and Angeloni (2015) on ECB banking supervision priorities.

Thirdly, the senior staff member of a European regulatory agency outlined that the main goal after the Crisis had become financial market control and minimizing potential crises. So, expectations had become more forward-looking and followed macroprudential surveillance premises (B3). This finding was also highlighted by an ECB senior staff member and the senior staff member of a European financial institution (A1, B5). Both experts reported that expectations had shifted from individual financial institutions to the systemic level after the Crisis.

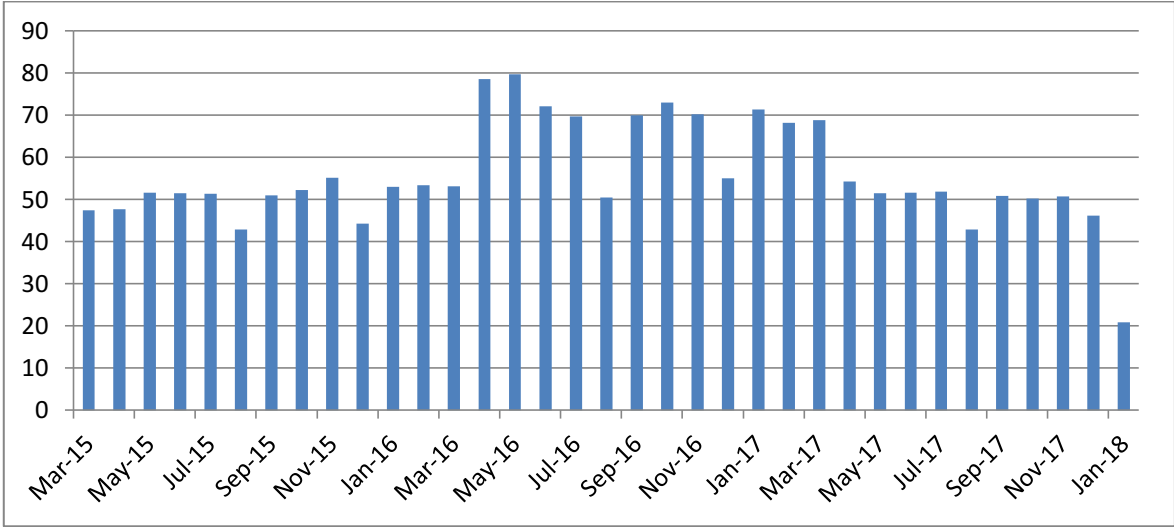
Additionally, the ECB senior staff member reported that pre-Crisis perception of inflation as a main risk had shifted to the perception of deflation as the primary risk after the Crisis. In this regard, the senior staff member of a European financial institution further added that the most important “game changer” after the Crisis had been Draghi’s will to do ‘whatever it takes’ to save the euro currency (B5). The interviewee emphasized that only a strong public intervention could reduce the immediate crisis effects. These exceptional measures were justified by the exceptional circumstances of the Crisis. With Draghi’s intervention, the ECB primary focus of inflation control shifted to the currency safeguarding of the euro. The next part analyzes the policy goal shift of the ECB and other EU regulatory agencies.

Policy goals

In addition to the expert interviews, an analysis of the main EU financial agencies’ mandates also shows the grown importance of financial stability as a major policy goal. In this regard, the ECB has significantly gained more responsibilities throughout the post-Crisis period. On top of the ECB’s task to maintain price stability, the ECB declares its responsibility to ensure the “safety and soundness of the banking system and the stability of the financial system within the EU” (European Central Bank, 2018b). Micossi shows how the ECB has changed its way of monetary policy-making towards more active monetary intervention and safeguarding financial stability rather than price stability (Micossi, 2015a, 2015b, pp. 1–5). The ECB has *de facto* adapted the role as a lender of last resort and the fight against inflation becomes only one central bank goal among others (Buiter & Rahbari, 2012; De Grauwe, 2011; Le Maux & Scialom, 2013; Micossi, 2015b; Wyplosz, 2012).

The interventionist shift of the ECB and its role as a lender of last resort becomes apparent in its daily policymaking actions. Under the expanded Asset Purchase Program (APP), the ECB injected huge amounts of cash in the financial market. Since January 2015, the ECB has re-launched an expanded asset purchase program of government bonds to the amount of up to 80 € billions per month (European Central Bank, 2018a). In addition to the Public Sector Purchase Program (PSPP), the ECB still pursues its third Covered Bond Purchase Program (CBPP3) and further started a Corporate Sector Purchase Program (CSPP) in June 2016. The vast extent of these actions has been unprecedented and indicates the shifting role of the ECB towards a more active part to boost economic growth. The following figure shows the ECB capital injections under the PSPP since 2015.

Figure 5.2: Monthly ECB net purchases under the PSPP in EUR billions



Source: ECB, history of cumulative purchase breakdowns under the PSPP

The monthly average of total ECB asset purchases was about 60 billion until March 2016 and about 80 billion until March 2017. Since then, purchases were reduced to about 60 billion until the end of 2017. From 2018 on, purchases shall not surpass the monthly amount of 30 billion (European Central Bank, 2018a). The PSPP has by far the largest share of all purchases, followed by the CSPP and the CBPP3. In total, Eurosystem holdings under the APP in January 2018 add up to 2.3 trillion Euros, of which 1.9 trillion stem from government bonds (European Central Bank, 2018a).

In addition to the ECB mandate shift to safeguard financial stability in the EU, other European financial institutions also explicitly highlight prudential responsibilities for financial stability. The EBA claims to contribute to financial stability across the EU by ensuring the effective prudential oversight of the banking sector (European Banking Authority, 2016, pp. 1–3). Similarly, ESMA contributes to ‘investor protection’ and a stable EU financial market (ESMA, n.d.). Additionally, EIOPA claims to rebuild trust in the financial system and to ensure “a high, effective and consistent level of regulation and supervision”(European Insurance and Occupational Pensions Authority, 2018). Furthermore, the Single Resolution Board (SRB) ensures banking resolution and mitigates negative effects of bank failures on financial stability (Single Resolution Board, 2018). Overall, all EU financial institutions explicitly state their commitment to ensuring financial stability. These findings were also reported in expert interviews with senior management from these agencies (B1, B2, B3, B4, B5). In this regard, the financial sectors of insurance, shadow-banking, OTCs and derivatives are stronger regulated and controlled compared to pre-Crisis level. The second chapter of this book refers to these institutional changes. The next section discusses the results in light of the theoretical arguments of this chapter.

5.5. Discussion

The previous chapter has shown how the efficient market hypothesis has been quickly eliminated throughout the 2008 Crisis as dominant paradigm of pre-Crisis Eurozone financial regulation. But the elimination of the “old” paradigm does not yet answer the question as to how the new technocracy has been established as the new financial regulation paradigm. Premised on a theory-testing process-tracing analysis, this chapter has investigated two causal factors of paradigm establishment in the

Eurozone. Firstly, during the phase of paradigm adoption, different factors influence the paradigm-building process and favor or prevent facets of the new paradigm. In the Eurozone, the CRR/CRD IV has been implemented whereas the banking structure reform failed. Secondly, policy goals and actor expectations shift within the new paradigm. In the Eurozone, secondary, policy core and deep core beliefs have changed. The next passage discusses the results of the paradigm adoption phase.

5.5.1. Paradigm adoption

Surprisingly, no paradigm competition takes place in Eurozone financial regulation after the Crisis. This result differs from Grabel's finding of productive incoherence in IMF policies (Grabel, 2011, 2015b, 2015a). Instead, the new technocracy's macroprudential narrative can provide for strongly convincing policy solutions and becomes the only serious alternative to the pre-Crisis efficient market hypothesis. However, even though ideational competition in Eurozone financial regulation is limited, competition takes place regarding the institutional design of a new macroprudential framework. Although the macroprudential idea has evolved for decades within the BIS, the approach has never before been implemented in an overall institutional framework. Hence, best practices, a coherent toolbox of macroprudential policy instruments, indicators and institutional recommendations have not existed. A variety of possibilities are conceivable to realize the macroprudential idea in an institutional framework. During the paradigm adoption phase different initiatives and institutional structures have been discussed. Depending on a set of different criteria and conditions some of these initiatives have been successfully implemented whereas others failed.

The CRR/CRD IV legal acts built the core element of Eurozone financial regulation after the Crisis. Additionally, another widely debated institutional initiative was the banking structure reform. But in contrast to the banking structure reform, the CRR/CRD IV acts have been implemented. In this case economic viability, i.e. the persuasive power and the ability to master urging economic challenges, is high. The CRR/CRD IV implements core premises of the macroprudential idea into European law. Thereby, it fully corresponds to the new technocracy paradigm which is built around a new policy agenda of macroprudential surveillance. As the Crisis has been understood to be a result of inadequate systemic risk control, the prudential requirements introduced in the CRR/CRD IV provide convincing policy answers to overcome post-Crisis uncertainty. Whereas Hall's nature of the national economy criteria does not apply to financial regulation, the international constraints criteria is beneficial for CRR/CRD IV implementation. As this act implements the international Basel III regulatory framework into European legislation, the signatory countries of the Basel accords endorse the CRR/CRD IV.

Political viability is also high in the CRR/CRD IV case. It refers to the characteristic of ideas to correspond to the interests of political groups that have the power to implement them in the political agenda. In this regard, the CRR/CRD IV fits to a large extent the interests of political parties to quickly re-install financial stability. As shown in the result section, EP approval rates have been extraordinarily high. Whereas Hall's criterion of coalition partners' interests is not relevant at EU level, collective associations and financial industry lobby groups supported, or at least did not oppose, the CRR/CRD IV. The influential European Banking Federation in particular favored the initiative. Furthermore, different policy entrepreneurs pushed for the implementation. As discussed in chapter four of this volume, the BIS strongly promoted the implementation of a strong macroprudential framework. Similarly, EU member states and the EC strongly supported the CRR/CRD IV.

Furthermore, administrative viability is likewise high concerning the CRR/CRD IV. As the expert interview analysis has shown, the power of regulatory European agencies has significantly grown during the Crisis. European administrative financial bodies, like the ECB and the ESAs, strongly supported the CRR/CRD IV legislation. As the CRR/CRD IV has *inter alia* introduced macroprudential premises in European legislation, this also entailed a significant enforcement of European authorities. Furthermore, due to the globalization of financial markets, the structural power of European agencies to efficiently exert macroprudential oversight and systemic risk control is higher than at the national level. In this respect, the implementation of a single European rulebook promised to be an effective solution to regain financial stability in the EU.

Complementary to Hall's three viabilities, Kingdon's three streams come together in the CRR/CRD IV case as well. Firstly, without any doubts, the problem stream in form of a major financial crisis has been remarkably strong. As shown in the expert interview analysis, the Crisis has been understood as a result of lacking surveillance and regulation at the macro level. Thus, the macroprudential policy agenda could provide for a strong alternative solution to the pre-Crisis efficient market hypothesis. As indicated in the previous chapter, the BIS could easily push as a major policy entrepreneur for the adoption of macroprudential policymaking. Secondly, the political stream includes mechanisms and variables which exert high influence on the implementation of ideas and new proposals. In the case at hand, the political stream pushed the CRR/CRD IV on top of the agenda. A wide range of political actors, EP members, interest groups and administrative bodies supported the reform. Besides, public opinion was also in favor of stricter reforms regulating the banking sector. Thirdly, the policy stream has been equally important. As shown in the last chapter, the new technocracy perfectly meets the criteria of survival, which define the short list of alternative proposals.

In contrast to the CRR/CRD IV implementation, not all criteria have been fulfilled in the banking structure reform case. During the Crisis, the too-big-to-fail problem of banks which had a systemic importance became a sincere challenge for policymakers. Although the separation of retail and investment banking could be seen as a measure to reduce systemic risks, its linkage to the macroprudential policy agenda is weaker than in the CRR/CRD IV case. Furthermore, the banking structure reform was a European initiative and not backed up by an international agreement like the Basel accords. So, economic viability of this initiative was moderate. Additionally, as shown in the result section, political parties in the EP did not agree on the proposal. The banking structure reform was narrowly defeated by the conservatives in the ECON. Furthermore, contrary to the CRR/CRD IV case, interest associations and financial industry lobby groups fundamentally opposed the banking structure reform. Thus, overall political viability was low. Finally, as indicated in the expert interview analysis, staff members of national and European financial regulatory administrations favored the reform. Still, the initiative had been not as prioritized as the CRR/CRD IV. What is more, the banking structure reform did not mean to strengthen structural powers of European entities. So, administrative viability has still been high, but to a slightly lesser degree than in the CRR/CRD IV case.

Concerning the three-stream model, the problem stream presented a convincing narrative with the too-big-to-fail issue of systemically important banks. The concerns have been shared by a variety of actors. However, the political stream has been weaker. The orientation of elected representatives partly shifted after the European elections, interest associations opposed the proposition and the EC composition changed compared to the CRR/CRD IV case. Also, the number of policy entrepreneurs within the policy stream was lower. Even though actors like the EC, European expert groups and the social democratic EP parliament group supported the initiative, influence of backers was lower than

in the widely supported CRR/CRD IV case. In total, the banking structure reform had significantly less political support. The following table summarizes the relevant criteria in the two cases.

Table 5.1: Summary of relevant paradigm adoption criteria

Criteria	CRR/CRD IV	Banking Structure Reform
Economic Viability	High	Moderate
Relationship to existing theories	<ul style="list-style-type: none"> ▪ Macprudential core premises ▪ High fit with post-Crisis policy agenda 	<ul style="list-style-type: none"> ▪ Split of retail and investment banking ▪ No core MPS premise
International constraints	<ul style="list-style-type: none"> ▪ Basel III implementation ▪ High emphasis in international sphere 	<ul style="list-style-type: none"> ▪ European initiative ▪ Low emphasis in international sphere
Political Viability	High	Low
European party goals	<ul style="list-style-type: none"> ▪ High approval across all EP groups ▪ Overall interest in financial stability 	<ul style="list-style-type: none"> ▪ No political agreement in EP ▪ Conservative party opposition
Collective associations	<ul style="list-style-type: none"> ▪ Interest in financial stability ▪ Support of reforms 	<ul style="list-style-type: none"> ▪ Reform unnecessary for financial stability ▪ Strong opposition
Administrative Viability	High	High
Power of admin. agencies	<ul style="list-style-type: none"> ▪ Enforcement of European agencies ▪ High support 	<ul style="list-style-type: none"> ▪ EU staff members in favor of reform ▪ Lower priority than CRR/CRD IV
Implementation capacities	<ul style="list-style-type: none"> ▪ Effective policy solution considered to be at European rather than national level 	<ul style="list-style-type: none"> ▪ No envisaged strengthening of European authorities
Three Streams	Present	Not Present
Problem stream	<ul style="list-style-type: none"> ▪ Major financial crisis ▪ MPS matches systemic risk failure 	<ul style="list-style-type: none"> ▪ Too-big-to-fail risk of banks ▪ Reform matches problem
Political stream	<ul style="list-style-type: none"> ▪ Broad coalition of supporting actors ▪ Public opinion in favor of strict regulation 	<ul style="list-style-type: none"> ▪ Insufficient support of institutional actors ▪ Interest group opposition
Policy stream	<ul style="list-style-type: none"> ▪ Criteria of survival fulfilled ▪ Compare chapter 4 	<ul style="list-style-type: none"> ▪ Criteria of survival not fulfilled ▪ Lower number of policy entrepreneurs

Source: author

Overall, the result section has verified the first hypothesis. Whereas the CRR/CRD IV largely meets Hall's three-viabilities, the banking structure reform does not. The following passage discusses the shift of policy goals and actor expectations.

5.5.2. Redefinition of policy goals and actor expectations

Financial markets are considered to be inherently unstable. After the 2008 Crisis, the fundamental perception of financial markets has changed and abandoned the assumptions of the efficient market hypothesis. As shown in the fourth chapter of this volume, the new technocracy paradigm has been built around the idea of public control over unstable financial markets. But, for a paradigm change to be lasting, actor expectations and the definition of policy goals have to change within the premises of the new paradigm. The result section has revealed four particular findings in this regard. Firstly, the expert analysis has shown that policymaking becomes more forward-oriented. The preventive control over unstable financial markets corresponds to the key premises of the macroprudential agenda. In this respect, systemic riskification is a key characteristic of the new technocracy and encompasses a forward-looking policy approach. Secondly, the expert interview analysis has concisely shown that the bail-out-principle has been reversed. Among the major post-Crisis policy objectives stands out the bail-in principle and the prevention of taxpayer money use for bank

bailouts. This policy goal shift entails a variety of institutional policymaking consequences, e.g. the BRRD and ESM initiatives (European Central Bank, 2016a, pp. 120–129).

Thirdly, the result section takes up on the findings of the third chapter of this volume. As indicated above, the primary concern after the Crisis had been to “tame the beast” of financial markets. After 2014, this policy goal has shifted and entered the debate of how prudential regulation could foster economic growth. This shows that the macroprudential approach has been widely accepted by relevant actors in this policy field and is developed further. Fourthly, the results of this chapter show that the self-image of the ECB fundamentally differs from pre-Crisis practice. Furthermore, the role of central banking has been newly defined in post-Crisis Eurozone financial regulation. As shown in the ECB asset purchase data analysis, the ECB fulfills a more active and interventionist function.

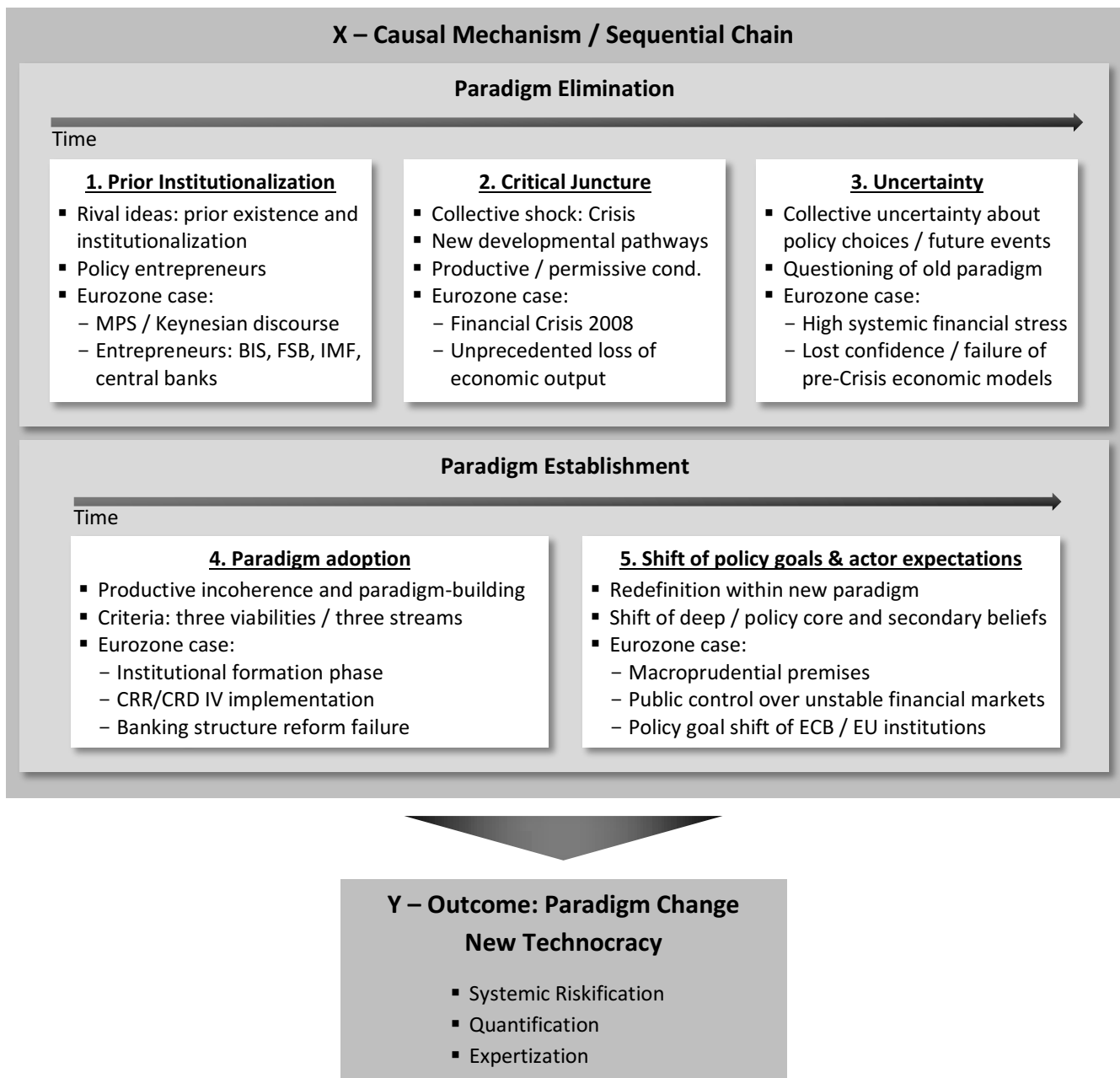
With respect to the differentiation of deep core, policy core and secondary beliefs, all three categories have shifted in post-Crisis Eurozone financial regulation (Sabatier, 1998, p. 103-104). The category of deep core beliefs encompasses the elementary shift from the financial stability assumption before the Crisis to the conception of instable financial markets. Consequently, policy core beliefs such as the role of central banks and the shift to an interventionist financial policymaking agenda have changed as well. Finally, the category of secondary beliefs includes a large variety of shifted minor policymaking assumptions and expectations, e.g. the changed use of indicators. Overall, it has become clear that actor expectations and policy goals have significantly shifted in the Eurozone case. The following passage elaborates on the general implications of this chapter.

5.5.3. General implications

Together with the previous chapter, this book section aimed at tracing the paradigm change process in Eurozone financial regulation after the Crisis. Two distinct phases have led to the replacement of the EMH by the new technocracy paradigm. In the first phase, the old paradigm has remarkably quickly been eliminated after the Crisis. In the second phase, the new paradigm has been established. This chapter has specifically investigated the paradigm establishment process of Eurozone financial regulation. Firstly, based on the models of Hall (1989) and Kingdon (1984), the most plausible criteria of paradigm adoption have been tested. Secondly, premised on the ACF differentiation of belief systems, this chapter has analyzed the shift of actor expectations and policy goals in the post-Crisis era. In concert with the previous chapter’s results, this book section finds that five different sequential factors have led to paradigm change in Eurozone financial regulation.

The developed PCA model makes it possible to generalize the Eurozone case findings to other policy areas and cases. Contrary to previous paradigm change models, this approach allows the formulation of testable hypotheses concerning the complete paradigm change process. Thereby, both the elimination of the old paradigm and the establishment of the new one are included in the model. So, this book section contributes to a better understanding of paradigm change processes. The following figure summarizes the PCA model. As explained in the precedent chapter, the different factors should be analyzed as INUS conditions in a configurational causal mechanism.

Figure 5.3: Paradigm Change Analysis (PCA)



Source: author

Regarding future research, it would be highly desirable to test and develop the PCA approach in other cases. Particularly interesting would be the comparison of Eurozone financial regulation with post-Crisis policymaking in the US currency area. The US has implemented a comprehensive financial market regulation framework with the Dodd-Frank Wall Street Reform and Consumer Protection Act. Furthermore, structural conditions and central bank responses in the US have been similar to the Eurozone. The American Federal Reserve Bank (Fed) actively engages in macroprudential policymaking debates and has been assigned a broad range of MPS responsibilities and rule-making processes (Bernanke, 2012; Hirtle, Schuermann, & Stiroh, 2009). Thus, the US case would constitute a most similar case design. Finally, it would be highly relevant for future studies to analyze the particular explanatory power of single paradigm-building criteria in more comparative cases.

5.6. Conclusion

This chapter has shown that two phases are essential during the process of paradigm establishment. During the paradigm adoption phase in the Eurozone case, the fit of a new initiative with the overall ideational and theoretical framework and the support of political parties have been essential to explain the implementation of institutional reforms. Whereas the CRR/CRD IV framework has been implemented, the banking structure reform has failed. Following the paradigm adoption phase, policy goals and actor expectations have to change within the new paradigm for lasting institutional and ideational change. In the Eurozone case, primary policy goals of the ECB and other financial institutions have significantly shifted and regulatory policymaking has become more forward-oriented. In line with findings presented in the third chapter of this volume, expectations and goals have re-shifted within the new paradigm after the 2014 European elections.

At a more general level, the Eurozone case has shown that the elimination of an old paradigm does not necessarily lead to a situation of productive incoherence. If a rival approach to the previously dominant paradigm is sufficiently strong, no ideational competition takes place. Instead, competition could be limited to the institutional level. Different initiatives and proposals compete with each other about how the new paradigm could best be implemented in a new institutional design.

6. Concluding remarks on paradigm change

The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else.

(Keynes, 1936, p. 383)

The main objective of this book was to analyze the paradigm change of Eurozone financial regulation after the Crisis. Since the end of the Second World War, collective uncertainty in economics has never been greater than after the Crisis in 2008. However, ten years later, uncertainty has been contained. Financial markets, particularly in the Eurozone, have regained financial stability. This volume has addressed three fundamental questions in this respect. Has the paradigm really changed? What are the constitutive characteristics of the new paradigm? How can the process of paradigm change be explained? The analysis of these questions contributes to the social sciences debate of institutional change and the constructivist approach to the International Political Economy.

The data collection of this book encompasses a large number of different sources. In addition to a comprehensive analysis of primary sources, 15 anonymized semi-structured expert interviews have been conducted. All interviewed experts have had at least ten years of professional experience in the field of financial regulation. Particularly the seniority level of expert interview partners has been extraordinary. Among others, interviewees have included four board members and one CEO. To ensure the highest possible interview standard, experts have been grouped in four categories: ECB/ESRB, EU financial institutions except of the ECB/ESRB, national regulatory agencies, private sector. Thus, different perspectives were included in the expert interview analysis.

This concluding chapter is structured in three sections. The first section summarizes the contributions of each book section to ideational IPE scholarship and points to the interconnectedness of the chapters. Furthermore, it shows how the PCA model can add to previous paradigm change research on the example of Hall's (1993) study on "Policy Paradigms, Social Learning, and the State". The second section gives an outlook on the generalizability of the PCA model. US financial regulation is a highly promising comparative case and shows that PCA provides important insights even if the overall paradigm has not changed. The third section discusses the limitations of this volume and points to open questions regarding the study of paradigm change and explanatory power of ideas.

6.1. Paradigm change of Eurozone financial regulation

The debate on the power of ideas in the IPE research field has gradually grown during the last decades. But, particularly in light of the global financial crisis in 2008, the question of paradigm change has attained considerably more attention than before. However, as discussed in the first chapter, current literature on ideational and institutional change has not yet answered different relevant questions in that respect (compare passage 1.2.3). This section discusses the contributions of this volume in light of the theoretical debates in IPE research. Furthermore, I show how the developed PCA approach can add to previous ideational models in IPE. The following passage briefly refers to the different aspects of current paradigm change research.

IPE literature on paradigm change can be structured around four aspects (compare passage 1.2.2). Firstly, the primary goal of ideational scholarship has been to show that ideas matter to explain institutional change processes. Yet, it is still unclear when, how and why ideas matter and what

causal mechanism leads to paradigm change after a major crisis. Secondly, ideational research has addressed the question whether the Crisis has actually led to a paradigm change in Eurozone financial regulation. But, previous studies have been inconsistent or focused on partial aspects of institutional and ideational change. So far, no systemic overview has been provided about which dimensions and institutions have changed or persisted after the Crisis. Thirdly, few scholars have addressed the question of wearing down the old paradigm. Yet, it still remains unclear which role the elimination of the “old” paradigm plays before a new paradigm is established. Fourthly, ideational scholars have in many ways addressed the question when and how new ideas and paradigms are established. But, no coherent model of the paradigm change process has yet been developed.

Overall, existing IPE research on paradigm change is fragmented. Whereas institutionalist literature neglects the power of ideas, ideational scholarship argues that ideas matter but leaves relevant questions open. This book has addressed three fundamental questions in this regard. The next passages outline the contributions of each chapter to ideational IPE scholarship.

6.1.1. Paradigm change after the Crisis

The second chapter has shown that the overall paradigm of Eurozone financial regulation has indeed changed after the Crisis. Premised on Campbell’s (2004) argument on the characterization of institutional change in empirical cases, the second chapter has defined the critical dimensions of financial regulation. Furthermore, it has specified the time frame over which change in these dimensions occurred. The classification of institutional change has been based on Hall’s concept of first, second and third order change (Hall, 1993). Complementary to previous research by Baker (2012) and Blyth (2013), results have shown that changes in all categories have taken place.

Particularly the implementation of the macroprudential idea has altered financial regulation in every dimension. More precisely, the analytical dimension has been complemented by macroprudential systemic risk analysis. Furthermore, the intensity dimension has significantly shifted from pre-Crisis deregulation to a strict post-Crisis regulation regime after the Crisis. In addition, the implementation dimension has largely been transferred from the national to the European level. Besides, the results suggest that two different patterns of institutional change have emerged after the Crisis: a discontinuous punctuated equilibrium until 2014 and a successive phase of continuous change.

Overall, the second chapter contributes to the IPE literature on paradigm change after the Crisis. This contribution is particularly relevant because the role of ideas has been neglected in this field for a long time. Thereby, the chapter leads to a better understanding of policymaking dynamics after crises. Furthermore, the chapter has shown that the establishment of macroprudential surveillance sharply breaks with pre-Crisis practice. The finding that indeed a paradigm change has taken place begs the question what characteristics actually define this new paradigm of Eurozone financial regulation. This issue has been addressed in the third chapter.

6.1.2. The new technocracy

In the third book section, I have developed the “new technocracy” framework to conceptualize the new normal of financial regulation after the Crisis. Thereby, it follows Gerring’s (2012a) argument of description as an independent methodological approach. Furthermore, the development of the new technocracy framework has been premised on concept-building strategies by Collier & Gerring (2009), Gerring (2012b), Goertz (2006) and Schaffer (2016). I have argued that three characteristics

are constitutive for the new technocracy: systemic riskification, quantification and expertization. In addition, the concept can be specified by its level of implementation. In that regard, regulatory legislation can be implemented at national, regional or global level. Thus, the term “European new technocracy” would be most specific for the Eurozone case.

The conceptualization of the new technocracy paradigm goes beyond previous research which has characterized the post-Crisis state of financial regulation as “productive incoherence” (Gabel, 2011, 2015b). This volume’s third chapter not only argues that pre-Crisis regulation has been replaced, but developed a three-level concept to structure the new outcome. Furthermore, it has shown that macroprudential tools are not only the “new policy kids on the block”, but entail far-reaching changes in different dimensions (Blanchard, 2015b). In addition, the conceptualization of the new financial regulation paradigm builds the fundament for the fourth and fifth chapter.

6.1.3. Paradigm Change Analysis

The fourth and fifth chapters have developed the paradigm change analysis (PCA) as a coherent model of paradigm change. The PCA approach integrates the elimination process of the old and the establishment process of the new paradigm. The fourth chapter has specifically analyzed the causal mechanism which led to the quick elimination of the pre-Crisis efficient market hypothesis (EMH) in Eurozone financial regulation. Based on a CPT analysis, I argue that three sequential causal factors were essential. Firstly, macroprudential surveillance and the renaissance of a Keynesian discourse provided a sufficiently alternative policy agenda of financial regulation. Secondly, the 2008 Crisis has been a critical juncture which opened a window of opportunity for institutional change. Thirdly, collective uncertainty of monetary and regulatory policymaking after the Crisis formed the basis for the successful implementation of an alternative paradigm.

At a more general level, the fourth chapter complements the argument by Abdelal, Blyth and Parsons that “old ideas (...) are difficult to abandon” (2010, p. 236). Even though the EMH was widely acknowledged in the pre-Crisis era, it has been quickly abandoned. Whereas existing research on paradigm change has primarily focused on institutional formation, the aspect of “wearing down” old ideas has often been neglected (Berman, 2013; McNamara, 1998, pp. 61–64; Mehta, 2011, p. 31). The fourth chapter leads to a better understanding of paradigm elimination dynamics.

The fifth chapter has focused on the establishment process of the new technocracy paradigm in the Eurozone. I have argued that two causal factors led to this outcome: a phase of paradigm adoption and the shift of policy goals and actor expectations. In the paradigm adoption phase, ideas and propositions influence the formation process of a new paradigm. Depending on different criteria some ideas are more successfully implemented than others. In the Eurozone case, the CRR/CRD regulation has been established whereas the banking structure reform failed. In this regard, the fifth chapter has analyzed the institutional change criteria developed by Hall (1989) and Kingdon (1984). Furthermore, the chapter has shown that policy goals of the ECB and other EU financial entities have significantly shifted. Therefore, it has become evident that the elimination of an old paradigm not necessarily leads to paradigm competition. Instead, rivalry could be limited to the institutional level.

Overall, the PCA approach can serve as a starting point for future paradigm change research. The developed model allows for the formulation of generalizable hypotheses on paradigm change. The next section gives an outlook on how PCA adds to previous paradigm change research on the example of Hall’s (1993) paper on “Policy Paradigms, Social Learning, and the State”.

6.1.4. The role of PCA for expanding ideational IPE scholarship

This section briefly recapitulates Hall's (1993) analysis of economic policymaking in Britain during the 1970s and 80s. Premised on the paradigm change from Keynesianism to Monetarism, I show how the PCA approach adds to existing IPE paradigm change research. Furthermore, I argue that PCA offers a more comprehensive picture of the paradigm change process than Blyth's (2001) definition of ideas as "instruction sheets" for institutional change (p. 26). This section is structured in three parts. The first part summarizes the paradigm change from Keynesianism to Monetarism. The second part shows how PCA can add to Hall's analysis of this well-known case of paradigm change in the IPE field. The third part briefly concludes on the contribution of PCA to current ideational scholarship.

Paradigm change from Keynesianism to Monetarism

The shift from Keynesianism to Monetarism during the 1970s and 80s in the UK is probably the best-known case of paradigm change in IPE research (Abdelal et al., 2010a; Baker, 2012; Béland & Cox, 2011; Blyth, 2013; Hall, 1989, 1993; Pontusson & Raess, 2012). Hall (1993) analyzes this paradigm change and shows that first, second and third order changes took place during this period. Different from Eurozone financial regulation paradigm change after 2008, the change from Keynesianism to Monetarism was an incremental process. A series of events, crises and other challenges led to this outcome. Most influential were the two oil crises during the 1970s and the election of Thatcher as British Prime Minister. In addition, Keynesianism could not explain simultaneous high unemployment and inflation rates. This 'empirical anomaly' compromised the Philips curve which had been a main pillar of Keynesian theory. As a result, inflation replaced unemployment as the primary political concern and monetary policy became a more important macroeconomic instrument than fiscal policy. Many policy instruments associated with state intervention were eliminated, e.g. income adjustment policies, exchange rate control, quantitative bank lending restrictions and others (Hall, 1993, p. 284).

The role of PCA

Hall (1993) asks how policy did "change so radically" and argues that "we need a conceptual framework for understanding the process whereby British macroeconomic policy changed" (p.284). He proposes the concept of a "policy paradigm" as an analytical category. Despite Hall's tremendous contributions to ideational scholarship in the IPE field, I argue that his analysis leaves some blind spots. The PCA model developed in this volume can provide additional insights in that respect.

Firstly, Hall argues that the "monetarist paradigm soon became the principal challenger to Keynesian doctrine" (p.286). But he does not further explain how and why monetarism became this principal challenger apart from claiming that monetarism was a "highly developed" alternative (p. 286). By contrast, PCA explicitly theorizes the prior existence and institutionalization of alternative ideas. The Monetarist school had been advanced by a group of economists around Nobel Prize winner Milton Friedman at the University of Chicago. When Keynesianism faced difficulties, Monetarism provided a coherent alternative policy agenda. Secondly, Hall primarily focuses on the level of ideational and institutional change. Thereby, he pays less attention to the causal mechanism of paradigm change. Particularly, the aspect of paradigm elimination only implicitly plays a role in Hall's model. He explains that Keynesianism could not cope with different empirical anomalies and categorizes subsequent policy changes. But, he does not systematically track this change process. Instead, PCA theorizes this process and analyzes three different causal factors of paradigm elimination.

Thirdly, Hall reports that unemployment and inflation rates have been high during the 1970s and 80s. The closer investigation of the uncertainty PCA causal factor gives additional insights in this regard. The unemployment rate had more than tripled from 1970 compared to the early 1980s and peaked around 12 percent (Trading Economics, 2018). The inflation rate increase was even more extreme. Compared to a rate of 2.45 percent in 1967, inflation dramatically increased to 24.89 percent in 1975. Inflation fell again to 8.39 percent in 1978, but doubled with 17.24 percent only one year later (Worldwide Inflation Data, 2018). In addition, the business confidence index practically crashed in the UK at the beginning of the 1980s (OECD, 2017). The amount and high volatility of these values indicate that uncertainty had strongly grown during these years. Thus, Keynesianism has been scrutinized and paradigm competition between Keynesian and Monetarist doctrines evolved. Hall describes this competition, but he neglects uncertainty as a driving force behind paradigm change.

Finally, Hall (1993) refers to different collective and individual actors which have contributed to paradigm change, e.g. the Treasury, the Bank of England, the journalists William Rees-Mogg and Samuel Brittan and politicians like Margaret Thatcher or Keith Joseph (p.287). Although Hall points to the importance of these actors, he does not systematically conceptualize their role in the paradigm change process. By contrast, the PCA approach particularly considers the role of individual and collective actors as policy entrepreneurs which back their favorite policy ideas. In addition, PCA also conceptualizes the change of actor expectations and policy goals within the new paradigm.

Expanding ideational scholarship

Overall, this section has shown that PCA systemizes the analysis of the paradigm change process and adds to existing research. In this respect, PCA can also offer additional insights even if not one single critical juncture contributes to a paradigm change, but a series of events. Thereby, the PCA approach goes one step further than Blyth's (2001) argument that ideas matter to understand institutional change. Instead, PCA investigates the 'big picture' of paradigm change and addresses the question of when, how and why ideas matter. If ideas are the instruction sheets for institutional change in times of uncertainty, then PCA explains which instruction sheet is picked and how to read it.

The next section gives an outlook on the comparative case of US financial regulation after the Crisis. The analysis shows that PCA can also give relevant insights on ideational and institutional change even if the overall paradigm has not changed.

6.2. Beyond the Eurozone: US financial regulation

This section gives an outlook on the comparative case of US financial regulation after the Crisis. Yet, in this section, I do not carry out an analysis equivalent to the Eurozone case. Instead, I show that a more detailed analysis of the US case in future studies can provide relevant insights on the generalizability of the PCA approach. Furthermore, this outlook indicates that the PCA model can provide relevant insights on ideational and institutional change even if the overall paradigm has not changed. Instead, it seems that post-Crisis US financial regulation remains in the categories of first and second order change. Despite this finding, the analysis of ideas is crucial to understand why only some institutions have changed whereas others persisted. It seems that the strong US belief in market efficiency and the aversion to state interventions have prevented a paradigm change. This section is structured in three parts. The first part presents the US case. The second part outlines the PCA approach to US financial regulation. The third part discusses ideational insights on the US case.

6.2.1. The empirical US case

Like the Eurozone, the US has implemented a comprehensive financial market regulation framework, called Dodd-Frank Wall Street Reform and Consumer Protection Act. The Dodd-Frank Act is “the most ambitious overhaul of the country financial regulations since the 1930s” (Woolley & Ziegler, 2012, p. 30). Additionally, the Federal Reserve Bank (Fed) actively engages in macroprudential policymaking debates and has been assigned many MPS responsibilities and rule-making processes (Bernanke, 2012; Hirtle et al., 2009). Different from the Eurozone’s attempt to implement the banking structure reform, the US has established the Volcker Rule. This initiative largely separates investment and retail banking. In terms of structural conditions and the design of post-Crisis institutions, US financial regulation corresponds to a most similar case design. The next part analyzes the causal factors of the PCA approach relating to the establishment of the Dodd-Frank Act and the Volcker Rule.

6.2.2. Paradigm change analysis of US financial regulation

This paragraph summarizes US financial regulation and macroprudential surveillance before 2008. As in the Eurozone, US financial oversight before the Crisis was highly decentralized at federal state level. Furthermore, it had been based on the belief of inherent financial market stability. Thus, the US financial market before 2008 was characterized by high deregulation (Woolley & Ziegler, 2012, p. 35). Furthermore, the globalization of financial markets led to a growing global link of financial entities outside of US regulatory oversight (Davis, 2009; Krippner, 2011). In addition, similarly to the Eurozone, the idea of macroprudential surveillance and systemic oversight played no role in the US before the Crisis. Regulatory oversight was based on microprudential principles only. But, like the Eurozone, the US is part of the BIS system. So, the development of the macroprudential approach since the 1980s has been the same for both currency areas. Hence, it is plausible to assume that the alternative macroprudential approach has equally existed for both cases. The next paragraph concerns the factors of critical junctures and uncertainty.

The impact of the Crisis on the US has been very severe. From 2008 to 2009, US annual GDP growth collapsed and turned negative with a loss of about -2.9 percent (OECD, 2018a). Similarly, the annual unemployment rate nearly doubled from 5.8 to 9.7 from 2008 to 2009 (OECD, 2018b). Housing prices also fell after the Crisis by about 18 percent on average in the two years following the Crisis (US Federal Housing Finance Agency, 2018). Furthermore, US stock prices fell on average about 14 percent from 2008 to 2014. Additionally, the Lehman Brothers bankruptcy has become widely acknowledged as one of the main events of the Crisis (Woolley & Ziegler, 2012, p. 29). Thus, as in the Eurozone, the Crisis in the US corresponds to a critical juncture which opens a window for large institutional changes. With regard to uncertainty following the Crisis, the decline of the OECD business confidence index has been similarly strong as in the Eurozone. From June 2007 to December 2008, the index fell by 3.4 index points. Furthermore, the high US stock market volatility also indicates a high uncertainty level in the US currency area in the years after the Crisis. The following paragraphs elaborate on paradigm adoption and policy expectation shifts.

The US phase of paradigm adoption differs from the Eurozone case. Despite the Dodd-Frank Act and the Volcker Rule implementation, the US regulatory system has not entirely changed. The Dodd-Frank Act, signed by US president Obama in July 2010, revises the US financial oversight regime (US Congress, 2010). A core element of the Dodd-Frank Act is the establishment of the Financial Stability Oversight Council (FSOC). The FSOC is an agency for systemic risk control which pools the expertise of

other regulatory agencies. Its main task is to monitor macroprudential risks in the US (Bernanke, 2011; FSOC, 2015). The reform is comparable to the ESFS establishment (Kern & Lantz, 2012). But, changes seem to remain in the categories of first and second order change in the US case: “The Dodd-Frank legislation represents an ambitious effort to adapt the underlying structure of core financial and regulatory institutions, but without rebuilding them” (Woolley & Ziegler, 2012, p. 59).

In addition to Dodd-Frank, the Volcker Rule resembles the EU banking structure reform. Whereas the EU initiative has failed, the US Volcker Rule has been implemented. Although US regulatory efforts exceed European banking regulation in this aspect, the Volcker Rule includes several exceptions and special provisions. Thus, the sustainable change of US financial regulation remains questionable. The next passages analyze the establishment processes of Dodd-Frank and the Volcker Rule.

Political, economic and administrative viability in the case of the Dodd-Frank Act establishment has been high. The Dodd-Frank Act was founded based on a White Paper in 2008 by the US Treasury (US Department of the Treasury, 2008). This report strongly called for the establishment of a new US agency responsible for macroprudential oversight. Support for this initiative has met broad approval from different actors and the idea of macroprudential oversight was widely accepted. The Democrats and the Republican Party favored the reform. Congress debates focused on the definition of MPS instruments, the revised role of the Fed and which financial entities were considered as systemically important (Woolley & Ziegler, 2012, pp. 40–42). Yet, different economists expressed concerns that the reform was not sufficiently profound (Johnson & Kwak, 2010; Skeel, 2010). Furthermore, the most influential financial interest groups in the US supported the reform (Ryan, 2009). In particular, the Securities Industry and Financial Markets Association (SIFMA) and the American Bankers Association (ABA) favored regulatory macroprudential reforms (Woolley & Ziegler, 2012, pp. 42–43).

The establishment of the Volcker Rule was more contested than Dodd-Frank. Broadly speaking, the Volcker Rule implements a light version of investment and commercial banking separation similar to the Glass-Steagall Act in 1933. The Volcker Rule was mainly promoted by a private policy-advisory association called the Group of Thirty (G30) headed by former Fed Chairman Paul Volcker. The G30 issued a reform in 2009 as blueprint for the separation of commercial and investment banking (Group of Thirty, 2009). Yet, this proposition faced strong Wall Street opposition and Volcker’s influence on the Obama Administration was limited (Woolley & Ziegler, 2012, pp. 50–51). But, when US public anger about bank bonuses and bailouts increased, Obama started supporting the reform (Alter, 2010; Heilemann, 2010). In the aftermath, the Obama administration incrementally moved away from the reform because the US Treasury opposed it. This changed when the SEC filed a civil fraud charge against Goldman Sachs (Woolley & Ziegler, 2012, p. 51). Finally, the Volcker Rule was implemented. Overall, political viability has eventually been high, but economic and administrative viability moderate. The next part summarizes the US case results.

6.2.3. Discussion of ideational insights on US financial regulation

Overall, changes in US financial regulation have been far-reaching. Yet, different from the Eurozone, the US has not established a new financial regulatory system but revised the existing one. In addition, although the Volcker Rule has been established, the US has not implemented a pendant to the European Banking Union. Whether the paradigm of US financial regulation has changed cannot safely be answered in this short outline. However, this outline indicates that changes remain in the

category of first and second order change. Although the external shock for a paradigm change has been strong, the US financial regulation paradigm seems not to have sustainably shifted.

Even though the overall financial regulation paradigm has rather not shifted in the US case, PCA can offer important insights. The model helps to structure the process analysis of first and second order change. This is particularly relevant concerning the Volcker Rule, which exceeds several aspects of Eurozone financial regulation. Alternative explanations, like partisan politics or corporatist approaches, cannot explain why some US regulatory elements are very encompassing, whereas the overall system persists. For example, from a partisan politics or corporatist perspective, one would rather expect that the Republicans and banking associations had blocked stronger regulation under the Obama administration. But, the Volcker Rule and Dodd Frank have been implemented.

The PCA approach indicates that US paradigm adoption has been limited. Additionally, actor expectations and policy goals have merely changed. A key criterion of paradigm adoption is the ideational fit of a new idea with the overall economic theory. The extraordinary firm US belief in the free market doctrines and aversion to state interventions is stronger than in Europe. For example, when European countries followed Keynesian doctrines, in the US, Keynesianism was understood as “pathway to communism” (Hall, 1989, pp. 376–377). Thus, it is plausible to assume that the idea of MPS and the renaissance of a Keynesian discourse have a higher ideational fit in the Eurozone than in the US. Finally, PCA indicates that the role of policy entrepreneurs pushing for change might have been stronger in the EU than in the US. In the EU, the European Commission and the ECB are largely independent from external influence and strongly shape the policymaking process. Overall, the US case constitutes a highly relevant case for future research.

The final section of this chapter elaborates on the limitations of this volume and points to open questions in the research area of the International Political Economy.

6.3. Limitations and open questions

The study of ideas and institutions is persistently subject to dynamic transformations and covers a wide field. The primary goal of this volume has been to enrich the debate of ideas in the International Political Economy. Thus, this book has addressed different questions concerning the analysis of paradigm change of Eurozone financial regulation after the financial crisis in 2008. Despite a thorough investigation and the inclusion of different actor perspectives, a series of questions remain open. This section elaborates on the main issues which should be answered in future studies and briefly discusses the limitations of this volume.

Firstly, the results of the second chapter have indicated that two different phases of ideational and institutional change have taken place after the Crisis: a phase of a discontinuous punctuated equilibrium until the European elections in 2014 and a phase of continuous change within the new financial regulation paradigm since 2014. Since 2014, institutional evolvments have occurred rather incremental than revolutionary. A more detailed analysis of this finding would certainly be highly desirable. Further studies would contribute to the analysis of permissive and productive conditions after critical junctures and also improve the general understanding of paradigm change dynamics.

Secondly, the third chapter has developed the three-level concept of the new technocracy to characterize the new paradigm of Eurozone financial regulation. This concept should be developed

further and tested in other cases. This book has mainly focused on the European new technocracy. Analyses of a potential US new technocracy or global new technocracy would provide insights about the concept's accuracy. The characterization of the new normal of post-Crisis financial regulation across different cases is highly relevant. Thus, the development of better and more efficient policy responses to the severe consequences of economic and financial crises can be facilitated.

Thirdly, the generalizability of the developed Paradigm Change Analysis (PCA) model should be specified and tested in other cases. As outlined in the previous section, a more detailed analysis of the US currency area is promising to develop the PCA model further. Similarly, the analysis of paradigm change in the UK or other crisis-affected countries would be desirable. Like the US and the Eurozone, the UK has established a revised macroprudential stability framework after the Crisis. Furthermore, a comparison of the 2008 Crisis with the Asian financial crisis during the 1990s could also provide interesting results with respect to paradigm change dynamics.

Fourthly, this volume has only theorized one pathway of paradigm change in the Eurozone case. This configurative causal mechanism has been assumed to be most plausible based on current paradigm change literature. However, in line with the argument of equifinality, other pathways are not denied. Hence, another inquiry of alternative causal factors would strengthen the specific understanding of the Eurozone case. One option would be the evaluation of integration theories in the case of competency-shifting to the European level in the post-Crisis era. The results of this volume could serve as a starting point for a more comprehensive analysis of the European case in this regard.

Finally, other challenges remain persistent in both Eurozone research and policymaking. Although financial stability has been re-established in the post-Crisis era, particularly the Eurozone design still lacks a balancing mechanism between Northern and Southern economies. In the specific case of financial regulation, the separation of investment and retail banking remains an important issue. So far, the too-big-to-fail risk of systemic relevant banks is not sufficiently solved. The coming years will show how sustainable changes of Eurozone financial regulation turn out. However, as indicated in the introductory remark at the beginning of this book, the paradigm of regulation has changed.

References

- Abdelal, R. (2006). Writing the rules of global finance: France, Europe, and capital liberalization. *Review of International Political Economy*, 13(1).
- Abdelal, R. (2007). *Capital rules. The construction of global finance*. Cambridge: Harvard University Press.
- Abdelal, R., Blyth, M., & Parsons, C. (2010a). *Constructing the international economy*. Ithaca: Cornell University Press.
- Abdelal, R., Blyth, M., & Parsons, C. (2010b). Re-constructing IPE. Some conclusions drawn from a crisis. In R. Abdelal, M. Blyth, & C. Parsons (Eds.), *Constructing the international economy* (pp. 227–239). Ithaca: Cornell University Press.
- Ackrill, R., & Kay, A. (2011). Multiple streams in EU policy-making: The case of the 2005 sugar reform. *Journal of European Public Policy*, 18(1), 72–89. <http://doi.org/10.1080/13501763.2011.520879>
- Agresti, M., Baudino, P., & Poloni, P. (2008). *The ECB and IMF indicators for the macro-prudential analysis of the banking sector* (Occasional Paper Series No. 99). Frankfurt am Main.
- Alter, J. (2010). *The promise: President Obama, year one*. New York: Simon and Schuster.
- Angeloni, I. (2015). Challenges and priorities for the ECB banking supervision. Retrieved February 22, 2018, from <https://www.bankingsupervision.europa.eu/press/speeches/date/2015/html/se151127.en.htm>
- Armour, J., Awrey, D., Davies, P., Enriques, L., Gordon, J. N., Mayer, C., & Payne, J. (2016). *Principles of financial regulation*. Oxford: Oxford University Press.
- Bafin. (2013). BaFin-Exekutivdirektor Raimund Röseler: „Künftige Krisen verhindern“. Retrieved February 18, 2018, from https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Fachartikel/2013/fa_bj_2013_05_crd_iv.html
- Baker, A. (2012). The New Political Economy of the Macroprudential Ideational Shift. *New Political Economy*, 18(1), 112–139. <http://doi.org/10.1080/13563467.2012.662952>
- Baker, A. (2015). Varieties of Economic Crisis, Varieties of Ideational Change: How and Why Financial Regulation and Macroeconomic Policy Differ. *New Political Economy*, 20(3), 342–366. <http://doi.org/10.1080/13563467.2014.951431>
- Bank for International Settlements. (2002). *72nd Annual Report*. Basel.
- Bank for International Settlements. (1986). *Recent innovations in international banking (Cross Report)*. Basel. Retrieved from <https://www.bis.org/publ/ecsc01a.pdf>
- Bank for International Settlements. (1997). *67th Annual Report*. Basel.
- Bank for International Settlements. (2001). *71st Annual Report*. Basel.
- Bank for International Settlements. (2005). *75th Annual Report*. Basel.
- Bank for International Settlements. (2010a). Basel III: International framework for liquidity risk measurement, standards and monitoring. Retrieved February 18, 2018, from

<https://www.bis.org/publ/bcbs188.htm>

- Bank for International Settlements. (2010b). *Macroprudential instruments and frameworks: a stocktaking of issues and experiences* (Committee on the Global Financial System Papers No. 38). Basel.
- Bank for International Settlements. (2018). International regulatory framework for banks (Basel III). Retrieved April 17, 2018, from <https://www.bis.org/bcbs/basel3.htm?m=3%7C14%7C572>
- Bank of England. (2011). *Instruments of macroprudential policy Instruments of macroprudential policy*. London.
- Bankenverband. (2012). Trennbanken kein geeigneter Weg zur Erhöhung der Finanzstabilität in Deutschland. *Presse-Info Deutsche Kreditwirtschaft*. Retrieved from <https://web.archive.org/web/20130209215406/http://bankenverband.de/presse/presse-infos/trennbanken-kein-geeigneter-weg-zur-erhoehung-der-finanzstabilitaet-in-deutschland>
- Beach, D., & Pedersen, R. B. (2013). *Process-tracing methods. Foundations and guidelines*. Ann Arbor: Michigan University Press.
- Béland, D. (2009). Ideas, institutions, and policy change. *Journal of European Public Policy*, 16(5), 701–718. <http://doi.org/10.1080/13501760902983382>
- Béland, D., & Cox, R. H. (Eds.). (2011). *Ideas and politics in social science research*. Oxford: Oxford University Press.
- Bennett, A., & Checkel, J. (Eds.). (2015). *Process tracing. From metaphor to analytic tool*. Cambridge: Cambridge University Press.
- Berg, T. O., & Carstensen, K. (2012). Funktionswandel der EZB? *Wirtschaftsdienst: Zeitschrift Für Wirtschaftspolitik*. <http://doi.org/10.1007/s10273-012-1332-0>
- Berman, S. (2013). Ideational theorizing in the social sciences since “Policy paradigms, social learning, and the state.” *Governance*, 26(2), 217–237. <http://doi.org/10.1111/gove.12008>
- Bernanke, B. (2011). Implementing a Macroprudential Approach to Supervision and Regulation. Retrieved August 21, 2015, from <http://www.federalreserve.gov/newsevents/speech/bernanke20110505a.htm>
- Bernanke, B. (2012). Fostering financial stability. Retrieved from http://www.federalreserve.gov/newsevents/speech/bernanke20120409a.htm?utm_campaign=Elevation+Group&utm_source=twitterfeed&utm_medium=twitter
- Best, J. (2005). *The limits of transparency: ambiguity and the history of international finance*. Ithaca: Cornell University Press.
- Best, J. (2010). The Limits of Financial Risk Management: Or What we Didn’t Learn from the Asian Crisis. *New Political Economy*, 15(1), 29–49. <http://doi.org/10.1080/13563460903553582>
- Bibow, J. (2009). *Keynes on monetary policy, finance and uncertainty. Liquidity preference theory and the global financial crisis*. New York: Routledge.
- Biehling, H.-J. (2011). Die EU in der globalen Wirtschafts- und Finanzkrise: Konturen und innere Widersprüche des europäischen Krisenmanagements. In O. Kessler (Ed.), *Die Internationale Politische Ökonomie der Weltfinanzkrise* (pp. 161–181). Wiesbaden: VS Verlag.
- Blanchard, O. (2015a). Ten takeaways from the ‘Rethinking Macro Policy. Progress or Confusion?’

Retrieved July 27, 2015, from <http://www.voxeu.org/article/rethinking-macro-policy-ten-takeaways>

Blanchard, O. (2015b, April 2). Contours of Macroeconomic Policy in the Future. *IMF Blog: IMFdirect*. Retrieved from <http://blog-imfdirect.imf.org/2015/04/02/contours-of-macroeconomic-policy-in-the-future/>

Blanchard, O., & Illing, G. (2006). *Makroökonomie* (4th ed.). München: Pearson Studium.

Blatter, J., & Haverland, M. (2012). *Designing case studies. Explanatory approaches in small-n research*. Hampshire: Palgrave Macmillan.

Bleich, E., & Pekkanen, R. (2013). How to report interview data. In L. Mosley (Ed.), *Interview Research in political science* (pp. 84–105). Ithaca: Cornell University Press.

Blyth, M. (2001). The Transformation of the Swedish Model: Economic Ideas, Distributional Conflict, and Institutional Change. *World Politics*, 54(01), 1–26. <http://doi.org/10.1353/wp.2001.0020>

Blyth, M. (2002). *Great Transformations: economic ideas and institutional change in the twentieth century*. New York: Cambridge University Press.

Blyth, M. (2003). From Comparative Capitalism to Economic Constructivism: The Cornell Series in Political Economy. *New Political Economy*, 8(2), 263–274. <http://doi.org/10.1080/13563460307175>

Blyth, M. (2006). Great Punctuations: Prediction, Randomness, and the Evolution of Comparative Political Science. *American Political Science Review*, 100(04), 493. <http://doi.org/10.1017/S0003055406062344>

Blyth, M. (2011). Ideas, uncertainty, and evolution. In D. Béland & R. H. Cox (Eds.), *Ideas and politics in social science research* (pp. 83–101). New York: Oxford University Press.

Blyth, M. (2013). Paradigms and Paradox: The Politics of Economic Ideas in Two Moments of Crisis. *Governance*, 26(2), 197–215. <http://doi.org/10.1111/gove.12010>

Blyth, M., Goldstein, J., Keohane, R., & Sikkink, K. (1997). “Any More Bright Ideas?” The Ideational Turn of Comparative Political Economy. *Comparative Politics*, 29(2), 229. <http://doi.org/10.2307/422082>

Borio, C. (2011). Implementing a Macroprudential Framework: Blending Boldness and Realism. *Capitalism and Society*, 6(1), 1–23. <http://doi.org/10.2202/1932-0213.1083>

Buiter, W., & Rahbari, E. (2012). The European Central Bank as lender of last resort for sovereigns in the Eurozone. *Journal of Common Market Studies*, 50(2), 6–35.

Bukovansky, M. (2009). *Legitimacy and power politics: The American and French revolutions in international political culture*. Princeton: Princeton University Press.

Buti, M., & Carnot, N. (2013). Fiscal policy in Europe: Searching for the right balance. Retrieved April 8, 2015, from <http://www.voxeu.org/article/fiscal-policy-europe-searching-right-balance>

Campbell, J. L. (1998). Institutional analysis and the role of ideas in political economy. *Theory and Society*, 27(3), 377–409. Retrieved from <http://www.springerlink.com/index/P714G4735J78N256.pdf>

Campbell, J. L. (2004). *Institutional change and globalization*. Princeton: Princeton University Press.

- Capoccia, G., & Kelemen, R. D. (2007). The Study of Critical Junctures: Theory, Narrative, and Counterfactuals in Historical Institutionalism. *World Politics*, 59(03), 341–369. <http://doi.org/10.1017/S0043887100020852>
- CFA Institute. (2013). *Capital requirements directive IV. Issue Brief*. Retrieved from https://www.cfainstitute.org/ethics/Documents/CRD_IV_issue_brief_final.pdf
- Checkel, J. (2015). Mechanisms, process, and the study of international institutions. In A. Bennett & J. Checkel (Eds.), *Process tracing. From metaphor to analytical tool* (pp. 74–97). Cambridge: Cambridge University Press.
- Claessens, S. (2014). *An Overview of Macroprudential Policy Tools* (IMF Working Paper Series No. WP/14/214). Washington, D.C.
- Clement, P. (2010). The term “macroprudential”: origins and evolution. In Bank for International Settlements (Ed.), *BIS Quarterly Review* (pp. 59–67). Retrieved from https://www.bis.org/publ/qtrpdf/r_qt1003.pdf
- Collier, D., & Gerring, J. (Eds.). (2009). *Concepts and Method in Social Science. The Tradition of Giovanni Sartori*. New York: Routledge.
- Committee on Economic and Monetary Affairs. (2015). *Minutes. Meeting of 26th May 2015. 15.00 - 18.30*. Brussels. Retrieved from <http://www.europarl.europa.eu/sides/getDoc.do?type=COMPARL&reference=PE-560.570&format=PDF&language=EN&secondRef=02>
- Connolly, W. E. (1972). On “Interests” in Politics. *Politics & Society*, 2(4), 459–477. <http://doi.org/10.1177/003232927200200405>
- Constâncio, V. (2016). The new ECB Macroprudential Bulletin. Retrieved July 16, 2016, from <http://www.voxeu.org/article/new-ecb-macroprudential-bulletin>
- Copelovitch, M. S. (2010). *The International Monetary Fund in the global economy*. Cambridge: Cambridge University Press.
- Corbett, A. (2005). *Universities and the Europe of Knowledge*. London: Palgrave Macmillan UK. <http://doi.org/10.1057/9780230286467>
- Cram, L. (2001). Whither the Commission? Reform, renewal and the issue-attention cycle. *Journal of European Public Policy*, 8(5), 770–786. <http://doi.org/10.1080/13501760110083509>
- Crawford, S., & Ostrom, E. (1995). A grammar of institutions. *American Political Science Review*, 89(3), 582–600.
- Crockett, A. (2000). *Marrying the micro- and macro-prudential dimensions of financial stability* (BIS Review 76/2000). Basel. Retrieved from <http://www.bis.org/review/r000922b.pdf>
- Crotty, J. (2011). *The realism of assumptions does matter: why Keynes-Minsky theory must replace efficient market theory as the guide to financial regulation policy*. Ann Arbor. Retrieved from http://people.umass.edu/crotty/Oxford_draft_April_27_2010_final.pdf
- Da Rocha Lopes, S., & Quagliariello, M. (2014). Banking supervision and growth: a new macroprudential paradigm? In M. Quintyn, D. Masciandaro, F. Lierman, & M. Balling (Eds.), *Money, Regulation & Growth: financing new growth in Europe* (pp. 101–117). Vienna: The European Money and Finance Forum.

- Davidson, P. (2009). *The Keynes solution. The path to global economic prosperity*. New York: Palgrave Macmillan.
- Davis, G. (2009). *Managed by the markets. How finance re-shaped America*. Oxford: Oxford University Press.
- De Grauwe, P. (2011). *The European Central Bank: Lender of Last Resort in the Government Bond Markets?* (CESifo Working Paper Series No. 3569).
- De Rynck, S. (2016). Banking on a union: the politics of changing eurozone banking supervision. *Journal of European Public Policy*, 23(1), 119–135.
<http://doi.org/10.1080/13501763.2015.1019551>
- Eichengreen, B. (2008). Time to grasp the fiscal nettle. In these desperate economic times, the only option left for governments is aggressive fiscal policy. *Theguardian*. Retrieved from <http://www.theguardian.com/commentisfree/2008/oct/09/creditcrunch.economy>
- ESM. (2015). About us. Retrieved April 16, 2015, from <http://www.esm.europa.eu/about/index.htm>
- ESMA. (n.d.). Who we are. Retrieved February 23, 2018, from <https://www.esma.europa.eu/about-esma/who-we-are>
- ESRB. (2014a). *Flagship Report on Macro-prudential Policy in the Banking Sector*. Frankfurt am Main. Retrieved from https://www.esrb.europa.eu/pub/pdf/other/140303_flagship_report.pdf
- ESRB. (2014b). *The ESRB Handbook on Operationalising Macro-prudential Policy in the Banking Sector. European Systemic Risk Board*. Frankfurt am Main.
- ESRB. (2017). *ESRB risk dashboard*. Frankfurt am Main. Retrieved from https://www.esrb.europa.eu/pub/pdf/dashboard/esrb.risk_dashboard171220_22.en.pdf?cd83d22fbe20c78eeefa20bf0954eb28
- European Banking Authority. (2016). *The European Banking Authority at a glance*. London. Retrieved from <http://www.eba.europa.eu/documents/10180/1401372/EBA+AT+A+GLANCE.pdf/e8686db2-6390-4c52-ad06-bc8d24b7aeb5>
- European Banking Federation. (2015). *EBF response to the European Commission consultation on the possible impact of CRR and CRD IV on bank financing of the economy*. Brussels. Retrieved from https://www.ebf.eu/wp-content/uploads/2017/01/EBF_017354-EBF-response-to-the-EC-consultation-on-CRR-CRD-IV_1.pdf
- European Central Bank. (2016a). *Financial stability review. May 2016*. Frankfurt am Main. Retrieved from <https://www.ecb.europa.eu/pub/pdf/other/financialstabilityreview201605.en.pdf?e1a2bef79ed901d8ceae004f2fcecdd>
- European Central Bank. (2016b). *Macroprudential Bulletin*. Frankfurt am Main.
- European Central Bank. (2016c). *SSM SREP Methodology Booklet*. Frankfurt am Main. Retrieved from https://www.bankingsupervision.europa.eu/ecb/pub/pdf/srep_methodology_booklet_2016.en.pdf?486e2833820b13c740ffb49a0ee57672
- European Central Bank. (2016d). What is the SREP? Retrieved October 10, 2017, from <https://www.bankingsupervision.europa.eu/about/ssmexplained/html/srep.en.html>

European Central Bank. (2017). *ECB Annual Report on supervisory activities 2016*. Frankfurt am Main.

European Central Bank. (2018a). Asset purchase programmes. Retrieved February 25, 2018, from <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html#abspp>

European Central Bank. (2018b). ECB Mission. Retrieved February 18, 2018, from <http://www.ecb.europa.eu/ecb/orga/escb/ecb-mission/html/index.en.html>

European Commission. (2012). *Summary of the replies to the consultation of the internal market and services directorate general on the recommendations of the high-level expert group on reforming the structure of the EU banking sector*. Brussels. Retrieved from http://ec.europa.eu/finance/consultations/2012/hleg-banking/docs/replies-summary_en.pdf

European Commission. (2013). *Stakeholders' meeting - Reforming the Structure of the EU Banking Sector, Brussels, 17 May 2013*. Brussels. Retrieved from https://web.archive.org/web/20140110202537/http://ec.europa.eu/internal_market/bank/docs/structural-reform/20130517-stakeholder-meeting/conclusions_en.pdf

European Commission. (2015a). Europe 2020. Other tools for growth and jobs. Retrieved April 21, 2015, from http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/eu-tools-for-growth-and-jobs/index_en.htm

European Commission. (2015b). Europe 2020 targets. Retrieved April 21, 2015, from http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/targets/index_en.htm

European Commission. (2015c, February 27). Understanding... Banking Union. *Finance Newsletter*. Retrieved from http://ec.europa.eu/information_society/newsroom/cf/fisma/item-detail.cfm?item_id=20758&newsletter_id=166&lang=en

European Commission. (2018a). Financial reform: list of actions. Retrieved August 5, 2018, from https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-reforms-and-their-progress/progress-financial-reforms_en

European Commission. (2018b). Financial Supervision. Retrieved May 15, 2018, from http://ec.europa.eu/finance/general-policy/committees/index_en.htm#maincontentSec2

European Council. (2015). Restructuring risky banks: Council agrees its negotiating stance. Retrieved February 14, 2018, from <http://www.consilium.europa.eu/en/press/press-releases/2015/06/19/restructuring-risky-banks-council-agrees-negotiating-stances/>

European Insurance and Occupational Pensions Authority. (2018). Mission and tasks. Retrieved February 22, 2018, from <https://eiopa.europa.eu/about-eiopa/missions-and-tasks>

European Parliament. (2012). Zusatzthema zu Modul 6 Währungsunion. Der Fiskalvertrag. Retrieved April 15, 2015, from http://www.europarl.europa.eu/brussels/website/media/modul_06/Zusatzthemen/Pdf/Wirtschaftsunion.pdf

European Parliament. (2013, April 16). Parliament votes reform package to strengthen EU banks. *Press Release*. Brussels. Retrieved from <http://www.europarl.europa.eu/news/en/press-room/20130416IPR07333/parliament-votes-reform-package-to-strengthen-eu-banks>

European Parliament. (2018). Banking structure reform. Retrieved February 14, 2018, from <http://www.europarl.europa.eu/legislative-train/theme-deeper-and-fairer-internal-market-with-a-strengthened-industrial-base-financial-services/file-banking-structural-reform>

- Evans, O., Leone, A. M., Gill, M., Hilbers, P., Blaschke, W., Krueger, R., ... Berge, J. (2000). *Macroprudential Indicators of Financial System Soundness* (Occasional Paper Series No. 192). Washington, D.C.
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383. <http://doi.org/10.2307/2325486>
- Finnemore, M. (1996). *National Interests in International Society*. Ithaca: Cornell University Press.
- Flinders, M. (2004). Distributed public governance in the European Union. *Journal of European Public Policy*, 11(3), 520–544. <http://doi.org/10.1080/13501760410001694282>
- Fontana, G., & Gerrard, B. (2004). A Post Keynesian theory of decision making under uncertainty. *Journal of Economic Psychology*, 25(5), 619–637. <http://doi.org/10.1016/j.joep.2003.11.001>
- FSOC. (2015). *Annual Report Financial Stability Oversight Council*. Washington, D.C. Retrieved from [http://www.treasury.gov/initiatives/fsoc/studies-reports/Documents/2015 FSOC Annual Report.pdf](http://www.treasury.gov/initiatives/fsoc/studies-reports/Documents/2015%20FSOC%20Annual%20Report.pdf)
- Gadanecz, B., & Jayaram, K. (2015). *Macroprudential policy frameworks, instruments and indicators: a review*. Basel.
- Galati, G., & Moessner, R. (2013). MACROPRUDENTIAL POLICY - A LITERATURE REVIEW. *Journal of Economic Surveys*, 27(5), 846–878. <http://doi.org/10.1111/j.1467-6419.2012.00729.x>
- Gerring, J. (2007a). *Case study research: principles and practices*. Cambridge: Cambridge University Press.
- Gerring, J. (2007b). Is There a (Viable) Crucial-Case Method? *Comparative Political Studies*, 40(3), 231–253. <http://doi.org/10.1177/0010414006290784>
- Gerring, J. (2012a). Mere Description. *British Journal of Political Science*, 42(04), 721–746. <http://doi.org/10.1017/S0007123412000130>
- Gerring, J. (2012b). *Social science methodology. A unified framework* (Second edi). Cambridge: Cambridge University Press.
- Gersbach, H., Hahn, V., & Liu, Y. (2017). Macroprudential policy in the new Keynesian world. In *Jahrestagung des Vereins für Socialpolitik: Alternative Geld- und Finanzarchitekturen*. Leipzig: German Economic Association. Retrieved from <https://www.econstor.eu/bitstream/10419/168185/1/VfS-2017-pid-3034.pdf>
- Gläser, J., & Laudel, G. (2010). *Experteninterviews und qualitative Inhaltsanalyse* (4th ed.). Wiesbaden: VS Verlag.
- Glöckler, G., Lindner, J., & Salines, M. (2017). Explaining the sudden creation of a banking supervisor for the euro area. *Journal of European Public Policy*, 24(8), 1135–1153. <http://doi.org/10.1080/13501763.2016.1184296>
- Goertz, G. (2006). *Social science concepts. A user's guide*. Princeton: Princeton University Press.
- Goldstein, J. (1993). *Ideas, interests and american trade policy*. Ithaca: Cornell University Press.
- Goldstein, J., & Keohane, R. (Eds.). (1993). *Ideas and foreign policy. Beliefs, institutions and political change*. Ithaca: Cornell University Press.
- Goodfriend, M., & King, R. (1997). The New Neoclassical Synthesis and the Role of Monetary Policy.

- In B. Bernanke & J. Rotemberg (Eds.), *NBER Macroeconomics Annual 1997* (Vol. 12, pp. 231–296). Cambridge: MIT Press. Retrieved from <http://www.nber.org/chapters/c11040>
- Grabel, I. (2011). Not your grandfather's IMF: Global crisis, "Productive incoherence" and developmental policy space. *Cambridge Journal of Economics*, 35(5), 805–830. <http://doi.org/10.1093/cje/ber012>
- Grabel, I. (2015a). Post-Crisis Experiments in Development Finance Architectures: A Hirschmanian Perspective On 'Productive Incoherence.' *Review of Social Economy*, 73(4), 388–414. <http://doi.org/10.1080/00346764.2015.1089111>
- Grabel, I. (2015b). The Rebranding of Capital Controls in an Era of Productive Incoherence. *Review of International Political Economy*, 22(1), 7–43. <http://doi.org/10.1080/09692290.2013.836677>
- Group of Thirty. (2009). *Financial reform. A framework for financial stability*. Washington, D.C. Retrieved from http://group30.org/images/uploads/publications/G30_FinancialReformFrameworkFinStability.pdf
- Haldane, A. (2010). *The \$100 Billion Question*. Retrieved from <http://www.bis.org/review/r100406d.pdf>
- Hall, P. (1989). *The political power of economic ideas. Keynesianism across nations*. (P. Hall, Ed.). Princeton: Princeton University Press.
- Hall, P. (1993). Policy paradigms, social learning and the state: The case of economic policymaking in Britain. *Comparative Politics*, 25(3), 275–296.
- Hall, P., & Taylor, R. (1996). Political Science and the Three New Institutionalisms *. *Political Studies*, 44, 936–957.
- Hay, C. (2004). Ideas, interests and institutions in the comparative political economy of great transformations. *Review of International Political Economy*, 11(1), 204–226. <http://doi.org/10.1080/0969229042000179811>
- Hay, C. (2015). Good in a crisis: Constructivism's institutionalism and the political economy of disequilibrium. In *Council for European Studies Conference 2015*. Paris.
- Hecló, H. (1986). Reaganism and the search for a public philosophy. In J. L. Palmer (Ed.), *Perspectives on the reagan years* (pp. 31–64). Washington, D.C.: Urban Institute Press.
- Heilemann, J. (2010). Obama is from mars, wall street is from venus: psychoanalyzing one of america's most dysfunctional relationships. *New York Magazine*. Retrieved from <http://nymag.com/news/politics/66188/>
- Hennessy, A. (2014). Redesigning financial supervision in the European Union (2009–2013). *Journal of European Public Policy*, 21(2), 151–168. <http://doi.org/10.1080/13501763.2013.853601>
- High-level Expert Group. (2012). *High-level Expert Group on reforming the structure of the EU banking sector. Final report*. Brussels. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.348.5669&rep=rep1&type=pdf>
- Hirschman, A. (1989). How the Keynesian revolution was exported from the United States, and other comments. In P. Hall (Ed.), *The political power of economic ideas* (pp. 347–359). Princeton: Princeton University Press.

- Hirtle, B., Schuermann, T., & Stiroh, K. (2009). *Macroprudential Supervision of Financial Institutions : Lessons from the SCAP* (Federal Reserve Bank of New York Staff Reports No. 409).
- Hirtle, B., & Stiroh, K. (2009). *Macroprudential Supervision of Financial Institutions : Lessons from the SCAP* (Staff Report No. 409). New York. Retrieved from http://newyorkfed.org/research/staff_reports/sr409.pdf
- Hollo, D., Kremer, M., & Lo Duca, M. (2012). *CISS - A Composite Indicator of Systemic Stress in the Financial System* (No. 1426). *Working Paper Series*. Frankfurt. Retrieved from <http://papers.ssrn.com/abstract=2018792>
- Ikenberry, J. (1993). Creating yesterday's new world order: Keynesian "new thinking" and the Anglo-American postwar settlement. In J. Goldstein & R. O. Keohane (Eds.), *Ideas and foreign policy. Beliefs, institutions, and political change* (pp. 57–86). Ithaca: Cornell University Press.
- Ikenberry, J. (1994). History's heavy hand: institutions and the politics of state. In *New perspectives on institutions*. Retrieved from <http://scholar.princeton.edu/gji3/files/HistorysHeavyHand.pdf>
- International Monetary Fund. (1998). *Toward a Framework for Financial Stability*. Washington, D.C. Retrieved from <http://www.imf.org/external/pubs/ft/wefs/toward/index.htm>
- Jabko, N. (2006). *Playing the market: a political strategy for uniting Europe, 1985-2005*. Ithaca: Cornell University Press.
- Jackson, R. H. (1993). The weight of ideas in decolonization: normative change in international relations. In J. Goldstein & R. O. Keohane (Eds.), *Ideas and foreign policy. Beliefs, institutions, and political change* (pp. 111–138). Ithaca: Cornell University Press.
- Jacobs, A. (2015). Process tracing the effects of ideas. In A. Bennett & J. Checkel (Eds.), *Process tracing. From metaphor to analytical tool* (pp. 41–73). Cambridge: Cambridge University Press.
- Jacobsen, J. (1995). Much ado about ideas: the cognitive factor in economic policy. *World Politics*, 47(2), 283–310. Retrieved from http://journals.cambridge.org/abstract_S0043887100016117
- Jenkins-Smith, H., Nohrstedt, D., Weible, C., & Sabatier, P. (2014). The advocacy coalition framework: foundations, evolution, and ongoing research. In P. Sabatier & C. Weible (Eds.), *Theories of the policy process* (3rd ed., pp. 183–223). Boulder: Westview Press.
- Johnson, S., & Kwak, J. (2010). *Thirteen bankers: the Wall Street takeover and the next financial meltdown*. New York: Pantheon.
- Joint Committee. (2018). Risks and Vulnerabilities - Objectives and Tasks. Retrieved January 18, 2018, from <https://esas-joint-committee.europa.eu/Pages/Activities/Risks-and-Vulnerabilities-Objectives-and-Tasks.aspx>
- Kern, S., & Lantz, S. (2012). *Macro-prudential financial supervision in the US*. Frankfurt. Retrieved from https://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000287478/Macro-prudential+financial+supervision+in+the+US%3A+.PDF
- Keynes, J. M. (1936). *The general theory of employment, interest and money* (First Harv). London: Harvest / Harcourt.
- Keynes, J. M. (1937). The general theory and after, part 2: defence and development. In *The collective writings of John Maynard Keynes* (Vol. 14). Cambridge: Macmillan / Cambridge University Press for the Royal Economic Society.

- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry: scientific inference in qualitative research*. Princeton: Princeton University Press. Retrieved from <http://press.princeton.edu/titles/5458.html>
- Kingdon, J. W. (1984). *Agendas, alternatives and public policies*. Boston: Little, Brown and Company.
- Kregel, J. (2014). *Minsky and dynamic macroprudential regulation* (Public Policy Brief Series No. 131). Annandale-on-Hudson. Retrieved from http://www.levyinstitute.org/pubs/ppb_131.pdf
- Krippner, G. (2011). *Capitalizing on Crisis. The political origins of the rise of finance*. Cambridge: Harvard University Press.
- Krugman, P. (2009). *How did economists get it so wrong?* Retrieved from http://www.ie.ufrj.br/hpp/intranet/pdfs/krugman_september_6_2009_howdideconomistsdidsowrong.pdf
- Kuhn, T. (1962). *The structure of scientific revolutions. Reprint 2012*. (I. Hacking, Ed.) (4th editio). Chicago: University of Chicago Press.
- Laeven, L., & Valencia, F. (2012). *Systemic Banking Crises Database* (IMF Working Paper Series No. WP/12/163). *International Monetary Fund*. Washington, D.C. Retrieved from <http://ideas.repec.org/a/pal/imfecr/v61y2013i2p225-270.html>
- Lange, M. (2013). *Comparative historical methods*. London: SAGE Publications.
- Lautenschläger, S. (2015). How can prudential regulation foster growth? Retrieved February 26, 2018, from <https://www.bankingsupervision.europa.eu/press/speeches/date/2015/html/se150316.en.htm>
- Le Maux, L., & Scialom, L. (2013). Central banks and financial stability: rediscovering the lender-of-last-resort practice in a finance economy. *Cambridge Journal of Economics*, 37(1). Retrieved from <http://cje.oxfordjournals.org/content/37/1/1.abstract>
- Levine, P., & Lima, D. (2015). *Policy mandates for macro-prudential and monetary policies in a new Keynesian framework* (Working Paper Series No. 1784).
- Lewis, O. A., & Steinmo, S. (2012). How Institutions Evolve: Evolutionary Theory and Institutional Change. *Polity*, 44(3), 314–339. <http://doi.org/10.1057/pol.2012.10>
- Lieberman, R. C. (2002). Ideas, Institutions, and Political Order: Explaining Political Change. *The American Political Science Review*. American Political Science Association. Retrieved from <https://www.jstor.org/stable/3117505>
- MacKenzie, D. (2006). *An engine, not a camera: How financial models shape markets*. Cambridge: MIT Press.
- MacKenzie, D., Muniesa, F., & Siu, L. (Eds.). (2007). *Do economists make markets? On the performativity of economics*. Princeton: Princeton University Press.
- Mahoney, J., & Thelen, K. (Eds.). (2010). *Explaining institutional change: ambiguity, agency, power*. New York: Cambridge University Press.
- Malhère, M. (2012). *Liikanen group proposes separating high-risk activities*. Brussels. Retrieved from <https://www.ebf.eu/wp-content/uploads/2017/01/Banking-Liikanen-group-proposes-separating-high-risk-activities.pdf>

- Malkiel, B. G. (2003). The Efficient Market Hypothesis and its critics. *Journal of Economic Perspectives*, 17(1), 59–82.
- Mankiw, N. G. (2000). *Makroökonomik* (4th ed.). Stuttgart: Schäffer Pöschel.
- March, J. G., & Olsen, J. P. (1996). Institutional Perspectives on Political Institutions. *Governance*, 9(3), 247–264. <http://doi.org/10.1111/j.1468-0491.1996.tb00242.x>
- March, J. G., & Olsen, J. P. (1998). The institutional dynamics of international political orders. *International Organization*, 52(4), 943–969.
- Marques-Ibanez, D., & Leuvensteijn, M. van. (2017). Bank competition and financial stability: The role of financial innovation. Retrieved February 27, 2017, from <http://voxeu.org/article/bank-competition-and-financial-stability-role-financial-innovation>
- McNamara, K. (1998). *The currency of ideas. Monetary politics in the European Union*. Ithaca: Cornell University Press.
- Mehta, J. (2011). The varied roles of ideas in politics. From “whether” to “how.” In D. Béland & R. H. Cox (Eds.), *Ideas and politics in social science research* (pp. 23–46). Oxford: Oxford University Press.
- Metz, J. (2014). EU Commission expert groups. Between inclusive and effective policy-making. In C. Holst (Ed.), *Expertise and Democracy* (pp. 263–291). Oslo.
- Metz, J. (2015). *The European Commission, Expert Groups, and the Policy Process. Demystifying Technocratic Governance*. Hampshire: Palgrave Macmillan.
- Micossi, S. (2015a). The changing tasks of the ECB. *VOX CEPR's Policy Portal*. Retrieved from <http://www.voxeu.org/article/changing-tasks-ecb>
- Micossi, S. (2015b). *The Monetary Policy of the European Central Bank (2002-2015). No. 109*. Brussels.
- Minsky, H. P. (1977). The Financial Instability Hypothesis: An interpretation of Keynes and an Alternative to "Standard" Theory. *Hyman P. Minsky Archive*, (Paper 38), 1–17. Retrieved from http://digitalcommons.bard.edu/cgi/viewcontent.cgi?article=1037&context=hm_archive
- Mosley, L. (Ed.). (2013a). *Interview research in political science*. Ithaca: Cornell University Press.
- Mosley, L. (2013b). “Just talk to people”?. Interviews in contemporary political science. In L. Mosley (Ed.), *Interview Research in political science* (pp. 1–28). Ithaca: Cornell University Press.
- Munro, G., Ditto, P., Lockhart, L., Fagerlin, A., Gready, M., & Peterson, E. (2002). Biased Assimilation of Sociopolitical Arguments: Evaluating the 1996 U.S. Presidential Debate. *Basic and Applied Social Psychology*, 24(1).
- Nouy, D. (2017). Progress and developments in European banking supervision. Retrieved March 28, 2018, from <https://www.bankingsupervision.europa.eu/press/speeches/date/2017/html/ssm.sp171124.en.html>
- OECD. (2017). Business Confidence Index. Retrieved May 17, 2018, from <https://data.oecd.org/leadind/business-confidence-index-bci.htm>
- OECD. (2018a). Gross domestic product (GDP) indicator. Retrieved April 4, 2018, from <https://data.oecd.org/gdp/gross-domestic-product-gdp.htm>

- OECD. (2018b). Unemployment rate. Retrieved from <https://data.oecd.org/unemp/unemployment-rate.htm>
- Ossege, C. (2014). Is expertise the driving force? Explaining agency autonomy in the EU. In C. Holst (Ed.), *Expertise and Democracy* (pp. 393–423). Oslo.
- Ostrom, E. (2007). Institutional Rational Choice. An assessment of the institutional analysis and development framework. In P. Sabatier (Ed.), *Theories of the policy process* (2nd ed., pp. 21–67). Boulder: Westview Press.
- Ostrom, E., Cox, M., & Schlager, E. (2014). An assessment of the institutional analysis and development framework and introduction of the social-ecological systems framework. In P. Sabatier & C. Weible (Eds.), *Theories of the policy process* (3rd ed., pp. 267–306). Boulder: Westview Press.
- Papi, L., Presbitero, A., & Zazzaro, A. (2013). IMF lending and banking crises. Retrieved April 15, 2015, from <http://www.voxeu.org/article/imf-lending-and-banking-crises>
- Parsons, C. (2003). *A certain idea of Europe*. Ithaca: Cornell University Press.
- Pech, W., & Milan, M. (2009). Behavioral economics and the economics of Keynes. *The Journal of Socio-Economics*, 38(6), 891–902. <http://doi.org/10.1016/j.socsec.2009.06.011>
- Persaud, A. (2000). *Sending the Herd Off the Cliff Edge: The Disturbing Interaction Between Herding and Market-Sensitive Risk Management Practices*. Retrieved from <http://www.bis.org/publ/bppdf/bispap02l.pdf>
- Peters, B. G. (1994). Agenda-setting in the European community. *Journal of European Public Policy*, 1(1), 9–26. <http://doi.org/10.1080/13501769408406945>
- Pierson, P. (1996). *The Path to European Integration: A Historical Institutionalist Analysis*. *Comparative Political Studies* (Vol. 29). <http://doi.org/10.1177/0010414096029002001>
- Pontusson, J., & Raess, D. (2012). How (and why) is this time different? The politics of economic crisis in Western Europe and the United States. *Annual Review of Political Science*, 15, 13–33. Retrieved from <http://www.annualreviews.org/doi/pdf/10.1146/annurev-polisci-031710-100955>
- Porter, T. (2003). Technical collaboration and political conflict in the emerging regime for international financial regulation. *Review of International Political Economy*, 10(3), 520–551. <http://doi.org/10.1080/09692290308430>
- Quiggin, J. (2010). *Zombie economics. How dead ideas still walk among us*. Princeton: Princeton University Press.
- Richardson, J. (2006). Policy-making in the EU: interests, ideas and garbage cans of primeval soup. In J. Richardson (Ed.), *European Union Power and Policy-making* (3rd ed., pp. 3–30). Oxon: Routledge.
- Ryan, T. (2009). *Testimony by the Securities Industry and Financial Markets Association before the US House of Representatives Committee on Financial Services*. Washington, D.C.
- Sabatier, P. (1987). Knowledge, Policy-Oriented Learning, and Policy Change: An Advocacy Coalition Framework. *Science Communication*, 8(4), 649–692.
- Sabatier, P. (1993). Policy change over a decade or more. In P. Sabatier & H. Jenkins-Smith (Eds.),

- Policy change and learning* (pp. 13–39). Boulder: Westview Press.
- Sabatier, P. a. (1998). The advocacy coalition framework: revisions and relevance for Europe. *Journal of European Public Policy*, 5(1), 98–130. <http://doi.org/10.1080/13501768880000051>
- Sabatier, P., & Jenkins-Smith, H. (Eds.). (1993). *Policy change and learning*. Boulder: Westview Press.
- Sartori, G. (2009). Concept misformation in comparative politics. In D. Collier & J. Gerring (Eds.), *Concepts and method in social science. The tradition of Giovanni Sartori* (pp. 1–43). New York: Routledge.
- Schäfer, D. (2016). A Banking Union of Ideas? The Impact of Ordoliberalism and the Vicious Circle on the EU Banking Union. *JCMS: Journal of Common Market Studies*, 54(4), 961–980. <http://doi.org/10.1111/jcms.12351>
- Schaffer, F. C. (2016). *Elucidating social science concepts. An interpretivist guide*. New York: Routledge.
- Schmidt, V. A. (2010). Taking ideas and discourse seriously: explaining change through discursive institutionalism as the fourth ‘new institutionalism.’ *European Political Science Review*, 2(01), 1. <http://doi.org/10.1017/S175577390999021X>
- Schmidt, V. A. (2011). Reconciling ideas and institutions through discursive institutionalism. In D. Béland & R. H. Cox (Eds.), *Ideas and politics in social science research* (pp. 47–64). Oxford: Oxford University Press.
- Schnell, R., Hill, P., & Esser, E. (2013). *Methoden der empirischen Sozialforschung* (10th ed.). München: Oldenbourg Verlag.
- Sikkink, K. (1993). The power of principled ideas: human rights policies in the United States and Western Europe. In J. Goldstein & R. O. Keohane (Eds.), *Ideas and foreign policy. Beliefs, institutions, and political change* (pp. 139–170). Ithaca: Cornell University Press.
- Sil, R., & Katzenstein, P. J. (2010). Analytic Eclecticism in the Study of World Politics: Reconfiguring Problems and Mechanisms across Research Traditions. *Perspectives on Politics*, 8(02), 411–431. <http://doi.org/10.1017/S1537592710001179>
- Single Resolution Board. (2018). The Single Resolution Board’s mission. Retrieved February 22, 2018, from <https://srb.europa.eu/en/mission>
- Skeel, D. (2010). *The new financial deal: understanding the Dodd-Frank Act and its (unintended) consequences*. New York: Wiley.
- Skidelsky, R. (2010). *Keynes. The return of the master*. New York: Public Affairs.
- SNR Denton. (2012). *Financial Regulatory Developments (FRd)*. London. Retrieved from <https://s3.amazonaws.com/documents.lexology.com/f92ee3c8-d680-4fcf-936f-6dd49ff76c8e.pdf>
- Soifer, H. D. (2012). The Causal Logic of Critical Junctures. *Comparative Political Studies*, 45(12), 1572–1597. <http://doi.org/10.1177/0010414012463902>
- Steil, B. (2014). *The battle of Bretton Woods. John Maynard Keynes, Harry Dexter White, and the making of the new world order*. Princeton: Princeton University Press.
- Stiglitz, J. (2008). Falling down. No manufacturing. No new ideas. What’s our economy based on? *New Republic*. Retrieved from <http://www.newrepublic.com/article/falling-down>

- Stiglitz, J. (2012). *Der Preis der Ungleichheit. Wie die Spaltung der Gesellschaft unsere Zukunft bedroht*. München: Siedler Verlag.
- Taleb, N. N., & Pipel, A. (2004). *On the unfortunate problem of the nonobservability of the probability distribution*. Retrieved from <http://www.fooledbyrandomness.com/knowledge.pdf>
- Tavasci, D., & Toporowski, J. (Eds.). (2010). *Minsky, crisis and development*. Hampshire: Palgrave Macmillan.
- Thelen, K. (1999). Historical Institutionalism in Comparative Politics. *Annual Review of Political Science*, 2, 369–404. <http://doi.org/10.1146/annurev.polisci.2.1.369>
- Thelen, K. (2009). Institutional Change in Advanced Political Economies. *British Journal of Industrial Relations*, 47(3), 471–498. <http://doi.org/10.1111/j.1467-8543.2009.00746.x>
- Trading Economics. (2018). United Kingdom unemployment rate. Retrieved May 18, 2018, from <https://tradingeconomics.com/united-kingdom/unemployment-rate>
- Turner, A. (2011). *Reforming finance: are we being radical enough?* (Clare Distinguished Lecture in Economics and Public Policy). Cambridge. Retrieved from http://www.fsa.gov.uk/pubs/speeches/0218_at_clare_college.pdf
- US Congress. (2010). H.R. 4173 (111th): Dodd-Frank Wall Street Reform and Consumer Protection Act. Retrieved June 4, 2018, from <https://www.govtrack.us/congress/bills/111/hr4173/text>
- US Department of the Treasury. (2008). *The department of the treasury blueprint for a modernized financial regulatory structure*. Washington, D.C. Retrieved from <https://www.treasury.gov/press-center/press-releases/Documents/Blueprint.pdf>
- US Federal Housing Finance Agency. (2018). House price index. Retrieved April 4, 2018, from <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index.aspx>
- van Ees, H., & Garretsen, H. (1993). Financial markets and the complementarity of asymmetric information and fundamental uncertainty. *Journal of Post Keynesian Economics*, 16(1), 37–48.
- Vives, X. (2012). Banking union and the financial architecture of the Eurozone: A retrospective. Retrieved July 22, 2016, from <http://voxeu.org/article/banking-union-and-financial-architecture-eurozone-retrospective>
- Weible, C. M., Sabatier, P., Jenkins-Smith, H. C., Nohrsted, D., Henry, A. D., & DeLeon, P. (2011). A Quarter Century of the Advocacy Coalition Framework: An Introduction to the Special Issue. *Policy Studies Journal*, 39(3), 349–360.
- Weidmann, J. (2015). Zur Rolle der Finanzstabilität für die Geldpolitik. Retrieved April 15, 2015, from http://www.bundesbank.de/Redaktion/DE/Reden/2015/2015_03_25_weidmann.html;jsessionid=0000aJ4HpF9OnYZ7W2Grauos-kj:-1#doc333214bodyText4
- Wendt, A. (1999). *Social Theory of International Politics*. Cambridge: Cambridge University Press. Retrieved from http://books.google.de/books/about/Social_Theory_of_International_Politics.html?id=s2xjEd0ww2sC&pgis=1
- White, W. (2009). Modern Macroeconomics is on the Wrong Track. *Finance and Development*, (December), 15–18.
- Widmaier, W. (2003). The Keynesian Bases of a Constructivist Theory of the International Political

- Economy. *Millennium - Journal of International Studies*, 32(1), 87–107.
<http://doi.org/10.1177/03058298030320010401>
- Widmaier, W. (2005). The meaning of an inflation crisis. *Journal of Post-Keynesian Economics*, 27(4), 555–573.
- Widmaier, W., Blyth, M., & Seabrooke, L. (2007). Exogenous shocks or endogenous constructions? The meanings of wars and crises. *International Studies Quarterly*, 51(4), 747–759.
<http://doi.org/10.1111/j.1468-2478.2007.00474.x>
- Woolley, J., & Ziegler, N. (2012). The two-tiered politics of financial reform in the United States. In R. Mayntz (Ed.), *Crisis and control. Institutional change in financial market regulation* (pp. 30–65). Frankfurt am Main: Campus Verlag.
- World Savings Bank Institute. (2012). *ESBG common response to the European Commission consultation on the Liikanen Report recommendations* (WSBI position paper series). Brussels. Retrieved from
https://web.archive.org/web/20140110231555/http://www.esbg.eu/uploadedFiles/Position_papers/ESBG_position_paper_on_the_Liikanen_Report_consultation.pdf
- Worldwide Inflation Data. (2018). Historic inflation Great Britain. Retrieved May 17, 2018, from
<http://www.inflation.eu/inflation-rates/great-britain/historic-inflation/cpi-inflation-great-britain.aspx>
- Wray, R. (2011). *Financial Keynesianism and market instability* (Levy Economics Institute Working Paper Collection No. 653). Annandale-on-Hudson. Retrieved from
http://www.levyinstitute.org/pubs/wp_653.pdf
- Wyplosz, C. (2012, February 13). The ECB's trillion euro bet. Retrieved April 15, 2015, from
<http://voxeu.org/article/ecb-s-trillion-euro-bet>
- Yellen, J. L. (2010). *Macroprudential Supervision and Monetary Policy in the Post-crisis World*. Denver. Retrieved from <http://www.federalreserve.gov/newsevents/speech/yellen20101011a.pdf>
- Zahariadis, N. (2008). Ambiguity and choice in European public policy. *Journal of European Public Policy*, 15(4), 514–530. <http://doi.org/10.1080/13501760801996717>
- Zahariadis, N. (2014). Ambiguity and multiple streams. In P. Sabatier & C. Weible (Eds.), *Theories of the policy process* (3rd ed., pp. 25–58). Boulder: Westview Press.

Annex

1. Interview guide expert interviews
2. Differences of mainstream economics to Keynesianism
3. Table of ESRB systemic risk indicators

1. Interview guide expert interviews

Mastering Uncertainty after the Financial Crisis: The dynamics of paradigm change in Eurozone financial regulation

Interview Guide

Semi-structured Format

Thank you very much for your participation in this expert interview. All information will be anonymized and you will neither be cited by name nor your position. Categorization is only made by overall institution, such as “Leading staff member, major private bank”. The primary objective of this research project is to analyze how and why financial regulation in the Eurozone have changed after the Financial Crisis in 2008.

The questionnaire comprehends four different parts and will take about 35 – 50 minutes. Please feel free to ask any questions.

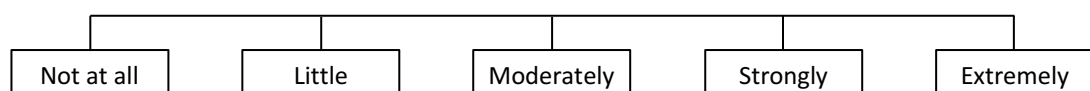
1. General Information (3-5 min)

1. How many years of professional experience in the financial industry or the field of financial regulation do you have?
2. Could you please describe your areas of responsibility at [respective institution] in a few words?

2. Financial regulation in the Eurozone before and after the Crisis (10-15 min)

1. Please think about the period **before** the Financial Crisis in 2008. How would you characterize the core elements of financial regulation in the Eurozone during this period?
2. Please compare financial regulation in the Eurozone **before and after** the Financial Crisis.

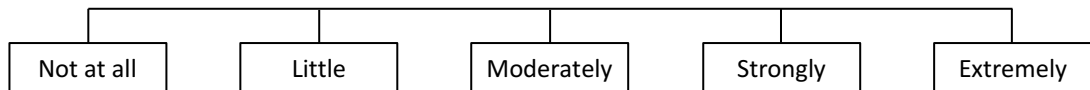
A) Have there been far-reaching (radical) changes after the Crisis in general?



B) What are the criteria which determine your assessment?

C) If there are any, what are the key changes and main trends of financial regulation after the Crisis?

D) Have there been far-reaching (radical) changes especially with regard to banking regulation?



E) What are the criteria which determine your assessment?

3. Did policy instruments change compared to the pre-crisis period? If yes, how?
4. Did the overall institutional framework of financial regulation change after the Crisis? If yes, how?
5. Would you use the term “paradigm change” to describe changes of financial regulation after the Crisis? If yes, why?
6. Please evaluate whether the following trends characterize the new status quo of financial regulation after 2008. If the propositions are not applicable, which alternatives would you propose?

Technocratization:

Do you see a responsibility shift to expert committees after the Crisis?

Is there a growing importance of European regulatory agencies after the Crisis?

Scientification:

Is financial regulation, particularly macroprudential surveillance, more indicator-driven than before the Crisis?

Has the analysis of big data amounts become more important than before the Crisis?

Internationalization:

Does financial policymaking become more European and / or global after the Crisis?

Have relevant competencies shifted from the national to the European (international) level?

3. The Process of institutional change after the Crisis (15-20 min)

1. When you think back to the peak of the Financial Crisis, did you or your colleagues question the paradigm of mainstream economics by the time?
2. Do you remember a kind of institutional uncertainty during or after the Crisis?
3. Which policy options have been on the table to overcome the Crisis at your professional environment during that time?
4. Did policy goals and expectations of financial regulation change after the Crisis?

5. *This question has varied depending on the categorization and professional background of the expert interview partner, e.g.:* Have [term] significantly changed compared to the pre-crisis period? / When you think back to the establishment process of the [term / organization]: Which actors played the most active role to strengthen [term / organization]?
6. Macroprudential surveillance:
 - A) Which role does macroprudential surveillance play in the Eurozone after the Crisis?
 - B) Which are the main reasons for this development?
 - C) Do you see similarities between macroprudential reasoning and Keynesian policymaking?

4. Closing Questions (3-5 min)

1. Would you like to make any further comments? Is an important item missing in this questionnaire?
2. Could you recommend further interview partners, who might likewise be willing to contribute to this research project?

Thank you very much for your time and effort. Your participation is of great value for this research project and will contribute to a better understanding of financial regulation after the Financial and Economic Crisis in Europe. Please feel free to ask any questions you might have about this research project. If you would like to contact me at a later time, you can email me at timo.blenk@unisg.ch.

2. Differences of mainstream economics to Keynesianism

Topic	Keynesianism	Mainstream economics
Future Events	Uncertainty assumption, no calculable risks of future events	Denial of uncertainty assumption, all future events can be reduced to a probability calculus. Keynesian insights about investment variability and liquidity preference are irrelevant
Time and Sequence	Events happen sequentially, markets do not balance in the short run. Counter-cyclical demand management may offset short term imbalances.	Events happen simultaneously; due to constantly updated information economic agents adjust immediately and efficiently to external shocks. However, New Keynesian modifications account for market imbalances in the short run; But as the theory denies the logic of uncertainty, mainstream models cannot explain the sources of aggregate demand imbalances
Methodology	Keynes argues that individual behavior (microeconomics) is structured by aggregate psychological data (e.g. propensity to consume, state of confidence, liquidity preference) arising from uncertainty of future events	Macroeconomics is seen as application of microeconomics, i.e. macroeconomic models should base on optimization by firms and consumers
Demand and Supply	Keynesian focus on aggregate demand, not supply	Mainstream economic is rather based on supply (Say's law) and not demand → real GDP growth in the long run depends on an increase in the supply of factor inputs and technological progress; Furthermore many mainstream economists only accept sticky contracts as contingent, not inescapable → plea for welfare benefits reduction and deregulation, against trade unions
Quantity Theory of Money	Quantity theory of money only true in case of full employment	True, also in case of a 'natural' unemployment rate → the rate of money supply growth always determines the rate of inflation
Model-type Economy	Keynes insists on the realism of economic assumptions	Ideal-type theorizing; fortified by maths, model assumptions are unrealistic and idealized
Countercyclical Demand Management	Governments engage in demand management and economic fine-tuning	Governments should avoid fine-tuning the economy; Stabilization policies should keep prices stable and thereby assist the market's self-correcting capacities
Stabilization	Stabilization as control-theory problem	Stabilization as modelled strategic game between authorities and private agents → governments should aim to provide agents with a consistent model of the economy

Source (modified): (Skidelsky, 2010, p. 109-110)

3. Table of ESRB systemic risk indicators

Field	Indicator
Interlinkages and composite measures of systemic risk	<ul style="list-style-type: none"> ▪ Composite indicator of systemic stress ▪ Probability of a simultaneous default ▪ Cross-border claims of banks ▪ MFI credits by counterpart sectors ▪ MFI deposits by counterpart sector ▪ MFI credits to general government ▪ MFI loans for house purchase ▪ Investment funds' holdings of debt securities by counterpart sector ▪ Investment funds' holdings of equity / investment fund shares by counterpart sector ▪ Insurance corporations' assets allocation (including derivative holdings)
Macro risk	<ul style="list-style-type: none"> ▪ Current and forecast real GDP growth ▪ Domestic credit-to-GDP gap ▪ Current account balance-to-GDP ratio ▪ Unemployment rate ▪ Aggregate debt-to-GDP ratio ▪ General government debt-to-GDP ratio ▪ General government deficit-to-GDP ratio ▪ CDS premia on sovereign debt ▪ Government debt service ▪ Household debt-to-gross disposable income ratio ▪ NFC debt-to-GDP ratio
Credit risk	<ul style="list-style-type: none"> ▪ Annual growth rates of MFIs loans to households ▪ Annual growth rates of MFI loans to NFCs ▪ Cost of borrowing from MFIs for households (house purchase) ▪ Cost of borrowing from MFIs for NFCs ▪ Lending margins of MFIs - loans to households (house purchase) ▪ Lending margins of MFIs - loans to NFCs ▪ Changes in credit standards for loans to households (house purchase) ▪ Changes in credit standards for loans to NFCs ▪ Option-adjusted spreads on euro area corporate bonds ▪ Expected default frequency of the corporate sector ▪ Foreign currency loans ▪ Over/undervaluation of residential property prices ▪ Change in nominal residential property prices
Funding and liquidity	<ul style="list-style-type: none"> ▪ Interbank interest rate spreads ▪ EUR/USD cross-currency basis swap spreads ▪ Banks' funding by central banks ▪ Money markets and the Eurosystem's standing facilities ▪ Maturity profile of banks' outstanding debt securities ▪ Banks' long-term debt securities issuance ▪ Loan-to-deposit ratio ▪ CDS spread between senior and subordinated debt ▪ Insurance groups' assets and liabilities duration
Market risk	<ul style="list-style-type: none"> ▪ Equity indices ▪ Price/earnings ratio of equity indices ▪ Exchange rate volatility ▪ Short-term interest rates - implied volatility ▪ Long-term interest rates - implied volatility
Profitability and solvency	<ul style="list-style-type: none"> ▪ Banking groups' profitability indicators ▪ Banking groups' solvency, liquidity and balance sheet structure indicators ▪ Insurance groups' profitability indicators ▪ Insurance groups' solvency ratio ▪ Insurance groups' retention ratio
Structural risk	<ul style="list-style-type: none"> ▪ Banking sector size ▪ Banking sector leverage ▪ Growth of components of the EU financial sector ▪ Total assets of investment funds and OFIs ▪ Total assets of investment funds and OFIs in the EU ▪ Non-MMF investment funds ratio of short term assets to short term liabilities

Source: author, data adapted from ESRB (2017, pp. 1–37)

Curriculum Vitae

Personal Profile

First Name: Timo Gerrit Alexander

Name: Blenk

Date of birth: 25.12.1986

Place of birth: Munich, Germany

Education

02/2014 – 09/2018 **Ph.D. in International Affairs and Political Economy**
University St. Gallen, Switzerland, approved by Prof. Patrick Emmenegger (University of St. Gallen) and Prof. Rawi Abdelal (Harvard Business School)

10/2010 - 12/2012 **Master in International Economic Policy**
Institut d'Études Politiques de Paris [Sciences Po] and

Master of Arts in Political Science
Freie Universität Berlin, German-French Double Degree Program

04/2007 – 04/2010 **Bachelor of Arts in Political Science**
Freie Universität Berlin

09/2008 – 07/2009 Annual studies in International Relations at the Institut des Hautes Relations Internationales (HEI) and the University of Geneva

Working Experience (Selection)

06/2018 – 06/2021 **Co-CEO, Agora Strategy Group AG**
Geopolitical Risk Advisory and Strategic Business Consulting

01/2015 – 02/2018 **General Secretary, Swiss Political Science Association**

04/2014 – 12/2015 **Research Fellow, Universität der Bundeswehr München, Faculty of business administration**

07/2006 – 03/2007 **German Air Force**