The financial valuation crisis

The inherent limits to taming unstable markets

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The Financial Valuation Crisis
the inherent limits to taming unstable markets

The way in which financial firms valuate their assets and liabilities directly affects their behavior and therefore financial stability. The 2007-9 global financial crisis exposed fundamental problems in firms' valuation approaches and the regulations that bolstered them. In response, policymakers set out to tackle the most pressing issues, in particular the destabilizing effects of accounting practices, credit ratings, and banks’ risk models. Yet, despite a flurry of changes, policy progress – in Europe and elsewhere – has been limited. What explains this?

In this book, I argue that lack of progress stems from an underlying issue: valuation practices do more than just measure financial risks – they shape them. Practices deemed conducive to financial stability can significantly alter market functioning, potentially contributing to instability over time. This introduces a major problem for policymakers, as there is no stable link between firms’ valuation approaches and financial stability. Worse still, public prescriptiveness might stimulate herd behavior, as it mandates widespread use of inevitably deficient valuation routines. Policymakers thus often embraced incremental reforms, for want of something better. In the book’s conclusion, I discuss policy options to deal with this regulatory problem.
THE FINANCIAL VALUATION CRISIS

The inherent limits to taming unstable markets

Bart Stellinga
THE FINANCIAL VALUATION CRISIS

The inherent limits to taming unstable markets
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Faculteit der Maatschappij en Gedragwetenschappen
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Overview of articles in this thesis

This thesis is based on five stand-alone articles, three of which have already been published. The bibliographic details of the published articles are as follows:


For the two co-authored articles, both authors contributed in equal manner. The two articles that at the time of writing have yet to be submitted are single-authored.
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<td>Available-for-Sale</td>
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<tr>
<td>AMF</td>
<td>Asset Management Fund</td>
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<td>ARC</td>
<td>Accounting Regulatory Committee</td>
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<tr>
<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
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<tr>
<td>BIS</td>
<td>Bank for International Settlements</td>
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<tr>
<td>CCB</td>
<td>Countercyclical Buffer</td>
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<td>CEBS</td>
<td>Committee of European Banking Supervisors</td>
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<tr>
<td>CESR</td>
<td>Committee of European Securities Regulators</td>
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<tr>
<td>CGFS</td>
<td>Committee on the Global Financial System</td>
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<tr>
<td>CRA</td>
<td>Credit Rating Agency</td>
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<tr>
<td>CRD</td>
<td>Capital Requirements Directive</td>
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<td>CRR</td>
<td>Capital Requirements Regulation</td>
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<tr>
<td>EBA</td>
<td>European Banking Authority</td>
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<tr>
<td>EBCI</td>
<td>European Bank Coordination Initiative</td>
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<tr>
<td>EBF</td>
<td>European Banking Federation</td>
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<td>EC</td>
<td>European Commission</td>
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<tr>
<td>ECB</td>
<td>European Central Bank</td>
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<tr>
<td>EFAMA</td>
<td>European Fund and Asset Management Association</td>
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<td>EFR</td>
<td>European Financial Services Round Table</td>
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<td>EMIR</td>
<td>European Market Infrastructure Regulation</td>
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<td>ESMA</td>
<td>European Securities and Markets Authority</td>
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<tr>
<td>ESRB</td>
<td>European Systemic Risk Board</td>
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<td>EU</td>
<td>European Union</td>
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<td>EUP</td>
<td>European Parliament</td>
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<td>EWI</td>
<td>Early Warning Indicator</td>
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<tr>
<td>FASB</td>
<td>Financial Accounting Standards Board</td>
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<td>FFVA</td>
<td>Full Fair Value Accounting</td>
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<tr>
<td>FPC</td>
<td>Financial Policy Committee</td>
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<td>Acronym</td>
<td>Full Form</td>
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<td>FSA</td>
<td>Financial Services Authority</td>
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<td>FSAP</td>
<td>Financial Services Action Plan</td>
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<td>FSB</td>
<td>Financial Stability Board</td>
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<td>FSF</td>
<td>Financial Stability Forum</td>
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<td>FVA</td>
<td>Fair Value Accounting</td>
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<td>FVO</td>
<td>Fair Value Option</td>
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<tr>
<td>GAAP</td>
<td>Generally Accepted Accounting Principles</td>
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<tr>
<td>G-SII</td>
<td>Global Systemically Important Institution</td>
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<tr>
<td>HCA</td>
<td>Historical Cost Accounting</td>
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<tr>
<td>HQLA</td>
<td>High Quality Liquid Asset</td>
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<tr>
<td>IAS</td>
<td>International Accounting Standard</td>
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<td>IASB</td>
<td>International Accounting Standards Board</td>
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<td>IASC</td>
<td>International Accounting Standards Committee</td>
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<tr>
<td>IFRS</td>
<td>International Financial Reporting Standard</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IOSCO</td>
<td>International Organization for Securities Commissions</td>
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<tr>
<td>IPE</td>
<td>International Political Economy</td>
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<tr>
<td>IRB</td>
<td>Internal Ratings Based</td>
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<tr>
<td>JWGBA</td>
<td>Joint Working Group of Banking Associations</td>
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<tr>
<td>JWGSS</td>
<td>Joint Working Group of Standard Setters</td>
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<tr>
<td>LTI</td>
<td>Loan-to-Income</td>
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<tr>
<td>LTV</td>
<td>Loan-to-Value</td>
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<tr>
<td>MBS</td>
<td>Mortgage-Backed Security</td>
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<tr>
<td>NSFR</td>
<td>Net Stable Funding Ratio</td>
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<tr>
<td>OCC</td>
<td>Office of the Comptroller of the Currency</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<tr>
<td>OEP</td>
<td>Open Economy Politics</td>
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<tr>
<td>O-SII</td>
<td>Other Systemically Important Institutions</td>
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<tr>
<td>PIT</td>
<td>Point-in-Time</td>
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<tr>
<td>SARG</td>
<td>Standards Advice Review Group</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>SEC</td>
<td>Securities and Exchange Commission</td>
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<tr>
<td>SSF</td>
<td>Social Studies of Finance</td>
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<tr>
<td>STS</td>
<td>Science and Technology Studies</td>
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<tr>
<td>TTC</td>
<td>Through-the-Cycle</td>
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<tr>
<td>VoC</td>
<td>Varieties-of-Capitalism</td>
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1 Introduction

1.1 The financial valuation crisis

“In many respects, the current crisis is about valuation”, Banque de France governor Christian Noyer remarked in October 2008, just one month after the collapse of Lehman Brothers (Noyer 2008: 1). Widespread uncertainty about financial firms’ exposure to complex instruments – the value and riskiness of which could barely be determined – triggered massive panic and threatened to cause a complete meltdown of the financial system, only prevented by central banks’ bold actions.

But if this was a crisis of financial valuation – a convenient shorthand for firms’ pricing and risk-management techniques – it was surely also a crisis of its governance. Accounting standard setters required firms to use destabilizing mark-to-market accounting practices for a significant part of their balance sheets (Botzem 2013). Banking regulators allowed big banks to use their own risk models to calculate required safety margins, but the models proved woefully inadequate and the safety margins insufficient (Lall 2012). Policymakers also gave credit rating agencies (CRAs) a central regulatory role, but many of their ratings for complex products were far off the mark (Partnoy 2009). Financial regulators and supervisors apparently allowed, or even required, the widespread use of flawed models and tools.

These problems did not come entirely as a surprise. In the decades before the crisis – as globalization, technological innovations, and market liberalization transformed financial sectors radically – firms’ risk management and accounting practices had become a focal point for financial regulators. While policymakers identified innovative private sector valuation practices as a potential boon for financial stability policy, they also expressed concerns about their potentially destabilizing effects. Banking regulators acknowledged the risks of an excessive use of mark-to-market accounting, pressuring accounting standard setters to limit its scope. They also worried about fully delegating risk assessment responsibilities to banks in capital adequacy regulation, leading them to introduce quite extensive model requirements and design key parameters themselves. Neither did they delegate full responsibilities for risk measurement to credit rating agencies. Moreover, far from embracing pre-crisis rules unconditionally, regulators often acknowledged that these were work-in-progress and that further reforms would be necessary (European Central Bank [ECB] 2004; Tarullo 2008).
It took the financial crisis, however, to demonstrate the systemic dangers of these valuation practices (Brunnermeier et al. 2009; Financial Services Authority [FSA] 2009b; Warwick Commission 2009). Policymakers themselves identified major flaws in these market practices and in the ways in which financial policy had dealt with them. The seminal Turner Review, published half a year after the Lehman Brothers-collapse, argued the crisis triggered “fundamental questions about our ability in principle to infer future risk from past observed patterns” (FSA 2009b: 44). Considering valuation practices, it stressed that at the “system level, the idea that values are realisable because observable in the market at a point in time is illusory [if] all market participants attempt simultaneously to liquidate positions” (FSA 2009b: 65). Policy makers thus acknowledged major flaws in pre-crisis practices and assumptions, pledging to reform financial regulation to limit the probability and severity of future financial crises.

Worryingly, the crisis does not seem to have led to a fundamental overhaul of pre-crisis valuation rules (Pagliari 2012; Helleiner 2014). Although accounting standard setters substantially revised the standard for financial instruments, financial firms are still required to apply market value accounting to a substantial part of their balance sheets. Policymakers have reduced regulatory reliance on banks’ risk models and they strengthened model requirements, but the rules still allow banks to use their own models to calculate safety margins (Carmassi and Micossi 2012). Despite significant shortcomings exposed by the crisis, regulators also continue to rely on CRAs’ credit ratings, and they hardly introduced substantive requirements for CRAs’ risk models (Botzem 2013; Underhill 2015).

Neither have policymakers’ attempts to strengthen their own risk assessment tools lived up to the high ambitions formulated immediately after the crisis (e.g. High-Level Group on Financial Supervision in the EU 2009). Policymakers developed so-called macroprudential policies aimed at limiting system risks in a top-down fashion. A key aspect of this would be to ensure rules would operate countercyclically, increasing in stringency when systemic risks build-up, while becoming more lenient when risks turn into financial distress (Baker 2013b). Yet the reforms that were implemented are quite modest. The scope of macroprudential policy is limited, being confined mainly to capital requirements. Governance arrangements are complicated, perhaps slowing down a timely response to the build-up of systemic risk. Crucially, there is still much controversy over how to identify and mitigate such risks. As a result, the policy frameworks lack clear guidance on how macroprudential authorities should prevent financial disasters in the future (Barwell 2014).
During the post-crisis period, policymakers have frequently backtracked on reform proposals or embraced uneasy compromises that nobody seems particularly happy about. Even though we now often hear policymakers praising post-crisis progress in regulatory reform, at the same time they express concerns about the extent to which newly designed rules will ensure valuation routines conducive to financial stability (Constancio 2014; Claessens 2016). It appears to be very difficult to design valuation rules conducive to financial stability, even after having learned all the crisis lessons.

From these observations flows the following research question:

- *What explains financial policymakers’ apparent inability to design coherent and effective regulatory approaches to financial firms’ and supervisors’ valuation routines?*

This question can be split up into the following sub-questions:

- How have international rules on firms’ and supervisors’ valuation routines – accounting and risk modelling – developed over time?
- What are the financial stability implications of the various valuation approaches in accounting and financial risk modelling?
- What substantive problems do regulators face when designing rules for financial valuation?
- How do these substantive problems affect governance patterns in the relevant regulatory domains?

In this thesis, I argue that the key to answering these questions lies in the perspective we adopt on the links between valuation practices, public regulation, and financial stability. The International Political Economy (IPE)-scholarship on financial regulation generally treats the financial system itself as a background variable, while focusing mainly on the actors (policymakers, supervisors, banks) who write or influence the rules (cf. Tsingou 2015). It implicitly assumes a relatively straightforward link between the regulation of valuation practices and financial stability: valuation practices can readily be ranked according to their contribution to stability. This suggests that regulators could in principle design valuation rules conducive to financial stability. While scholars differ in their explanation for why policymakers implement defective rules – generally highlighting either institutional path-dependencies, regulatory capture by powerful firms, or flawed regulatory ideas – the factors they emphasize are all essentially *external* obstacles.
I argue that we should adopt a different perspective on valuation practices and their link with financial stability. The central claim is that if we conceptualize financial markets as a reflexive system, we get a much better understanding of the problems to regulate financial valuation practices effectively. Reflexivity implies that financial markets have no stable footing; they depend on market participants’ assessments. It is at the heart of financial markets’ inherent instability. Market participants’ optimistic assessments are self-enforcing when they drive up asset prices and thereby confirm initial expectations. This feedback loops raises the fragility of the system although it appears increasingly stable, until the imbalances unravel and the system spirals out of control (Minsky 2008 [1986]; Soros 2008). I argue that financial market reflexivity has key implications for financial market regulation, particularly for the governance of financial firms’ valuation practices. Policymakers cannot regulate reflexivity away, and any particular regulatory approach comes with severe downsides and potential stability risks. Reflexivity itself is key to understanding regulators’ struggles with valuation routines – both before, and after the crisis.

To substantiate this argument, the thesis’ empirical body consists of four chapters (chapters 3-6) that address market reflexivity’s regulatory implications for particular valuation domains. The chapters deal with accounting standards, credit rating agencies, and liquidity and capital standards for banks. In all these domains, reflexivity causes regulatory dilemmas that hamper the design of coherent and prudent valuation routines. Similarly, reflexivity hinders post-crisis attempts to make financial rules operate countercyclically – countering markets’ boom-bust patterns stemming from reflexive feedback loops. This macroprudential approach to financial regulation falters on regulators’ inability to confidently identify and mitigate systemic risks. In these chapters, I show that focusing on the nature of the problem that policymakers must tackle is key to understanding the frequent policy reversals and often half-baked regulatory outcomes.

The rest of this introductory chapter serves to summarize the thesis. I first discuss how dominant IPE-approaches have approached the research questions outlined above, highlighting several shortcomings and gaps. In section 3, I present my main argument. In section 4, I discuss the research approach, focusing on the case selection and methods used. Section 5 concludes with a short overview of the rest of the thesis.

1.2 Gaps in the existing literature

As international regulatory forums have gained increased importance in rule development, the IPE-literature on financial regulation is an obvious place to start investigating the politics of financial valuation. How do different strands explain the rules’ substance, and to what extent do
valuation dilemmas play an explanatory role? At the risk of oversimplification, we can identify three main lines of reasoning.

A first line sees international rules as a mix of historically developed national regulatory approaches. Financial regulators design rules conducive to a stable and efficient national financial system. In response to globalization, states harmonize certain rules, but aim to ensure their national approach remains intact or is not fundamentally challenged by the international standards (Simmons 2001; Singer 2007). States’ rule-preferences to a large extent depends on the relative importance of capital markets and banking for financing the economy. For example, ‘capital market countries’ such as the USA are assumed to favor mark-to-market (fair value) accounting, given its focus on up-to-date numbers and transparency for outside investors. In contrast, ‘banking countries’ such as Germany favor historical cost accounting, given its more conservative accounting approach (Perry and Nölke 2006; Palea 2015). International rules are an uneasy compromise.

While this line of reasoning is right to highlight national differences in financial approaches, regulatory controversies are confined to clashes between different national approaches. This assumes that national regulators would in principle be able to design the perfect rules, if only they were not constrained by financial globalization. This assumption seems unwarranted.

A second research strand links the rules’ substance to powerful private actors’ material interests. Financial rules have distributional consequences for firms, as they introduce compliance costs and (more importantly) set the terms of competition (Underhill 1997). Regulators must balance private actors’ competing demands, while also paying attention to broader public interest goals such as financial stability. Global financial policymaking is particularly prone to ‘capture’, given the opaque and technical nature of financial regulation and the lack of meaningful ways for stakeholders to influence policymaking but for a small set of well-organized and resourceful private actors. These actors thus often succeed in bending the rules to their advantage, to the detriment of small firms and the general public. Turning to financial valuation, material interest scholars argue that the relevant rules mainly reflect the wishes of big, transnational firms. For example, big banks pushed for the shift to regulatory reliance on banks’ risk models in capital adequacy standards to lower their capital requirements (Blom 2012; Lall 2012).

While this strand rightly stresses the importance of powerful firms, it treats regulatory controversies about rule substance as a simple trade-off between public and private interests. Like the first strand, it implicitly or explicitly assumes that regulators could design the perfect rules.
conducive to financial stability, only now the problem is regulatory capture. Again, this does not really get at the heart of why financial valuation appears to be so difficult for policymakers.

A third and final strand emphasizes that rule substance derives mainly from policymakers’ regulatory ideas. Policymakers embrace a policy paradigm – collectively held ideas about policy goals, the kind of instruments to attain them, and the nature of the problem they should address (Hall 1993: 279) – and design rules accordingly. IPE-scholars have argued that pre-crisis rules reflected a progressive institutionalization of neoliberal ideas. At the neoliberal paradigm’s core is the idea that market forces are generally the best way to achieve public interests. For example, regulatory reliance on credit ratings reflected regulators’ belief in their superiority over publicly developed risk-indicators (Mügge 2011a). Whether or not the crisis triggered a ‘paradigm shift’ is still subject of debate (cf. Baker 2013; Blyth 2013).

This line of reasoning correctly emphasizes the importance of regulators’ ideas. Yet by locating regulatory controversies at the level of translating abstract economic ideas into concrete policies, the paradigm perspective gives little guidance for understanding why policymakers appear to be continuously struggling with financial valuation. Indeed, when the crisis hit valuation rules were much more incoherent than the paradigm perspective would have us believe. Surely there is more going on.

1.3 The reflexivity problem

Notwithstanding the differences between these three approaches, they have in common a general neglect of the financial system’s nature and the problem that financial regulation needs to address. In this thesis, I argue that the policy’s substance is in fact the key to understand the politics of financial regulation. If we follow heterodox economics-accounts that conceptualize financial markets as reflexive (self-referential) systems, we get a much better understanding of why regulators struggle to design effective valuation rules.

The financial system consists of a wide array of actors that create and trade financial instruments – debt, equity, and insurance contracts – that link the present to an uncertain future. We can think of it as a web of interlocking claims on other actors’ future income streams. By concluding a debt contract, two parties agree to exchange a sum of money today in exchange for future re-payment. Yet by being contingent on future events, there is something inherently intractable and unstable about the financial system. If financial firms’ assessments of other market participants’ abilities to meet commitments turn out to be wrong, the (implied) losses might endanger their own ability to
repay other actors. This might set off widespread turmoil and can completely destabilize the system. This is essentially what happened in the crisis of 2007-9.

The problem thus goes beyond fundamental uncertainty about future outcomes. In reflexive systems, there is a two-way feedback loop between participants’ actions and the system’s functioning. As participants’ assessments shape their actions, the system’s functioning ultimately depends on actors’ ideas about how the system operates. Translated to finance, this means that financial markets ultimately rest on market participants’ beliefs, rather than being anchored in objective ‘economic fundamentals’ (Soros 2008; Beinhocker 2013; Bronk 2013; see figure 1.1).

**Figure 1.1  Schematic representation of the financial sector as a reflexive system**

The resulting indeterminacy is a key component of Minsky’s (2008 [1986]) account of financial markets’ inherent instability. In economically benign circumstances, financial institutions’ positive experiences will encourage increased lending. Simultaneously, households and businesses feel more confident about future outcomes, encouraging increased borrowing on their part. In the aggregate this reinforces the good economic conditions. A feedback loop sets in where credit and optimism feed off each other. But if this process goes on for too long, the system becomes increasingly fragile: more and more market participants take on debt-positions that require ever increasing profits and asset price rises to be paid off. Increasing fragility makes the system more
prone to a destabilizing response to unexpected changes in economic conditions. If the system is fragile enough, small changes – such as a firm default or an interest rate hike – may set-off a downward spiral of losses, asset sales, asset price collapses, further losses, further asset sales, etc. Market participants’ pessimism then also becomes self-reinforcing, but often in a much more violent manner than in the previous upswing (cf. Kregel 2008; Minsky 2008 [1986]; Wray 2009).

Financial actors’ assessments of other actors’ future ability to meet commitments are thus at the core of the financial system. These *valuation routines* come in two basic guises: risk assessment, and assigning monetary values to assets and liabilities (valuation in the narrow sense). Risk assessment means estimating the likelihood of different future scenarios, for example that a debtor defaults, that an investment portfolio will lose value, that a currency will crash, or that ultra-low interest rates will continue. The assignment of prices to financial instruments builds on such risk assessments, and it concerns both the valuation of a portfolio that is held by an institution as well as an estimation of what an appropriate price would be for which to buy or sell a particular asset.\(^1\) Unsurprisingly, firms take great interest in the proper execution of these activities; after all, valuation practices influence their profits, their competitiveness, and the risks of going bankrupt.

As becomes clear from the social studies of finance (SSF)-literature, financial markets’ reflexive nature implies that these valuation practices are *performative*: they shape the values that they supposedly merely measure. MacKenzie’s (2004; 2006) seminal contributions focused on financial theories’ performative effects. For example, he asserted that a finance theory (the Black-Scholes option pricing formula) not so much described an already existing state of affairs, but through its widespread application helped make derivatives trading possible. But performativity is not confined to theories: given the right conditions, all valuation practices can transform the environment that is being measured. So, credit ratings are performative in the sense that positive assessments can trigger easy access to credit, in turn confirming the initial positive assessment (Carruthers 2013; Esposito 2013b).

What is key for my argument is that conceptualizing financial markets as reflexive, and valuation practices as performative, puts the governance of financial valuation in a new perspective. Not only is there ultimately no ‘objective’ basis to determine a financial instrument’s value and risk,

but valuation practices shape these. It is not obvious what valuation approach will contribute to financial stability. Valuation approaches that rely on up-to-date market prices can hardwire financial markets’ boom-bust nature in financial regulation. But the alternatives (using historical data or relying on stress tests) can be just as performative – and just as bad. Worse still, it is unclear how prescriptive regulators should be vis-à-vis financial firms. An overly prescriptive approach risks steering everybody in the same direction, potentially reinforcing herd behavior. But a very flexible approach risks becoming meaningless, may invite regulatory arbitrage, and may still allow for private sector induced herding. In short, both flexibility and prescriptiveness can have harmful unintended consequences.

This perspective thus gives clear reasons why regulators struggle to design coherent and effective regulatory approaches for financial valuation. It suggests that regulators must choose from inevitably flawed valuation approaches with indeterminate links to financial stability. And it implies that neither a very prescriptive nor a hands-off approach is sustainable for a very long time. As the inevitable unintended consequences of any particular approach emerge, regulators will be tempted to modify the rules to limit instability problems in the short run.

1.4 The research focus

The goal of the empirical research has been to investigate the extent to which dilemmas caused by financial markets’ reflexive nature affect the politics of financial valuation. I have studied the valuation issues that are key to modern day financial market functioning: accounting for financial instruments, the issuance and use of credit ratings, and the assessment of credit and liquidity risks of banks’ assets and liabilities. In addition, I have investigated how similar dilemmas affected the design of public systemic risk measurement tools, which became a key post-crisis priority in the context of the so-called ‘macroprudential turn to regulation’.

The rationale for this case selection is two-fold. First, as mentioned, these valuation issues are fundamental to the functioning of financial markets. As these valuation issues form the core of financial markets, the empirical findings have practical relevance. Second, the cases differ in important ways. The institutional frameworks vary markedly. The International Accounting Standards Board (IASB), a private sector agency, is in the lead to design accounting standards; CRA-regulation and supervision is the prerogative of securities markets regulators; and banking regulators are responsible for designing capital and liquidity standards. The rules target different things: rating methodologies, the composition of banks’ balance sheets, and the valuation of instruments on these balance sheets. And the actors directly affected are different: the Big Three
rating agencies (CRA-case), banks (liquidity and capital requirements), publicly listed companies (accounting case), and banking supervisors (macroprudential regulation). Despite this diversity, in each case the appreciation that market reflexivity hampers regulating valuation practices effectively, has a key influence on the governance process.

This broad focus in terms of valuation issues came at the expense of the geographical scope and the time-period studied. The focus has been mostly on the European Union (EU). Yet given EU rules’ importance, both for EU Member States and countries outside the EU (Mügge 2014), this EU-focus can hardly be considered overly narrow. Moreover, as global rules are of key importance for the EU, I have (where relevant) also studied policy developments at global forums such as the Basel Committee on Banking Supervision (BCBS), the IASB, and the Financial Stability Board (FSB). I have focused mostly on the post-crisis period, while also paying attention to the decade leading up to the crisis. This time-frame allowed for studying how financial regulators already before the crisis dealt with financial valuation issues, and to what extent the crisis triggered fundamental reforms.

I have opted for a qualitative research approach, as this is most suitable for studying the links between valuation dilemmas, policy processes, and regulatory outcomes. A first step has been to identify precisely the most important valuation problems within a particular policy domain. I focused on seminal post-crisis reports that discussed how valuation routines contributed to the crisis. In addition, I analyzed in detail specialized reports and academic publications on the topic at hand, published before and after the crisis. This step was thus rather inductive. As a second step, I have linked these valuation dilemmas to the insights derived from the heterodox economics-literature and the social studies of finance-literature. Here the leading question was what the insights on financial reflexivity and valuation routines’ performativity implied for these valuation issues. Crucially, I tried to distill their regulatory implications. This second step thus had a more deductive nature.

As a third step, I have studied to what extent these valuation problems played a role in policy debates, and how regulators have dealt with them. For this, I have analyzed reports on policy processes and the debates surrounding them. These policy debates and the policy preferences of different public and private actors were often well-documented. I could rely on news media reports, policymakers’ and private actors’ public statements on policy proposals, and proceedings of roundtables and policy debates. As a key goal of the research is to investigate the ways in which public and private actors deal with valuation dilemmas, I have also conducted semi-structured
interviews with representatives of the most relevant regulatory agencies and private actors. The purpose of these interviews was not to find the ‘one and only’ causal explanation for a specific policy outcome. Rather, the aim was to get a better understanding of public and private actors’ understanding of the valuation problems, and their view on how these issues affected policy processes (I elaborately discuss case-selection and research methods in chapter 2).

1.5 Outline of the thesis

The thesis is structured as follows. In chapter 2, I present a more elaborate account of the theoretical and methodological issues addressed in this introductory chapter. In chapter 3, I discuss two decades of political clashes over the most appropriate measurement approach for financial instruments. From the 1980s onwards, banks transformed into capital market-oriented, global, and increasingly complex institutions. In response, accounting standard setters and banking regulators alike argued that accounting standards for financial instruments – the bulk of banks’ balance sheets – needed a thorough update. Yet in twenty years no rule-set has emerged that was more than a temporary fix, to be succeeded by further reforms.

The chapter shows how banking regulators have been central to this dynamic and how their support for applying fair value accounting to financial instruments, the cornerstone of regulatory debate, has oscillated throughout the whole period. It argues that market reflexivity is at the heart of regulators’ struggles with financial instrument accounting, as it implies that there is no standard that unequivocally promises to contribute to financial stability. In the absence of a fool-proof solution, regulators repeatedly find themselves torn between embracing a prescriptive standard to keep firms from cooking the books and allowing firms sufficient discretion to limit short-term instability. Accounting standards for financial instruments are therefore continuously work-in-progress.

Chapter 4 turns to the issue of credit ratings. Just as regulators already before the crisis grappled with financial instrument accounting, they also struggled with substantive issues pertaining to ratings. For example, they debated whether CRAs’ methodologies should be subject to regulatory scrutiny and to what extent regulations should mandate private actors’ reliance on ratings. Yet it took the financial crisis to truly convince policymakers that ratings can contribute to systemic stability risks. Assessing post-crisis regulatory reforms, however, we mainly see progress in tackling CRAs’ integrity problems. In contrast, progress is more limited on tackling ratings’ substantive problems: CRAs’ flawed methodologies, the homogeneity of their ratings, and
widespread reliance on them. While these problems were arguably at the heart of the rating debacle, regulators have apparently failed to do something about them.

I argue that rating performativity is at the heart of the regulatory problem with ratings: ratings influence the risks that they supposedly merely describe. Regulation cannot remedy rating performativity’s detrimental effects. So, replacing ratings in regulation with another risk indicator might merely displace rather than remove the source of systemic risk. More fundamentally, performativity implies that bold regulatory actions might make problems worse: standardizing methodologies, or setting up a public CRA, risk stimulating a homogeneity in risk assessments that regulators want to prevent. Just as in the accounting case: identifying the valuation problem is one thing, tackling the problem in a meaningful way is far from straightforward.

In chapter 5, I use the empirical findings of previous chapters to make a more general point about why post-crisis reforms appear to be rather limited. Many IPE-studies relate this lack of progress to regulatory capture: post-crisis reform attempts were led astray by vested interests. I contest the capture account’s underlying assumption: regulators know which rules would promote the public interest – irrespective of whether they eventually adopt them or not. I argue that while many pre-crisis valuation approaches were clearly inadequate and indeed contributed to the financial crisis, it is much less clear what valuation approaches should replace them. The problem is that neither a hands-off approach to valuation routines, nor an interventionist stance promises to be effective in limiting financial instability. This conundrum is ultimately rooted in market reflexivity. Apart from presenting additional empirical findings on the regulation of accounting standards and credit ratings, I also discuss how this dilemma hampered the implementation of coherent bank liquidity standards.

Chapter 6 discusses the extent to which post-crisis macroprudential reforms have lived up to the high hopes. A macroprudential approach to financial regulation implies that rules aim to limit systemic risks, rather than merely risks for individual financial institutions. I argue that the reforms are not the ‘paradigm shift’ that many commentators argued it would be. Macroprudential regulation is best understood as a policy add-on. Supervisors can increase rule-stringency through ad-hoc discretionary interventions, but their ambitions are modest: rather than preventing instability, macroprudential policy aims to increase financial firms’ resilience to be able to better cope with stress.

The chapter points to factors internal to the macroprudential approach as key to understanding the limited reforms. There are fundamental obstacles to measuring and mitigating systemic risks;
obstacles rooted in the endogenous nature of instability. An ambitious but ill-designed macroprudential policy framework could make things worse, policymakers feared. There are hard limits to what regulators can do to tame the cycle, tempering policymakers’ enthusiasm for sweeping reforms. Also attempts to address the underlying procyclicality of banks’ risk assessment practices falter: as both cycle-sensitive and cycle-insensitive risk approaches can contribute to systemic risk, policymakers see no way out but to adopt half-baked reforms that are never fully satisfactory.

The final chapter contains a summary of my main findings. I also discuss in what ways these findings contribute to the broader IPE-literature on financial regulation. I then turn to the thesis’ policy implications. I argue that financial reflexivity presents important limits on the governance of financial valuation, but that this should certainly not inspire nihilism. There are ways to embed market dynamism more explicitly in governance frameworks for financial valuation practices. In terms of policy processes, regulators should embrace dynamic regulation and frequently reassess regulatory instruments. In terms of substance, regulators should aim for sufficient heterogeneity in valuation practices, as this seems the best way to prevent valuation-induced herd behavior. But given inherent limitations, we also need to go beyond financial regulation to reassess non-financial actors’ – households, corporations, and semi-public organizations – credit dependence. If the financial system is inherently unstable, it is imperative to make society less vulnerable to its boom-bust nature.
Theorizing the politics of financial valuation

2.1 Introduction

At the heart of this thesis stands a question that is of key importance for our understanding of the politics of financial regulation: what explains policymakers’ inability to design coherent and effective regulatory approaches to financial firms’ and supervisors’ valuation routines? The previous chapter provided an overview of the thesis’ focus and argument. In the current chapter, I elaborate on its theoretical and methodological aspects. Before doing so, section 2 puts more flesh on the bones of the main empirical puzzle: the problems with regulating financial valuation practices.

In section 3, I review the relevant International Political Economy (IPE)-literature on financial regulation, focusing specifically on how different strands within IPE have addressed the financial valuation problem. Many IPE-approaches assume that policymakers could in principle design financial valuation routines conducive to financial stability, highlighting factors exogenous to financial markets – such as private interests lobbying or the influence of a flawed policy paradigm – that prevent them from doing so. This assumption, I argue, is highly questionable.

To substantiate this claim, I review the heterodox economics-literature and the social studies of finance (SSF)-literature (section 4). The work of Minsky (1986 [2008]) and Soros (2008) is key to understanding financial markets’ boom-bust nature. They highlight the importance of reflexivity: the financial system’s functioning depends in a circular fashion on market participants’ assessments of its functioning. The SSF-literature is useful for understanding the role of valuation practices therein: rather than mirroring an already existing external reality, they shape it, and may do so in destabilizing ways. Yet while these bodies of literature are particularly helpful in understanding financial markets’ inherent instability – and the key role that financial valuation practices play therein – it tells us less about the concomitant regulatory problems.

What does financial market’s reflexive nature and valuation routines’ performative effects imply for the politics of financial regulation? This is the central question of section 5. Here I elaborate on the empirical questions that the heterodox economics and SSF-perspectives generate for the regulation of financial valuation. Section 6 discusses the methodological choices I have made to answer these questions. Finally, section 7 provides a summary of this chapter.
2.2 Governing financial valuation

2.2.1 The changing faces of financial regulation

In the three decades after World War II, Western countries’ financial sectors were “a safe, but dull place” (Goodhart 2010b: 8). While this was to an important extent a reflection of the post-war economic context, public regulation also played a major role. Informed by the devastating consequences of the Great Depression, governments had introduced a variety of measures to prevent such a disaster from happening again.

Ensuring financial stability was thus a key public policy concern. Financial stability requires that key institutions – banks, or institutions closely linked to the banking sector – can continue to meet their contractual obligations without serious disruptions. And it means the absence of significant volatility in asset prices that would impair the financial sector’s normal functioning (Crockett 1997). The main post-war strategy to maintain stability was to limit competition between financial firms through so-called structural regulations. Policymakers explicitly supported compartmentalized financial systems, differentiating rules for different types of banks and often prohibiting mergers and acquisitions. They also prohibited banks from acquiring stakes in insurance companies and non-financial firms. In addition, policymakers applied conduct regulations, such as limits on banks’ deposit and lending rates and credit quotas. Such measures were a complementary way to ensure that firms would behave prudently (Bröker 1989; Organisation for Economic Development and Cooperation [OECD] 1992; Borio and Filosa 1994; Edey and Hviding 1995; Claessens 2016).

Apart from maintaining financial stability, there was a second rationale for public intervention in financial markets: stimulating the financial sector’s contribution to economic recovery. Governments aimed to ensure credit allocation would be conducive to this goal (Hodgman 1973). They often did so by limiting lending rates and stimulating the financing of particular economic sectors (trade, agriculture, industry) (Zysman 1983). Public financial institutions generally played an important role in this regard (Forsyth and Notermans 1997). Governments limited cross-border capital flows, not only to facilitate exchange rate policies in the Bretton Woods context but also to support the credit policies. Capital outflows could undermine cheap credit policies, while capital inflows could lead to excessive inflation (OECD 1992).

Over time this regulatory framework became increasingly difficult to maintain. Specialized banks wanted to expand their work field or experienced more competition from less stringently regulated financial firms, leading them to push for a relaxation of structural regulations. Financial
globalization returned as so-called *Eurodollar markets* allowed banks and non-financial firms to evade national regulations. The real break came in the 1970s, when the Bretton Woods regime collapsed and Western countries’ economies experienced both economic stagnation and rapidly rising inflation. Governments’ inability to ensure quick economic recovery seriously dented trust in top-down public steering.

From that moment onwards, governments focused more and more on stimulating market forces to boost economic growth. This policy recipe was also applied to financial services. Governments eliminated most of the conduct regulations focused on credit growth and allocation, facilitating the subsequent rapid expansion of private debt levels. They progressively dismantled capital controls, further boosting financial globalization. And policymakers relaxed or abolished structural regulations, enabling the emergence of big, universal banks (OECD 1992; Borio and Filosa 1994; OECD 2002; Borio and White 2004).

### 2.2.2 Regulating financial valuation

The decades preceding the 2007-9 financial crisis were certainly not merely a period of deregulation. Financial authorities acknowledged the financial stability risks of the highly competitive environment that followed financial liberalization and globalization. Precisely because of these stability risks, policymakers developed new prudential requirements for financial institutions. These requirements targeted financial firms’ balance sheets, aiming to ensure firms could withstand adverse scenarios such as high losses and funding difficulties. Most importantly, policymakers introduced formal and binding rules for banks’ capital adequacy ratios – the level of equity in relation to bank assets’ riskiness (Tarrullo 2008; Claessens 2016).

In tandem with these regulatory reforms, financial systems and the players active therein changed profoundly (Coleman 1996; Underhill 1997; Boot and Marinč 2008). Complementary to changes in the scope and scale of banks’ activities, financial valuation practices changed significantly. The increased importance of banks’ international trading and market-making activities stimulated reliance on market-based measures of financial instruments’ value (Financial Stability Forum [FSF] and Committee on the Global Financial System [CGFS] 2009). Supported by technological developments, particularly computers’ increased computing powers and data storage capacities, firms increasingly relied on risk models – such as Value-at-Risk models – to aid their assessments of potential future losses (MacKenzie 2006). The globalization of financial markets boosted demand for common yardsticks to assess financial instruments’ riskiness, leading to a widespread usage of bond ratings produced by credit rating agencies (CRAs) (Sinclair 2014).
As financial stability policy shifted from structural and conduct regulations to prudential rules, regulators also became much more focused on ensuring that firms’ valuation practices were conducive to financial stability. In international negotiations on capital adequacy regulation, one of the most controversial issues has been how to determine the riskiness of banks’ exposures. The question is not only whether firms or supervisors should do the risk assessment, but also what methodologies they should use, and how to deal with the models’ unintended consequences (Tarullo 2008). Debates on accounting standards for financial instruments have centered on valuation methodologies: should firms value their assets and liabilities relying on their current market prices or the original transaction values (Georgiou and Jack 2011)? And under what circumstances should firms recognize impending investment losses: when actual defaults occur, or already when firms’ risk assessments indicate that something is wrong (Borio and Lowe 2001)? When developing rules for CRAs, policymakers have had to address not only how to regulate their methodologies, but also to what extent market participants and regulators themselves should rely on these risk assessments (Sy 2009).

In the 2007-9 global financial crisis, firms’ valuation routines broke down. In the Summer of 2007, the biggest CRAs downgraded many structured finance products previously labeled ‘safe’, leading to widespread market stress. As markets for these complex securities dried up, firms had a hard time assessing their values. This in turn created panic that firms would default on their commitments, worsening the stress. Banks claimed that events were so exceptional that their risk models could not make sense of them, with observers neatly pointing out that this meant their models were inadequate (Haldane 2009c). The crisis clearly was intimately linked to valuation problems (Banque de France 2008b): “valuation issues are at the heart of today’s modern, market-based, and risk-sensitive financial systems” (Noyer 2008: 1), and something had gone terribly wrong.

But being a crisis of valuation, it was also a crisis of the governance of valuation. Critics proposed roughly two, conflicting narratives of what had gone wrong. One narrative framed the problem as one of undue public intervention distorting financial market functioning in general and firms’ valuation routines in particular. Regulatory reliance on credit ratings had ensured demand for these ratings, interfering with the normal operation of the rating market (cf. Partnoy 2009). Accounting standards had allowed firms to ignore financial market developments and hide mounting troubles from outside investors, disabling the markets’ disciplinary powers (Laux and Leuz 2009). And arbitrary risk-measures in capital adequacy standards led to a discrepancy between firms’ and regulators’ risk assessments, incentivizing firms to ‘game the system’ rather
than focus on the actual risks they were taking (Dowd 2009). So, the problem was too much public interference and too little reliance on market-sensitive valuation practices, with straightforward normative implications: regulators should steer clear of firms’ valuation routines to ensure that market forces could henceforth do their disciplinary job.

The opposing narrative was that regulators had almost completely privatized valuation responsibilities in the run-up to the crisis, leading to overly lenient rules and excessively high dependence on market-sensitive valuation routines. Basel II – the global capital adequacy standard implemented shortly before the crisis – effectively delegated financial regulation to firms themselves, allowing major banks to use their own risk models to calculate capital charges (Lall 2012). By relying on recent market data, these models proved fundamentally incapable of predicting a major crash. Worse still, they contributed to financial firms’ procyclical behavior, by underestimating risks in the boom but overestimating them in the bust (Warwick Commission 2009). The privatization of regulation was also evident in the increased regulatory reliance on credit ratings, making regulators and firms highly dependent on unaccountable, private rating agencies. This reinforced credit ratings’ procyclical effects substantially (Kruck 2016). Finally, accounting standards required financial firms to measure their financial instruments “at fair value under almost all circumstances” (Lall 2014: 135). In short, the crash was the result of privatized, market-sensitive valuation approaches. The obvious solution: regulators should take back control and design routines conducive to financial market stability.

While these accounts contain elements of truth, both are unsatisfactory. The first account rightly stresses the significant influence of public intervention on financial market functioning. However, the claim that without public intervention firms’ valuation routines would have ensured self-stabilizing markets is unconvincing. Indeed, as financial markets have been subject to extensive public scrutiny since at least the 1930s, this account fails to explain why things went so terribly wrong at this particular point in time. Moreover, many pro-market commentators had celebrated pre-crisis regulatory reforms as a welcome trend towards less public interference, making their subsequent claim that excessive government intervention caused the crisis opportunistic.

The second account rightly signals this pre-crisis liberalization trend, but significantly overstates the regulatory shift towards private, market-sensitive valuation approaches. For example, while fair value accounting was in ascendency in the run up to the crisis, Lall (2014) is wrong to assert that accounting standards required full fair value accounting. Indeed, even in France, the country where the greatest share of banking sector assets had been subject to FVA before the crisis, this
share did not exceed 50 percent (FSF and CGFS 2009). Similarly, capital adequacy standards mixed several valuation approaches – relying on risk assessments of CRAs, banks, and regulators themselves –, hardly constituting a full-blown privatization of financial regulation.

2.2.3 Peculiar policy patterns

In this thesis, I discern different patterns in the governance of financial valuation. Instead of a clear and straightforward implementation of a specific policy approach – for example, a market-based approach before the crisis, and a wholesale reform afterwards – we see a failure to implement any approach fully, both before and after the crisis. Indeed, three decades of international deliberation and negotiations have not yielded a straightforward solution to two particularly controversial issues. First, in any regulatory domain, policymakers fail to design stable requirements for firms’ valuation methods. The valuation rules – whether they pertain to methodologies for valuing assets and liabilities, assessing losses in firms’ loan portfolios, or measuring the credit risk of bond and credit exposures – have been continuously revised, never settling on a clear-cut choice for one approach over another. Second, the distribution of responsibilities between firms and supervisors remains contested, as regulators constantly move back and forward between giving firms more discretion and subsequently limiting it.

These patterns are evident in the governance of key valuation activities: accounting standards and rules on banks’ and CRAs’ risk models. They are all characterized by being perpetually work-in-progress, failing to resolve the core issue of what firms’ valuation approaches should look like and what should be the appropriate distribution of responsibilities between private and public actors. Even the global financial crisis of 2007-9 failed to change this situation. New accounting standards for financial instruments are significantly different from their predecessors, but they fail to resolve the inherent flaw of mixing two seemingly incompatible valuation approaches – reliance on current market prices, and past transaction prices (see chapter 3). Supervisors scrutinize CRAs’ risk assessment methodologies, but do not actually prescribe their content (Underhill 2015). Finally, newly issued capital requirements (Basel III) have reshuffled the boundaries between private and public-sector risk-assessments, without settling the issue of how to measure the risk of losses on a particular portfolio (Lall 2012).

Neither did policymakers’ post-crisis attempts to design or strengthen financial supervisors’ own risk assessment models – as a correction to firms’ flawed approaches – lead to very convincing outcomes. The popularity of the macroprudential policy approach certainly boosted the case for supervisors responding to systemic risks in a top-down, countercyclical fashion (Baker 2013b). Yet
despite high hopes, supervisors seem unable to design foolproof systemic risk models (Hellwig 2014). Newly introduced macroprudential tools are only very loosely tied to systemic risk indicators, and there is a lack of consensus whether supervisors are at all capable of signaling the build-up of risk in time to be able to effectively constrain systemic risk build-ups (Barwell 2014). Systemic stress-tests conducted in the European Union (EU) after the sovereign debt crisis have done little to instill confidence in supervisors’ capacity to do so. Rather than creating transparency and confidence, the models and assumptions underlying these tests were challenged from all sides, creating confusion rather than clarity (cf. Anderson 2016).

In sum, instead of the rules moving steadily in a specific direction – for example from supervisor designed valuation routines towards increased private responsibilities, or the other way around – they seem destined to be stuck in some uneasy compromise that neither regulators nor firms seem particularly happy about. Indeed, even when policymakers present a brand-new standard, they often state that the rules are work in progress and will need further revision. And as the crisis made painfully clear, the pre-crisis regulatory approaches failed to instill prudent behavior, making the post-crisis inertia particularly worrisome. What explains policymakers’ apparent inability to design coherent and effective regulatory approaches to financial firms’ and supervisors’ valuation routines?

2.3 The politics of financial regulation

The controversies over financial firms’ valuation approaches have to a significant extent played out in negotiations within and between global regulatory forums. A good place to start investigating the politics of financial valuation is therefore the International Political Economy (IPE)-literature on global financial regulation. In this section, I provide an overview of IPE-scholarship that addresses aspects of the main research question, discussing how different IPE-approaches explain political controversies over financial valuation. I conclude that one particularly pressing issue has so far received little attention in the IPE-literature: the possibility that policymakers are hard-pressed to find appropriate solutions to financial valuation problems. Instead, in many of the IPE-accounts on financial regulation, substantive dilemmas are assumed to be absent or trivial.

One important disclaimer applies to this section. For analytical purposes and for the readability of the text, I split the IPE-literature on finance into relatively clearly demarcated ‘approaches’. Of course, this does injustice to actual empirical studies’ often more eclectic and nuanced perspectives. For example, while I distinguish between scholarship stressing the importance of
private firms’ material interests and scholarship focusing on actors’ belief systems, much IPE-scholarship allows for both to play a meaningful role (for example, Underhill 2015). Actual IPE-studies thus generally blend aspects of these different approaches.

2.3.1 Stability, competitiveness, and regulatory coordination

Financial globalization took off from the 1970s onwards, with international capital flows increasing rapidly and with financial firms expanding their cross-border activities (Helleiner 1995). IPE-scholars have since paid extensive attention for the ways in which policymakers stimulated this process and dealt with undesirable consequences (Oatley and Nabors 1998; Simmons 2001; Singer 2007). A dominant research question was whether and how states would strive for international regulatory coordination. Under what circumstances do states harmonize national rules, and when will they refrain from doing so?

Answering this question required prying open governments’ regulatory objectives. On the one hand, governments aim for financial stability: “the stability of the key institutions and markets that go to make up the financial system” (Crockett 1997: 9). Governments fear financial instability as it can jeopardize the safety of voters’ deposits, because it can disrupt the payments system, and because it can cause serious economic harm with significant public and private costs. On the other hand, governments care about firms’ room for maneuver to fulfill a key economic role: financing economic activities efficiently. According to Singer (2007), maintaining the right balance between stability and efficiency is the core overarching issue in financial regulation. Banking regulators have the task to design rules stringent enough to ensure stability but lenient enough to ensure efficiency.

IPE-scholars have argued that financial globalization put serious pressure on governments’ regulatory frameworks. It introduced the possibility of a widespread ‘regulatory race to the bottom’: as financial firms seek the jurisdiction with the lowest regulatory burden, all governments would have incentives to competitively deregulate, to the detriment of financial stability. Scholars have thus explained the post-1980 international coordination initiatives as policymakers’ attempts to marry international competitiveness with financial stability (Singer 2007).

International regulatory forums are the place where this coordination often plays out. The Basel Committee on Banking Supervision (BCBS) has since the 1980s been the main forum responsible for developing international standards for banking regulation and supervision. The International Organization for Securities Commissions (IOSCO) provides the forum for deliberations on
standards for securities markets regulation. The International Accounting Standards Board (IASB) has played a crucial role in the international harmonization of accounting standards. And the Financial Stability Board (FSB) – previously the Financial Stability Forum (FSF) – is tasked with the coordination of these different regulatory initiatives.

Scholars have generally analyzed these international regulatory forums as mere vectors of (powerful) governments (Oatley and Nabors 1998; Simmons 2001; Singer 2007). These arenas are the battleground where state fight out conflicts about international rules; but the organizations themselves have no independent role to play. States’ power depends on the (relative) size of their markets (Simmons 2001) and the degree of regulatory centralization within these states (Bach and Newman 2007; Posner 2009; Büthe and Mattli 2011). Scholars have argued that these factors account for the United States’ dominant role in global financial regulation, only countered by countries with relatively less power, such as the United Kingdom, Japan, Germany and France (Simmons 2001).

Yet if we return to the thesis’ main research question, the harmonization literature does not provide many clues why regulators would have difficulty designing valuation rules conducive to financial stability. As the harmonization (or otherwise) of national rules was the key dependent variable, scholars focused less on the rules’ actual substance (their content). Scholars explicitly or implicitly assumed that financial regulators know precisely what rules will balance the objectives – regulators’ ‘win set’, as Singer (2004) calls it. Objectives neatly translate into specific policies: rules can be more or less stringent and thus be more or less conducive to financial stability. But this assumption seems at odds with the financial crisis: why would regulators allow this to happen? One possibility is that supervisors preferred efficiency over stability. While this surely contains some truth, the costs of the crisis far outweigh the pre-crisis economic gains. Another possibility is that the crisis was an exogenous, once-in-lifetime experience that regulators could not possibly take into account. But this conflicts with the broad post-crisis consensus that pre-crisis regulation contributed to the financial crisis (Financial Services Authority [FSA] 2009b). As such, the crisis throws doubt on Singer’s (2007) contention that regulators can perfectly translate objectives in regulatory frameworks conducive to these objectives.

Another possibility is that pre-crisis conflicts at the global level obstructed the development of effective regulation. But again, this explanation fails to satisfy: many valuation rules blamed for contributing to the crisis were in fact developed at the global level – for example the Basel capital adequacy framework, and International Accounting Standards. If these rules were indeed
deficient, then the regulatory harmonization-framework cannot really account for why this is the case. Rule-output of global forums should reflect the preferences of powerful states (Kapstein 1992; cf. Thiemann 2014), but why would they prefer flawed rules? In short, while these accounts provide valuable insights in international harmonization efforts, they provide less guidance on addressing the rules’ substantive aspects. To account for rules’ potential deficiencies, we must look elsewhere.

2.3.2 Regulatory approaches and the battle of the systems

The Varieties of Capitalism (VoC)-strand within the IPE-literature pays specific attention to financial standards’ substance. Blending elements of historical institutionalism and comparative policy economy, this literature posits that a country’s financial regulatory approach is embedded in a wider institutional framework that closely matches the economy’s specificities (Hall and Soskice 2001). The economy’s different components each fulfil particular functions, but how these components interact differs from country to country. So, while finance plays a key role in the functioning of all modern capitalist economies, the countries’ financial systems will differ markedly. For example, whereas in some countries bank loans are corporates’ dominant form of external finance, in others bond and equity finance are more important. This symbiotic relationship between the financial system and the economy is the result of a long development, and historical path dependencies ensure that changes are limited and slow (Zysman 1983).

Although VoC-scholars argue that each country has its own particular ‘variety of capitalism’, as a shorthand for analysis they have grouped similar countries in various ideal types (cf. Hall and Soskice 2001). A dominant distinction is the split between ‘liberal market economies’ and ‘coordinated market economies’. The former group – generally Anglo-Saxon countries such as the USA, the United Kingdom (UK), Canada, and Australia – is characterized by adversarial management-labour relations, comparatively short-term employment, the predominance of financial markets for capital provision, an active market for corporate control, and an increased emphasis on short-term price movements on stock markets (Perry and Nölke 2006: 569).

These countries’ financial regulatory approach is aimed at providing ample room for market forces: light-touch regulation that aims to stimulate competition. The latter group – encompassing continental European countries (most notably Germany and France) and Japan – is characterized by more consensual economic relations, with ample room for cooperation and more active, interventionist governance styles. Financial regulation provides ‘insiders’, particularly banks,
protection from outside competition, in return for their active contribution to long-term economic development (Perry and Nölke 2006).

Financial globalization potentially disrupts this historically evolved financial regulatory approach. States therefore aim to ensure that international standards are compatible with national ones. International rules that differ markedly from domestic regulatory frameworks could undermine the sector’s stability and its contribution to economic development. The core regulatory problem thus is to ensure that international rules do not depart too far from countries’ traditional approaches. International forums are the battleground for fights between national regulators representing seemingly incompatible regulatory traditions.

Applied to this thesis’ topic – the regulation of financial valuation – this perspective suggests that controversies and half-baked rules derive from the incompatibility of liberal market and coordinated market economies’ valuation methods. While the power of the USA and the UK ensured an Anglo-Saxon bias in global standards, successful resistance from continental European countries and Japan implied they were an uneasy compromise. Consider international debates on accounting standards. The recurrent clashes over the appropriate valuation method – fair value accounting (FVA) versus historical cost accounting (HCA) – are basically conflicts between the liberal market approach (favoring FVA’s transparency) and the coordinated market approach (favoring HCA’s stability) (cf. Perry and Nölke 2006; Palea 2015). The result of international bargaining is an incoherent compromise. Similarly, pre-crisis controversies over hardwiring credit ratings in regulation essentially derive from a clash between two regulatory systems, with one camp (led by German regulators) being skeptical and the other (led by US regulators) enthusiastic. Again, the result is an ill-conceived standard (Kruck 2013).

The VoC-literature is right to stress that financial regulatory approaches can differ markedly among countries and that these national differences are often the source of conflict in international negotiations. Yet identifying the key source of regulatory controversies over financial valuation in countries’ incompatible regulatory systems is unsatisfactory, for three reasons. First, it unwarrantedly assumes an absence of valuation dilemmas at the national level. However, a cursory glance at, for example, the USA shows that regulatory problems can be just as thorny there. The US experience of accounting standard reform shows that national standards can be as messy as international ones. Just like international accounting standards, the US standard setter has not succeeded in picking one method over another one – with the scope of FVA being continuously revised (Greenberg et al. 2013). Similarly, US banking regulators have continuously
revised rules on how banks should calculate the credit risks inherent to their balance sheets—without ever finding a stable regulatory approach (Barth and Matteo Miller 2017). One might argue that problems at the national level perfectly account for international rules’ incoherence. Yet this merely displaces the problem, for what would explain controversies over national standards’ substance? The VoC-literature does not provide many clues to answer this latter question.

Second, the VoC-literature risks making a caricature of the stability and coherence of countries’ regulatory approaches (cf. Hardie and Howarth 2013). Countries’ financial sectors have changed markedly over time, and so have their financial regulations (OECD 2011). For example, framing conflicts over international financial accounting standards as a clash between countries traditionally favoring fair value accounting and those favoring historical cost is partial, at best. As many financial systems had become more ‘market oriented’, all regulators (whether from Germany, France, the UK or the USA) wanted to expand fair value accounting. Attributing international conflict to incompatible traditions then becomes quite misleading. Indeed, when the crisis hit in 2008, French banks’ fair value assets as a share of total assets was 47 percent, significantly more than the 30 percent in the USA (FSF-CGFS 2009: 11). This seems incompatible with the assumed ‘traditional’ French banking system. It means that we should not assume that international conflicts over financial valuation are time-invariant ‘battles of the systems’.

Finally, the VoC-approach assumes that regulators can without much effort derive regulatory preferences from structural factors: the needs of the economic system. This downplays the fact that financial regulation can have markedly different consequences for different societal actors—and that these actors might also play an important role in financial regulatory politics. The next section thus discusses the literature emphasizing the importance of private sector bargaining in financial regulatory affairs.

2.3.3 Material interests and regulatory capture

The private interest IPE-approach stresses that the rule-output of global regulatory forums is best understood as the (temporary) outcome of interest group bargaining. The overriding research objective is to find out the different private and public actors’ material interests. Material interests are the root source of political conflicts over the regulation of valuation practices. Private actors stand to gain or lose from different regulatory approaches, both because regulatory requirements impose compliance costs or taxes (directly affecting profits) and because it sets the terms of competition (Underhill 1997). Public actors balance different stakeholders’ rule-preferences to
fulfil their own material benefits: to get re-elected (politicians) or maintain their independent position (regulators) (Goldbach 2012).

Scholars adopted this perspective to explain actors’ preferences for economic openness – removing or erecting barriers to cross-border flows of goods, services, people, and capital – and regulatory harmonization. Private actors who stand to gain from competing on foreign markets will push for economic openness and international harmonization, while less competitive actors favor protectionism, so the argument (Lake 2009; Mügge 2010; cf. Milner 1989). Although material interest analyses have generally focused on regulatory harmonization efforts, scholars have increasingly studied the substance of (newly created) international rules. But in terms of the analysis this does not change much: private actors prefer rules maximizing income and minimizing costs. So firms will favor rules that will boost their competitiveness while decreasing compliance costs (Goldbach 2012).

How do these private preferences translate into actual policy reform? One strand (the Open Economy Politics-approach) stresses the importance of domestic politics: actors’ regulatory preferences are ‘aggregated’ at the national level, after which governments’ international bargaining power determines the actual policy outcomes at the international level. So domestic political institutions are key to understanding governments’ preferences at the international level, as they structure the bargaining of competing societal groups (Lake 2009). Another strand (the transnational politics-approach) emphasizes the key importance of global regulatory forums’ institutional configuration, as firms have responded to (and pushed for) the supranationalization of rule-making authority (Mügge 2010; Lall 2012). Of course, both dynamics can operate simultaneously, with private actors operating at both the national and international level pushing for their preferred regulatory outcomes.

A key issue is to determine who wins the bargaining competition. Private interest-scholars argue that financial policymaking is particularly prone to ‘regulatory capture’: a situation in which the content and purpose of regulation derives from powerful private stakeholders, to the detriment of the public interest. This insight builds on the economic theory of regulation, as developed by Chicago-school economists Stigler (1971) and Peltzman (1976). In brief, the Stigler-Peltzman argument is that given regulation’s distributional consequences, private stakeholders will aim to steer rule-making to their benefit. Put very simply, producers and consumers have different stakes in regulation. Yet there is an incentive problem. For producers, as a rule, the benefits of exerting influence on the policy process will far outweigh the costs. For consumers, costs will generally
exceed individual benefits. This creates a collective action problem: the large consumer group will fail to organize successfully, as each consumer has an incentive to free ride. For the smaller group of producers, on the other hand, it is easier to organize. Stigler (1971: 3) therefore concludes “that, as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit”. This capture story is quite deterministic: no matter how you organize the policy development process, you will always end up with rules biased towards vested interests (see Pagliari 2012a). The normative implication, then, is that it is usually better not to try, with deregulation as the default policy recipe (see Weber 2012).

Private interest-scholars focusing on global financial regulation generally take a more empirical (inductivist) approach: do we, in practice, see a group of actors ‘capturing’ the regulatory process? They highlight several factors that make global financial regulation particularly susceptible to capture dynamics: a small set of firms have disproportionate resources to organize themselves; international regulatory forums mostly operate in the shadow, giving privileged access to a small group of insiders; and financial markets’ ever increasing complexity makes regulators technically and intellectually dependent on powerful financial firms’ knowledge and expertise (Baker 2010; Pagliari 2012a; Underhill 2015). Thus, in global financial rulemaking often the most powerful firm coalitions successfully convince policymakers to implement rules favoring them rather than being conducive to the public interest. Less powerful stakeholders – such as small, domestically oriented firms and financial services consumers – lose out in this regulatory battle, failing to influence the rule substance (Baker 2010; Lall 2012; Pagliari and Young 2014; Goldbach 2015). In comparison to the Stigler-Peltzman variant, the normative implications are less skeptical towards regulation: public regulation can be conducive to the public interest, but this requires balanced policy input and independent, but accountable regulators.

Other scholars have enriched such accounts of private sector influence on financial regulation. Some scholars have argued that the politics of international financial regulation involves more private actors than just the big, transnational banks (Kastner 2014; Pagliari and Young 2014), implying that a “multitude of participants within or outside finance are capable of exercising an influence that knocks the regulator off its original balance” (Pagliari 2012a: 9). Other scholars take issue with the idea that big banks always get their way: Young (2012), for example, argues that regulators frequently resist big financial firms’ lobby attempts, and adopt rules against their opposition. So more actors than powerful banks may capture financial regulation, and capture is never complete.
Turning to the issue of financial valuation, material interest scholars argued that pre-crisis regulatory developments in the domain of credit rating agencies, accounting standards, and bank capital adequacy standards mainly benefited powerful, transnational firms. For example, the Basel II’s Internal Ratings Based (IRB) approach – only available for banks with ‘sophisticated’ risk management systems – allowed big financial firms to lower their capital requirements, deemed to constitute a competitive advantage (Underhill and Zhang 2008; Blom 2011; Lall 2012).

By hijacking the negotiations [...], large international banks succeeded in minimizing their required levels of capital, with potentially disastrous consequences for the stability of the international financial system (Lall 2012: 611).

Privileged access to decision-making forums may also allow non-banking firms to capture the regulatory process. According to Lall (2014: 134), the global shift to fair value accounting mainly benefited the Big Four accounting firms (Ernst & Young, PwC, Deloitte, and KPMG) who could expand market share in European countries used to historical cost accounting, while harming European firms by imposing ‘switching costs’ on them. And hardwiring ratings in regulation further boosted the Big three rating agencies’ (Standard & Poor’s, Moody’s, and Fitch) dominant position, harming potential challengers.

Similarly, the limited nature of post-crisis reforms stems from vested interests’ powerful lobby – be they big, transnationally active banks, accounting firms, or credit rating agencies. Basel III is not significantly different from its predecessor, reformed accounting standards do not meaningfully depart from the pre-crisis approach, and post-crisis rating agency reforms are “not terribly significant” (Helleiner 2014: 86; cf. Lall 2012; 2014). International regulators’ attempts to fix financial regulations’ flaws were led astray by particularistic interests, so the argument (Helleiner 2014; Goldbach 2015; Underhill 2015). Hence, rules governing global finance are still by and large the same as before the crisis – an approach that mainly favors big financial firms.

The material interest perspective and its capture variants rightly emphasize that (international) financial standard setting is often dominated by a small group of stakeholders, introducing the risk that powerful private actors exercise a disproportionately large influence. But there are two key limitations. First, actual policymaking patterns suggest that financial valuation controversies are not fully reducible to the problem that public regulators are under private actors’ spell. Indeed, this would be difficult to square with the identified empirical pattern where regulators continuously label rules as ‘work in progress’ and frequently modify them. One could argue that this dynamic stems from regulators being at times able to free themselves from private interests and propose rules conducive to the public good, after which they are reined in again by powerful
lobby efforts and backtrack on their initial proposal. Yet this introduces another problem, for what explains the variance in capture over time? In short, there are empirical reasons to doubt this story’s completeness.

Second, the capture account presents a rather narrow perspective on the substantive issues at stake. The key regulatory controversy is located at the level of objectives: do regulators aim for rules conducive to the public, or the private interest? Substantive dilemmas – what rules are in fact conducive to the public interest? – are mostly absent. Debates over the *substantive issues* are a distraction from the *real* issues at stake, namely the material interest of the stakeholders. In Heclo’s terms, it is all powering and little puzzling. Both regulators and financial firms are attributed the ability to know precisely the (future) real-world effects of different rule-sets (cf. Singer 2007); and if regulators change their mind along the way it must have been because they eventually gave in to financial firms’ wishes. On financial valuation issues, however, it is very well possible that there is controversy and disagreement in the regulatory community about the appropriateness of different rule-sets.

### 2.3.4 Ideas, policy paradigms, and expert networks

Constructivist scholars explicitly challenge the conjecture that all policy dynamics are reducible to actors’ material interests (Abdelal et al. 2010). They argue that actors’ observed actions are often incompatible with their assumed material interest. A more principled objection is that even if actors mainly care about their material interests, they must *know or understand* what these are. This implies scholars should investigate actors’ ideas about their goals and the associated preferred policies. As the political world is inherently social, scholars must take seriously the social world’s defining characteristic: it is populated by *thinking* actors (McNamara 1998; Blyth 2002; Chwieroth 2010).

Constructivist scholarship has generally studied global financial standards through the lens of policy paradigms, or ‘regulatory philosophies’ (cf. Baker 2006; McPhilemy 2013). This is congruent with the constructivist’s central claim that “*collectively held ideas shape the social, economic and political world in which we live*” (Abdelal et al. 2010: 2; emphasis added). Scholars argue that the pre-crisis policy reforms constitute the progressive institutionalization of a neoliberal policy paradigm (Blyth 2003; Best 2010; Germain 2010; Mügge 2011a). This paradigm’s core idea is that market forces are (generally) the best way to achieve public interests. It suggests self-regulation is preferable to public intervention (Pagliari 2012b). In terms of rule substance, it implies a belief that “greater transparency, more disclosure and more effective risk management by financial
firms based on market prices are all that is required for the regulation of efficient markets” (Baker 2013b: 117).

Pro-market beliefs had been gaining popularity since at least the 1970s and had been floating around for hundreds of years. To explain their pre-crisis application to financial regulation, constructivist scholars point to institutions, particularly regulatory forums. A neoliberal paradigm was embedded in national regulatory agencies (McPhilemy 2013) as well as at international regulatory forums (Baker 2006; Chwieroth 2010; MÜgge 2011a). McPhilemy (2013) has emphasized the key importance of pro-market beliefs for the UK financial market regulator’s (the Financial Services Authority) policy approach. Mügge (2011a) stresses that a dogmatic pro-market approach – where regulators’ dominant concern is the policy’s intellectual coherence rather than its contribution to public interests – took a firm hold in international regulatory forums. The institutional context is thus of key importance: regulator’s relative insulation from political scrutiny ensured the room for maneuver to pursue this type of policy approach (MÜgge 2011a; McPhilemy 2013).

Why this institutional isolation? According to Porter (2014), the technical and increasingly global nature of financial markets warranted the delegation of policymaking to technocratic, supranational regulatory agencies that were only to a very limited extent exposed to democratic control and contestation. Politicians delegated rule-development responsibilities for bank capital, accounting, and credit rating agencies to unaccountable agencies such as the FSF, the BCBS, the IOSCO, and the IASB at the global level. At the European level, insulated agencies such as the Committee of European Securities Regulators (CESR), the Committee of European Banking Supervisors (CEBS) and the European Financial Reporting Advisory Group (EFRAG) gained influence. These policy arenas were particularly prone to group think of technocrats aiming to implement ‘intellectually coherent’ policies (MÜgge 2011a).

Financial valuation rules developed by these agencies breathed the belief in market forces’ disciplinary powers (Seabrooke and Tsingou 2009; MÜgge 2011a). The IASB presided over a general shift from the traditional historical cost accounting approach – recording assets and liabilities at the price when acquired – to fair value accounting, where market values play a dominant role (Nölke and Perry 2007; MÜgge 2011a; Botzem 2013). This latter approach was deemed more coherent as it relies on “market actors as the discoverers of value” (MÜgge 2011a: 194). Rating agencies were exempt from public scrutiny, as the IOSCO and the CESR trusted in the healing powers of CRAs’ reputational concerns. Simultaneously, credit ratings were hardwired in
a wide set of financial rules, reflecting regulators’ belief in their superiority over publicly
developed risk-indicators (Pagliari 2012b). Finally, regulators reformed bank capital adequacy
standards to increase reliance on banks’ (market-based) risk management systems (such as Value-
at-Risk-models) (Tarullo 2008). Hence, technocrats reformed valuation rules along the lines of
neoliberal orthodoxy, so the argument.

As the financial crisis seemingly challenged policy orthodoxy’s core belief – market forces
contribute to the public interest – constructivist scholars have since investigated whether a new
regulatory paradigm emerged. Some scholars argue a paradigm shift is underway. Baker (2013)
maintains that the crisis triggered a ‘macroprudential ideational shift’ in banking regulation. He
describes this shift as an ‘insider coup-d’état’, where reform-oriented regulators succeeded in
quickly transforming the regulatory ‘cognitive filter’. This ideational shift makes possible a whole
new, more interventionist regulatory approach (Baker 2013b). Other scholars stress neoliberal
ideas’ flexibility, meaning that policymakers could just believe they had to be implemented better.
Actors’ ability to blame the crisis not on underlying ideas but on how they were implemented

The constructivist approach rightly identifies a broad pre-crisis shift to policies favoring private
sector practices over government steering. Yet actual policies – both before and after the crisis –
appear much more hybrid than the paradigm perspective would have us believe. For example,
bank capital adequacy rules are a mixed bag in terms of valuation (risk-assessment) approaches.
Roughly half of EU’s banking assets is subject to Basel’s Internal Ratings Based (IRB) approach, that
mostly relies on banks’ risk indicators. The other half is subject to the Standardized Approach
where ratings and supervisory assessments are more prominent (FSB 2014; Trucharte Artigas et
al. 2015). The IRB-approach also does not fully delegate risk assessment responsibilities to banks:
instead, key provisions are developed by regulators (Young 2012). So, it is a hybrid approach:
regulators became ever more involved in calculating risks and assessing the adequacy of banks’
internal risk management systems, while at the same time introducing considerable scope for
discretion (Haldane 2013a). The standardized approach does not fully rely on private sector risk
assessments, i.e. credit ratings. Less than ten per cent of outstanding corporate credit is externally
rated (EBF 2016), and consumer credit, such as mortgages, is not rated at all. Moreover, EU
policymakers allow banks to ignore EU sovereign bonds’ ratings when assessing their riskiness
(European Systemic Risk Board [ESRB] 2015b). In short, it is hard to square the variety in valuation
approaches with a dogmatic implementation of pro-market orthodoxy.
One could counter this critique by arguing that this hybridity is due to the underlying policy paradigm’s flexibility. But this counterargument introduces more problems than it solves, as this essentially forms a departure of a paradigm-based explanation. Indeed, the argument that pre-crisis policy reforms constituted a dogmatic implementation of a neoliberal policy paradigm conflicts with the argument that pro-market beliefs are compatible with multiple policy routes (cf. Mügge 2013; Schmidt and Thatcher 2014). If policy paradigms are really that flexible, it becomes quite difficult to recognize dogmatic policymaking. For example, analysts have portrayed regulatory reliance on credit ratings both as excessive market reliance (Nölke and Perry 2007) and as undue public intervention in what should have been a free market for financial information (Partnoy 2009). To understand such policies, we thus clearly need to go beyond policy paradigm-explanations.

More importantly for our purposes, the policy paradigm-framework obscures substantive dilemmas over the right course of action. It only allows for policy actors to be temporarily unsure about the right way to go, due to externally triggered crises. Once the dust has settled, actors should again know precisely what to do – either because of a paradigm shift, or because actors succeeded in saving the pre-crisis paradigm through incremental fixes. But taking ideas seriously also requires taking doubts and uncertainties seriously – whether this is during a crisis or otherwise (Nelson and Katzenstein 2014). Moreover, by locating the key policymaking problem as designing an appropriate translation of economic orthodoxy in actual policies, scholars risk obscuring the more practical problems that policymakers face: what rule-sets for financial valuation will likely be most conducive to public interests? Here the paradigm variant of constructivist thinking unfortunately provides little guidance.

2.4 Financial markets as a reflexive system

The approaches described above provide important insights in the politics of financial regulation. Yet they do not really get at the heart of why regulating financial valuation practices appears to be so difficult. These difficulties appear to transcend mere conflicts over adjustment costs, material benefits, or the rules’ appropriateness in light of policy orthodoxy. The IPE-literature addresses two fundamental questions only peripherally: how do valuation techniques affect financial market functioning? And what does this imply for financial regulation?

In this section, I will use insights from heterodox economics and the social studies of finance-literature to present an answer the first question. Both literatures attack the neoclassical economics’ conceptualization of valuation practices as methods to discover a financial
instruments’ ‘true’ value or risk. Instead, they argue that these practices are at the core of financial markets and that they are a crucial component of financial markets’ inherent instability (MacKenzie 2006; Minsky 2008 [1986]; Soros 2008; Sinclair 2010). These literatures tell us much about valuation techniques’ influence on financial markets, but they have less to say about the second question: the concomitant political and regulatory consequences. This issue will then be discussed in section 5.

2.4.1 Finance as any other market

To appreciate the ideas of both heterodox economics and social studies of finance we must look at what they are challenging: neoclassical economics’ conceptualization of finance and financial markets. This line of thought strictly separates financial activity from real economic activity, treating financial activity as a mere derivative of what happens in the real economy. Finance has a passive role in economic processes: financial transactions are merely manifestations of transactions in the real economy (Winkler 1998: 7). As neoclassical economics gained ground after World War II and especially after the 1970s, finance increasingly disappeared from (macro)economists’ radar screen: “Finance came to be seen effectively as a veil – a factor that, as a first approximation, could be ignored when seeking to understand business fluctuations” (Borio 2009: 1).

Finance is not special: the ‘laws’ that apply to other markets also apply to financial markets. The most pro-market version of this line of thinking can be summarized as follows. Markets are populated by atomistic, utility-maximizing agents that can calculate precisely what course of action has the highest probability of furthering their material interests. Through competitive forces, this self-serving behavior will at an aggregate level lead to self-equilibrating markets and maximize economic welfare. As market mechanisms are the best way to organize humans’ natural propensity to trade, they have spread widely across modern day societies. This in principle requires no outside (public) interference; indeed, public intervention is thought of as an outside force distorting markets’ normal operation.

As Turner (2010b: 1319) points out, such a summary is quite a caricature of academic economics, as a good deal of economic research was devoted to understanding under what conditions these simplistic ideas do not hold true. Particular lines of thought – most notably: institutional economics – emphasize obstacles to the efficient functioning of market mechanisms that arise from overly high ‘transaction costs’: information asymmetries, public goods, externalities, and natural monopolies (Akerlof 1970; Meade 1973). Solving market failures requires cooperation (or
collusion) between market participants. If, however, markets are too complex and free rider behavior too difficult to contain, public intervention is the most suitable strategy to fix market failures (Underhill 2016). Information asymmetries between consumers and producers can be fixed by transparency requirements or product standards; externalities such as pollution can be internalized through taxation; and monopoly positions can be addressed through competition policy (cf. Den Hartog 2010).

However, any benefits arising from state intervention could be outweighed by the costs of government failure. Policymakers themselves are confronted with endemic information asymmetries, hampering them in designing optimal policies regulatory design. Moreover, as already discussed above, there is always the risk of capture by a select group of well-organized market participants that bend the rules to their wishes. Even if markets fail to produce ‘optimal’ results, this thus does not necessarily mean government intervention will deliver better results (cf. Posner 1974; Stigler 1971).

What about financial valuation? What happens in the ‘real economy’ (investment, trade, consumption) determines what happens in financial markets. Financial firms’ valuation practices are thus merely instrumental: they must ensure that identified values and risks are accurate reflections of their real economic substance. Valuation involves discovering a financial instrument’s ‘fundamental value’, based on an analysis of real economy variables such as the firm’s income, its inventory, and the relevant industry in which it operates. Financial market participants’ trading activity will subsequently ensure – if the markets are functioning properly – that market prices reflect equilibrium values. Similarly, risk models help market participants calculate financial instruments’ true riskiness. Competitive forces filter out flawed models and thus ensure that only the best ones survive. Valuation techniques are therefore not much more than efficiency enhancing tools: functional technologies that do not themselves significantly alter ways in which markets generally operate (see for a more elaborate discussion: Weber 2012; Marandola and Sinclair 2014; Mügge and Perry 2014).

Regulating financial valuation practices can be a way to fix market failures. For example, as free rider problems prevented the emergence of ‘investor paid’ credit rating agencies, the dominant CRAs are all paid by debt issuers. This creates perverse incentives on the part of CRAs, as they are tempted to inflate ratings to attract business. Regulating CRAs’ risk assessment procedures could then be a way to ensure ratings reflect debt instruments’ ‘true’ riskiness (Coffee 2011). Similarly, financial firms can be tempted to hide negative information from outside investors, worsening
information asymmetries and thereby hamper effective market discipline. Accounting standards are a way to fix these problems. Finally, banks’ actions might create externalities in the form of financial stability risks. Public intervention can be a way to ensure banks take these wider stability risks into account. Regulating banks’ risk models is one way of achieving this (Tarullo 2008).

While these economic ideas on markets and public regulation contain many valuable elements, several aspects are unsatisfactory for our purposes. Finance is treated as a passive force facilitating real-economy processes, while it is much more realistic to emphasize the interactions and mutual dependencies between finance and the economy. Moreover, this perspective on financial values and risks is limited. While it allows for market failures in the domain of financial valuation, it implicitly assumes that ‘risks’ and ‘values’ exist independent of firms’ actions, waiting to be ‘discovered’ by valuation practices. As I will argue below, it makes more sense to treat risks and values as being endogenous to market participants’ behavior. Lastly, these ideas tell us little about regulators’ problems to effectively regulate financial valuation practices. Although it is true that public intervention can lead to new problems, the concept of ‘regulation failure’ is not specific enough about why regulation failure would be particularly prominent in the domain of financial valuation.

2.4.2 Finance as an active, destabilizing force

The great contribution of the heterodox economist Hyman Minsky was to remind us that our economies are inherently ‘financial’. He forcefully rejected the neoclassical perspective that finance is of marginal importance for economic processes:

Established economic theory [...] can demonstrate that an abstractly defined exchange mechanism will lead to a coherent, if not an optimum, result. However, this mathematical result is proven for models that abstract from corporate boardrooms and Wall Street. The model does not deal with time, money, uncertainty, financing of ownership of capital assets, and investment (Minsky 2008 [1986]: 4).

Minsky argued that finance is an active rather than passive force – and that it plays a key role in our economies’ instability. He claimed that periods of benign economic conditions are followed by periods of financial turmoil and economic bust. Going further, he argued that these periods are intimately related: the seeds for financial and economic turmoil are sown in periods of economic prosperity. This is Minsky’s famous argument: stability is destabilizing. But why is this the case?

Minsky conceptualized the economy as a financial system in which a great amount of balance sheets and cash flows are linked in a highly complex fashion. It is a complex network of intertwined relationships, where one actor’s investment spending is another actor’s income. To finance
investment, economic actors take on debt to generate future income, that in turn will be used for interest payments. This inevitably ties the fate of the financial sector to the ‘real economy’, and vice versa. In effect, there is no such thing as a ‘real economy’ separate from financial factors.

Debt finance is the key to understanding the instability of this finance-economy nexus. Debt liabilities and interest payment obligations are generally nominally fixed: debt obligations do not fluctuate in tandem with economic developments. Only when the debt contract is due and a new one is concluded do terms and conditions change. The value of actors’ assets and income streams, in contrast, do fluctuate along with economic conditions. This makes actors’ economic positions inherently risky: there is always the possibility that income streams (volatile) fail to match debt payment obligations (fixed), or that the value of an actor’s assets does not match the value of its debt liabilities (Detzer and Herr 2014).

Minsky called the difference between actors’ expected incomes and their future payment obligations the ‘margin of safety’. In stable periods, the great majority of market participants has an income sufficient to meet debt payment obligations. Put differently, system-wide safety margins are adequate. The economy has a robust financial structure: small changes in economic conditions will not inhibit the ability of most units to meet their financial commitments. But as participants in the non-financial sectors make high profits, they have incentives to take on more debt to finance additional investment. They can achieve a higher return on equity by borrowing more money. The rise in the value of the assets they can pledge as collateral rises and supports their increased borrowing. Financial firms are eager to provide the finance: standing aside means foregone profits, and they feel assured by value rises of borrowers’ collateral and low default rates. This behavior in the aggregate reinforces the economic boom: a feedback loops sets in, where an economic expansion feeds upon itself (Kregel 2008).

As more and more market participants take on debt-positions that require ever increasing profits and asset price rises, the system becomes more fragile – even though it superficially looks more stable than ever. Increasing fragility makes the financial-economic system more prone to a destabilizing response to changes in economic conditions. When margins of safety have been sufficiently reduced, only a very small departure of actors’ initial expectations may change many firms’ strategies to meet fixed payment obligations, such as inventory sales. The system is ready for collapse. A relatively insignificant event – such as a rise in the interest rates, which further reduces system-wide safety margins – may set-off a destabilizing feedback loop. As borrowers default on their debt payments financial firms get into trouble, which influences their terms to
non-financial firms. As all actors simultaneously deleverage to improve their financial position, the aggregate effect is a worsening of economic conditions – a micro-macro paradox. Economic problems set-off a systemic financial-economic crisis (Minsky 2008 [1986]; Kregel 2008; Wray 2009).

In the post-war period, this destabilizing process was muted in Western economies. Indeed, as Minsky (1982) himself pointed out for the USA, the most significant economic event of the post-war era was the absence of economic depression. Public intervention played an important role. As mentioned above, it significantly constrained financial firms’ room for maneuver. Moreover, central banks acted as stabilizers, for example through lender of last resort policies. And government spending played a key role. Investment spending made economic activity less dependent on unstable dynamics in the private sector. Furthermore, the government engaged in deficit spending in case of economic slowdown. In periods of economic and financial turmoil, these factors limited the extent of losses that banks, firms, and households suffered, ensuring an effective floor under the financial economy (Minsky 1982: 9-11).

In such a constrained and steered environment, the financial system’s destabilizing potential was thus limited. All this changed, however, after the 1970s. Financial liberalization played a particularly important role, as it “weakens financing constraints, supporting the full self-reinforcing interplay between perceptions of value and risk, risk attitudes and funding conditions” (Borio 2012: 6). What role do these value and risk perceptions play?

### 2.4.3 Market reflexivity

A core component of Minsky’s explanation for the financial system’s inherent boom-bust tendencies is its reflexive nature: market participants’ assessments of the system’s functioning shape its functioning, in turn affecting participants’ assessments. Confronted with inevitable uncertainty about future outcomes, investors’ assessments of future returns depend on their current optimism or pessimism. Cautious borrowers choose high margins of safety. If expectations about future cash flows turn out to be too modest, the borrower may decide that she had been too cautious and reduce the safety margins. The same applies to lenders: if (most of) their clients meet their payment obligations, banks’ worries about borrowers’ solvency risks decrease, and they will provide more funds. A period of benign economic conditions thus changes actors’ expectations and their behavior, which in turn boosts economic conditions. Economic stability can endogenously lead to an economic boom. Similarly, should events prove less favorable than expected – central banks push up the interest rate, or income flows are less than expected –
expectations are revised, and a self-reinforcing downward spiral can set in (Detzer and Herr 2014; Papadimitriou and Wray 1998).

Market participants are thus confronted with a high degree of uncertainty about future outcomes, and mistakes will be inevitable (Mehrling 1999). But the problem goes deeper: as market participants’ expectations and corresponding actions in the aggregate (partly) shape these outcomes, the whole process has an inbuilt indeterminacy: “any attempt to forecast which of the myriad possible futures will actually be realized comes down to an attempt to forecast the forecasts of one’s fellow economic units” (Mehrling 1999: 141). So market reflexivity itself contributes to uncertainty, meaning that there are no objective anchors for expectations. The financial system is anchored in market participants’ assessments, but in a circular way these are dependent on market circumstances (Sinclair 2010; Mügge and Perry 2014).

Market reflexivity is also central to Soros’ (1987; 2008; 2013) account of the financial system’s proneness to instability. More than Minsky, Soros emphasizes the importance of market participants’ cognitive limitations. Confronted by a reality of extreme complexity, market participants have little choice but to resort to “various methods of simplification: generalizations, dichotomies, metaphors, decision rules, and moral precepts […]” (Soros 2013: 311). This corresponds to behavioral finance scholarship that emphasizes that market participants’ decision-making systemically differ from what would be expected from the rational expectations theory and the efficient market hypothesis (Detzer and Herr 2014). Similarly, Soros challenges the postulates of these theories by emphasizing reflexivity and fallibility, leading him to conclude that markets can be subject to reflexive positive feedback loops that drive apart market participants’ views and the actual situation (Soros 2013).

Soros (2013: 323) analyzes financial boom-bust processes (or bubbles) as the result two components: “an underlying trend that prevails in reality and a misconception relating to that trend”. The boom sets in when a trend and a misconception reinforce one another. He gives the example of a real estate bubble. Easy credit is the trend that triggers it, the misconception is market participants’ belief that collateral values are independent of credit availability. Reflexive feedback loops then drive an asset bubble: cheap credit causes asset prices to rise, there are fewer defaults, credit performance improves, and lending standards are relaxed. The credit boom thus feeds on itself. Inevitably, expectations are so far removed from reality that market participants must admit they made mistakes. The trend then reverses. Forced liquidations and depressed real
estate values reinforce market participants’ pessimism. The process becomes self-reinforcing in the opposite direction, often in a much more turbulent manner.

Soros is right to emphasize that the financial system’s social nature is key to understanding its inherent instability. However, it is unclear why he explains financial instability by pointing at actors’ mistakes. As Bronk (2013: 345) rightly points out, “there is lurking in his thought a residual equilibrium notion of reversion to fundamentals – of an inevitable and growing divergence between perceptions and reality that must be resolved”. Indeed, it is surprising that Soros sticks to the concept of ‘fundamentals’, given its clear association with the neoclassical conception of finance as a ‘mirror’ of an external economic reality; a perspective that Soros explicitly rejects. As Detzer and Herr (2014: 27) argue, it seems to be “theoretically much clearer to assume that there are no fundamentals which determine asset prices”. If the economic system is reflexive all the way to its core, we should drop any distinction between ‘the subjective social world’ and ‘objective reality’ (see the next section).

The work of Minsky and Soros contains key elements to understand financial markets’ recurrent instability. By emphasizing financial markets’ active rather than passive role in economic processes, and the inbuilt indeterminacy in financial relations, it provides key clues why financial markets periodically implode. It is thus unsurprising that these ideas have gained in popularity to explain the increased prevalence of financial instability in our economies. Echoes of these ideas can also be heard in recent theories on the monetary system. The so-called I-theory on money (where the ‘I’ stands for ‘intermediaries’) holds that not only financial stability, but also price stability is in key ways influenced by bank activities. As the money supply by and large consists of bank deposits – and bank deposits are created (destroyed) in the process of borrowing (repayment), financial reflexivity permeates the entire monetary system (Murau 2017; Brunnermeier and Sannikov 2014).

The reflexivity concept also suggests a perspective on financial valuation that is radically different from the neoclassical perspective: rather than measuring an external reality, market participants’ assessments shape this reality. Yet for our purposes, one crucial aspect is still missing. While the notion of reflexivity clearly indicates the fundamental importance of market participants’ valuation practices, their specific roles are left unexplored. For example, whether assets are valued with reference to market value or their acquisition price matters for financial market functioning, but such specificities receive less attention in Minsky’s and Soros’s work. Instead, the accounts
rely on more generic notions such as market participants’ optimism or misconceptions. To explore the role of valuation techniques, the social studies of finance-literature provides important clues.

2.4.4 Re-socializing financial markets

The social studies of finance (SSF)-literature aims to ‘open the black box’ of financial markets and study them in their actual manifestations (Knorr Cetina and Preda 2012). The literature emerged in the 1990s and 2000s in tandem with a broader sociological interest to study markets. Economic sociologists dismiss the neoclassical account of markets as ‘asocial’ and ‘natural’ as fundamentally misleading:

As soon as one observes the formation and operation of real markets, it becomes obvious that none of [their] dynamism is possible without deep involvement by entrepreneurs, managers, workers, firms, and governments. [...] Competition and market forces are themselves defined by market actors and governments over time. These forces are not exogenous to market society, but endogenous to these social relations (Fligstein 2002: 3-4).

The SSF-literature agrees with economic sociology’s starting point that markets are inherently social (De Goede 2005; Preda 2007a). As De Goede (2005: 23) puts it succinctly, “[s]ocial studies of finance repopulates abstracted financial markets with human traders and speculators, who have particular and complex relations to what they understand to be the market [...]”. In short, the aim is a resocialization of financial practices.

The SSF-literature, however, wants to avoid too a stark distinction between ‘the social’ and ‘the natural’. Drawing on science and technology studies (STS), it emphasizes that markets are complex assemblages of humans and ‘non-humans’ – such as laws, institutions, technologies, models, and screens (Leyshon and Thrift 1999; Preda 2007b). SSF-scholars thus conceptualize markets as socio-technical constructs that are shaped by the interaction of actors, their ideas, and the technologies they use (Callon 1998; De Goede 2005; MacKenzie 2006). This leads to the question what determines the functioning of these socio-technical constructs: what makes financial markets operate in practice? What roles do technologies and economic ideas play? And how do they develop over time?

The SSF-perspective, like the heterodox economics perspective, dismisses the mainstream economics conceptualization of ‘financial value’ and ‘financial risk’ as external entities that are waiting to be accurately measured (Paudyn 2013; Persaud 2015). As Beunza et al. (2006) put it, a price is a social thing – or perhaps better still: a socio-technical thing. Indeed, the value and risk of a financial instrument must be ‘constructed’ by market participants using tools, techniques, and
models. These valuation technologies are crucial: they are not merely an ‘aid’ for actors, but they conjointly with the actors’ actions construct the instrument’s value and risk.

What makes financial value and risk special is that they are essentially statements about the future. The ‘credit risk’ of an instrument can never be observed. Risk is always in a state of ‘virtuality’: it is a claim about likely future outcomes. Once problems materialize we no longer speak about risk (Paudyn 2013). Perry and Nölke (2006: 562) stress that “since the future is inherently unknowable, any precise value placed on an asset is ultimately an estimation of the future, rather than a simple fact”. To put it bluntly: no valuation practices, no value. That does not make them any less ‘real’, as valuations exert great influence on people’s actions. Neither is the point that value and risk are wholly subjective and can be redefined by any actor at will. In contrast, they are constructed through the interaction of a wide variety of valuation practices (Mügge and Perry 2014).

Valuation practices are therefore not merely useful tools that increase market efficiency, as a neoclassical perspective would have it. They are much more fundamental: valuation practices make financial markets possible (Knorr Cetina 2007). Valuation and risk management are thus part of the financial system’s core. Seen from this angle, credit ratings do not merely reduce information asymmetries between debt issuers and investors. Instead, they are part of the financial instruments themselves, significantly affecting supply and demand (Sinclair 2010; MacKenzie 2011). Likewise, banks’ risk modeling techniques play a major role in constructing the ‘risk’ of an investment or an asset class. So, measuring an asset class’s riskiness by looking at historical default rates generates markedly different assessments and responses than looking at default insurance instruments’ current market price (Danielsson 2002). And if the value of an instrument does not exist independently of the practices that measure it, accounting standards get a whole new significance. Whether one uses a financial instruments’ current market price or its historical cost to determine its value, the measurement technique constructs rather than reflects the value (Perry and Nölke 2006; Power 2010).

2.4.5 Valuation and performativity

Valuation practices thus construct a reality, rather than merely reflect an already existing situation. The SSF-literature calls this ‘performativity’: instead of passively recording an external reality, these practices act as an “active force transforming its environment” (MacKenzie 2006: 12). Performativity is a concept originating in the philosophy of language (Austin 1962). A performative statement is one that “establishes its referent through the very act of uttering”
For example, the utterance ‘I apologize’ does not refer to an existing state of affairs but brings it (the apology) into being. This makes it a performative utterance. And the speech act itself is not enough to bring about the desired effect: how the utterance is made may influence the receiver’s interpretation. A sarcastic tone of voice will create an insult rather than an apology (MacKenzie et al. 2007).

Studying valuation practices’ performativity implies studying how their practical effects relate to the underlying assumptions, models, and tools. A core research focus is the performativity of economic ideas: studying how insights from the academic literature are translated into market practices and subsequently modify market functioning (Callon 1998; Muniesa 2000; Clark et al. 2004; MacKenzie 2006). Financial theories can do so with varying success. MacKenzie (2006) distinguishes four types of performativity. Generic performativity is the weakest variant, merely denoting that that economists and market participants use the same concepts or theories. Effective performativity is one step stronger, where a theory’s application modifies economic processes. Barnesian performativity is the strongest variant, denoting the situation where the practical application of models makes economic processes more like the models’ assumptions. Counterperformativity is its mirror image, when applying models makes reality conform less well to the models’ initial depiction of the world (MacKenzie 2006; cf. Bronk 2013).

MacKenzie (2004) has analyzed the 1987 stock market crash as a probable and particularly dramatic episode of counterperformativity. It centers on the widespread application of the Black-Scholes-Merton option pricing theory. This theory was a crucial enabling factor in the rise of a specific strategy: portfolio insurance. It was performative in both the generic and the effective sense: market participants used it, and it was at the heart of the growth of derivatives markets. However, its widespread application was widely regarded as having contributed to the 1987 stock market crash, which did not at all conform to the models’ underlying assumptions:

The crash was a grotesquely unlikely event on the [...] model of stock-price movements underpinning Black-Scholes-Merton option pricing theory [...]. More generally, the crash is a frequently cited counter-example to finance theory’s claim that stock price movements are the result of the impact of new information on rational expectations of future returns from those stocks. Yet it is hard to identify ‘new news’ over the previous weekend that would rationally justify such a huge, sudden re-evaluation of stocks (MacKenzie 2004: 307).

This is thus an instance of counterperformativity: the crash invalidated the theory’s underlying assumptions about the behavior of market prices.
Performativity, however, need not necessarily be tightly linked to academic financial theories. Assumptions underlying valuation practices can have (counter)performative effects whether or not they are linked to academic knowledge. Default assumptions in credit rating agencies’ structured finance models are a case in point. The newness of these products implied that historical default experience was very limited – so CRAs took historical default correlations from the corporate sector and applied them to the structured finance sector. This allowed for the construction of very complex products that would still receive a favorable rating (MacKenzie 2011). The familiarity of the signals (the ratings) and the initial positive assessments of CRAs contributed to structured finance products’ popularity. The resulting credit inflow sustained housing price increases and ensured that subprime mortgage owners could continue to refinance their house. This, in turn, ensured that the observed default rates confirmed CRAs initial positive assessments. Ultimately, however, rampant demand unhinged the whole market segment (cf. Carruthers 2013). The correlation assumption broke down – actual defaults differed markedly from initial assumptions (MacKenzie 2011).

But what ensures that valuation practices have performative effects? Three general conditions are conducive. First, the practices (or their outputs) must be widely used – or market participants believe that they are widely used. Second, there are limited alternatives to the valuation practice. Bronk (2013) calls this an analytical monoculture: market participants’ beliefs converge around one specific assessment. The credit ratings that labeled structured finance instruments as safe are a telling example: while there were probably also alternative risk assessments of their safety, market participants predominantly focused on ratings (also because of their inclusion in financial contracts and regulations). Finally, market participants can easily adapt their actions – for example, buying more assets or extending more credit – in response to perceived value and risk assessments. In other words, valuation practices can easily affect the behavior of market participants, thereby strengthening the belief-behavior-belief feedback loop.

We should note the intimate link between ‘reflexivity’ and ‘performativity’. Reflexivity denotes the broader phenomenon where there is a two-way feedback loop between actors’ assessments and a system’s functioning. Performativity can be thought of as “a specific facet of market reflexivity more generally: it specifically concerns formalized routines and models that purport to assess or observe markets but shape them instead” (Stellinga and Mügge 2017: 397). It could thus be understood as “a form of hard-wired reflexivity” (ibid.: 397).
2.4.6 The political dimension of financial valuation

De Goede (2005: 24) stresses that opening the black box of financial market practices also implies “a politicization of practices and technologies that were hitherto regarded as natural and a-political”. Similarly, MacKenzie (2004: 328) argues that exposing financial practices’ performative effects prompts a political question: “what sort of a world do we want to see performed?”. It exposes a political reality: if value measurement is not a neutral reflection of an underlying, external value, then the tools, technologies, and assumptions to construct it also lose their neutrality. Valuation practices are inherently political as they have distributive consequences and real-world effects. As such, it adds a dimension to the issue of ‘power’: whereas the traditional focus of International Political Economy-analysis is on powerful ‘actors’, the SSF-literature broadens our attention to include powerful valuation practices (cf. Carstensen and Schmidt 2016).

This perspective thus encourages an analysis of valuation practices’ political dimensions. For example, given the importance of credit ratings in financial markets, a government’s borrowing costs depends on the rating. It is thus warranted to investigate the methodologies that CRAs use to evaluate what is ‘appropriate’ fiscal conduct. According to Paudyn (2013), these methodologies impose upon governments a neoliberal model of budgetary policy (but see Saudis 2015 for a critical take). Similarly, accounting standards are inherently political, as they form the basis of calculating assets, liabilities, equity, and profits. So, Perry and Nölke (2006) argue that an accounting framework centered on market-based value measures favors financial sectors over productive sectors. There is power in numbers, as MacKenzie (2003) reminds us: in the Enron debacle people lost their jobs because of them. And the global financial crisis was very much a valuation crisis (Warwick Commission 2009).

Despite the major contribution of the SSF-literature to our understanding of the (political) nature of financial valuation, it pays relatively little attention to performativity’s regulatory implications. “[R]egulation remains a peripheral subject in the sociology of finance”, Coombs (2016: 281) argues. This is surprising: if valuation practices are at the core of financial market functioning and therefore inherently political, what does this imply for financial regulation? After all, financial policies have a major influence on financial firms’ valuation practices. Even if policymakers do not usually discuss valuation practices in terms of their ‘performatve effects’, the continued regulatory controversies over valuation approaches in practices as diverse as accounting, risk modelling, stress testing, and systemic risk monitoring show that policymakers are well aware of their importance. But are regulators really in the position to determine which valuation practices
will have, to paraphrase MacKenzie (2004), ‘the right kind of performative effects’? And if financial regulators aim to design rules conducive to financial stability, is it obvious what rules ensure a ‘benign’ form of performativity? And can a performativity perspective be congruent with more traditional IPE-takes on policy processes, such as capture dynamics? These policy-related questions receive scant attention in the SSF-literature.

2.5 The politics of financial valuation

The IPE-literature on financial regulation reviewed in section 3 implicitly or explicitly assumes that public policy could in principle design valuation practices conducive to financial stability. The main factors hampering public policy from achieving this are obstacles that are in a way external to financial valuation, for example policy inertia, private interest bargaining, or policymakers’ flawed regulatory beliefs. Yet while all these factors in fact play a meaningful role in the politics of financial regulation, the heterodox economics and social studies of finance accounts reviewed in section 4 suggest that this is not the entire story.

These accounts indicate that there is no clear or stable link between financial valuation practices and the public policy goal of financial stability. Reflexivity – the assessment-behavior-assessment feedback loops – means that financial markets are ultimately built on shaky foundations. It implies that valuation techniques are performative: the values and risks that market participants calculate do not exist independently from the tools that are used to measure them. They can transform the reality they seek to describe and can do so in destabilizing ways. But if the widespread use of specific valuation techniques can contribute to financial instability, what could this imply for the politics of financial valuation? This section presents the potential regulatory implications of financial reflexivity; implications that are further investigated in the subsequent empirical chapters.

2.5.1 The market and regulatory context

While financial markets are inherently reflexive, the extent to which market reflexivity and valuation practices’ performative effects become a regulatory concern should depend on the broader regulatory and market circumstances. The extent of financial market liberalization is of key importance: when market participants face little constraints in their ability to extend credit, the assessment-behavior-assessment feedback loop will be particularly strong. Financial liberalization reduces limits on financial firms’ actions, thereby strengthening the self-reinforcing interaction between risk attitudes and financial firms’ willingness to extend credit (Borio 2012: 6).
Relatedly, the competitive environment matters. Fierce competition between firms that operate on similar business models will feel compelled to join the herd, strengthening reflexive feedback loops. Cartel-like circumstances, on the other hand, stifle competitive forces and thereby limit the significance of markets’ reflexive nature for financial stability policy (Goodhart 2016a).

This suggests that the identified dynamics will be particularly prominent in circumstances where market participants have ample room for maneuver and where competitive forces are strong. This implies that the dynamics were less prominent in the post-war period, where competitive forces were significantly constrained (see section 2 of this chapter). This changed from the 1980s onwards, as western governments liberalized their financial sectors and as financial markets changed profoundly under the influence of innovations and technologies (OECD 1992). In these circumstances, market reflexivity became a much more prominent problem (Minsky 1987). Despite post-crisis reregulation, governments have still maintained the basic pre-crisis principle that market forces should be the dominant allocation mechanism. Moreover, as the crisis will likely have heightened regulators’ appreciation of financial market reflexivity, I expected the salience for regulators of finding solutions to valuation problems to be especially high in post-crisis regulatory debates (see, for example, FSA 2009b).

### 2.5.2 Dilemmas pertaining to regulating financial valuation

The idea that valuation practices are performative shines a whole new light on their role in financial markets. It changes how we look at accounting practices, that relate to the way companies value assets and liabilities for official financial reports: rather than merely measuring (market) prices, accounting practices shape these (Mügge and Perry 2014). The same applies to risk measurement: market risks are affected by the tools used to measure them. Credit rating issuance and usage is a prominent example: as many market participants rely on credit ratings to assess a debt obligation’s default risk, these ratings shape the risks they are supposedly merely measuring (Sinclair 2010). But the list can easily be expanded, for instance firms’ assessment of their financial portfolios’ riskiness; their use of quantitative models such as Value-at-Risk; or firms’ stress testing practices that assess whether they can withstand adverse market conditions (Lockwood 2015).

Turning to the regulation of these practices, two aspects seem particularly relevant. First, the extent to which firms themselves can decide on the most appropriate valuation methods. Regulators may choose to be very prescriptive, effectively telling firms what to do. They may also to a significant extent leave it up to the firms themselves to figure out the most appropriate
valuation method (Blom 2011). To the extent that regulators tell firms what to do, a second aspect comes to the fore: what type of information should firms use to assess financial instruments’ value and risk? Valuing an instrument with reference to its original transaction price (its historical cost) will generally yield a markedly different result than if valued with reference to its current transaction price; in jargon, its ‘fair value’ (Enria et al. 2004). Similarly, assessing an instrument’s or a portfolio’s riskiness based on historical default rates (in jargon: a through-the-cycle method) will lead to different outcomes than if estimated based on current market circumstances (a point-in-time method) (Gonzales et al. 2004; Hunt 2009).

How do these considerations relate to regulators’ task to contribute to financial stability? A prescriptive approach seems to score better on ‘rule stringency’ than a discretionary approach, suggesting it is the best way to contribute to financial stability (cf. Blom 2011). Yet a very prescriptive approach risks hard-wiring one specific valuation procedure into policy and thereby force many market participants in the same direction. This is especially the case when rules are applicable at the European or even global level. As the uniformity of firms’ valuation approaches could stimulate herd behavior among market participants, financial stability might be at risk (Danielsson 2013). Similarly, as up-to-date information on banks’ financial positions is indispensable for market supervision, public authorities have strong incentives to prescribe market-based valuation approaches. But a high reliance on recent trends may reinforce market procyclicality, as it tightens the link between recent trends and financial firms’ behavior (European Central Bank [ECB] 2004). This suggests regulators are confronted with tough policy dilemmas when designing rules for financial valuation.

These implications need not be confined to the regulation of private actors’ valuation practices. Public actors likewise assess financial stability risks, for instance through stress testing exercises, or by comparing current to past market trends. These public valuation techniques are not necessarily immune to the challenges posed by financial markets’ reflexive nature and the performative effects of valuation techniques (Kregel 2014). Just like private actors, supervisors cannot step out of financial markets and assess (systemic) risks from an external point of view. And to the extent that supervisors intervene in financial markets based on specific systemic risk assessments, these assessment techniques may have performative effects. In a reflexive system, it is highly uncertain whether such actions will mitigate systemic risk.

These policy problems are ultimately rooted in financial markets’ reflexive nature: lacking a solid anchor outside of market participants’ assessments, valuation routines shape rather than describe
the financial system. Policymakers thus must ensure valuation routines have the ‘right kind’ of performative effects, in other words ensuring that they contribute to stable and efficient markets. But if we take the insights of the heterodox economics and SSF-literature seriously, there do not appear to be fool-proof solutions here. Market reflexivity introduces a fundamental problem for regulators: there appears to be a highly ambiguous link between valuation practices and financial market stability. And it is far from obvious how prescriptive regulators should be. Hard wiring valuation techniques reinforces their procyclical effects, but a laissez-faire approach could still lead to private sector herding.

So at least theoretically, there are clear policy dilemmas flowing from valuation practices’ performative effects. To assess whether and how these issues affect the policy process required an empirical assessment of the regulation of valuation. Accounting practices, credit rating issuance and usage, and banks’ risk modelling routines substantially differ, suggesting that the regulatory problems they introduce could also differ in important ways. Similarly, while market reflexivity surely matters for public actors’ valuation practices, this need not necessarily have the same implications as the regulation of private actors’ practices.

In other words, we have good theoretical reasons to assume that market reflexivity introduces comparable regulatory difficulties for the various valuation routines, but this required prying open the issues at stake to see how exactly how reflexivity and performativity issues play out. Moreover, these issues might play out differently over time: as financial markets, activities, and valuation techniques change, so will the regulatory issues. All this suggested the need to investigate the time- and issue-specific regulatory dilemmas pertaining to financial valuation.

2.5.3 Regulators’ perception of valuation problems

Ex ante, it is an open question to what extent policymakers recognize these valuation problems, and what influence this recognition has on their decisions regarding valuation policies. If we draw on the policy paradigm-variant within the constructivist IPE-literature, we would expect these dilemmas to play a minimal role before the financial crisis. This literature suggests that regulators were under the spell of a neoclassical economics philosophy, making it unlikely that they recognized the valuation problems outlined above – or (if they did) at least unlikely they considered them to be very problematic (cf. Mügge 2011a). The extent to which the crisis triggered a shift in regulators’ appreciation of these problems would then depend on whether they abandoned pre-crisis pro-market ideas and subscribed to a heterodox economics-take on financial market functioning.
However, as pointed out in section 2 of this chapter, regulators might have been much more pragmatic in rule development than the policy paradigm-perspective suggests. Indeed, while pro-market thinking certainly put a mark on pre-crisis policies, it is far from obvious that policymakers will have only paid attention to neoclassical economics textbooks. And while pre-crisis economic thinking paid scant attention to finance and its role in the economy, policymakers still had to develop and implement rules to tackle real-world problems. As financial economics was dominated by formal mathematical modeling, its relevance for policymakers finding solutions to these problems might have been limited. All this suggests that there might have been quite some regulatory pragmatism. The take-away message is that it is an empirical question how financial regulators think about financial valuation problems, and how these ideas relate to regulatory issues that likely flow from reflexivity and performativity.

This also does not imply that regulators only recognize these valuation dilemmas if they fully subscribe to heterodox economics reasoning. While I used insights from heterodox economics and social studies of finance to unearth potential dilemmas in regulating financial valuation, it is possible that regulators debate such problems in terminology different from the heterodox accounts. Just as regulators may be aware of policy dilemmas that are absent in neoclassical thinking, they may also be only limitedly influenced by alternative, heterodox accounts. Once again, this suggested the imperative to empirically investigate whether policymakers identified the valuation problems discussed above, how these assessments have changed over time, and how all this affected financial policymaking.

2.5.4 Implications for governance processes and policy output

As financial valuation practices form the financial system’s core, policymakers must design rules to influence these. The valuation problems outlined above suggest the absence of a straightforward regulatory approach conducive to financial stability. Even if we would simplify matters by assuming that regulators have no other concerns than stability, it is far from obvious that there is a clear solution to valuation problems.

What does this imply for policy dynamics over time, and policy output at any point in time? Regarding the former, I expected frequent policy reversals and ad hoc modifications. Firms’ valuation approaches and their concomitant behavior change over time, thereby altering financial market functioning. Crucially, rules on valuation approaches may over time lead to unintended consequences, potentially undoing the regulatory approaches’ initial benign effects. I expected financial valuation rules to be constantly subject to policy debate; they are perpetually work in
progress. It suggests that solutions “should often have a temporary character, either because they are designated as temporary from the outset or turn out to be so through frequent policy reversals and backtracking by regulators” (Stellinga and Mügge 2017: 401-402). Particularly intractable valuation dilemmas may simply be often deferred: as regulators fail to develop convincing solutions, they will kick the can down the road. I thus expected the policy process to be unstable; with rules constantly subject to modification and perpetual controversy over their financial stability implications.

In terms of policy output (at any point in time), the implications are less clear cut. Market reflexivity suggests regulators will opt for mixed approaches. Regulators have clear incentives to neither completely support nor fully reject public prescriptiveness in the domain of financial valuation. They should fear excessive private discretion, lest firms’ opportunism becomes a financial stability threat. Yet a very high degree of public prescriptiveness increases the risk of publicly mandated herding. So, this implies regulators will allow scope for private discretion, while refraining from completely delegating valuation responsibilities to the banks. To the extent that regulators mandate specific valuation routines, they can be expected to lean towards market-based valuation approaches. Yet they should be reluctant to hard-wire market-based valuation routines, as this may put market procyclicality – a destabilizing feedback loop between market functioning and firms’ behavior – in overdrive. This suggests that they aim for rules that encourage prudent valuation routines that neither excessively rely, nor completely ignore recent market trends. In short, I expected regulators to prefer compromises and mixed approaches.

Still, the implications for the policy process over time are more important than the implications for the policy output at any specific juncture. While financial valuation practices’ performative effects introduce specific regulatory dilemmas, this does not imply that it forces regulators to embrace a specific policy approach. Crucially, to the extent that regulators acknowledge these valuation dilemmas, there are good reasons to expect a certain indeterminacy in terms of the policy output: as regulators realize there is no one right solution to the valuation problem, they may choose from several (flawed) solutions at any point in time. And regulators are not always fully in control here. Political demands for action may force them to opt for a seemingly ‘strict’ solution. But over time this solution should again become subject to policy debate, as regulators will be confronted by its unintended consequences. In short, the key regulatory implication pertains to the policy process – reopened debates and further (ad hoc) modifications – rather than to the specific policy output at any particular point in time.
2.5.5 Private actors’ preferences and influence

The material interest-strand of the IPE-literature suggests that private actors play a significant (if not leading) role in policymaking arenas. The regulatory capture account suggests that powerful financial firms want to skew regulation to their benefit, thereby harming public interests. Firms surely favor those rules that boost their profitability or enhances their competitiveness vis-à-vis foreign or domestic actors. But it is not immediately evident what this implies for their regulatory preferences on financial valuation. On the one hand, we may expect firms to favor a high degree of discretion on valuation practices as this will minimize compliance costs, thereby boosting profitability. We may expect them to want freedom to choose valuation methods that fit business model most, or that will improve their financial situation given general economic circumstances. On the other hand, it is unlikely that they will favor unlimited discretion: firms often favor some degree of public guidance, lest regulators will ‘arbitrarily’ interfere in their business practices. In other words, we may expect firms to favor a balance between discretion and public guidance. How that plays out in regulatory debates depends on the issue at stake: it requires empirical analysis.

Surely there are ample examples of financial firms succeeding in bending the rules to their advantage, even if this later turns out to be clearly harmful for financial stability. But when looking at financial firms’ role in policymaking, we cannot a priori assume that public and private interests will necessarily be opposed. Given banks’ key importance for the economy’s functioning, regulators have an interest in financial firms’ viability – especially when they are deemed systemically important. This implies that regulators will want to know how rules play out on the ground. If banks make plausible claims that the rules are harmful for a significant share of the sector, regulators may – from a stability point of view – reconsider their approach. This means that we cannot just assume that when public and private interests converge, the regulator was captured.

2.6 Focus and methods

2.6.1 Case selection

To assess the ways in which valuation dilemmas stemming from market reflexivity influence the regulatory process and policy output, I have studied multiple policy domains where valuation routines stand central. I have focused on three valuation issues that are central to financial market functioning: accounting for financial instruments; the issuance and use of credit ratings; and the assessment of credit, market, and liquidity risks of banks’ assets and liabilities. I have thus studied
accounting standard setting, the regulation of credit rating agencies, and the development of capital and liquidity standards. An additional key research focus has been the ways in which bank regulators themselves aim to assess financial values and risks. I have looked at developments in banking regulators’ attempts to measure and mitigate systemic risks – practices that got a great boost after the crisis exposed fundamental shortcomings in supervisors’ ability to identify the build-up of systemic financial imbalances.

I have thus focused on a variety of valuation-relevant policy domains, rather than on only one of them. I have studied the decade leading up to and following on the global financial crisis of 2007-9. This twenty-year time-frame allowed for assessing the extent to which regulators already before the crisis dealt with firms’ valuation routines. The thesis is thus certainly not a crisis-only study, although most of the empirical analysis focuses on post-crisis reforms. By focusing on the crisis-aftermath we could identify to what extent the crisis triggered substantive reforms of the regulation of valuation practices. While the crisis certainly exposed fundamental flaws in these practices, the underlying valuation problems suggested that regulatory solutions would be not be coming easily.

These issues are addressed in regulatory frameworks that differ in terms of distribution of responsibilities, the actors involved, and the object of regulation. For example, whereas banking regulators are in charge of the development of rules for banks’ risk models (Tarullo 2008), accounting standard setters develop international rules how firms should value their assets and liabilities (Botzem 2011), and securities markets regulators are in charge of developing rules for credit rating agencies (Kruck 2011). The private actors directly affected also differ markedly. And the valuation practices as such are of course not identical: valuing assets is a different activity than issuing a credit rating or measuring systemic risks. Yet despite this variety, market reflexivity implies that these practices might introduce similar regulatory problems.

I have focused mostly on the European Union context. Given the key importance of international rules for EU policy, and vice versa (Mügge 2014; Quaglia 2014b), the research also has involved a study of regulatory initiatives at the global level. The precise balance in the focus (EU context versus global context) depended on the policy issue at hand. So, while for accounting and bank capital regulation there is a long established global governance framework, this was less the case for the credit rating agency regulation or the development of policies aimed at preventing systemic risk. The choice for a focus on European policies rather than American ones – the obvious
alternative – was ultimately arbitrary. Similar dynamics should feature in the American case, although the thesis does not demonstrate this.

As I have focused on the link between valuation issues and financial stability, specific attention for banking regulators was warranted. Given banks’ central role in this system – and their inherent fragility – safeguarding financial stability in many ways implies safeguarding the banking sector’s stability. At least since the late 1980s, the Basel Committee on Banking Supervision (BCBS) – part of the Bank for International Settlements (BIS) – has occupied a central place in standard setting (Tarullo 2008). While this body has no ‘formal’ power – it cannot force member states to adopt its standards – in practice its standards are widely used as governments translate these standards into national laws, or as financial firms voluntarily choose to comply with them (Singer 2007). So, an analysis of financial valuation issues required paying close attention to how the BCBS deals with them. At the European level, the relevant actors are the European Banking Authority (EBA; previously the CEBS) and the ECB.

Banking regulators are, of course, not always in complete control over the regulation of market participants’ valuation approaches. Accounting standard setters are responsible for developing the relevant accounting rules for financial instruments. Here the key actors are the IASB and the (American) Financial Accounting Standards Board (FASB). At the European level, the EFRAG plays an important role by assessing whether the IASBs standards are compliant with European rules. The regulation of CRAs is predominantly the prerogative of securities markets regulators. Here we should look at the work of the IOSCO at the global level, and the European Securities and Markets Authority (ESMA; previously the CESR) at the European level.

As these regulatory agencies have broader (or other) considerations than financial stability, and as their rules may transcend the banking sector, it is not obvious that regulatory dynamics on financial valuation issues will be fully dominated by banking regulators’ concerns. Yet while this surely affects the politics of financial valuation, this does not make the valuation issues outlined above any less relevant. Regulators might have other objectives than ensuring financial stability, yet its fundamental importance might still induce them to take stability considerations into account when designing the rules.

Similarly, banking regulators’ preferences need not necessarily conflict with those of the other agencies. For example, banking regulators might agree with accounting standard setters that firms should present a fair picture of their financial position, even if they disagree on the rules’ more detailed aspects. If considerations do conflict, banking regulators may have multiple routes to
influence the work of these other agencies. They can influence others through formal partnerships, such as the Joint Forum, where international banking regulators cooperate with securities markets regulators and insurance supervisors. They also exert influence through the work of the Financial Stability Board (previously Financial Stability Forum). Finally, they may simply opt for ad hoc interventions, such as submitting comment letters to regulatory proposals.

These considerations generated a focus on the following policy domains and valuation issues:

- **Accounting for financial instruments**: the two most relevant valuation issues are the choice of valuation method (fair value accounting versus historical cost accounting) and the extent to which firms may provision for loan losses. The empirical focus has mainly been on EU agencies’ attempts to influence the work of the International Accounting Standards Board.

- **Credit rating issuance and usage**: the key valuation issues pertain to the extent to which ratings are hardwired in regulation and private sector contracts, the methodologies that credit rating agencies use, and rating diversity. The empirical focus was on EU’s regulation of CRAs’ methodologies, the removal or insertion of regulatory references to credit ratings, and EU’s attempts to set-up a European credit rating agency to challenge the Big Three.

- **The assessment of banks’ liquidity and credit risks**: the issues here are firms’ discretion to identify their asset portfolios riskiness in the context of bank liquidity and capital adequacy regulation. The empirical focus was on whether policymakers should become more prescriptive in how banks do this, or whether they should take a hands-off approach.

- **Supervisors’ measurement and mitigation of systemic risks**: the issue here is supervisors’ ability to measure systemic risks, and how policymakers embed systemic risk measurements and mitigation techniques in financial regulation. The focus has been on the development of an EU macroprudential policy framework.

These cases have allowed me to trace key regulatory issues pertaining to financial valuation as they unfolded over time. From the 1980s onwards, banking sectors changed tremendously under influence of new technologies, financial globalization, and liberalization. The extent to which past accounting practices were suitable for the ‘brave new world of market-based finance’ became a key regulatory concern. As banks became more and more involved in capital market activities, banking regulators and accounting standard setters both worried whether traditional, cost-based accounting practices were still suitable. This led to a debate on the extent to which mark-to-market accounting should play a more prominent role. While mark-to-market accounting gained
prominence before the crisis, this expansion was not unchecked: banks could still value a great chunk of their assets without reference to market prices. Still, the crisis challenged the expanded scope of market-based accounting, with subsequent clashes between banks, their regulators, and accounting standard setters over its suitability for the banking business (see chapter 3).

As banking transformed before the crisis, regulators also increasingly paid attention to banks’ risk management practices. Of specific importance in this regard was the development of the Basel II capital adequacy standard. This standard gave banks with advanced risk management practices more freedom to calculate required capital using their own risk assessments. The standard also increased regulatory reliance on credit ratings. One reason for these changes was that this would better align public regulation with private risk assessment techniques. However, the crisis exposed serious shortcomings of regulatory reliance on both ratings and firms’ internal risk models. Although I do address aspects of regulatory reliance of banks’ risk models (in chapters 4 and 6), I have focused mainly on the regulatory debates concerning credit ratings. I have studied to what extent the crisis triggered fundamental reform in the domains that are arguably at the heart of the performativity problem: rating agencies’ methodologies, their ratings’ homogeneity, and widespread reliance on them (see chapter 4).

The financial crisis heightened regulatory awareness for issues that had before escaped the attention of global regulatory forums, such as the ways bank manage their liquidity risks. Before the crisis, banks and their regulators assumed that solvent banks would always be able to refinance themselves (limiting funding risks). If they needed to meet payment commitments related to the withdrawal of funds, they could always sell assets in well-functioning markets (limiting market risks). The crisis showed otherwise. As a result, banking regulators took up the task to design rules to ensure banks hold a sufficient amount of liquid assets to meet funding withdrawals, and to ensure that they have sufficiently stable funding sources. I have focused on regulatory requirements on liquid asset requirements. The key valuation dilemma here was that labeling assets as ‘liquid’ affects their liquidity. In other words, liquidity regulation has performative effects (see chapter 5).

Finally, the crisis showed that financial supervisors needed to become more active in (systemic) risk management and mitigation themselves. Under the banner of the ‘macroprudential turn’ in

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2 Chapter 5 also includes a discussion of post-crisis reforms of CRAs and international accounting standards, reflecting its origin as a stand-alone article.
financial regulation, policymakers have made attempts to design ways to measure and mitigate systemic risks. Specifically, banking supervisors aimed to limit financial markets’ boom-bust nature by having regulatory requirements operate countercyclically, becoming more stringent when systemic risks build up, and more lenient when they materialize. This, however, required designing ways to measure systemic risks. Here I also expected regulatory problems pertaining to financial market reflexivity to come to the fore (see chapter 6).

2.6.2 The research approach

The empirical research was mostly of a qualitative nature, as I deemed this the most obvious approach to study the link between valuation dilemmas, policy processes, and regulatory outcomes. As stated above, it required prying open the issues at stake to see how valuation problems influence financial governance. The empirical research involved both studying policy developments over time, and a detailed analysis of policy output at any point in time. This involved some degree of process tracing: a systematic examination of diagnostic evidence to answer specific research questions (Collier 2011). But as my most important research objective was to find evidence whether valuation problems – ultimately stemming from market reflexivity – exert a significant influence on policy processes, I refrained from overly detailed historical analyses or a step-by-step tracing of policy developments.

A first step was to identify and interpret the relevant valuation dilemmas. The selection of the most relevant valuation issues was mainly inductive: by analyzing post-crisis regulatory debates (e.g. Brunnermeier et al. 2009; FSA 2009b), I got a good sense of the fundamental issues pertaining to valuation. This allowed identifying how policymakers addressed these valuation issues before the crisis, and in what regulatory forums these debates played out. To understand precisely what was at stake required a detailed analysis of specialized reports and academic publications on the topic at hand. Distilling the valuation problems’ essence from these technical debates required a degree of abstraction and simplification. In other words, while a specific valuation problem often had many different facets, it helped to frame it as an opposition between a limited set of policy choices (for example, market-based versus regulator-designed valuation methods).

Analyzing how specialized reports and academic publications report on valuation problems has less to say about the ways in which regulators and other stakeholders interpret these issues. This required assessing how these dilemmas came back in policy debates. This necessitated analyzing policy proposals and debates, and how news media reported on them. I could also rely on regulators’ and private actors’ public statements on policy issues. Financial rulemaking generally
involves a long process involving consultations, roundtables, and public debates. Policymakers often publish statements explaining regulatory proposals. And public and private actors often get the opportunity to respond to rule-proposals through comment letters. Such public statements are useful resources to tease out how regulators and firms interpret, frame, and respond to the valuation dilemmas at stake.

Focusing on public reports on policy debates obviously has limitations. Most importantly, from a strategic point of view, actors will not always express all their wishes or concerns. To get a better understanding of how valuation dilemmas’ affect the policy processes, I have done 21 semi-structured interviews with regulatory agencies and private sector representatives, involving 29 respondents. Given the political sensitivity of the issues, in each case I have asked whether they would prefer anonymity, which all of them did. I can therefore only disclose that the interviews took place in 2016 in Amsterdam, Basel, Brussels, Frankfurt, London, Paris, and Madrid. Of these 21 interviews, seven interviews were with private sector representatives: four from the banking and investment sector, and three with credit rating agency representatives. Of the public agencies, nine were with banking regulators, and five with securities markets regulators.

These interviews had two main goals. First, to get a better understanding of public and private actors’ interpretation of the valuation problems at stake. This involved asking general questions on the valuation issues that financial policy addresses, and the potential upsides and downsides of specific regulatory approaches. A second objective was to get a better understanding how these valuation problems affected policy processes. This required asking more specific questions about the policy process: I have asked regulators what role previously adopted rules played, whether this affected policymakers’ desire for alternatives, why they opted for reforms, or why they refrained from pursuing alternative courses of action. Similarly, I have asked private sector stakeholders why they embraced or rejected specific proposals. As such, the overarching goal was to get a more general sense of how regulators interpreted the policy dilemmas and how this affected the policy process. The interviews are thus complementary to, rather than a substitution for, the analysis of published material.

To select the respondents, I have firstly analyzed publicly available documents on the policy processes to identify what regulators and private actors were involved, or which actors would likely have an important stake in the relevant valuation issue. I have then approached some of these agencies to request an interview with a representative. Through these respondents I have often acquired the contact details of people at other relevant agencies. The goal has not been to
get a representative selection of all relevant stakeholders. Again, the interviews’ main purpose is to get a good sense of the policy dilemmas and their influence on the policy process. This means that I have limited the interviews to those regulatory agencies and private actors that arguably played the most important role in the policy process, and who could thus be expected to have the best grasp of the issues involved.

Of course, even if we find evidence of regulators identifying valuation problems and indications that this results in reopened debates, ad hoc modifications, and half-baked reforms, this can still be congruent with other IPE-accounts on financial governance. For example, lack of post-crisis reforms on a valuation issue might merely be the result of regulatory capture. To ascertain whether policy outcomes that, for example, benefit private financial firms are clear examples of regulatory capture, or whether they indicate that regulators were unable to find a better solution, again required prying open the issues at stake. If banking regulators at a particular point in time are able to formulate a clear and coherent regulatory solution to a valuation problem, only to abandon it in favor of firms’ self-interested wishes, this suggest a degree of regulatory capture. However, if we find clear signs of regulators being aware of policy dilemmas and therefore shy away from reforms that potentially conflict with private wishes, I argue that the case is much stronger for reflexivity itself as a driver of regulatory caution.

Notwithstanding this last point, I want to stress that the overarching research goal was not to find the ‘one and only’ causal explanation for specific policy outcomes through a formal refutation of ‘rival hypotheses’. While in the empirical chapters I do challenge the way in which some IPE-accounts have addressed and explained (post-crisis) regulatory reforms, this is not to say these accounts are completely off the mark. Indeed, many aspects that these IPE-accounts highlight — for example the key importance of private actors for financial regulation — are compatible with my account stressing valuation dilemmas. Instead, I wanted to assess whether a focus on market reflexivity and concomitant valuation dilemmas helps us better understand the relevant policy processes than if we focus only on private sector bargaining, regulatory ideas, or institutional path-dependencies.

2.7 Conclusion

In this chapter I have reviewed IPE-approaches to identify potential explanations for the thesis’ main topic: regulators’ apparent inability to design coherent and effective financial valuation approaches. While these theories point at many relevant factors for why this might be the case, these obstacles are generally external to financial market functioning: power-politics between
countries with different regulatory traditions, regulators’ lack of resources, private interest bargaining, or policymakers’ embrace of a specific policy paradigm. These factors surely are of key importance, but they do not really provide a clear explanation why regulating financial valuation practices would be particularly problematic. Put differently, what is it about financial valuation that makes it so difficult to regulate?

Rather than focusing immediately on the relevant rule-making processes and the various stakeholders active therein, I have proposed to first take a step back and look at the substance of financial valuation. If we follow the heterodox economics accounts of Minsky and Soros and conceptualize markets as reflexive (self-referential), unstable systems, we see financial valuation practices in a whole new way. Rather than reflecting risks and values, these practices shape them. Following insights of the SSF-literature, we can call them performative: valuation routines change the reality they purportedly merely describe. What is crucial here, however, is that this perspective also shines a different light on the governance problem. If financial valuation practices influence values and risks, is it obvious which ones will contribute to financial stability? How can regulators ensure that valuation practices’ performative effects are conducive to a stable system?

In the final part of this chapter, I have thus detailed the empirical questions pertaining to the governance of financial valuation that flow from this ‘reflexivity-perspective’. While financial markets’ reflexive nature should in principle confront financial policymakers with fundamental problems, it is an empirical question to what extent they recognize these problems and how they deal with them. Nor is it evident how financial firms deal with these problems, and how this feeds back into their policy preferences. I have thus translated the reflexivity-perspective in empirical questions for specific policy domains that are key to financial market functioning: accounting standards for financial instruments, credit rating agency regulation, capital and liquidity requirements for banks, and the design of policies aimed at mitigating systemic risk. The next chapters will present these empirical findings, starting with the problem of accounting for financial instruments.
3 The unstable core of global finance. Contingent valuation and governance of international accounting standards

3.1 Introduction

As financial globalization gathered pace in the 1980s, a fundamental question emerged in the domain of accounting standard setting: should countries converge on a single set of standards, and if so: who should develop these? Apart from this harmonization issue, a crucial question was how standards should be reformed given the major changes to the global economy. This latter issue was particularly pertinent in the domain of accounting for financial instruments. As financial markets changed rapidly – with many banks becoming complex, global institutions focused more and more on trading activities – accounting standard setters and banking regulators alike considered that accounting standards needed a thorough reform. These two issues – harmonization and reform – became intertwined in the work of the International Accounting Standards Board (IASB), which has become the de facto global standard setter since the European Union embraced its standards at start of the new millennium.

This chapter examines two decades of political battles over the IASB’s financial instrument accounting standards. The main issue at stake was the balance between the application of Fair Value Accounting (FVA), which shows assets and liabilities at their current market value, and Historical Cost Accounting (HCA), which shows them at their acquisition cost (André et al. 2009). Remarkably, ever since the issue had risen to prominence in the mid-1990s, policymakers have been unable to agree on a clear set of accounting rules in this area. Instead, accounting standard setting in this field has been a succession of temporary policy fixes. Every standard that was agreed over the past 20 years was immediately recognized as deficient and in need of replacement with a more durable solution. What explains this pattern?

This pattern seems at odds with two dominant IPE-approaches: material interest-based bargaining (e.g. Lall 2014) and expert governance guided by shared sets of ideas (e.g. Büthe and Mattli 2011) (see chapter 2, section 2). The differences between these approaches mask a common assumption: actors in global financial governance have clear policy goals and know with which

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regulatory policies to promote them. If goals and their policy implications are clear to the actors involved, why do standard setters fail to design a coherent standard and stick to it?

Against an emphasis on bargaining between stakeholders with clear policy preferences, for example banks, we show that politics in this domain has been driven primarily by banking regulators who did and do not have such clear preferences – in spite of almost two decades of intense debate. Against an emphasis on the power of ideas (the putative dominance of FVA), we show that the central feature of this case is not a straightforward trend towards the adoption of FVA (cf. Power 2010), but the persistent failure to agree for good how and when FVA should be applied to financial instruments. Banking regulators have been central actors in the development of these standards, but they have not been able to derive unambiguous accounting preferences from either their policy goals or a guiding policy paradigm. As a consequence, governance patterns in this field have been highly unstable. Although that does not invalidate the expertise- and bargaining-perspectives in general, it does suggest that the pattern studied here requires a different explanation.

The key to two decades of unstable governance lies in the interaction between accounting rules on the one hand and financial stability and bank profitability on the other. Depending on market circumstances and future expectations, FVA and HCA can either promote or undermine both policy goals. In reflexive markets, accounting standards influence the asset values they only seek to measure, for example by inviting procyclicality. In the terminology used in chapter 2: accounting standards are performative. When FVA or HCA is applied in practice, it spawns market developments that bolster the case for switching to its alternative. That makes governance unstable: regulators realize that the application of a rule set undermines its efficacy. Because this applies to every potential accounting ‘solution’, rules are continually adapted without the emergence of a standard that is seen as more than a temporary fix.

This decades-long inability to settle a fundamental question in finance strikes at the heart of financial governance. Banks follow accounting standards when they calculate profits and losses, which determine their viability as going concerns or potential collapse. Credit rating agencies use banks’ accounts to assess creditworthiness. Supervisors and investors depend on banks’ reports on the value of their assets and liabilities. Hence, the dynamics of accounting standard setting are not ‘an exceptional case’ among diverse regulatory domains in finance. Accounting standards are a key pillar of global financial governance, and banking regulation is no more stable than the asset valuations that feed it.
We demonstrate how the IASB clashed with banks, global banking regulators and financial authorities in the European Union (EU), the most important adopter of the IASB’s standards. To become effective in the EU, the EU’s Accounting and Regulatory Committee (ARC) has to endorse IFRS (Dewing and Russell 2004). Although the ARC accepts most standards without change, for rules concerning financial instruments – the key standard for financial stability – it modified standards or outright refused endorsement. Instead, it followed the line set out by the banking regulators and supervisors in the Basel Committee on Banking Supervision (BCBS). That puts regulators central in both our conceptual framework and the empirical analysis.

The empirical sections cover three key episodes. In the late 1990s, the standard setter’s proposal for full fair value accounting was defeated, with a standard mixing FVA and HCA as a temporary solution (episode 1). Subsequent proposed fixes included revised rules for hedge accounting and a fair value option (episode 2, early 2000s) and amendments to reclassification rules (episode 3, since the onset of the financial crisis), but all of these were recognized as inadequate and temporary, even as they were introduced. Even ten years after the crisis, the EU still uses the standard that the IASB had originally issued as a ‘temporary solution’ (IAS 39), with a full switch to the new standard (IFRS 9) taking at least another five years. Despite all parties’ proclaimed eagerness finally to solve the accounting impasse, key issues remain unresolved.

3.2 The rise of international accounting standards

The European debate on accounting has been focused on both harmonization and reform. As it became clear during the 1990s that the European Commission wanted to harmonize European standards by adopting international accounting standards, the debate on accounting reform centered on the work of the IASB. This section discusses this shift, describing developments that led to the European endorsement of IASB’s standards in 2002. It shows that the EU embraced these standards primarily for pragmatic reasons: they were readily available and a viable alternative to US standards. The standards’ content was initially of secondary concern, but quickly gained more prominence. This was especially the case for the standard for financial instruments (IAS 39), which became a key concern for banks and banking regulators when they realized that it would become mandatory for all the major European banks.

3.2.1 Developments stimulating accounting harmonization in the EU

The rise of IFRS is intrinsically linked with European efforts to harmonize their rules. The setting of accounting standards in the EU was for a long time a national affair, generally the preserve of
finance ministries or other public organizations (see Büthe and Mattli 2011: 89-94). The European Commission began its attempts to harmonize accounting rules for limited liability companies in the EU in the 1970s, leading to the issuance of the Fourth Council Directive in 1978 and the Seventh Council Directive in 1983. The Commission’s goal was to ensure the ‘equivalence’ of EU companies’ financial statements (Van Hulle 2004). The Fourth Council Directive defined the types of companies required to prepare annual accounts and their formats. The Seventh Council Directive introduced a separation between annual and consolidated accounts: a significant distinction as only the annual accounts of listed companies were used for tax purposes. It implied that accounting harmonization need not intervene into governments’ taxation policies. Still, the development of these directives was a painstaking process, as member states saw little urgency in harmonization and had different accounting traditions (Botzem 2012: 39-41).

Accounting harmonization in Europe accelerated in the late 1980s due to changes in the global and European corporate and financial landscape. The expansion of European business abroad involved multinational firms seeking funds in global financial markets. Due to the removal of intra-European barriers (part of the Single European Market program of 1986/87), Europe saw a rush of cross-border mergers and take-overs. The ties between the large European companies that ventured on European and global markets and their traditional financiers (such as creditor banks) thereby weakened, meaning that globalizing firms increasingly had to look for funds elsewhere. Many multinational firms chose to tap into booming, deep, and liquid US financial markets by listing on US stock exchanges. Between 1990 and 1998, the number of European companies listed in the USA rose from 50 to 250 (Camfferman and Zeff 2007: 427). Many were high-profile companies; Daimler Benz, for example, listed on the New York Stock Exchange in 1993.

US accounting standards (US Generally Accepted Accounting Principles [GAAP]) became the de facto global standards for multinational firms as foreign firms listed in the USA were required to adopt (or reconcile statements with) US GAAP (Camfferman and Zeff 2007: 311). This heightened the urgency of European accounting harmonization. Doing nothing was an unattractive option: it would likely mean that an ever-growing number of EU companies would shift to US GAAP, the content of which the EU could not influence.

The EU, however, was unable to develop its own set of rules (Dewing and Russell 2004; Véron et al. 2006; Posner 2010), because of disagreements among Member States and the EU lacked regulatory capacity to do so. Apart from the Commission, the most important EU fora for accounting matters were the Contact Committee (an advisory body composed of representatives
of member states) and the European Accounting Study Group (dubbed E5+2). Both were weak actors (Camfferman and Zeff 2007: 445-446).\(^4\) Developing a stronger institutional framework was not a feasible strategy for the Commission as member states and private actors alike remained wary of attempts to develop a separate set of EU standards (ibid.: 421). In the end, the Commission came to realize the minimal chances of EU-made accounting standards being recognized in the USA – where European standards were generally seen as deficient (Mügge 2007: 11).

Although the Commission tried to resolve some tensions in the directives in the early 1990s, it changed its course shortly thereafter: it began to see the International Accounting Standards (IASs) issued by the International Accounting Standards Committee (IASC) as the way forward to harmonize European accounting rules and counter growing US hegemony. In 1995, the Commission formulated its preference to permit or require EU listed companies to publish their statements according to IASs. This preference was thus largely pragmatic: it had little to do with the content of IASC’s standards.

3.2.2 The IASC vis-à-vis the USA and the EU

The IASC was founded in 1973 by national accounting standards boards and operated until the birth of the International Accounting Standards Board (IASB) in 2001. Its goal was to “formulate and publish in the public interest, basic standards... and to promote their worldwide acceptance and observance” (Camfferman and Zeff 2007: 500). The IASC had little impact during its first two decades: its standards (IASs) were mainly used by developing countries on a voluntarily basis and it lacked enforcement power (Büthe and Mattli 2011: 69). Most developed countries (and specifically the USA) saw IASs as too flexible and of doubtful quality, arguing that they contained too many options and represented the lowest common denominator of global accounting practice (Camfferman and Zeff 2007; Zeff 2012).

During the 1970s and 1980s, the European Commission – which saw the issuance of directives as the path to EU-level accounting harmonization – paid little attention to the work of the IASC (Camfferman and Zeff 2007: 16-17). This changed in the late 1980s (Posner 2010). The EU now wanted the USA to acknowledge IASs as equivalent to US GAAP so European companies listed in the USA could use a non-US standard. The EU also wanted to prevent these standards from being fully modelled on US standards. The USA, on the other hand, stressed that international standards

\(^4\) The E5+2 forum consisted of accounting representatives from France, Germany, the Netherlands, the Nordic Federation, and the UK (E5) as well as representatives from the European Commission and the Federation of European Accountants (+2).
and standards setting procedures would have to improve before they were deemed equivalent to US GAAP.

The rise of IFRS involved negotiations between EU and USA agencies over the IASC’s standard setting process (Camfferman and Zeff 2007; Posner 2010; Zeff 2012). The push for a new institutional framework was mainly due to pressure from the US Securities and Exchange Commission (SEC), as it had stated its recognition of IASs equivalency would depend on the quality of standards-setting procedures at the IASC. The EU favored a set-up based on the geographical representation of countries that had committed themselves to adopt the standards. The USA, in contrast, pushed for a governance framework involving independent experts, modelled on its own accounting framework (Zeff 2012: 819). The SEC expected that ‘independent experts’ selected based on their professional experience would almost by default come from accounting standards boards (or the big accountancy firms) that were inclined to the American view on accounting. The IASC sided with the USA as it feared for its own demise should the USA turn away and pursue international harmonization on its own terms (Camfferman and Zeff 2007: 443-446). The eventual outcome thus mirrored the SEC’s wishes: a relatively independent standards-setting board – the IASB – replaced the IASC in 2001, without any prescribed geographical representation (ibid.: 15). The IASB inherited the International Accounting Standards (IASs) issued by IASC but would henceforth only issue International Financial Reporting Standards (IFRSs) that would eventually replace all IASs.

As the IASC strove for the recognition of its standards by national securities regulators (specifically the SEC), it sought cooperation with the International Organization of Securities Commissions (IOSCO). While the IASC had hoped for an IOSCO endorsement of its standards, the latter (mainly due to SEC pressure) stated that its endorsement would depend on their improvement. The IASC thus commenced on projects to improve IASs, first by eliminating the many options contained in them (1987-1993), then by developing a set of high quality ‘core standards’ (1993-1999) (Zeff 2012). Especially during this second phase, controversies about the standards’ content emerged. Especially the standard for financial instruments became a cause for concern (more on this below), but not to the extent that the EU backtracked on its harmonization efforts: the push for harmonization was stronger than concerns about the standards’ content.

The IASC completed work on its core standards in December 1998. While these standards leaned heavily on American accounting practices (Posner and Véron 2010: 404), they cannot be seen as just another version of US GAAP as differences remained significant (Leblond 2011). While the
IOSCO endorsed these standards in May 2000, this constituted a ‘hollow victory’ for the EU (and IASC). Following the demands the SEC had made earlier that year, IOSCO allowed national regulators to impose supplementary treatments on the statements of multinational companies complying with IASs (Zeff 2012: 822-823). Rather than a full endorsement implying the equivalence of US GAAP and IASs, the SEC could continue requiring companies to conform to or reconcile with US GAAP.

3.2.3 EU adoption of IAS/IFRS

European leaders decided to make IASs mandatory for the consolidated accounts of all European listed companies at the Lisbon Summit in 2000. This was formalized in EU Regulation No. 1606/2002 which required shifting to IASs by 2005. The harmonization of accounting standards was part of a general 1990s trend in the EU to centralize financial regulation (Posner 2009, 2010). Compared to the period before 1990, European governments and businesses had changed their positions on the desirability of a supranational strategy—a common framework was now seen as necessary to boost the European financial sector. The Financial Services Action Plan (FSAP) of March 2000 provided the legislation to integrate Europe’s national financial services industries (Posner 2009: 681). Part of this plan was to harmonize accounting rules. As many public and private stakeholders found EU decision-making procedures too cumbersome to keep up with financial market developments, the Lamfalussy process provided the institutional framework to speed up regulatory reforms at the EU level.

The years thereafter witnessed new dynamics in the global politics of accounting regulation (Posner 2010). Whereas the USA was by and large able to dictate developments in the 1990s (Simmons 2001), it now had to take a more cooperative stance (Posner 2010). The Enron and WorldCom scandals at the beginning of the millennium did much to challenge the aura of technical superiority around US GAAP (Zeff 2012). Significantly, in 2002 the US Congress asked the SEC to review FASB’s very detailed, ‘rules-based’ approach and to consider moving in IASB’s ‘principles-based’ direction. The EU’s adoption of IFRSs had bolstered the IASB’s bargaining position vis-à-vis the FASB. Without EU backing, it is inconceivable that the IASB would have emerged as an equal partner to FASB in the creation of a global accounting regime (Mügge 2007; Botzem 2012).

Still, the EU was hesitant to fully delegate rule-making authority to a private organization over which it had only limited influence. The adoption of IFRSs in the EU was therefore conditional (Botzem 2012: 43): the standards would have to be approved by several EU bodies following a comitology procedure before entering into force, implying that IASs/IFRSs would not
automatically become EU rules. The standards’ content and their effects on the EU economy, occupying a secondary concern in the previous debates, were now getting more and more attention.

This endorsement procedure works as follows. After the IASB issues or modifies a standard, the European Financial Reporting Advisory Group (EFRAG) – a privately financed and managed organization staffed by accounting experts – advises the Commission on its compliance to European framework directives. The Standards Advice Review Group (SARG), staffed by representatives of national accounting standards boards, then reviews whether EFRAG’s advice is balanced and objective. If both organizations give their approval, the Commission issues a draft endorsement regulation which is subsequently examined by the Accounting Regulatory Committee (ARC), staffed by national representatives. If ARC considers the regulation adequate, the European Council and European Parliament have three months to oppose the endorsement. If no objection is made, the regulation is approved and the standard enters into effect in the EU. Although the Commission can reject standards, postpone adoption, or in exceptional cases ‘carve out’ sections of standards, it cannot modify them by adding language.

This formal endorsement procedure became the most powerful tool, albeit a blunt one, for the EU to influence the standards setting process of the IASB. As a newly issued or modified standard would be scrutinized by European organizations, the IASB had an interest in ensuring the acceptability of its standards by EU organizations. As the IASB was keen to present itself as an independent standards setter uninfluenced by particularistic interests and had many other countries and organizations to consider (especially the SEC), it had to walk a tightrope between gaining the EU’s acceptance and not appearing as a mere ‘agent’ of the Commission (Leblond 2011).

The EU faced a similar dilemma. It of course had an interest in ensuring standards that were acceptable within the EU, but also risked frustrating equivalence negotiations with the USA if it did not wholeheartedly implement IASB standards. In practice, this tension generally proved to be relatively unproblematic. The EU endorsed almost all standards without delay. As many listed companies were already familiar with international accounting practices (either US GAAP or IASs/IFRSs), most IASB standards were hardly controversial (Donnelly 2010: 227). But as we will see below, this was not the case for a particularly crucial issue: accounting for financial instruments.
3.3 Preference formation in global accounting standard setting

Given forceful intervention by public authorities, one would expect accounting standard setting in the area of financial instruments to exhibit parallels with other areas of global financial governance, for example standard setting for banks, securities markets and insurance (cf. Singer 2007). In these and other domains, stakeholders are argued to form policy preferences based either on their material interest or on a set of normative and technical beliefs. The distribution of relevant resources and the institutional setting then determine how individual preferences translate into policy output.

3.3.1 Expert governance

The case for technical rationality is strong in accounting standards: in 2002 the EU has outsourced standard design to the IASB, a private organization staffed by accounting experts (Camffermann and Zeff 2007). The countries using IFRS have had few levers to influence standard setting, and the IASB has become an exemplary case of transnational private governance (Botzem 2012; Büthe and Mattli 2011). This perspective emphasizes the institutions through which accounting standards are set; their specific substance, in contrast, is frequently of secondary concern. The rise of FVA as an accounting paradigm is explained by a functionalist logic: the rise of corporate restructuring in the 1980s increased the appeal of accounting techniques that reported the market value of assets and liabilities into which a company could be broken up (Barlev and Haddad 2003).

An emphasis on expert governance and epistemic communities leads us to expect relatively stable policy output. Policy changes incrementally, and rule output is mainly a function of public actors’ willingness to delegate rule setting to experts who derive unambiguous accounting preferences from the dominant policy paradigm. The IASB has indeed shown a consistent preference for FVA in this area, but this preference has not generated stable and consistent policy output. Instead, we find a succession of temporary fixes and policy reversals. Another dynamic clearly is at play.

3.3.2 Bargaining perspectives

The main alternative approach sees regulation as captured by identifiable material interests, normally financial firms. Also here, policy preferences are considered relatively unproblematic. They are inferred either from the impact of harmonized rules on firms’ competitiveness or from the domestic status quo (Oatley and Nabors 1998; cf. Simmons 2001). The defining hallmark of what we label the bargaining-approach is that the actors who actually make the difference to the observed policy outcomes have unambiguous preferences, such that the policy-dynamic is one of
powering, not puzzling, to use Heclo’s terms (as cited in Hall 1993). So when internationally harmonized rules emerge, their substance follows from actors’ relative bargaining power and prevailing domestic rules (Drezner 2007).

Applied to accounting standards, this approach has emphasized transatlantic rivalry (Mattli and Büthe 2005; Posner 2009; Büthe and Mattli 2011; Leblond 2011). Because it sees standard design by the IASB and the FASB as disconnected from political fights between their public sponsors (the EU and the USA, respectively), it studies the success of a particular rule detached from its specific content. Accounting standards setting becomes a coordination game comparable to the competition between, say, the BlueRay and HD DVD formats to succeed the DVD (Sunder 2002).

This scholarship captures very well the politics that have created the global dominance of IFRS and their incremental recognition in the USA. However, it provides less leverage on the actual content of these standards and the futile attempts to craft a lasting standard for financial instruments. Banks have been consistent and surprisingly unified across borders in their demand for accounting flexibility for financial instruments. But a durable accounting standard along those lines – as expected when emphasizing private interest bargaining – has not emerged. Concerned about financial stability, regulators successfully rebuffed both accounting standard setters, who consistently favored strict application of FVA, and banks, who preferred flexible accounting rules.

This emphasis on regulators stands prominent in the scholarship of Singer (2007; cf. Mügge 2010 in the European context), who has fused firms’ interest in ‘competitiveness’ with regulators’ concern for financial stability in a single framework. But in contrast to his findings for banking, securities and insurance, in our analysis the international politics of accounting for financial instruments are not primarily driven by bargaining between regulators with clear and incompatible preferences, even if international differences obviously exist (cf. Lagneau-Ymonet and Quack 2012). In the tug-of-war with the IASB, banking regulators, assembled in the BCBS, emerge as a relatively unified actor – but as one without a clear and consistent preference either for a specific accounting treatment for financial instruments or for allowing banks to choose one themselves. To understand these ambiguous preferences, we have to disentangle the link between accounting standards and financial stability.

### 3.4 Financial stability and ambiguous accounting preferences

In this chapter we distinguish between policy goals, policy preferences, and accounting preferences. Policy goals are the ends that actors want to attain by seeing a standard implemented
– for example financial stability for regulators, coherence and transparency for the IASB, or profitability for banks. Policy preferences are the specific standards that actors favor based on the expectation that they would promote these policy goals. Such a policy preference could be a very rigorous standard, for example, or one that gives financial institutions accounting flexibility. Accounting preferences, finally, are preferences for a particular accounting treatment, most importantly FVA or Historical Cost Accounting (HCA). Thus defined, a bank that consistently prefers flexibility in how it accounts for its financial instruments has a clear policy preference but no consistent accounting preference (which is why it favors flexibility).

We demonstrate that both regulators and firms are unable to form unambiguous accounting preferences. They cannot unequivocally answer the question: what should be the general rule for determining the value of financial assets and liabilities? That is true at any given moment, because stakeholders realize that the accounting treatment they prefer right then may not be the one they prefer at a later date. This ambiguity of preferences, in turn, leads to unstable governance over time, as one uneasy compromise is replaced with another.

This finding would hold even if we made the simplifying assumption that policy goals were fixed and unambiguous – financial stability for regulators, and profits for banks. Depending on market circumstances, FVA and HCA can buttress as well as undermine both policy goals. Banks favor the easy way out: a high degree of freedom to switch between accounting treatment at will. While they have a consistent policy preference – flexibility – the regulators do not: they oscillate between championing such flexibility and wanting to restrict it. The key to these ambiguous preferences lies in the contingency of valuation.

3.4.1 The contingency of financial valuation

Standards setters’ inability to agree on an appropriate valuation technique derives from the contingency of value itself. Objects do not have a fixed, inherent value independent of our ability to measure it. Therefore, proponents of FVA argue, the current market value of any asset or liability is the best value-estimate we have, given that – if a market for that asset or liability exists – it integrates judgments of a wide variety of observers. Of course, the price investors are willing to pay for an asset is influenced by many external factors: interest rates, future expectations, investment alternatives, and so forth. The market valuation of financial instruments can therefore be extremely volatile (Mandelbrot and Hudson 2004). And if markets for an asset are illiquid, FVA
relies on models or estimates, introducing a highly subjective dimension into accounting (Enria et al. 2004: 8f, 46).  

On the macro-level, FVA can generate procyclicality (Laux and Leuz 2009; Magnan 2009; Novoa et al. 2009; Casabona and Shoaf 2010). Future assessments, as expressed in asset valuations, feed market behavior and can generate herding and self-fulfilling prophecies (Akerlof and Shiller 2009). For example, positive market sentiment can funnel credit into real estate and sustain an asset bubble that would otherwise collapse. Conversely, dropping prices can trigger asset sales, further depressing their value, triggering more sales, and so on. Such market reflexivity operates irrespective of accounting standards (cf. Minsky 2008 [1986]). But FVA translates changes in asset values into bank profits or losses and therefore incentivizes market participants to follow such self-reinforcing trends. FVA ‘hardwires’ market reflexivity into the financial system.

While HCA may temper market volatility, it generates its own problems. HCA records assets and liabilities at acquisition prices and does not update banks’ books to reflect current market conditions (Barlev and Haddad 2003: 386). In an economic downturn banks may start amassing ‘non-performing’ loans hidden from market participants and financial supervisors; creditors doubt the banks’ viability, stifling lending to businesses and thus prompting the further build-up of economic vulnerability and risk. The 1980s US Savings and Loans crisis and the Japanese economic stagnation in the 1990s are examples of hidden losses aggravating financial and economic problems (Enria et al. 2004: 10-11; on Japan, see Hoshi and Kashyap 2004: 15ff).

Derivatives have exacerbated the problems of HCA (European Central Bank [ECB] 2004; Enria et al. 2004). Even simple derivatives such as options entail contingent liabilities that fluctuate with market conditions. Given that the original cost of a derivative can be a fraction of the ultimate liability, the market value of banks’ assets and liabilities can diverge widely from reported positions (ECB 2004: 70). HCA becomes a poor guide to the health of a bank.

### 3.4.2 Stable goals, ambiguous preferences

There is no consistent, let alone universally agreed, valuation technique that is appropriate for financial instruments. When FVA is applied to a bank’s whole balance sheet, including its liabilities, counter-intuitive situations arise: a bank in trouble, whose own traded debt falls in market value, would be allowed to record its liabilities at a discount and, in an extreme scenario, post a profit

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5 For example, in the year before its implosion, Lehman Brothers had more than 80 percent of its fair value-assets valued in this way (Magnan 2009: 206).
Applying FVA only to assets also creates problems as the match between assets and liabilities that defines the banks’ risk management becomes undone (BCBS 2000: 14). Nor is valuing only tradable assets at FVA a viable option. Banks and insurance companies use derivatives to hedge risks. Hedges that make sense from a risk-management perspective would be invalidated if the hedged instruments were treated differently than the hedge itself (Enria et al. 2004: 6).

With no obviously appropriate accounting regime for financial instruments, from the perspective of banks the impact of accounting rules on competitiveness moves to the fore. Ceteris paribus, banks should favor FVA in times of market upswing to record rising asset values as profits. In market downswings – as during the credit crisis – FVA may force financial institutions to mark down the value of assets, even if they still generate returns and are to be held until maturity (Enria et al. 2004: 3). Then banks will prefer a switch to HCA. As a result of these dynamics, banks’ have no consistent accounting preference (for either FVA or HCA), but they do have a consistent policy preference: the flexibility to switch between accounting treatments depending on market circumstances and assets’ function in the portfolio (for example hedging). Of course, because of their concern with competitiveness, banks anticipate the impact of a rule change relative to their peers, and based on that, scholars have found banks to support divergent specific policies over time (Perry and Nölke 2006; Botzem 2012; Lagneau-Ymonet and Quack 2012). At the level we discuss, however, these are differences of emphasis: the common position that banks share, with very few exceptions, is that they should retain a modicum of flexibility in the application of accounting treatments.

Regulators face a more complicated dilemma. As up-to-date information on banks’ financial positions is indispensable for market supervision, public authorities have strong incentives to support FVA. At the same time, in the name of financial stability, they have high stakes in the viability of financial institutions. Regulators cannot support standards that risk pushing large banks over the brink. In times of distress, regulators will adopt the view-point of banks: regardless of inconsistencies, desirable standards are those that forestall pernicious losses.

Accounting standard setting is unstable because standards do not only provide a snapshot of corporate activity but drive that activity itself. In short, they are performative. FVA can increase systemic risk by amplifying changes in asset values, spawning calls for HCA as a corrective. In contrast, HCA can lead banks to understate their liabilities and losses, with FVA as the obvious remedy. Banks can adapt their business models opportunistically to changes in accounting rules, undoing their intended effects. Herein lies the dilemma of accounting standard setting: regulators
realize that the negative consequences of any approach applied will eventually bolster the case for switching to its alternative. Instead of long-term alterations between HCA and FVA, regulators fail to embrace either approach fully. Regulators frequently sanction flexible standards but at the same time dread the scope for abuse they offer banks and regularly try to re-impose stringency, only to fail to settle for any specific accounting treatment that should replace flexibility for good. Like banks, regulators have no unambiguous accounting preference. They also, however, have no unambiguous policy preference, because they fear that flexible standards invite instability. With no solution to this dilemma, accounting standards for financial instruments offer no solid fundament for global financial governance. Instead, they remain temporary fixes to an intractable problem and invalidate the apparent solidity of other rules that build on them, whether they concern bank capital buffers, derivatives trading or credit ratings.

The link between financial stability and the viability of banks has important implications for the relationship between regulators and the financial sector. Regulators may argue for rules that bolster bank profits not because they are ‘captured’, but because these rules promote (short-term) financial stability. Depending on market circumstances, financial stability and bank competitiveness can imply similar as well as opposing policy preferences. In essence, regulators have two hearts beating in their chests: as guardians of banks’ conduct, they cherish bank’s openness about their financial positions. As guardians of banks’ survival, they may dread that same transparency (see Table 3.1).

Table 3.1  
Overview of policy goals, policy preferences, and accounting preferences

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<thead>
<tr>
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<th>Standards setters</th>
<th>Financial firms</th>
<th>Regulators</th>
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<tbody>
<tr>
<td><strong>Policy goal</strong></td>
<td>Market efficiency through transparency</td>
<td>Competitiveness (boosting profits)</td>
<td>Financial stability</td>
</tr>
<tr>
<td><strong>Policy preference</strong></td>
<td>Unambiguous: stringent standard</td>
<td>Unambiguous: flexible standard</td>
<td>Ambiguous: stringent standard, fearing abuse and long-term instability; flexible standard fearing short-term instability</td>
</tr>
<tr>
<td><strong>Accounting preference</strong></td>
<td>Unambiguous: FVA</td>
<td>Ambiguous: FVA in market upswing, HCA in downswing</td>
<td>Ambiguous: neither FVA nor HCA, fearing abuse and procyclicality; mixed measurement standards only as temporary solutions because of inconsistencies</td>
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3.4.3 Unstable governance in accounting for financial instruments

The following sections reveal this dynamic in real-world accounting standard setting. The main conflicts over fair value accounting took place in three episodes (see figure 3.1 and table 3.2 for an overview). They were not driven by a clash of stakeholders with clear accounting preferences. Instead, each time it was ambiguity on this point that let stakeholders revisit extant policy arrangements. Concerned about their viability, regulators repeatedly sided with banks. But they ignored bank preferences when these could be separated from stability-issues.

**Figure 3.1   Timeline of policy dynamics**

In each episode, stakeholders haggled over appropriate standard design, but the successive rule modifications did not amount to simple bargaining: as we show in the detailed accounts, modifications did not stem from changing power balances in any tangible sense, but from regulators’ ambiguous policy preferences as each temporary fix (inevitably, we argue) triggered further modifications once its inadequacy materialized. Regulators’ ambiguous preferences have also trumped the IASB’s putative rule-setting power: in the most controversial area of accounting standard setting, it has failed to get its way up to this day.
### Table 3.2  Overview of actors’ positions in different episodes

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<tr>
<td>Strict application of FVA to all financial instruments</td>
<td>Mixed model with flexible classification rules</td>
<td>Retain mixed model in the short run</td>
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<tbody>
<tr>
<td>Strict hedge accounting rules</td>
<td>Flexible hedge accounting rules</td>
<td>Flexible hedge accounting rules to facilitate risk management; not too flexible to allow earnings management</td>
<td></td>
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<tr>
<td>IAS 39: Reclassification not allowed</td>
<td>IFRS 9: HCA only in specific circumstances; loan loss provisioning rules should not invite income management; hedge accounting more principles-based but with limited management discretion</td>
<td>IFRS 9: classification depending on business model; loan loss provisioning rules should not increase regulatory burden; hedge accounting should be flexible and aligned with risk management strategies</td>
<td>IFRS 9: classification rules should not lead to FVA expansion; decisions supported by clearly documented risk management strategies; loan loss provisioning rules should be countercyclical; hedge accounting should be aligned with risk management strategies but management discretion should be limited</td>
</tr>
</tbody>
</table>

### 3.5 The Full Fair Value proposal (1997-2001)

Georgiou and Jack (2011) chronicle the use of mixed models in accounting, which blend different valuation methods. HCA dominated from the Great Depression until the 1970s, even if market-based valuation methods were also used. Since then, FVA has been on the rise (cf. Barlev and Haddad 2003; Power 2010). Although ‘fair value’ has remained disputed and been given different meanings over time (Power 2010), it generally came to denote “the amount for which an asset
could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction” (André et al. 2009: 4) – the market (exit) value, or an estimation thereof.

Turning to financial instruments (cf. Botzem 2012), the expansion of banks’ trading activities (the ‘trading book’) relative to loans (the ‘banking book’) since the 1980s caught the attention of both standard setters and banking regulators (Lagnéau-Ymonet and Quack 2012). The rise of tradable assets on banks’ balance sheets was deemed to demand more market-based valuation methods to maintain the relevance of accounting figures. Derivatives in turn blurred the line between traded and non-traded assets as one and the same derivative could function both as a frequently traded investment and as a long-term ‘hedge’ – in effect an insurance against financial risks. Both standard setters and banking supervisors realized that these developments necessitated a clear and consistent standard for financial instruments.


The core principle was laid out in a 1997 IASC Discussion Paper: all financial instruments should be measured at fair value (full fair value accounting, or FFVA) (IASC and Canadian Institute of Chartered Accountants 1997). Hence, the 2000 JWGSS draft standard proposed abandoning IAS 39 in favor of FFVA. Fair value, the JWGSS (2000) argued, was the most relevant measurement for financial instruments, as it reflects the market’s assessment of the effects of (changes in) current economic conditions on financial instruments. Changed fair values of financial instruments should

6 International Accounting Standards were issued by the IASC. The IASB (the successor) inherited the old standards (IAS) but itself only issues standards called International Financial Reporting Standards (IFRS), which should eventually replace all IAS.
immediately be recognized as profits or losses, restricting management’s freedom to obscure firms’ financial positions (JWGSS: 150-151).

FFVA differed from the IAS 39 ‘mixed model’ (Hernández Hernández 2003: 82), in which only instruments held for trading were measured at fair value, while those intended to be held until maturity were measured at historic cost (BCBS 2000: 2). The JWGSS (2000: 161) dismissed this model:

Existing mixed cost-fair value accounting for financial instruments is not sustainable in the longer term, and cannot provide a satisfactory basis for financial accounting, because it is based on mixing elements of two incompatible measurement systems for financial instruments.

Depending on categorization, similar assets would appear in balance sheets with different values – anathema to the coherence and transparency favored by standards setters (Hernández Hernández 2003: 80).

Banks preferred the mixed model, which allowed them to categorize assets following their own business models and interests, over FFVA. Their industry associations set up the Joint Working Group of Banking Associations (JWGBA), composed of the banking associations of the USA, Australia, Canada, Japan and the EU. In a 1998 letter to the IASC/JWGSS it rejected FFVA (cf. JWGSS 1999: §2.1). Instead, it argued, “the mixed measurement system provides the optimal means of reporting financial performance” (JWGBA 1999: 2). Fair value accounting might be suitable for a bank’s trading activities, but not for traditional credit intermediation, as the fair value of long-term loans would fall victim to short-term market volatility.

The banks’ main concern was not an intellectual inadequacy of FVA for traditional banking activities, but its implications for their income statements. Banks argued that the volatility FFVA would introduce would undermine public confidence and limit their ability to perform credit intermediation. In short, banks did not favor one or the other methodology per se, but an accounting system that could flexibly respond to their own business model.

Regulators and supervisors shared banks’ volatility concerns. The BCBS (2001: §1.4) argued that the time was not ripe for FFVA. While FVA might be appropriate for trading activities, too many difficulties remained with the fair value measurement of banking book instruments (ibid.: §3.1). Moreover, as accounting practices influence business decisions, the wider micro- and macro-economic effects of new rules would have to be thoroughly assessed (ibid.: §3.9) – a clear recognition that accounting standards not only measure but also shape bank performance. From
a supervisory vantage point, the European Central Bank (ECB 2001: 3) rejected application of FVA to the banking book because it would induce imprudent bank behavior.

At the same time, regulators acknowledged the flaws of mixed measurement models, not least through complex hedge accounting provisions – the eventual Achilles’ heel of the mixed model. Hence a move towards FFVA in the long run was not to be excluded *a priori* (BCBS 2001: §4.2). The BCBS (2001: §1.5) argued that such a move might improve reporting if four preconditions were met: 1) conceptual and practical issues of fair value are resolved; 2) active markets develop for major aspects of banking book positions; 3) bank risk management evolves to rely on fair value measurements; and 4) a broad range of financial statement users, including depositors and other creditors, see fair value as the best measure for primary financial statements. For the time being, however, regulators simply urged standards setters to address problems as they arose – in other words, to muddle through.

In its feedback summary, the IASB (2002) concluded that most preparers opposed FFVA – so much so that it temporarily abandoned the project. Regulators had acknowledged that FFVA might promote financial stability through transparent bank accounts. But they avoided a clear decision on FVA, pointing to unsuitable market conditions. In the end both banks and regulators towed the same line, but the latter had their own motivations from the very beginning. While banks rejected FFVA because of its interference with business practices, regulators worried about micro- and macro-stability issues. Without a clear accounting preference, regulators supported an incoherent mixed measurement approach. IAS 39 became the reference point for subsequent debate.

### 3.6 The IAS 39 controversies (2002-2005)

When the European Commission announced in 2002 its intention to mandate IAS for EU-listed companies, IAS 39 turned from an object of theoretical debate into a source of real urgency for European stakeholders. The mixed-measurement model of IAS 39 soon generated its own problems through its treatment of derivatives. The two ways to address these – hedge accounting and the voluntary use of FVA – became the new focal point of clashes between the IASB, regulators and banks. The central issue remained unchanged: could regulators and banks even articulate an unambiguous preference for how a particular financial instrument should be valued? If the answer was ‘No’ – as it indeed turned out – the rest of the regulatory edifice would continue to rest on quicksand.
3.6.1 Hedge accounting

Unsurprisingly, the main conflict between standards setters, banks and public regulators concentrated on accounting for derivatives (Shin 2004: xiv). IAS 39 held that all financial instruments should be on the balance sheet and that fair value is the most relevant measure for financial instruments and the only relevant measure for derivatives. In accordance with this principle, almost all derivatives falling within the scope of IAS 39 are measured at fair value (Hague 2004: 22).

Previous European accounting practices had not required all derivatives to be on the balance sheet, let alone to be measured at fair value (BCBS 2000: 2). Volatility in banks’ financial positions through fluctuations in derivatives values was again a major concern. Banks had managed such volatility through ‘hedging’, in which value-changes of derivatives could be offset by recognizing fluctuations in ‘linked’ instruments that would otherwise have been measured at historic cost. Now, the IASB limited ‘special accounting’ to clearly defined circumstances lest banks could manipulate income by hiding gains and losses too easily (Hague 2004: 25f).

Banks protested, arguing that these provisions did not correspond to long-standing practice (e.g., European Banking Federation 2002: 2). Again they were backed by the BCBS, which feared that the new rules would discourage prudential risk management strategies (BCBS 2002: 5). At the same time, it remained wary of overly flexible standards. Hedging strategies, it argued, should be clearly identifiable, measurable, effective and documented for hedge accounting to be appropriate. In short, the BCBS wanted banks to enjoy flexibility while making sure that this flexibility was not abused – an intractable dilemma.

Big banks lobbied the IASB – both individually and through the European Banking Federation (EBF) – but to no avail (Parker 2004b). The European Financial Services Round Table (EFR), a trade association of mostly continental banks and insurers, appealed to the European Commission: “the current proposals do not reflect economic reality, create artificial and undue volatility on earnings and equity and would lead to misinterpretation of financial statements” (EFR 2004: 1-2). Threatening not to endorse IAS 39 unaltered, the Commission set a deadline for a solution (Parker 2004a).

In the end, France, Italy, Spain and Belgium opposed full endorsement of IAS 39; six other member states (including Germany) remained undecided (Dombey 2004). The European Financial Reporting Advisory Group (EFRAG) also withheld full endorsement (Walton 2004: 6). With the 2005 implementation deadline looming, the Commission resolved to endorse IAS 39, but with the
controversial sections on hedge accounting ‘carved out’. This amended version again dodged a clear decision in favor or against FVA for financial instruments, and both the European Commission (2004) and the ECB (2006: 24) stressed that it was only a temporary solution (to an already temporary standard).

3.6.2 The Fair Value Option

On hedge accounting, regulators sided with banks, fearing for financial stability if one accounting methodology was applied too stringently. But on the other key issue – the so-called Fair Value Option (FVO) – they ignored bankers’ demands as competitiveness issues could be disentangled from stability concerns. The FVO had been introduced into an amended version of IAS 39 in December 2003 (Whittington 2005: 139). It allowed the measurement of any financial asset or liability at fair value if that instrument was designated in the FVO category the first time it appeared on a bank’s balance sheet. This would allow offsetting fluctuations without complex hedge accounting. Interestingly, while in the hedge accounting debate IASB worried about giving banks too much accounting discretion, the initial FVO proposal gave banks just that – though the option was irrevocable and prohibited reclassification. The IASB’s support for FVA trumped the danger of institutions measuring similar instruments differently and accounts becoming less comparable.

Banking regulators and the ECB remained skeptical (cf. ECB 2006). The BCBS acknowledged that the FVO might resolve mixed measurement problems in IAS 39 but feared that banks might record profits when their creditworthiness deteriorated (BCBS 2002). For financial instruments without reliable fair values, “this option may permit companies to manage earnings in ways that would not easily be detected by financial statement users” (ibid.: 2). And institutional investors might pressure banks to extend fair-valuing assets opportunistically, reintroducing concerns about income volatility and financial stability (Enria et al. 2004: 40-41).

Bowing to regulators’ pressure, the IASB proposed a more restrictive rule in March 2004 (Croft 2004). The industry response was overwhelmingly negative. The EBF (2004) championed the FVO for eliminating basic flaws in IAS 39; the London Investment Banking Association (2004) portrayed an unrestricted FVO a “key cornerstone” of IAS 39. Political stalemate ensued and the issue remained unsolved when IAS 39 was endorsed in late 2004. So the original FVO provisions were also ‘carved out’, much to the chagrin of banks (Buck and Parker 2004).

The question was finally resolved in line with supervisors’ demands the following year (ECB 2006). The FVO could be used to eliminate or significantly reduce an “accounting mismatch” (European
Commission 2005). Alternatively, financial institutions had to document that instruments were managed with a specific risk or investment strategy and to support FVO application with adequate disclosure (ibid.). The FVO was not going to be the free-for-all that banks had hoped for.

The controversies around hedge accounting and the FVO show unstable governance in action. The failure to adopt FFVA necessitated fixes to address the shortcomings of a mixed measurement model. On hedge accounting, banks and standard setters pleaded for flexibility and stringency, respectively. Regulators tried to combine both – a contradiction in terms. The fair value option, devised to circumvent the flaws of hedge accounting, generated its own problems, as regulators feared that its flexible use could undermine financial stability. As in the first episode, the question how one should determine the value of a financial instrument remained unanswered. And before long, the (new) temporary fix spawned its own problems and further reforms.


The ‘solution’ found through IAS 39 modification calmed nerves, largely because propitious economic conditions until mid-2007 prevented any real problems. Political debates refocused on the issue of IFRS-US GAAP convergence. In September 2002, the IASB and FASB had reached the so-called Norwalk Agreement where the two parties committed to make US GAAP and IFRSs fully compatible and to coordinate future changes (Posner 2010: 646). In this convergence process, accounting standards reform had been more or less a two-way street: sometimes the FASB followed IASB, at times vice-versa (Leblond 2011: 454). In 2007 the SEC acknowledged IFRSs (although not the EU version of IFRSs) as equivalent to US GAAP. The EU followed suit and decided in 2008 that US GAAP (and Japanese GAAP) were equivalent to IFRSs.

But with the credit crisis, accounting for financial instruments reappeared on the political agenda. The IASB modified IAS 39 once more and began work on a new standard (IFRS 9) to replace it. Both moves revealed the dilemmas faced by stakeholders.

3.7.1 Ad hoc amendment of IAS 39

As the credit crunch evolved into a full-blown crisis, banks complained that FVA forced them to translate falling asset prices into losses even when they had no intention of selling the assets concerned (cf. American Bankers Association 2008; Financial Stability Forum 2009, 5; Securities and Exchange Commission 2008). Wary of FVA’s systemic effects, both banks and regulators revisited their original positions. But regulators found it difficult to argue for flexible rules to
dampen market turmoil and for stringency to avoid future abuse by banks – especially as banks’ ability to hide risk had exacerbated systemic vulnerabilities to begin with.

EU member states advocated asset reclassification into categories that did not require market-based valuations to give banks ‘breathing space’. The EU effectively threatened the IASB: ‘either you change the rules, or we will’, arguing that European banks were being disadvantaged by the IASB rules as reclassification in “rare circumstances” was allowed in the USA (André et al. 2009). The pressure on the IASB was so intense that, without due process, it amended IAS 39 in October 2008, suspending market-based valuations for many assets. This modification exposed the difficult position of public authorities. Many observers balked at banks who suddenly claimed that troubled assets were long-term investments even though they had happily marked them to market values when prices had been rising (André et al. 2009: 22). On top, deferred loss recognition was problematic from a prudential perspective, as hiding losses can aggravate economic crises (Enria et al. 2004: 10-11).

That said, the danger of imploding credit intermediaries was even greater, and banks were seen to need freedom to choose ‘appropriate’ valuation techniques for their assets. But the BCBS’ (2009c) demand that “[c]lassification and reclassification practices should not be used with the view to circumvent accounting requirements in order to achieve a particular result” rang hollow. It was precisely the need to achieve ‘particular results’ – the survival of banks – that required ad hoc IAS 39 modification. Analyzing 100 large financial firms, the Committee of European Securities Regulators (CESR) found 61 to have used the option to reclassify assets, allowing 28 billion euros in losses to go unrecognized in 2008 alone, enough to bankrupt several large European banks (CESR 2009: 6f).

Despite the IAS 39 amendment, banks remained unsatisfied. Two weeks later, the European Banking Federation asked for possibilities to transfer instruments out of the FVO-category and to amend the impairment rules for instruments classified in the ‘Available for Sale’ (AFS) category (EBF 2008: 1-2). In episode II, banks had favored the FVO while regulators worried about its abuse. In response, the EBF (2004) had emphasized the prohibition on reclassification as “a safeguard against possible abuses” (EBF 2004: 1). But once markets were under stress, the EBF concluded

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7 Although the IAS 39 amendment allowed for the reclassification of instruments out of the AFS category, this only applied to instruments that met the requirements of loans and receivables. Banks still faced future losses on AFS instruments and lobbied against the obligation to use FVA to calculate them. Effectively, they were arguing for historic cost treatment of losses on instruments that did not meet the requirements of loans and receivables (KPMG 2009: 19).
that “the FVO is in many cases no longer effective at eliminating or reducing the accounting mismatch which it was intended to address” (EBF 2008: 2). Changed market circumstances altered banks’ perspective on FVO rules, and the European Commission (2008c) asked the IASB to amend IAS 39 on precisely those issues the EBF found problematic. However, this time round the EC could not point to a competitive disadvantage vis-à-vis the USA for justification, as the modifications it desired were in tension with US rules (Cheung and Morley 2008: 52). The IASB could easily ignore these demands and instead argued that an entirely new standard for financial instruments was required.

The IASB’s second move was to begin developing a standard to replace IAS 39 (IASB 2008: IN4). In the long run, it argued, a single measurement method would reduce complexity, and fair value was the most appropriate one (ibid.: IN5). In advocating FFVA, the IASB returned its position of a decade earlier. Banks predictably opposed the move (British Bankers Association 2008; International Banking Federation 2008). But the crisis had also changed regulators’ perspective: even in the long run, any move to FFVA was out of the question (BCBS 2008; Committee of European Banking Supervisors 2008b). The IASB promised a new standard by the end of 2009, to be developed in three steps that would each replace a key part of IAS 39: measurement and classification; impairment methodology; and hedge accounting.

3.7.2 **IFRS 9 step 1: Classification and measurement**

The proposals for classification and measurement reopened the FVA-HCA debate: which instruments should be measured according to which methodology, and who should decide when banks could switch between them? In July 2009, the IASB (2009b) gave in to outside pressure and announced that

> the Board decided that measuring all financial assets and financial liabilities at fair value is not the most appropriate approach to improving the financial reporting for financial instruments (IASB 2009b: BC13).

Still, the draft proposal departed from IAS 39 in having two instead of four accounting categories and hence less room for maneuver. An instrument’s characteristics would be the main criterion for classification, and subsequent reclassification would not be allowed (IASB 2009b).

The BCBS (2009c: 1) had transformed from a cautious champion of FVA into a skeptic, warning that “[t]he new two-category approach for financial instruments should not result in an expansion of fair value accounting”. A bank’s “business model” should be central to classification but also be clearly documented. Reclassification should only be allowed if “events […] clearly led to a change
in business model” (ibid.: 2). In its final draft of the first stage, issued in November 2009, the IASB basically followed this line (see IASB 2009c: §§ B 5.9-5.11).


3.7.3 IFRS 9 step 2: Impairment methodology

Meanwhile, the IASB had started work on the second phase of IFRS 9 development, impairment methodology: how should banks provision for losses on loans measured at historic cost? Under the IAS 39 ‘incurred loss approach’, firms had to wait for losses to materialize. Regulators blamed this model for requiring insufficient buffers and inducing procyclicality (BCBS 2009c: 2). The IASB responded in November 2009 with the ‘expected loss approach’ (IASB 2009a), a U-turn from the system used thus far (Sanderson 2010). The loan value was to be recalculated periodically, discounting for expected losses, in order to recognize losses earlier and dampen procyclical effects. Crucially, the IASB allowed banks to use their risk models to calculate expected losses. But the IASB simultaneously feared this would give banks the flexibility to ‘cook the books’. They therefore pleaded for the use of so-called ‘point-in-time (PIT) models’, that mainly rely on publicly available information (IASB 2009a).

For banking regulators, the proposal was a mixed blessing. They supported the switch to the expected loss approach. Yet they feared that reliance on PIT-models, with their emphasis on current market circumstances, would lead to worse forms of procyclicality (BCBS 2010b; Wood and Clark 2010). Banking regulators favored a more ‘through-the-cycle (TTC) approach’, under which banks build up buffers based on historical data and assumptions about the economic cycle. On the other hand, they also acknowledged that the TTC-approach would give banks too much discretion:

[If] expected loss is calculated by reference to judgements about future possible losses informed by past experiences or by formulae which link provisions to broad indicators or likely future credit problems [...] some investors might have concerns whether these judgments [...] are based on fact and are transparently understandable (Turner 2010a: 3-4).
So, regulators favored the TTC-models as the lesser of two evils. In spite of the ensuing “regulatory burden” of the TTC-approach, banking associations supported the regulators’ line (EBF 2010; Institute of International Finance 2010).

Unsurprisingly, the IASB feared the implicit flexibility of a TTC-approach would give banks too much freedom to manage income. IASB head Sir David Tweedie retorted that regulators wanted accounting to do their job: “We are not going to show banks making profits when they are making losses (...). We’ll make clear the profit and then it’s up to the regulator to say, this bit can’t be handed out, this bit has to be retained. That’s not the job of accounting.” (Quoted in Sanderson and Jones 2010). So, the IASB returned to the drawing board to amend the ‘expected loss approach’, again having to square the circle of mixing stringency with discretion.

In 2014, the IASB issued a final version of the expected loss approach (IASB 2014b), constituting an uneasy compromise between a PIT-approach and a TTC-approach (Novotny-Farkas 2015). While banking regulators were happy about the reduction of the rules’ potential procyclical effects, the proposal has nonetheless become a cause for concern. Banks and their regulators fear that the new proposal will lead to substantially higher provisioning requirements for a significant amount of EU banks. As provisions are deducted from income, and any shortfall in provisions deducted from capital, policymakers worry that the standard will harm bank recovery in the short-run, even if it might make banks more robust in the longer run (EBA 2016). The EC has thus recently proposed a transitional arrangement of up to five years after IFRS 9 enters into force (in 2018), to ensure a limited impact on capital figures (EC 2016b: 264-5; see also chapter 6 for a more extensive discussion of loan-loss provisioning).

3.7.4 IFRS 9 step 3: Hedge accounting

Finally, the IASB issued an exposure draft on hedge accounting in December 2010 (IASB 2010). The new rules accommodated demands of banks and regulators to be more congruent with firms’ risk management strategies (Ernst & Young 2011). But they only covered relatively simple hedging strategies. The treatment of macro hedges, the most contentious issue for financial firms, was simply postponed.

Banking representatives welcomed new rules but demanded they be “entirely faithful to the risk management objective” (EBF 2011a: 1) and that “[s]ome flexibility in designating hedging relationships is needed to adequately reflect underlying risk management activities” (Institute of International Finance 2011: 4). Regulators supported better alignment of rules with firms’ risk management strategies, but they warned against excessive flexibility on hedge accounting: “it is
important to include appropriate safeguards to maintain rigor in accounting application, to prevent the link between hedging activities and their reflection in the financial statements being used improperly, for example, to manage earnings or to inappropriately defer loss recognition” (BCBS 2011: 4). Yet again, regulators championed rules in line with banks’ risk management strategies but feared their abuse.

The IASB finished the hedge accounting framework in 2014, but as mentioned this did not include the most contentious issue: macro hedge accounting. This issue had led to the IAS 39 carve out (see Episode 2) that at the time of writing (April 2018) is still unresolved. The problem is that it is difficult to establish a clear link between the derivative used to hedge, and the portfolio that is being hedged. Banks say this is inherent to the strategy, but the accounting standard setter fears abuse. Once again, the IASB worries about overly flexible rules, banks demand sufficient discretionary space, and banking regulators cannot formulate a clear policy preference.

Unsurprisingly, the IASB Discussion Paper on this topic (issued in 2014) proved very controversial. The proposal suggested that hedged portfolios (loans or deposits) would have to be revalued in line with fair value accounting to ascertain whether the hedging strategy was effective (IASB 2014a). Banks opposed it for fear of being a full fair value plan in disguise: “[it] will change the classification and measurement of the entire banking book, by measuring it at fair value for interest rate risk. It would directly conflict with the banking book business model to originate and hold to collect cash flows” (EBF 2014: 2).

Banking regulators also worried about this aspect (cf. EBA 2014; ECB 2014). The ECB (2014: 2) warned that “the resulting increase in profit or loss volatility could increase procyclicality and thus might be detrimental to financial stability”. They also once again highlighted the dilemma of mixing flexibility with stringency. A BCBS-statement on this matter is worth quoting at length:

The model should allow banking transactions to be portrayed in a robust and consistent manner in line with their economic substance. However, it is essential that appropriate discipline surrounds the use of the macro hedging accounting model. Therefore, the [BCBS] believes that it is very important to elaborate additional eligibility criteria to avoid cherry-picking of hedge accounting models and the creation of opportunities to manage profit or loss. The current IAS 39 includes provisions which may have been designed with an overly strong emphasis on “anti-abuse rules” […]. Against that background, it is important that any future macro hedging accounting model strikes an appropriate balance between discipline and flexibility (BCBS 2014: 2).

Unable to find a suitable way out of the impasse, the IASB again postponed the issue of macro hedge accounting. It now plans to issue a second discussion paper in 2019.
3.7.5 Consequences for accounting harmonization

The IASB’s original plan to complete IFRS 9 in 2010 had proven too optimistic. It finished work in 2014, but only because it excluded one of the most contentious issues. Moreover, controversy still surrounds the issues, with the EC (2016) announcing a phase-in period rather than an immediate implementation. The tension between banks’ need for flexibility to maintain financial stability and its potential for abuse, which may undermine that same stability, remains unresolved. If regulators repeatedly found themselves on the same side of regulatory issues as banks, it was – more than anything else – due to their inability to formulate unambiguous preferences for or against the stringent or flexible application of FVA to financial instruments.

The controversies over financial instrument accounting have had broad effects. It triggered widespread discontent with the IASB’s governance structure. EU member states, the European Parliament, and the Commission blamed the IASB for being unresponsive to (the EU’s) financial stability concerns and demanded increased influence. The IASB responded by speeding up the planned constitution review (2008-2011), which resulted in the creation of a monitoring board in early 2009 to strengthen its links to public regulators. Apart from one Commission representative, this board was comprised of the IOSCO emerging markets committee, the IOSCO technical committee, the Japanese FSA, the SEC, and the BCBS. It participates in the trustee nomination and approval process, has oversight responsibilities for trustees, and refers accounting issues to trustees and the IASB chair. As Posner (2010) points out, the creation of the monitoring board fits the overall pattern since the 1990s in which “IASB’s relative autonomy […] has been on the decline […] The creation of the Monitoring Board […] is merely the latest and most visible manifestation of this trend” (ibid: 648).

More importantly, the crisis affected the convergence project between the IASB and FASB: under EU pressure, the IASB backed away from prioritizing convergence with US GAAP. The standards setters had signed a memorandum of understanding in 2006 to reiterate their commitment to convergence and, under G20 pressure, had pledged in 2009 to intensify their efforts (Zeff 2012). But the financial instrument standards controversy unveiled their reluctance to coordinate their work: under EU pressure, the IASB released a ‘mixed measurement’ standard, while the FASB initially released a ‘full fair value’ standard with no role for HCA (which it later withdrew). The boards announced that their plan for complete convergence by 2011 would not be reached. The Commission stated that the quality of IASB standards was more important than convergence, while the IASB stated in 2012 that it would no longer prioritize convergence (Arons 2012).
The USA likewise backed away from formal commitments to introduce IFRSs any time soon. That the IASB had given in to EU demands to modify IAS 39 without due process provoked serious questions in the USA about the credibility of the IASB as a viable standards setter, feeding domestic resistance against the adoption of IFRSs (Zeff 2012: 830). Still, in the heat of the crisis the FASB itself had, under pressure of banks and regulators, modified aspects of its financial instrument standard to give banks more breathing space. In both the EU and the USA, the issue of how to balance FVA and HCA proved highly controversial – and ultimately remains unresolved (André et al. 2009).

3.8 Conclusion

In two decades of international accounting standard setting we find a succession of short-term fixes that is owed to ambiguous policy and accounting preferences of regulators. This pattern prevails at the time of writing as the core accounting problems remain unresolved. With accounting rules as the fundament of global financial governance more generally, the intractable valuation problems have meant that the regulatory edifice remains unstable.

This chapter contrasted these findings with what we would expect following two key approaches in the study of global financial governance: the interest-based bargaining approach and the expert politics approach. In both of them, dominant actors are assumed to have clear and unambiguous preferences regarding the nature of the rules that are likely to further their policy goals. International accounting standard setting for financial instruments does not fit either category: regulators have failed to articulate an unambiguous preference for or against FVA. Although the IASB consistently propagated an increased use of FVA, both banks and regulators changed their mind on key issues as economic circumstances and hence the impact of accounting standards on bank balance sheets changed.

In accounting standards, the contingency of preferences goes further. Cognizant of the variable impact of standards on capital, banks have effectively championed liberty to switch between accounting rules. Regulators have frequently supported this stance in the name of financial stability. At the same time, financial scandals and crises have justified their fear that flexibility can and will be abused to hide mounting losses and ultimately spawn instability. This makes the governance of accounting standard setting unstable: because any approach to accounting for financial instruments that may fix short-term problems can be abused and aggravate market instability, the (anticipated) effects of any one regime have simultaneously sown the seeds for opposition against it.
Ultimately, this dynamic rooted in the reflexivity of financial markets, in which future expectations, which are translated into valuations, shape the future they seek to describe. Given the key importance of accounting standards for other regulatory domains such as banking rules or assessments by credit rating agencies, this dynamic permeates global financial governance more broadly. To be sure, regulators have tried to devise alternative, domain-specific accounting-rules in several instances, and they have experimented with prudential filters. For example, in the calculation of capital adequacy, the denominator (total assets) is calculated using risk-weighting formulas that are specified in the Basel Accord, not IFRS accounting rules themselves. But the profits and losses of financial institutions, which may push them into bankruptcy, are calculated according to IFRS (or US GAAP, its US counterpart), such that accounting rules for financial instruments do have direct implications for financial stability. Indeed, if they did not, it would have made little sense for banking regulators to get involved in standard setting as much as we have shown them to have done over the past two decades.

Turning to real-world financial governance itself, these findings imply that an enduring accounting standard for financial instruments is elusive. With financial instability as old as money itself (cf. Graeber 2011; Kindleberger 1978; Reinhart and Rogoff 2009), codified rules cannot fully replace judgment based on experience as a guide for policymakers. This suggests that an apparent ‘lack of progress’ in global financial governance is not solely owed to its global nature, but more importantly to the inherent limits of governing reflexive financial markets. In chapter 7, I will elaborate on these policy implications. The next chapter assesses whether regulatory dilemmas similar to those discussed here also hamper post-crisis reforms of credit rating agency regulation.

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8 Prudential filters are intended to limit the impact of value-changes of particular financial instruments on the value of banks’ equity as it is used for prudential purposes. In other words, for the calculation of bank’s capital for prudential purposes, accounting rules are not followed across the board (see CEBS 2006; Matherat 2008). However, these filters loosen the link between accounting standards and capital adequacy calculations only to a limited extent, as not all regulators apply them and they only apply to certain accounting categories (Matherat 2008: 58). Given that reclassification rules were modified during the crisis to dampen financial turmoil, these prudential filters were clearly not sufficient to break the link between accounting rules and financial stability.
4 Mitigating the systemic risk of credit ratings. Performativity as a stability threat and as a regulatory problem

4.1 Introduction

The globalization of finance and the transformation of the banking business from the 1980s onwards not only made regulators reconsider accounting standards, but also presented them with fundamental questions regarding the ways in which banks measure and mitigate financial risks. A key issue was how to ensure that public regulation would stimulate prudent risk management. Policymakers worried about excessive mismatches between public requirements and private practices, flagging that this would hamper market efficiency and invite regulatory arbitrage. In response, regulators deemed (partial) reliance on private risk management practices a particularly promising way forward, hoping this would stimulate firms to improve their risk management techniques, thereby aligning public and private interests. A key example is the Basel II capital adequacy accord (2004), which not only increased regulatory reliance on banks’ risk models, but also stimulated reliance on credit ratings.

The global financial crisis of 2007-9 showed that this strategy had severe shortcomings. Credit ratings’ flaws were most visible: as the Big Three credit rating agencies (CRAs) – Standards & Poor, Moody’s and Fitch – downgraded thousands of securities previously labelled safe, they were at the center of the market panic. The crisis also challenged the regulatory approach towards CRAs. Before then, policymakers essentially focused on CRAs’ governance and their transparency to outside investors. They hoped this would ensure that investors were not duped by CRAs’ integrity problems, rooted in their issuer-pays business model. It took the crisis, however, to convince policymakers that ratings, by inducing herd behavior, can contribute to systemic risks. These systemic problems stem from CRAs’ rating approaches (their methodologies), market participants’ overreliance on these ratings (partly induced by their inclusion in regulations), and the homogeneity of the Big Three’s ratings (Morris 2008; Sy 2009). While these issues had surely been recognized before, policymakers had hitherto opted for a hands-off approach (Mügge 2011a).

The magnitude of the crisis would lead us to expect bold regulatory actions to tackle these systemic rating problems. Critics argued that the pre-crisis focus on governance requirements would not suffice: regulators should get involved in the substance of both CRAs’ and firms’ risk assessment practices. They pleaded for a full removal of ratings from regulations, public control
over CRAs’ methodologies, and setting up a public alternative to the Big Three (Bofinger 2009; Partnoy 2009; Sy 2009; Kruck 2011).

Surprisingly, the implemented reforms are timid. Policymakers have only very moderately succeeded in reducing (regulatory) reliance on ratings. They also avoided prescriptive rules on the content of CRAs’ methodologies. And they shied away from setting-up a public CRA. Regulatory steps mainly come in the form of governance requirements (aimed at both CRAs and market participants), and predominantly address CRAs’ integrity problems. Post-crisis rules show much more continuity with the pre-crisis approach than expected.

Why were the systemic problems not tackled through ambitious, substantive measures? IPE scholarship on CRA-regulation provides a variety of explanations for limited reforms. Institutionalist accounts argue that the path-dependency of CRAs’ previous public endorsement made a radical switch too costly (Chiu 2013; Kruck 2016). Other scholars stress that it is mainly CRAs’ lobbying efforts that account for meagre reforms (Underhill 2015). Yet others hold that policy continuity stems from the resilience of policymakers’ pro-market beliefs (Pagliari 2012b). Despite their differences, all these explanations share the assessment that the key obstacle to fixing ratings’ systemic problems is regulators’ unwillingness to do so. The normative implication is that regulators have apparently failed to implement reforms conducive to the public interest.

This chapter, in contrast, argues that limited reforms stem not from regulators’ unwillingness but their inability to remove ratings’ systemic problems. It argues that regulators have shied away from intrusive reforms for fear that they would make things worse, not better. This dynamic is rooted in the performativity of risk assessments (including credit ratings): rather than merely reflecting risks, they shape them (Sinclair 2010; Carruthers 2013; Esposito 2013b; Paudyn 2013; critical: Svetlova 2012). Rating performativity has particularly pressing regulatory implications: while it is clear that CRAs’ actions can have nefarious consequences, it hampers regulators’ ability to fix them.

Performativity implies that what seems to be a desirable cure (public intervention in the substance of risk assessment practices) might in fact be worse than the disease (ratings’ systemic effects). Replacing all rating references in regulation with another risk indicator might merely switch the source of systemic risk to this other indicator. As the main alternatives to ratings are based on market prices, this feedback loop might increase market volatility. Similarly, standardizing methodologies or setting up a public CRA risk reinforcing herd behavior – either because CRAs’ rating actions become even more synchronized, or because participants give a disproportionate
weight to the public CRA’s assessments. In short, it is not regulators’ unwillingness to fix the systemic problems: performativity introduces key regulatory dilemmas and makes bold actions potentially harmful.

Regulators recognize the limits of what regulation can do to fix ratings’ systemic problems. The appreciation of these inherent limitations, more than external obstacles such as private sector resistance, accounts for the limited post-crisis reforms. While this assessment implies that scholars should be careful in dismissing post-crisis reforms as a blatant failure, it should certainly not warrant an uncritical embrace of the status quo. Indeed, if CRA re-regulation will unlikely prevent future problems, this necessitates a proactive rather than a fatalist policy approach – a point that I will stress in the conclusion (more elaborate in chapter 7).

The chapter proceeds as follows. The next section details the (apparent) mismatch between the significance of the problems and the timidity of regulatory reforms. It then borrows from the performativity literature to argue that performativity not only limits regulators’ ability to tackle the systemic problems, but also implies intrusive reforms are potentially harmful. The chapter’s empirical body details European Union (EU) policymakers’ struggles to tackle the three key issues mentioned above: (1) addressing rating overreliance; (2) regulating rating methodologies; and (3) setting-up a public CRA.

4.2 Systemic problems, a timid response

4.2.1 Increased reliance on private sector risk measurements

The ratings of the Big Three CRAs – Standards & Poor, Moody’s and Fitch – play a crucial role in global financial markets. A credit rating is an indicator of a CRA’s assessment regarding the creditworthiness of a particular entity (such as a firm or a government) or a particular obligation (such as a structured finance security), expressed using a ranking system. Ratings are meant to assess the probability of defaults or losses for investors. The economic literature generally treats ratings as a tool to decrease the inherent information asymmetry between the debt issuer and investors (White 2010), providing a “focal point” for investors (cf. Boot et al. 2006).

In the two decades leading up the financial crisis, credit ratings gained a more prominent role in European financial markets. Financial globalization and the integration of European capital markets were of key importance (Brummer and Loko 2014). The inclusion of ratings in (especially banking) regulation was a contributing factor (McVea 2010). Ratings also informed the European Central Bank’s assessment of banks’ collateral in refinancing operations (European Central Bank
[ECB] 2008), thereby stimulating banks to pay attention to their assets’ credit ratings. And national authorities used ratings (albeit only limitedly) in investment fund regulation (García Alcubilla and Ruiz del Pozo 2012; FSB 2014). While in the run-up to the crisis the EU still did not match the USA’s rating reliance, it was definitely catching up (Menillo and Roy 2014).

The Basel II capital adequacy accord (2004) was arguably the most important rule-set stimulating reliance on credit ratings. This accord stipulated that risk weights used to determine capital requirements for credit exposures should henceforth be based to a significant extent on market participants’ risk assessments. In the so-called ‘standardized approach’, banks should use credit ratings (if available) to determine risk weights. Banks with advanced risk management techniques would be allowed to use the ‘internal rating based’ (IRB)-approach to credit risk, allowing them to calculate key risk parameters themselves. Moreover, the so-called Securitization Framework determined that all banks should rely on credit rating agencies to calculate structured finance exposures. Given these instruments’ complexity and lack of data of the underlying exposures, regulators deemed it undesirable if banks were to do the risk calculations all by themselves (Weber and Darbellay 2008; FSA 2009b; Alexander 2014).

Despite these developments, the EU refrained from regulating CRAs. The European Commission (EC) had actually championed a system of monitored self-regulation, requiring the Committee of European Securities Regulators (CESR) to check CRAs’ compliance with the International Organization for Securities Commissions Code of Conduct (IOSCO 2004; European Commission [EC] 2006). To protect investors from being duped by CRAs’ integrity problems, this framework essentially focused on internal governance and transparency (Brummer and Loko 2014). For the Big Three CRAs, the IOSCO-framework did not really constitute a significant regulatory burden: the bar was so low that these CRAs were already by and large compliant when CESR checked them (CESR 2006).

European capital adequacy rules implementing Basel II (the Capital Requirements Directive; CRD) required banks to use ratings issued by explicitly recognized ‘External Credit Assessment Institutions’ (ECAIs) for regulatory purposes. The CRD formulated several requirements that CRAs needed to meet before the relevant national authority could grant them recognition. Yet in practice banking supervisors recognized the major CRAs as ECAIs without much scrutiny. As such, the European Commission (2006) admitted that in practice this measure too fell short of regulating CRAs (Sy 2009). Rules on banks’ internal models were more stringent in that regard: banks were
required to do all sorts of model tests before being allowed to use the IRB-approach (Interview 20160316).

4.2.2 Problems exposed by the crisis

The financial crisis, however, exposed serious shortcomings of both regulatory strategies. Critics attacked regulatory reliance on banks’ internal risk models as being fundamentally misguided (e.g. Warwick Commission 2009). According to the influential Turner Review (Financial Services Authority [FSA] 2009b: 44), the crisis revealed “severe problems with these techniques”. In particular, it argued that the risk models had too short observation periods, unwarrantedly relied on the ‘normal distribution’, and ignored correlation and feedback effects. More fundamentally, the crisis posed “fundamental questions about our ability in principle to infer future risk from past observed patterns”, arguing that in a social system such as finance it we might need to recognize “that we are dealing not with mathematically modellable risk, but with inherent ‘Knightian’ uncertainty” (FSA 2009b: 44-45). Other critics emphasized the incentive problem: as banks aim to maximize return on equity, but also want to present good capital figures, they have a motivation to underestimate risk weights (Carmassi and Micossi 2012; we will get back to the issue of internal ratings in chapter 6).

Flaws in credit ratings were more visible: from the Summer of 2007 onwards, CRAs downgraded thousands of asset backed security-tranches to junk status, triggering massive panic. The crisis exposed systemic problems: widespread reliance on apparently dubious ratings issued by a small number of CRAs had contributed to the build-up and materialization of systemic risk (Sy 2009). While integrity problems had surely played a role in the structured finance debacle (Coffee 2011; US Permanent Subcommittee on Investigations 2011; White 2010), policymakers agreed they were not the whole story (cf. Kruck 2016: 4). This assessment was reinforced by the onset of the Eurozone sovereign debt crisis: as sovereigns generally do not pay to get rated, CRAs’ actions could hardly be explained by their issuer-pays business model. Instead, the problem was more fundamental: it was the systemic risk of widespread reliance on specific risk indicators.

These problems partly stemmed from CRAs’ methodologies – both individual methodologies as well as their general rating approach (Sy 2009). CRAs’ structured finance methodologies proved flawed: they lacked long-run data on default risks for structured finance products; they missed the deteriorating quality of the underlying asset pools; they were too sanguine about the US housing market and correlations between defaults; and they erroneously supposed that risk probabilities followed a normal rather than a ‘fat-tail’ distribution (Committee on the Global Financial System
Observers criticized CRAs’ general risk assessment approach – their attempt to rate ‘through the cycle’ – for being slow to respond to changing market conditions, while overshooting once problems seemed evident (Deb et al. 2011).

The systemic problems went beyond the dominant CRAs’ rating approaches to include market participants’ overreliance on their ratings. Investors herded into highly rated structured finance securities, leading to the build-up of systemic risks (Financial Stability Forum [FSF] 2008). Herd behavior was stimulated by the inclusion of ratings in regulations (most notably in the Securitization Framework and the Standardized Approach to credit risk of the Basel II accord) and in asset management contracts (Sy 2009). Widespread reliance ensured that downgrades and fire-sales reinforced one another in vicious downward spirals. Finally, the sector’s oligopolistic structure and CRAs’ homogeneous rating actions ensured that everything collapsed simultaneously (Deb et al. 2011).

### 4.2.3 A timid regulatory response

While potential stability risks stemming from inadequate methodologies, market overreliance, and rating homogeneity had been recognized before, policymakers had so far been cautious. Given the magnitude of the problems, one would expect the crisis to trigger a bold regulatory response. Critics pleaded for substantive remedies: policymakers should take control over firms’ risk assessment practices. They argued for abandoning regulatory reliance on ratings (Partnoy 2009; Kruck 2011), setting up a public EU CRA to increase diversity in the rating sector (Bofinger 2009), and introducing public control over ratings methodologies (Underhill 2015).

Yet actual reforms fail to live up to these expectations. EU policymakers have only very moderately reduced regulatory reliance on ratings (Kruck 2016). They have hardly tackled CRAs’ methodology failures and have avoided regulating their content (Paudyn 2015; Underhill 2015). And the continued dominance of the Big Three CRAs implies a lack of ratings diversity, after the EU refrained from setting-up a European (public) CRA that many politicians deemed necessary (Schroeder 2015).

To be sure, there has been quite some regulatory action. The EU abandoned its hands-off approach and adopted a Regulation (CRA 1) in 2009 (Quaglia 2013). These rules require CRAs to rotate analysts frequently, prohibit them from mixing consultancy and rating services, and ban analysts from rating an entity in which they have an ownership interest. They introduce procedural requirements for rating methodologies and require transparency on CRAs’ potential conflicts of interests and their procedures to ensure high quality ratings (García Alcubilla and Ruiz del Pozo [CGFS] 2008; FSA 2009a).
This Regulation was amended in 2011 (CRA 2) to entrust the newly created European Securities and Markets Authority (ESMA) with the authority to register and supervise CRAs. The Eurozone debt crisis triggered a third amendment, finalized in 2013 (CRA 3). Among others, this reform defined procedural requirements for sovereign debt ratings, introduced a civil liability regime for CRAs, and obliged market participants not to rely on ratings in a mechanistic manner (cf. Chiu 2014, for an extensive discussion of these measures).

Yet, these regulatory solutions mainly consist of governance requirements, and then mostly to address CRAs’ integrity issues. In contrast, policy solutions for the systemic problems are limited, and policymakers have avoided becoming prescriptive on the substantive aspects of firms’ and CRAs’ risk assessment approaches. Instead, they encourage firms also to consider other risk indicators in their conduct, and they check CRAs’ procedures for the development, application, and revision of methodologies.

4.2.4 Dominant explanations for lack of reform

This policy outcome is surprising: after all, the systemic problems were the most pressing issues, and substantive measures seemed an obvious remedy. What explains it? The post-crisis CRA-literature provides various explanations. Ideational accounts focus on changes in policymakers’ regulatory beliefs (Pagliari 2012b). Here the argument is that pre-crisis pro-market ideas have been much more resilient than many expected: regulators could attribute rating failures to misaligned incentives – a framing chiming perfectly well with pre-crisis policy precepts (Mügge 2011a). Private interest accounts, in contrast, argue that successful opposition from vested interests (the dominant CRAs) hampered more fundamental reforms. While regulators to set out to fix rating flaws by designing rules conducive to the public interest, they were led astray by particularistic interests, so the argument (Underhill 2015).

The arguably dominant approach – the institutionalist perspective (cf. Moschella and Tsingou 2013) – argues that lack of fundamental reform stems from policy’s path-dependency. Despite CRAs’ obvious mistakes, regulatory reliance on ratings has made public and private actors structurally dependent on CRAs’ risk analyses. Lacking the required risk assessment expertise and capacity themselves, policymakers find it too costly to revoke CRAs’ earlier granted quasi-regulatory status (Chiu 2013; Menillo and Roy 2014; Kruck 2016).

These perspectives each highlight important facets of the post-crisis regulatory politics. Yet they share an assumption that I argue is unwarranted: the key obstacle to fix ratings’ systemic problems is regulators’ unwillingness. This rests on a flawed notion of ratings: they are treated as reflections
of an objectively existing entity called ‘risk’ – and CRAs constantly get it wrong. If only regulators were willing to implement the proper rules, we would no longer suffer from CRAs’ blunders, so the suggestion (cf. Kruck 2016). Yet a different take on risk assessments – the social studies of finance (SSF) perspective that sees them as performative – makes this assumption highly questionable. Most importantly, performativity throws doubt on the idea that bold regulatory actions – such as the full removal of ratings from regulation, standardization of rating methodologies, or regulators issuing risk assessments themselves through a public CRA – would contribute to financial stability. In fact, the opposite might be the case.

4.3 The regulatory implications of performativity

4.3.1 Rating performativity

The financial system is reflexive: market participants’ assessments of the system’s functioning shape its functioning, in turn affecting participants’ assessments. Put differently, the two-way feedback loop between assessments and outcomes makes the system change under observation (Soros 2008; Beinhocker 2013; Bronk 2013; Esposito 2013b; Mügge and Perry 2014). This implies that financial markets have no firm anchor – the often-invoked fundamental values in the real economy – outside of actors’ assessments (Keynes 1964 [1936]; Minsky 2008 [1986]).

From this starting point, the SSF-literature investigates which and whose assessments matter and how they affect the system. MacKenzie’s (2004; 2006; 2011) seminal contributions focused on the performative effects of financial theories. Drawing on Callon (1998), he asserted that these theories, rather than passively recording an external reality, may act as an “active force transforming its environment” (MacKenzie 2006: 12). If a model has a high academic standing and is publicly available, market participants may start using it. The model then affects economic processes, but it may do so in different degrees. What MacKenzie labels ‘Barnesian performativity’ and ‘counterperformativity’ are the strongest forms. The first occurs when actors’ actions lead to outcomes that confirm the financial model’s assumptions: the world becomes more like the model. Counterperformativity is the precise opposite: over time actions lead to outcomes that conflict with the model’s assumptions (MacKenzie 2006; Bronk 2013).

Esposito (2013b) argues that SSF-scholars should not confine the study of performativity to financial theories but broaden the focus to include a variety of market practices and observations. Credit ratings are an important example (Esposito 2013a). There are several felicitous conditions (Svetlova 2012) why ratings can exert a key influence on financial market functioning. First, ratings’
visibility: the assessments are available for all to see, and the symbols are relatively easy to understand. Second, and related, they are widely used, also because of their inclusion in financial contracts and regulations. Third, CRAs’ methodologies ensure ratings are relatively stable over time, making them a reliable focal point for (long-term) investors. Finally, there is limited diversity in ratings: the Big Three dominate the sector, and their rating approaches are quite similar. All this increases the chance that market participants’ beliefs converge around CRAs’ assessments, thereby strengthening ratings’ real-world effects (cf. Deb et al. 2011).

As Svetlova (2012) rightly argues, widespread reliance on a model will not ensure a strong form of performativity. It crucially depends on market participants’ calculative culture – whether they follow ratings blindly or whether they take them with a grain of salt. Yet ratings may be so hardwired in financial markets that individual actors act upon them even if they consider the dominant CRAs’ ratings to be ‘incorrect’: as Sinclair (2010: 99) convincingly argues, “sceptical individuals have incentives to act based on the assumption that others will use the rating agencies as benchmarks”, giving rating reliance a self-enforcing element (cf. Esposito 2013a). As such, ratings have performative effects: they influence the risks that they supposedly merely describe. Positive assessments trigger easy access to cheap credit, while downgrades can exacerbate the issuer’s financial strains (cf. Kregel 2008; MacKenzie 2011; Mügge 2011a; Carruthers 2013; Esposito 2013a; Beckert 2016; see Paudyn 2013, for an extensive discussion of CRAs’ effects on sovereigns; see Soudis 2015, for a critical take).

As the crisis made clear, ratings’ real-world effects can contribute to the build-up of systemic risks (Sy 2009) – the risk of a “disruption to financial services that is caused by an impairment of all or parts of the financial system [...]” (International Monetary Fund [IMF] et al. 2009: 2). Particularly in case of financial innovations (think of structured finance products) or novel market developments (for example the introduction of the Euro), market participants look for anchor points to cope with the inherent uncertainty of future outcomes (Bronk 2013: 346). CRAs’ optimistic assessments about a particular asset class or financial innovations can then become self-reinforcing, stimulating behavior that validates these assessments (Barnesian performativity) (cf. MacKenzie 2011). But as Minsky already pointed out, this self-reinforcing belief-behavior-belief feedback loop raises the fragility of the system, even though it appears increasingly stable (Borio et al. 2012). We can think of this as rating counterperformativity: initial optimism has sowed the seeds for subsequent panic. A minor event can be a breaking point and turn a boom into a bust (Gerding 2014). Rating downgrades and fire-sales then reinforce each other in downward spirals (Sy 2009).
4.3.2 Regulators’ struggle with performativity

‘Opening the black box of finance’ exposed the political dimension of seemingly technical issues such as risk models (cf. MacKenzie 2004; De Goede 2004). Yet surprisingly, the SSF-literature has so far paid less attention to performativity’s regulatory implications – and how regulators deal with these (Coombs 2016: 281). For example, while both De Goede (2004) and Paudyn (2015) discuss global regulators’ embrace of private sector risk practices, they appear to discard the possibility that regulators recognize potential undesirable (performatively) effects and the dilemmas associated with the various policy options. The literature mostly treats regulation as an exogenous factor (Coombs 2016), although this has more recently been changing. For example, Coombs (2016) tentatively concludes that regulation – in this case, the regulation of financial algorithms – can ensure benign forms of performativity. Similarly, Langley (2012) shows how US regulators’ financial stress testing exercises were intentionally and successfully performative.

This study aims to contribute to this endeavor by focusing on how regulators deal with rating performativity. The message is quite sobering: banking and securities markets regulators struggle to tackle it. On the one hand, regulators hope that CRAs contribute to financial stability by providing relatively accurate risk assessments, allowing market participants to take precautionary measures. Indeed, regulators require banks, pension funds, insurers and asset managers to use ratings mainly to ensure prudent investment behavior. On the other hand, they dread ratings’ systemic consequences (Sy 2009). But while these problems obviously exist, it is not clear what regulators can do to fix them. More significantly, bold regulatory actions aimed at the substance of CRAs’ and firms’ risk assessment approaches might be a cure worse than the disease. Put differently, regulators fear sweeping reforms will reinforce rating performativity and thereby increase systemic risks.

Performativity hampers regulators in tackling rating overreliance. Regulatory reliance on ratings is clearly problematic. It stimulates an automatic market response to rating changes and other market participants’ anticipation of this effect can set-off feedback loops. But replacing ratings with other risk indicators may be equally if not more problematic. If this reinforces market participants’ blind reliance on other, more volatile indicators, the performativity problem might become worse (FSB 2014). The solution to increase firms’ discretion in risk assessment procedures also has downsides: especially for systemically important financial firms that tend to neglect long-term solvency to gain short-term profits or competitive advantage, abandoning microprudential stringency is unattractive (cf. Mügge and Stellinga 2015).
Even if regulators reduced regulatory reliance, ratings’ systemic effects will not be eliminated. Market participants’ rating use is not reducible to regulatory requirements. According to the former British financial market supervisor, “the use of ratings based investment and cash management rules by individual [...] institutions is entirely rational at the idiosyncratic level and it is very difficult to imagine how many institutions could operate without such decision rules” (FSA 2009b: 79). Although regulators can stimulate firms to rely on a variety of risk indicators, preventing them from using credit ratings is well neigh impossible, let alone desirable. An outright ban on rating issuance has many downsides, not least in that it could contribute to uncertainty and market stress.

Performativity similarly makes regulatory intervention in rating agencies’ methodologies problematic. Because methodologies shape ratings, they clearly warrant regulatory attention. But regulators are not necessarily better at identifying appropriate methodologies than CRAs. Consider the main critique of CRAs’ methodologies: they lead to ratings that are slow to respond to market signals (Partnoy 2009). CRAs aim to rate ‘through the cycle’ (TTC), meaning that ratings are usually relatively stable, contributing to their popularity among investors (and thus their performative effects). But this also means that stress levels can be building up for some time before CRAs finally reconsider their ratings, meaning that downgrades are usually abrupt and substantial (Gonzales et al. 2004; Dittrich 2007; Deb et al. 2011). This was the case in the Asian debt crisis of 1997-8, the subprime crisis of 2007-8, and the Eurozone debt crisis of 2010-2. But does this buttress the case for a regulator’s prescribed shift to the alternative, ‘point in time’ (PIT) approach, that more quickly translates changing market signals in risk estimates? Not necessarily: ratings would still have performative effects, but as PIT-estimates are very volatile during market turmoil this could lead to even worse forms of instability (Gonzales et al. 2004; Hunt 2009).

As regulator approved or prescribed methodologies are not necessarily better than those of CRAs, regulators have good reasons to avoid substantive involvement. More importantly, prescribing methodologies could aggravate the problem it was meant to solve. Public vetting of methodologies could suggest ratings are officially approved, further bolstering market participants’ reliance on them. And as ratings’ systemic effects derive from the dominance of the Big Three, standardizing methodologies would increase ratings’ homogeneity, thereby worsening the herding problem.

More diversity in ratings seems a promising way to mitigate the performativity problem. Systemic crises are often the result of a lengthy period of “cognitive myopia” (Bronk 2013: 348). Limiting
rating homogeneity is one way to address this, but also one that is fraught with difficulties. Given the systemic relevance of the Big Three’s rating decisions, it is unlikely that smaller competitors employing different methodologies could by themselves provide a sufficiently strong counterweight, if only because their assessments would not remain unaffected by the Big Three’s actions. This seems to warrant setting-up a public (or publicly sponsored) CRA. But while this might be a quick way to introduce a ‘new voice’, there is a danger that this voice might be heard all too well: market participants might exclusively rely on the public CRA’s assessments, seeing them as official stamps of approval. By inducing herd behavior, this would reinforce systemic risks rather than mitigate them. Conversely, market participants could see public ratings as ‘tainted’ and ignore them, rendering the costly effort useless.

This certainly does not imply that policymakers just ignore these issues. They cannot: rating methodologies, the diversity of rating assessments, and the way in which ratings are used are all fundamental to financial market functioning. Moreover, regulators have had to live up to political and societal calls for bold actions, meaning there have certainly been reform attempts. However, once policymakers had to translate high-level requests to fix rating problems into actual reforms, they hit upon the inescapable performativity problem. The next section empirically shows how this has led to half-baked reforms, backtracking and regulatory indecisiveness. It discusses in detail the attempts to tackle rating overreliance, the regulation of CRAs’ methodologies, and the failed initiative to set-up a public CRA, respectively.

4.4 Re-regulation and its limits

4.4.1 Reducing reliance on credit ratings

Market overreliance on credit ratings was a core cause of the global financial crisis (Sy 2009; FSB 2010; Deb et al. 2011). Policymakers identified regulatory reliance on ratings as contributing to market overreliance, thus reinforcing herd behavior. The FSF (2008: 38) therefore recommended that “authorities should check that the roles that they have assigned to ratings in regulations and supervisory rules [...] do not induce uncritical reliance on credit ratings”.

A bold response would be to fully remove ratings from regulations. Proponents argued that this would reduce ratings’ systemic effects, as both regulated entities and other market participants would pay less attention to them. It would also stimulate market discipline in the rating sector and thereby boost ratings’ informational value (Weber and Darbellay 2008). But this solution immediately triggered other questions: should ratings be replaced with other risk indicators? Or
should regulators simply abandon the use of risk indicators in regulation and supervision? In both the EU and the USA, policymakers have struggled with these questions, and ultimately adopted half-baked – albeit different – solutions.

EU policymakers had only cautiously touched upon this issue during the negotiations on CRA 1 (2008-2009). The EC (2008b: 5) argued that “a one-size-fits-all approach need not necessarily be followed, as ratings are used in different contexts, with varying intensity and for different purposes”. However, the Eurozone crisis – which EU officials partly attributed to CRAs’ sovereign debt downgrades – heightened the urgency to diminish ratings’ systemic effects. The problem of rating overreliance was therefore a core aspect of the CRA 3 negotiations (cf. EC 2010).

But policymakers were confronted with a fundamental problem. What risk indicators (if any) can replace ratings? The main alternatives are indicators based on market prices – such as bond prices, credit spreads or the prices of credit default swaps. While some experts argue that these are more timely and accurate than ratings (Partnoy 2009), there are significant downsides. Even if particular market-based indicators are more accurate than ratings, this accuracy could become undone once they are used in regulation and more actors pay attention to them. More problematically, market-based indicators are more procyclical than ratings: in good times they indicate risk is low, but they become very volatile during market turmoil (Shin 2013).

Hardwiring such indicators in regulations could therefore lead to even worse forms of systemic instability (Hunt 2009). EU policymakers have thus opposed this policy route. UK authorities warned that “movements in market prices are driven by factors other than credit risk – such as the depth and liquidity of the market – and are prone to overshooting (procyclical effects)” (FSA et al. 2011: 5). The European Central Bank (ECB 2011a: 2) argued against “any automatic reliance of regulation on market-based variables. Market-based information may be excessively volatile and significantly misleading, for instance, during times of market dislocation”. In short, a bold solution to the rating performativity problem might introduce an even worse form of performativity, centered around more volatile indicators.

Alternatively, policymakers could stop using publicly designated risk indicators and leave it up to firms themselves. But giving firms much more discretion is obviously problematic from a (micro)prudential perspective (Carmassi and Micossi 2012). The Eurozone debt crisis showed that this strategy can be quite dangerous. EU politicians had not required any risk-sensitivity in capital charges for EU sovereign debt and left it up to the banks to decide how much to invest in particular government bonds – with disastrous consequences (European Systemic Risk Board 2015b).
Policymakers could also require firms to use their own risk models, with Basel’s Internal Ratings Based-approach (the alternative to the Standardized Approach) as an example. But the financial crisis had also exposed major flaws in banks’ risk models. And it would not necessarily reduce rating reliance, as banks’ models often use credit ratings as benchmarks (Interview 20160603): “internal models are currently often linked back to CRA ratings or CRAs’ default histories as external independent measures of risk” (FSA et al. 2011: 4).

Policymakers thus faced a dilemma. Replacing ratings with market-based indicators would substitute rating performativity for something worse. And leaving it up to the firms might reduce rating performativity but would introduce another systemic stability threat: firms’ opportunism. A bold response would arguably make things worse, not better.

Given these major drawbacks, the EU opted for a very general policy goal: to reduce the extent to which market participants rely “solely or mechanistically on credit ratings” (CRA 3 – Article 5a; emphasis added). CRA 3 required European supervisory agencies no longer to refer to ratings in their guidelines or in their warnings “where such references have the potential to trigger mechanistic reliance” (CRA 3 – Article 5b[1]). But the Regulation did not require the full removal of ratings from Union Law. Although it contained the aspiration to do so by 1 January 2020, policymakers included an important disclaimer: “provided that appropriate alternatives to credit risk assessment have been identified and implemented” (CRA 3 – Recital 6). This has so far proved elusive.

While the CRA 3 required EU regulators to look for potential alternative risk indicators, the open-endedness of this assignment ensured a low-key follow-up. Although financial authorities consulted market participants and national authorities on their ideas on rating alternatives (cf. European Banking Authority [EBA] et al. 2014; ESMA 2015), this merely resulted in calls for further investigation rather than a thorough analysis and testing of identified alternatives. An EU banking regulator admitted that “for the time being it is merely a stocktaking exercise […]. The prevailing opinion is that at this point in time we cannot get rid of the external ratings anyway – it is kind of unrealistic” (Interview 20160413a). This sobering conclusion was echoed by ESMA (2015: 36): “The process to reduce reliance on ratings [is] at an early stage, with some work done on agreeing high

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9 Apart from ESMA, these are the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA).
level principles and goals but more to be done in terms of mitigating mechanistic reliance and proposing alternatives”.

The EU focusses on market participants’ use of ratings: CRA 3 stated that they shall make their own credit risk assessment and shall not solely or mechanistically rely on credit ratings – a requirement subsequently incorporated in sector-specific legislation. This approach fails to substantially limit ratings’ systemic effects if there are no requirements to use alternative risk indicators. But regulators want to avoid this: “I completely understand market participants asking supervisors: ‘If I cannot use ratings, what then should I use? Tell me and I will do it’. But this is very difficult. Are you going to say: ‘you should all use credit spreads’? No, because if everyone does this, you will get the same problem. Or worse” (Interview 20160404). So, the EU decided that supervised entities may still use ratings, provided they have appropriate internal controls to ensure this is not blind reliance (Joint Committee of the European Supervisory Authorities 2016). This approach is congruent with FSB’s (2014: 2) warning that “[n]ational authorities and financial entities should guard against the temptation to adopt a small number of alternative measures for assessing creditworthiness in place of CRA ratings, which can result in substituted procyclicality and herd behavior”.

The EU’s approach was partly informed by the problems experienced by US regulators. The US Senate had taken a bold approach and obliged regulators to remove all rating references from Federal laws – subsequently incorporated in Section 939A of the Dodd-Frank Act of 2010 (Manns 2013). This being a political obligation, US regulators had to find a way to do this, but they struggled to find suitable alternatives. They therefore often simply removed rating references. But abandoning prudential stringency is dangerous – so how to square the circle? As an EU banking regulator reflects, the “American regulators experience the Dodd-Frank prohibition as a problem. They think that ratings should actually continue to play a role, albeit a smaller one than before the crisis” (Interview 20160316).

US regulators adopted a pragmatic solution: “they found a way to continue using ratings while still complying with the law” (Interview 20160316). They did so by sticking to the old language of ‘investment grade’ and ‘non-investment grade’ securities while remaining vague what this means. Regulators’ definition of investment grade – “the risk of default is low, and the full and timely repayment of principal and interest is expected” (Office of the Comptroller of the Currency [OCC] et al. 2013: 2) – gives no guidance, but this was deliberate. It ensured that firms could still use ratings, as they could plausibly claim that a high-rated entity implied low default risks and was
therefore investment grade. According to another banking regulator, the USA has thus only superficially reduced reliance on ratings: “Is this a solution? Legally yes, because they don’t refer to external ratings. But they do not even define what investment grade is supposed to mean. It’s only a different presentation” (Interview 20160413a). So, at first sight the US approach appears to be a major policy shift. In practice, however, regulators did not fully stop relying on ratings. As reflected by a CRA-representative: “I am not convinced that the Americans have gotten to a place that is very different from where Europe is” (Interview 20160413b).

So, the EU has, for the time being at least, given up on the agenda of reducing regulatory reliance on ratings (Interview 20160316; Interview 20160408a; Interview 20160413b; Interview 20160421). ESMA concluded that it may not be practical to remove all regulatory references, and that “the focus of any future initiatives should be on the mitigation of mechanistic reliance on ratings rather than their removal altogether” (ESMA 2015: 7). Work is still to be done in this respect: particular regulations – for example capital adequacy rules – still appear to induce mechanistic reliance (Interview 20160413a; Interview 20160421). But policymakers have great difficulty squaring the circle of combining stringency (regulatory use of risk indicators) with flexibility (preventing mechanistic reliance).

These half-hearted responses stem not so much from policymakers’ unwillingness to change course, but from a lack of viable alternative solutions. Regulators acknowledge that replacing ratings with other indicators would not solve the problem, and potentially make it worse. From a performativity perspective it makes sense to require diversity in market participants’ risk assessments, but regulators understandably fear the scope for abuse this flexibility offers firms. Effectively, policymakers see no way out of this conundrum.

### 4.4.2 Regulating rating methodologies

Policymakers identified fundamental flaws in CRAs’ methodologies as a core cause of the structured finance debacle. These were therefore a focal point in post-crisis regulatory reform debates: “the idea was that methodology was the key issue, because at the end what goes out, the triple-A or double-B or whatever, comes from a certain methodology” (Interview 20160408a).

But on which aspects of methodologies should policymakers focus? Should regulators take a bold approach and prescribe the methodologies CRAs should use? The eventual solution adopted in

CRA 1 was to avoid public meddling with their content (Article 23) and concentrate on CRAs’ procedures, instead (Article 8).

The EC consultation paper was vague on the issue of regulatory scrutiny of methodologies: while it made clear that the substantive requirements “do not interfere with the content of ratings” (EC 2008a: 3), it did not provide a similar provision for methodologies. This worried CRAs, who feared regulatory interference with their rating approaches (Standard & Poor’s 2008; Interview 20160413b; Interview 20160422). But from the start, EU regulators had also been concerned about the idea of supervisors checking or even prescribing rating methodologies (Interview 20160408a; Interview 20160421). For instance, ESMA’s predecessor – the Committee of European Securities Regulators (CESR) – argued that the “goal for a potential regulation should be the supervision/monitoring of principles and processes that a CRA undertakes to generate a proper rating rather than influencing the methodology a CRA uses” (CESR 2008: 3). The Committee of European Banking Supervisors [CEBS] simply stated that the Regulation “should not seek to regulate rating methodologies” (CEBS 2008).

Several problems fed regulators’ opposition to interference, including major conflicts of interest (Interview 20160404; Interview 20160408). But the substantive challenges were central to regulators’ skeptical stance: a rating methodology is “about credit quality, which is something you cannot observe. Or not even test for the next cycle, of which we don’t even know how long it is.... So all these things you cannot do with them” (Interview 20160413a). As substantive involvement would unlikely improve rating quality, it would at best shift reputational risks towards the regulator, making it an unattractive policy option: “as a supervisor you don’t want to be held responsible for a particular rating. You don’t want to suggest it has been approved by the supervisor” (Interview 20160404).

The most fundamental problem, however, was that regulators’ substantive involvement would not only fail to take away rating performativity but would likely reinforce it. As market participants’ perception of ratings’ importance is key to their performative effects, policymakers deemed explicit government endorsement undesirable. So UK authorities warned that “regulatory assessment or challenge of CRAs methodologies or models” exacerbate the risk that markets participants see ratings as having “an official seal of approval” (HM Treasury et al. 2008: 9-10). Moreover, if regulators were to prescribe a particular rating approach, this risked introducing even more homogeneity in ratings, boosting systemic risks. As an EU regulator puts it: “[CRAs’] methodologies will always produce different results. Which in theory is even good. [...] [But] relying
on the supervisors is relying on an even higher form of systemic risk. Because if the government is wrong, everybody is wrong” (Interview 20160413a).

Still, the fundamental importance of methodologies implied that regulators could not ignore the issue. While CRA 1 included a clause (Article 23) stating that public authorities “shall not interfere with the content of credit ratings or methodologies”, Article 8 introduced significant procedural requirements concerning the development, application, review and disclosure of rating methodologies. “What you can do is a lot of supervision, checking the governance, the independence, the internal processes and so on...” (Interview 20160413a; emphasis added).

Despite this focus on procedural aspects, a key clause – Article 8 (3) – seemed to be directly concerned with the content of methodologies: CRAs “shall use methodologies that are rigorous, systematic, continuous and subject to validation based on historical experience, including back-testing”. The ambiguity this introduced has been a source of contention ever since, as it implied that ESMA would have to check whether CRAs’ methodologies conformed to Article 8 (3), without actually interfering with their content.

The issue emerged when, during the Eurozone debt-crisis, the EC (2011c: 3) proposed that a CRA modifying one of its methodologies “may only apply the new rating methodology after ESMA has confirmed the methodology’s compliance with Article 8 (3)”. ESMA itself, however, vehemently opposed this proposal, fearing that it might be seen as validating ratings or methodologies (Interview 20160421; Interview 20160422). The rule would have “led to a sort of regulators-approved rating. You would get a triple-A rating that was seen by investors as being in some way ESMA-approved. That is not something you want to have” (Interview 20160421). The proposal was eventually shelved; instead, CRA 3 required CRAs to notify ESMA of material changes to their methodologies. Key members of the European Council had opposed the Commission proposal (Interview 20160404; Interview 20160408a). According to an EU securities market regulator, this solution effectively freed ESMA from checking the substance of methodology changes: “they left the issue to ‘notify in advance’, so the supervisor gets it in an official register. What are you going to do with it? You put it in a drawer” (Interview 20160408a).

While regulators have not created substantive requirements for CRAs’ methodologies, they do subject them to supervisory scrutiny. Where to draw the line is difficult. Given the impossibility of assessing whether methodologies are ‘correct’ (cf. Paudyn 2013; Paudyn 2015), ESMA settles for checking whether CRAs consistently apply their methodologies and modify them in case of unexpectedly poor performance. This latter aspect of ‘methodology validation’ is controversial.
CRAs warn that ESMA’s approach pushes them in the direction of quantitative rating approaches, which in their eyes contributes to rating homogeneity (Interview 20160414a). Regulators are sensitive to this argument: “We want to prevent that market participants think that there is only one way of looking at credit risk. There isn’t. So the rules aren’t meant to... we want to have alternative opinions. So that means you cannot say that the methodology should contain ‘this, and this, and this’ or that there is one approach to validation” (Interview 20160421).

Still, the subjectivity introduced by the qualitative nature of ratings is a mixed blessing for regulators. The upsides are that it buttresses rating heterogeneity and limits mechanistic feedback loops between market developments and rating changes. But regulators fear that CRAs’ emphasis on the qualitative aspect might be an excuse for poor conduct and an unwillingness to reassess ratings in a timely manner. So ESMA (2015) champions tighter standards for CRAs to check their own methodologies. CRAs should assess whether actual default percentages in different rating categories (so AAA, AA+, and so on) match their earlier expectations; if they do not, methodologies should be reviewed. Simultaneously, ESMA provides enough leeway to ensure that the rules do not obligé CRAs to “automate their approach so that if a rating category exceeds or falls below their expectations, the CRAs should change their methodology / credit ratings mechanistically” (ESMA 2016: 11). Hence, ESMA requires CRAs to draw conclusions from faulty expectations even if this does not predict the methodologies’ future adequacy. But ESMA knows better than to become too closely involved in this domain.

Despite CRAs’ deeply problematical pre-crisis methodologies, policymakers have struggled to find a solution and ultimately adopted contradictory rules. Regulators acknowledge the inherent limitations of scrutinizing methodologies: “It is the financial system that relies on these opinions [of the Big Three], and the models have to be good, but they will never be perfect anyway. So even if ESMA would have 200 quants checking every single input and every single output, it will not change very much” (Interview 20160413a). The adopted rules reflect the regulator’s dilemma: regulators know that substantive involvement will not solve the performativity problem and likely makes it worse, but neither can they afford to leave it completely to the CRAs.

4.4.3 Increasing diversity through a European CRA

If the structured finance debacle had not shaken EU’s confidence in the rating sector, the Eurozone debt crisis certainly did. When the Big Three started downgrading Greece, Portugal and Ireland, angered EU-politicians stated they were behaving irresponsibly. EU Commissioner Barnier expressed his discontent in May 2010: “It is not normal for these rating agencies to play such an
important role and to be so few in number” (quoted in: EurActiv 2010). The financial turmoil once again exposed the dominance of the Big Three: “even if they’re right or wrong it does not matter, if one of the major rating agencies downgrades one asset class or one country [...] this will have a systemic impact of some kind” (Interview 20160413a).

The Eurozone crisis thus heightened attention to the systemic risks of the rating sector’s homogeneity, owing to its oligopolistic structure (cf. EC 2016c). In response, politicians floated the plan to set up a European CRA, to act as a counterbalance to the major agencies’ pessimistic perspectives. German Chancellor Merkel joined French President Sarkozy in expressing support for an EU CRA, stating that it could provide “an understanding of basic economic mechanisms different from the existing agencies, more oriented towards ...[sustainability] of the economy and less on the short term” (quoted in: Willis 2010). A strong European agency as an alternative to the big American CRAs had also been a long-standing wish of several fractions in the EU Parliament (Pagliari 2013: 220-221). Given high-level support for the idea, the EC was tasked to investigate this option in the third revision of the CRA Regulation (2010-2013).

A key issue was whether it should be a public agency. The EC (2010: 19) identified the ECB as a suitable candidate to issue ratings, or alternatively a new agency could be set up. While private actors such as banks or investors did not express much enthusiasm for either option (EC 2011a; European Banking Federation 2011b), they would unlikely be harmed in any significant way. They mainly seemed concerned whether they would be obliged to use these ratings (European Fund and Asset Management Association [EFAMA] 2011). The CRA-sector was divided on the issue: whereas Standard &Poor’s (2011: 9) warned that a public CRA would distort competition, Moody’s was much more supportive. Moody’s (2012: 4) argued that “policy makers could neutralise private-sector credit rating opinions by introducing a public-sector voice to contribute competing views”, and that this was mostly a “matter of political will”.

Yet precisely this political will was waning. The ECB opposed the idea of having to issue ratings, bluntly stating that “[the] ECB should not issue public ratings to be used for regulatory purposes” (ECB 2011a: 7). Governments publicly responding to the EC consultation (including the UK, France, and the Netherlands) warned for the significant downsides of a public CRA. What was the problem? Regulatory capacity was certainly not the most fundamental obstacle. As policymakers acknowledged, public sector bodies such as the ECB had intimate knowledge of the financial positions of sovereigns. Moreover, the ECB and multiple other EU central banks already had risk-
assessment departments (cf. EC 2015). CRA lobbying also fails to explain policymakers’ hesitation: they were clearly divided on this issue. So where did this hesitation come from?

While politicians hoped to quickly increase the sector’s diversity, policymakers realized that it was more likely that the public CRA would either attract too little or too much attention. If it was ignored because of being tainted by the “image of political interference” (The Netherlands Ministry of Finance 2011: 10), it would be a waste of money and fail to increase diversity. If, on the other hand, the EU CRA’s ratings were seen as official stamps of approval on sovereign debt, it could lead to herd behavior around these indicators. According to a banking representative, this latter danger was evident if the ECB were to rate sovereign debt: “If you have the ECB issuing ratings, why would anybody still listen to S&P? Why would you still listen to Fitch? Then you would have the ECB saying what is rubbish and what is not. So I can imagine this would have systemic effects on the markets” (Interview 20160603). An EU CRA would not solve the performativity problem but could in fact lead to a worse variant. Despite the major dissatisfaction with the sector’s oligopolistic structure, key public actors backed down.

The EC (2011c) thus did not propose setting up a public CRA, expressing skepticism regarding the feasibility thereof (EC 2012). But several fractions in the EU Parliament (EUP) seemed unshaken by the concerns voiced and kept the idea alive. EUP Vice President Pitella wanted further investigation of the feasibility of a European agency, for instance the European Court of Auditors or the ECB, issuing sovereign ratings (EurActiv 2011). EUP Rapporteur Domenici also tabled the idea (European Parliament 2012). A compromise seemed possible: the EU could (financially) support a European private agency. An EUP Motion (November 2011) had already called on the EC to investigate this possibility.

This option, however, also did not gain sufficient support, but now clearly for fear that it would not get enough attention. A failed initiative in Germany had not boosted confidence. In July 2011, the consulting firm Roland Berger tried to set-up a private rating agency that would be funded by both private and public actors, but it failed to gather enough financial support from issuers and banks (Der Spiegel 2012). When it asked the German government for help it was turned down: the idea of fully funding a CRA that eventually might not even get sufficient attention seemed very unattractive. This failure resonated in the EU: it challenged the prospect that a private European CRA would (eventually) be successful, making it unappealing to fund it with taxpayers’ money (Interview 20160422).
The final CRA 3 Regulation (Recital 43) merely obliged the EC to submit a report on the desirability of setting up a public CRA or a European credit rating foundation. According to stakeholders, this was a way to shelve the issue: “the European Commission eventually said ‘we will write a report on it’, which is usually a good way to get the discussion off the main stage” (Interview 20160421). The submitted report (EC 2015) reiterated the key problem: it would either duplicate existing information (making it a waste of money), or it would get too much attention (making it potentially dangerous). According to the EC, it entailed “the risk of creating over-reliance on a new alternative if relied upon by investors in an exclusive way” (EC 2015: 18). Ultimately, policymakers did not dare go down that road. Once again, the potential harmful consequences of a substantive solution limited policymakers’ reform ambitions. The Commission therefore indicated it would not pursue the idea any further.

4.5 Conclusion

The global financial crisis made clear that ratings can contribute to build-up of systemic risks. Critics looked at governments to fix these flaws: regulatory rating references should be replaced by better indicators, CRAs’ methodologies should be vetted or prescribed, and public alternatives to the dominant CRAs should be set up. Actual reforms turned out differently: while some progress has been made in addressing CRAs’ integrity problems, there is a substantial gap between the magnitude of the identified systemic problems and the adopted solutions. Policymakers encourage market participants to also use other risk indicators, but they themselves still rely on ratings. Regulators introduced procedural requirements for CRAs’ methodologies but steered clear of their substance. And the public CRA that many deemed necessary was never set up.

There have been frequent accusations that this was because of regulators’ unwillingness to fix these problems, either because institutional path-dependence made it too costly, regulators feared private sector opposition, or they were reluctant to discard pre-crisis regulatory ideas. This chapter, in contrast, has argued that limited reforms stem from the impossibility to solve these systemic risk problems. These regulatory limitations are rooted in the performativity of risk assessments: CRAs cannot help but influencing the risks they purportedly only measure, and regulation cannot take this away. Crucially, policymakers feared that bold regulatory actions, such as prescribing rating methodologies, issuing ratings themselves, or requiring market participants to use market-based measures instead, would make things worse.

The limited post-crisis reforms need not necessarily constitute regulatory failure. Some policy problems defy straightforward solutions. This should not be interpreted as a defense of the status
quo ante, nor that half-baked reforms are necessarily conducive to the public good. Indeed, EU’s lack of progress on requiring more diversity in firms’ risk assessment practices is not without risks (Danielsson 2013). The dangers of mechanistic rating reliance may re-emerge once memories of the crisis fade, implying that continuous regulatory vigilance is imperative. But ultimately, there are limits to what regulators can do to fix rating problems.

Does this mean that regulation is futile? Not necessarily. The sobering conclusions should inspire alertness rather than nihilism. First, it requires regulatory efforts to prevent analytical monocultures. Performativity can turn into systemic crises when “all actors come to share the same or similar beliefs, narrative or modelling framework” (Bronk 2013: 346). To spot anomalies and potential sources of systemic risks, we need institutionalized ‘self-doubt’: organizations that provide alternative narratives to dominant conceptions of benign market developments. This may go some way in tempering future ‘this-time-is-different’-delusions. Second, regulators should by all means attempt to address the underlying forces of such crises: abnormal credit growth (Drehmann et al. 2011). Tackling this phenomenon, even if it will not prevent crises, will at least ensure that once problems materialize and market participants’ optimism gives way to pessimism, this will not again bring down the whole financial system. We will return to these policy implications in the final chapter.

In both the domain of financial instrument accounting and credit rating agency regulation, the reflexivity of financial markets hampers policymakers in designing rules conducive to stability. The following chapter will incorporate this point into a broader claim about post-crisis regulatory reforms: while reforms appear to be quite limited, this need not necessarily stem from regulators’ unwillingness to fix the underlying stability problems, but more importantly from their inability to do so. Again, this stems from regulatory dilemmas caused by the reflexivity of financial markets. To make this argument, I will return to both the politics of accounting standard setting and credit rating agency regulation, but I will also focus more specifically on banking regulation. After the crisis, policymakers agreed that banking rules were woefully inadequate. In particular, many banks did not have enough liquid assets to meet funding problems, suggesting the need to design adequate bank liquidity requirements. Yet as we shall see, identifying the problem is only one step. Finding an appropriate solution is something completely different.
The regulator’s conundrum. How market reflexivity limits fundamental financial reform

5.1 Introduction

In the run-up to the financial crisis, regulators increasingly embedded financial firms’ valuation routines in financial stability policy, for example when Basel II allowed major banks to rely on their own risk models to calculate required capital (Tarullo 2008) and also reinforced private credit rating agencies (CRAs) as arbiters of creditworthiness (Kruck 2011; Paudyn 2013). As discussed in the previous chapters, already before the crisis regulatory reliance on private actors’ valuation routines proved quite controversial. Regulators frequently opted for hybrid approaches, providing key risk parameters themselves or limiting the use of market-based valuation routines. Yet the crisis exposed major shortcomings the pre-crisis approach. Just like fair value accounting (Botzem 2013), which relied on markets to value assets and liabilities, firms’ valuation routines proved destabilizing: optimism would feed strong valuations, which would buttress firms’ confidence and thus encourage further lending and risk-taking. When markets turned in 2007, this seemingly virtuous circle turned into a vicious one (Crockett 2008). Decentralized valuation approaches, in short, fueled procyclicality and systemic risks (Baker 2013b).

The crash underscored that financial markets are reflexive (Minsky 2008 [1986]; Soros 2008). Market reflexivity implies that valuation techniques are performative: they never just estimate market values or risks, but also shape them as they guide financial actors’ decisions (MacKenzie 2006). They not only missed the build-up of systemic vulnerability, but actively contributed to it (Financial Services Authority 2009b). With this in mind, public authorities were expected to curb destabilizing practices by becoming much more prescriptive in valuation routines. Ideas included stricter rules for judging financial instruments’ riskiness in capital and liquidity regulation, filtering out the procyclical effects of accounting standards, or limiting the impact of flawed CRA methodologies (Brunnermeier et al. 2009; Sy 2009; Warwick Commission 2009).

Compared to the enormity of financial market failure, however, reforms have been limited (Helleiner 2014). Crucially, public authorities have refused to take the lead on valuation routines. Accounting standards are little changed from before the crisis (see chapter 3), CRAs continue to

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decide on their own methodologies (see chapter 4), and banks’ investment and funding decisions are still predominantly informed by their own risk models (Lall 2012).

The most prominent IPE-explanation for post-crisis regulatory stasis has been regulatory capture: financial firms have bent regulation to their own advantage, compromising the public interest in financial stability along the way. Such an argument builds on a long tradition of thought that depicts regulation as a tug of war between public authorities and private actors – which the latter eventually win, to the detriment of the general public (Stigler 1971). If the appreciation of market reflexivity did not inspire radical changes, then apparently regulators placed private interest over and above the public good (Lall 2012; Goldbach 2015; Underhill 2015).

In this chapter, we contest this account of post-crisis reforms and the underlying framing of regulatory politics more generally. While regulators’ appreciation of financial market reflexivity had been cited as the key reason to expect drastic regulatory overhaul, we argue, in contrast, that it has had the opposite effect. Reflexivity inspires regulatory timidity, not boldness. We denote this dynamic as the regulator’s conundrum: because valuation routines are inevitably performative – irrespective of whether they are public or private – regulators cannot simply regulate their potentially detrimental effects away. In fact, when they prescribe specific routines or offer official seals of approval for them, they may reinforce rather than mitigate systemic risks by enforcing herding among market participants and lulling them into a false sense of security.

Regulatory outcomes that look like evidence of capture at first glance may therefore be no such thing. When public authorities shy away from highly prescriptive rules and build in much leeway instead, that may indeed suit private actors. But it is also consistent with regulators being aware of reflexivity and the limits it imposes on public policy fixes for financial instability. Indeed, when there is clear evidence of such awareness, we argue that it is a much more convincing explanation of regulatory restraint than the idea that private interests had blocked alternative policies that regulators knew to be in the public interest. The cautious measures should be seen as attempts to serve the public good, not as evidence that it has been sidelined.

We illustrate this argument empirically through three case-studies of post-crisis reform in the European Union: (1) the regulation of credit rating methodologies; (2) the introduction of bank liquidity requirements; and (3) the modification of accounting standards for financial instruments. Aspects of two of these cases were already discussed in the previous chapters, whereas bank liquidity requirements have not been discussed before.
Valuation routines stand central in all these cases, but the regulatory domains differ in terms of the distribution of responsibilities, the actors involved, and the object of regulation. The main responsibility for rule development lies with securities markets regulators, banking regulators, and accounting standard setters, respectively. The private actors directly affected also differ: regulating rating methodologies predominantly affects the big American rating agencies, liquidity regulation is a direct concern for banks, while financial accounting standards are relevant to a much wider and heterogeneous range of actors. The themes are different: the first case is about how to calculate credit risk; the second about the composition of banks’ balance sheets; and the third is about how firms should value the instruments on these balance sheets. This diversity makes these cases suitable to illustrate the argument’s broad scope. Despite these differences, in each one the appreciation of market reflexivity – and of the attendant impossibility of regulating valuation practices effectively – has hampered reform.

5.2 High hopes, unmet expectations

5.2.1 The crisis of valuation and risk management

Financial markets traffic in futurology. When players in those markets price assets and liabilities, their valuation routines are shot through with assumptions about the future (Beckert 2016): estimates of default probabilities, interest rates levels in the years to come, economic growth trajectories, foreign exchange movements, and so on. The possibility that firms’ assessments are off the mark generates financial risk – and the crisis beginning in 2007 demonstrated just how badly things can go wrong.

Firms’ valuation practices are key to financial market functioning. They come in two basic guises: risk assessment, and assigning monetary values to assets and liabilities (valuation in the narrow sense). Risk assessment means putting probabilities on different future scenarios, for example that a debtor defaults, that an investment portfolio will lose value, that a currency will crash, or that ultra-low interest rates will prevail. The assignment of prices to financial instruments builds on such risk assessments, and it concerns both the valuation of a portfolio that is held by an institution as well as an estimation of what an appropriate price would be for which to buy or sell a particular asset.

The importance of these practices explains their centrality in regulatory politics. Issues such as the regulatory reliance on banks’ or CRAs’ risk-estimates and the scope of fair value accounting had been subject of much controversy well before the crisis (Tarullo 2008; André et al. 2009; Kruck
2011). It took the financial crisis itself, however, to demonstrate the real-world impact of state-of-the-art market practices (Power 2009; Mügge 2013). The British Financial Services Authority (FSA 2009b) criticized a misplaced reliance on sophisticated mathematical techniques, such as Value-at-Risk based methodologies. Others questioned the widespread reliance on market-based risk-indicators such as credit default swap spreads, warning that such ‘trust in the market’ was misguided (Warwick Commission 2009).

Fundamentally, critics pointed out that financial markets are reflexive. This means that the system changes under observation: market participants’ ideas about (other participants’ ideas about) the functioning of the system shapes their behavior and thereby affect the system’s functioning. It has no solid anchor outside of market participants’ assessments (Soros 2008; Sinclair 2010; Mügge and Perry 2014). The systemic consequences of reflexivity were already recognized and described by Keynes (1964 [1936]) and famously picked up by Minsky (2008 [1986]): systemic risks are endogenous to financial markets. Optimistic assessments are self-enforcing when they stimulate investment and drive up asset prices. This feedback loop raises the fragility of the system even though it appears increasingly stable (Borio et al. 2012). A relatively minor event, for example a corporate failure or an interest rate increase, can be a breaking point and turn a boom into a bust (Gerdin 2014).

Market reflexivity has particularly pressing implications for our understanding of financial risks and values: it implies that they are not given, waiting to be accurately measured, because measurement itself changes them (Paudyn 2013; Persaud 2015). The problem was therefore not that firms’ valuation practices were ‘off the mark’, but rather that they themselves were a key driver of market prices and risks – that they were, in a word, performative (MacKenzie 2006). Performativity therefore is a specific facet of market reflexivity more generally: it specifically concerns formalized routines and models that purport to assess or observe markets but shape them instead; it could be understood as a form of hard-wired reflexivity.

Performativity has posed a special challenge to reliance on decentralized valuation routines. Individual firms treat values and risks as independent from their actions (so, as exogenous), often relying on indicators of recent market trends in their assessments (BIS 2008). But in a micro-macro paradox, individually sensible behavior can feed systemic risks (FSA 2009b; Baker 2013b; Danielsson 2013). Fair value accounting has allowed firms to record rising asset prices as profit, further stimulating balance sheet expansions and asset price rises (Mügge and Stellinga 2015). The credit ratings that labeled structured finance instruments as ‘safe’ have shaped the risks they
purportedly assessed, belying their ambition to objectivity (Paudyn 2013). Value-at-Risk models have done the same (Lockwood 2015). In short, the performative effects of pre-crisis tools were particularly nefarious: decentralized risk assessments put market reflexivity in overdrive, as it were.

Many academics as well as public and civil society actors have demanded much more heavy-handed public intervention as a result (Sarkozy 2008; Soros 2008; Stiglitz 2010). Mere tweaking of existing rules would not suffice. After all, many flaws in valuation routines had been buffeted by pre-crisis regulation (Brunnermeier et al. 2009; Warwick Commission 2009). So faulty credit ratings for complex financial products suggested that public authorities should introduce quality checks for rating methodologies (Sy 2009) or even start doing the rating themselves through a public rating agency (Bofinger 2009). And banks’ pre-crisis risk models, that apparently contributed to procyclicality by allowing them to reduce capital requirements and underestimate liquidity risks during the boom, seemed to call for public authorities’ prescription or intensified checking of risk-assessment procedures (Di Noia et al. 2009). The alternative to privately controlled valuation routines would be ones that are publicly monitored, mandated or even executed.

Post-crisis reforms, however, have failed to meet the high reform hopes that the crisis had spawned. Regulators and supervisors have tightened many existing rules and introduced a flurry of new ones at the global, European, and national levels (Pagliari 2012b; European Commission 2014b). They also strengthened the competences of many regulatory and supervisory agencies, think for example of the new European System of Financial Supervision. But reforms have fallen short of the expected fundamental transformation and have instead been incremental and half-hearted (Helleiner 2014; Moschella and Tsingou 2013a). Crucially, precisely in those areas where reflexivity is the core issue, central weaknesses have not been tackled. Banks still have much discretion in risk-weighting their own portfolios, never mind their apparent inability to do so well. Newly introduced liquidity rules fail to set hard standards for banks’ investments in safe assets and their reliance on stable funding sources. Regulators have refrained from prescribing rating agencies’ methodologies. Accounting standards for financial instruments still engender the danger of serious procyclicality. So especially in the domains where they seemed most necessary, reforms have failed to live up to expectations (Helleiner 2014).
5.2.2 Regulatory capture: as skeptical assessment

Why have the obvious failings of financial regulation not generated more fundamental reform? The common answer is that big, internationally active financial firms succeeded to block, stall, or water down sweeping reforms (cf. Finance Watch 2016; SOMO 2016). Regulation fell victim to regulatory capture and prioritized private benefits over the public interest – an assessment that we challenge with our focus on the regulator’s conundrum, set out further below.

Many reform accounts take regulation that suits financial firms as evidence of regulatory capture. Sundry financial firms had reaped substantial material benefits from the pre-crisis regulatory approach and therefore preferred not straying too far from the status quo. While regulators (at the national or international level) set out to fix financial flaws by designing rules conducive to the public interest (roughly, rules that ensure financial stability), they were led astray by particularistic interests, so the argument (Helleiner 2014; Goldbach 2015; Underhill 2015). “By hijacking the negotiations […], large international banks succeeded in minimizing their required levels of capital, with potentially disastrous consequences for the stability of the international financial system” (Lall 2012: 611).

Other scholars have nuanced this rather narrow capture account. Young (2012) argues that regulators frequently resist the vehement lobbying of big financial firms and adopt rules against their opposition. Moreover, struggles over financial regulation involve more actors than just big banks (Kastner 2014; Pagliari and Young 2014), implying that a “multitude of participants within or outside finance are capable of exercising an influence that knocks the regulator off its original balance” (Pagliari 2012a: 9). Still others warn for tautological reasoning in capture accounts: regulatory reform always has distributive consequences, so that a search for ‘winners’ – subsequently identified as policy captors – is almost certain to succeed (Carpenter and Moss 2012; McPhilemy 2013).

While these accounts refine the capture line of argument, they share with it an assumption that we argue is unwarranted: that regulators would know which rules would promote the public interest – irrespective of whether they eventually adopt them or not. Both capture narratives and its criticisms suggest that after the crisis regulators had a clear idea of what rule-sets would fix finance. Applied to valuation practices, this implies that regulators – now aware of the systemic risks of decentralized valuation routines – were in the position to replace them with ones that they knew would contribute to the public interest. These rules, so the assumption, would fundamentally depart from pre-crisis ones: while reforms would likely harm financial firms’
material interests, they would contribute to financial stability. If it were not for capture, regulators would have succeeded in fixing valuation flaws.

We contest this reading of regulatory politics. It is far from obvious that rule-sets starkly different from pre-crisis approaches would necessarily contribute to financial stability. While in retrospect the reliance on decentralized valuation routines was woefully inadequate, we should not automatically assume that obviously better alternatives were readily available but ignored. As Charles Goodhart (2009a: 11), not exactly a cheerleader of the pre-crisis regulatory approach, acknowledges,

"Basel II and [International Financial Reporting Standards] were not introduced out of some perverse wish to destabilise the world's financial system, though they have, alas, played a supporting role in that outcome. Indeed Basel II incorporates best available current thinking on micro-prudential behaviour for individual banks, and 'mark-to-market' may have unfortunate systemic side effects, but [the alternatives] are generally (much) worse."

Crucially, alternative valuation approaches – such as those prescribed by regulators – also were not without shortcomings. For example, they could reinforce rather than mitigate herd behavior if they would all steer firms in the same direction. In other words, the alternatives were not clearly superior to pre-crisis approaches (Mügge 2013).

Indeed, it is not obvious that on these issues public and private interests can be neatly separated. Sweeping reform measures that significantly affect financial firms’ short-term profitability may unintentionally destabilize the financial sector when market circumstances are dire. Similarly, relaxing valuation rules in stressful times – as happened during the crisis with accounting standards – may be celebrated by firms, but it simultaneously bolsters short-term financial stability. Needless to say, such public dependence on the viability of financial firms is highly undesirable. It is a constituent dilemma of thoroughly financialized economies and the reality regulators confront when designing reforms (Mügge and Stellinga 2015). It also implies, however, that what at first sight may look like capture in the sense outlined above may be no such thing.

5.3 The regulator’s conundrum

We argue that regulators may resist radical reform not because they neglect the public interest but because they fear that such reforms would hurt it. In essence, performativity makes it so difficult to design rules that are both very prescriptive and effective that regulators shrink away from them. Scholars cannot assume that these policy outcomes – if they are beneficial to (big)
financial firms – are necessarily the result of capture. Instead, we have to take seriously the dilemmas that regulators face in assessing the pros and cons of different rule-sets.

The replacement of decentralized valuation practices with a much more prescriptive approach is hampered by what we identify as the regulator’s conundrum: regulators cannot regulate away the performativity of valuation techniques. The regulatory question becomes which valuation techniques will ensure the least damaging performative effects, and there are no obvious answers. If private actors are unable to devise proper valuation techniques by themselves, why should we expect public actors to be able to mandate and prescribe them? Performativity is just as much of a problem for public authorities as it is for financial firms.

Indeed, performativity furnishes two potent arguments against too much public intervention. First, and most importantly, publicly mandated valuation techniques might worsen the problems they were meant to solve. Public authorities might hard-wire an inevitably faulty valuation procedure into policy and thereby force financial actors all in the same direction, especially in case of European or global policy. Arguably, that is what had happened when banks had been obliged to use credit ratings in the risk-weighting of structured finance assets (Gelpern and Gerding 2016). Although potentially undesirable from a microprudential or ‘level playing field’ perspective, the fallibility of valuations would actually encourage a diversity of valuation approaches in the marketplace instead of publicly mandated homogeneity (Danielsson 2013).

Second, if valuation routines will necessarily have deleterious effects and public authorities have no reason to believe they will do a better job than private actors, they have no incentive to get their hands dirty, as it were. Mandating a particular valuation technique, or approving one devised by a private actor, implicates public actors when things go wrong – leading to reputational damage and (possibly) litigation risks. This problem has always dogged stress tests, and it ultimately is inescapable. Public actors have an incentive to steer clear of valuation routines themselves.

In light of these considerations, a capture perspective poorly fits the cases we discuss and is not convincing theoretically. It underappreciates how financial reflexivity and the associated performativity of valuation techniques prevent clear-cut solutions to regulatory challenges. Powerful interests frequently intervene as policymakers consider reform. But it is far from obvious that a translation of performativity into reforms would have come easy if only regulators had wanted. In our empirical cases we find that regulators face conundrums that hinder radical reforms – conundrums that are ultimately rooted in reflexivity itself. It generates the timid reforms
that champions of reflexivity decry. We observe limited reforms not *despite* of reflexivity but *because of* it.

This argument generates several empirical expectations. Regulators face incentives to opt for half-baked solutions, which neither fully embrace nor fully reject public guidance over valuation routines. Solutions should often have a temporary character, either because they are designated as temporary from the outset or turn out to be so through frequent policy reversals and backtracking by regulators. Finally, we expect regulators to defer implementation of crisis-induced reforms frequently, partly so as to gauge the unpredictable market impact of these rules, but more importantly simply to kick the regulatory can down the road.

These outcomes, of course, can still to some extent be congruent with capture accounts of post-crisis reforms. To adjudicate between performativity-induced caution and regulatory capture as explanations for outcomes we therefore delve into the rule substance and the policymaking process itself. If we find the kinds of regulatory dilemmas outlined above in policy domains, and also find clear signs of regulators being aware of them and therefore shying away from drastic reforms, we argue that the case is much stronger for performativity itself as the brake on policy reversals than a capture-induced neglect of the public interest. Regulators’ acknowledgment of the significant risks of publicly prescribed valuation routines for financial market functioning would constitute proof that lack of substantial reforms is not necessarily due to regulators’ unwillingness to fix valuation routines, but rather to their inability to do so.

5.4 The regulator's conundrum in practice

This section illustrates these arguments for key valuation and risk assessment practices: credit rating agencies’ methodologies, banks’ liquidity-risk assessments, and valuation approaches for financial instruments. While regulators address these practices in the context of broader regulatory frameworks – credit rating agency regulation, bank liquidity requirements, and accounting regulation – these practices have been at the heart of the problem in these frameworks. Market reflexivity and the concomitant performativity problem limits regulators’ ability to fix valuation problems in these regulatory domains. Each case-study combines two elements: we first outline the regulator’s conundrum in the domain in question and then demonstrate how it shaped regulatory dynamics in the EU.
5.4.1 Regulating credit rating agencies’ methodologies

A credit rating is an indicator of the assessment of a credit rating agency (CRA) regarding the creditworthiness of a particular entity (such as a firm or a government) or a particular obligation (such as a structured finance security), expressed using a ranking system (Kruck 2011). Ratings are meant to assess the probability of defaults or losses for investors. While the Big Three firms – Standard & Poor’s, Moody’s, and Fitch, together accounting for over 90 percent of the rating market – have different rating approaches, they share an emphasis on rating ‘through-the-cycle’ (TTC). This means that their ratings should reflect an entity’s credit risk irrespective of the state of the economic cycle, although in practice ratings do tend to be procyclical (Warwick Commission 2009; Deb et al. 2011).

Ratings are about credit risks, and these are impossible to estimate with certainty. By definition risk is about future occurrences, meaning it is always virtual: once problems materialize, we no longer speak about risk (Paudyn 2013). More problematically, the ratings affect risks when market participants base investment decisions on them. Positive assessments trigger easy access to cheap credit, while downgrades can exacerbate the rating target’s financial strains. This particularly applies to the ratings of the Big Three: as these are widely used (partly through inclusion in financial contracts and particular regulations), rating changes can have systemic effects (Sy 2009). Although methodologies obviously differ in quality, no methodology is immune to the perils of performativity: ratings always affect and never just measure risks. A ‘correct’ rating methodology remains elusive.

Performativity thus imposes severe constraints on regulators. Because rating methodologies shape the rating outcomes, they clearly warrant regulatory attention. But why would regulators be better at identifying appropriate methodologies than CRAs? The essence of the regulator’s conundrum is that intervention in rating methodologies could aggravate the problems it was meant to solve. The systemic effects of ratings hinge on the market dominance of the Big Three and their similar rating approaches. Prescribing particular methodologies could amplify this effect by homogenizing ratings even more. And public vetting of methodologies could suggest that they are somehow officially approved, further bolstering their importance.

These problems permeate post-crisis EU policy-making. Before then, CRAs were essentially unregulated. The European Commission had championed ‘monitored self-regulation’, in which the Committee of European Securities Regulators (CESR) would monitor CRA compliance with the IOSCO-Code of Conduct (European Commission 2006). This code required CRAs to disclose some
methodology-relevant information to investors, but the bar was so low that the Big Three were thought to comply with these requirements already (IOSCO 2004; CESR 2006). The 2006 Capital Requirements Directive required banking supervisors to assess some aspects of CRAs’ methodologies before allowing banks to use their ratings in calculating capital requirements, yet the European Commission (2006) admitted that in practice this measure too fell short of regulating CRAs. The pre-crisis regulatory framework steered clear of rating methodologies and procedures (Hiss and Nagel 2014; Interview 20160316).

When the biggest CRAs downgraded scores of structured finance securities in the summer of 2007, they sent shockwaves through the financial system and precipitated the crisis (Morris 2008). Observers identified market participants’ overreliance on ratings, partly resulting from their inclusion in financial regulations, as a key problem (FSF 2008). However, there had also been massive failures in the rating sector itself. Critics pointed to conflicts-of-interest problems, such as the issuer-pays model and the lack of ‘firewalls’ between the advisory and rating departments (White 2010; Coffee 2011). But the problems were not limited to CRAs’ integrity, they argued; they cut to the heart of the rating agency business: methodologies.

The content of the methodologies – rating assumptions, models, and the weighting of different risk factors – had grave shortcomings (FSA 2009a; Deb et al. 2011). CRAs lacked long-run data on default risks for structured finance products; they missed the deteriorating quality of the underlying asset pools; they failed to incorporate these products’ exposure to systematic risk; they were too sanguine about the US housing market and correlations between defaults; and they erroneously supposed that risk probabilities followed a normal rather than a ‘fat-tail’ distribution (Committee on the Global Financial System 2008). Moreover, as CRAs’ through-the-cycle rating approach ensured a slow response to market developments, their eventual aggressive downgrades occurred when market tension was already very high (Partnoy 2009). At the same time, CRAs lacked adequate procedures to develop, implement, review and disclose their methodologies. Investors were left to guess about the meaning of ratings, especially for structured finance products (Sy 2009).

The crisis thus challenged the pre-crisis policy approach. While European authorities, like their US counterparts, recognized the need of reducing overreliance on ratings, they also resolved that they needed a regulatory framework for CRAs (Kruck 2011). The adopted Regulation (CRA 1) arguably is rather intrusive, but the biggest changes were aimed at mitigating conflicts-of-interests by imposing higher governance standards (García Alcubilla and Ruiz del Pozo 2012). Fixing rating
methodologies proved thornier, although they were a focal point in negotiations on CRA 1. As acknowledged by a European securities market regulator involved in the process: “methodology was the key issue, because at the end what goes out, the triple-A or double-B or whatever, comes from a certain methodology” (Interview 20160408a).

At the same time, from the outset it was unclear for regulators on which aspects they should focus. The EC consultation paper had been vague on the issue of regulatory scrutiny of methodologies: while it made clear that the proposed requirements “do not interfere with the content of ratings” (EC 2008a: 3), it did not provide a similar provision for methodologies. This worried CRAs, who feared regulatory interference with their rating approaches (Interview 20160413a; Interview 20160422; Standard & Poor’s 2008). The eventual policy outcome – Article 23 of the Regulation contains an explicit provision to leave methodologies’ substance alone – could thus suggest CRAs captured regulators along the way and blocked unwelcome meddling. But this overlooks that EU regulators and supervisors themselves had from the start been deeply skeptical of vetting rating methodologies, let alone determining methodologies themselves (Interview 20160408a; Interview 20160421). For instance, CESR (2008: 3) argued that the “goal for a potential regulation should be the supervision/monitoring of principles and processes that a CRA undertakes to generate a proper rating rather than influencing the methodology a CRA uses” (cf. CEBS 2008a).

Several problems fed public authorities’ opposition to interference with the rating methodologies, including insufficient regulatory expertise and major conflicts of interest (Interview 20160408a; Interview 20160404). But the substantive problems were most fundamental. In the words of the FSA (2009a: 171), “there is no evidence to suggest that regulators would be more accurate in assessing the appropriateness of methodologies than the CRAs”. Probabilities of future events are intractable. As an EU banking regulator frames it: “the problem is always the same. You can check a methodology on ratings, which is about credit quality, which is something you cannot observe. Or not even test for the next cycle, of which we don’t even know how long it is…. So all these things you cannot do with them” (Interview 20160413b). Given the slim chance that substantive involvement would improve rating quality, it would at best shift reputational (and possibly litigation) risks towards the regulator, making it an unattractive policy option (Interview 20160408b).

The most fundamental problem, however, was that regulators’ substantive involvement would not take away rating performativity. Vetting or prescribing methodologies would necessitate regulators to determine whether CRAs should adopt ‘point-in-time’ (PIT) rating approaches
instead of the common TTC practice (cf. Partnoy 2009). However, the performative effects of both
approaches can be destabilizing: while the TTC-approach leads to ratings that are slow to respond
to market developments, the volatility of PIT-estimates means that this approach could also
increase financial instability (Gonzales et al. 2004; Hunt 2009). Moreover, if regulators prescribed
rating methodologies, they would boost systemic risks: “if the government is wrong, everybody is
wrong” (Interview 20160413b). Market participants could consider ratings as an ‘official seal of
approval’, contributing to herd behavior.

While CRA 1 formally prevented regulators from substantive involvement in methodologies, this
did not imply that CRAs were completely ‘off the hook’ – as capture accounts would suggest. Much
to the chagrin of CRAs, Article 8 of CRA 1 introduced significant procedural requirements
concerning the development, application, review, and disclosure of rating methodologies. A key
clause – Article 8 (3) – would appear to tackle the content of methodologies: CRAs “shall use
methodologies that are rigorous, systematic, continuous and subject to validation based on
historical experience, including back-testing”. This implied that the European Securities and
Markets Authority (ESMA) – CESR’s successor and the main CRA supervisor since the first revision
of the Regulation (CRA 2) in 2011 – would have to check whether CRAs’ methodologies conformed
to Article 8 (3), without actually interfering with their content. But how this was to be done has
been a key dilemma ever since.

The problem emerged when, during the Eurozone debt-crisis, the European Commission (2011b: 3)
proposed that when a CRA wants to modify its methodologies, “[the] credit rating agency may
only apply the new rating methodology after ESMA has confirmed the methodology’s compliance
with Article 8 (3)”. ESMA itself, however, led the subsequent opposition to the proposal (Interview
20160421; Interview 20160422). Its chairman argued that

[m]oving to the new CRA3 has indeed the tension that we, as ESMA, become
involved in the rating methodologies. There is clearly a tension there with
the strong points of CRA1 and CRA2 that we should not interfere with the
ratings themselves (House of Commons 2011).

This provision would have “led to a sort of regulators-approved rating. You would get a triple-A
rating that was seen by investors as being in some way ESMA-approved. That is not something you
want to have” (Interview 20160421). The proposal was eventually shelved; instead, the second
revision of the Regulation (CRA 3; 2013) did require CRAs to notify ESMA of material changes to
their methodologies. Key members of the European Council had found the original proposal
unworkable (Interview 20160404; Interview 20160408a).
Regulators have not created substantive requirements for CRAs’ methodologies, but they do subject them to supervisory scrutiny. Where to draw the line proves difficult. As it is impossible to assess ex ante whether methodologies are ‘correct’ (cf. Paudyn 2013; 2015), ESMA checks whether CRAs apply their methodologies consistently and modify them in case of unexpectedly poor performance. This later aspect of ‘methodology validation’ is controversial. CRAs warn that this approach pushes them in the direction of quantitative rating approaches, which in their eyes contributes to rating homogeneity, thereby potentially boosting ratings’ performative effects (Interview 20160414a). ESMA (2016: 11), however, denies that the rules oblige CRAs to “automate their approach” and cling to tighter standards for CRAs to check their own methodologies: rating agencies should assess whether default percentages in different categories match their earlier expectations; if they do not, methodologies should be reviewed. CRAs thus face tighter rules on their methodologies – much to their chagrin (Moody’s 2016) – but supervisors know better than to become too closely involved in this domain.

Despite fundamental flaws of CRAs’ pre-crisis methodologies, regulators have struggled to respond effectively. The new rules aspire to stringency on the procedural aspects of rating without regulators’ becoming enmeshed in the actual methodologies. But in effect, that line is impossible to draw, and the rules remain contradictory. This policy outcome is certainly not clear evidence of CRAs successfully convincing regulators to adopt lenient rules that harm the public interest. Such a diagnosis would be hard to square with the overall regulatory backlash CRAs have seen since the crisis, and the fact that they have frequently but unsuccessfully opposed regulatory scrutiny of their methodologies (García Alcubilla and Ruiz del Pozo 2012; Interview 20160421; Interview 20160422). More than anything, from the outset regulators have not been able to find a coherent solution: they know that substantive involvement can worsen ratings’ systemic effects, but neither can they afford to leave it completely to the CRAs. The uneasy policy fixes reveal how performativity presented public authorities with a conundrum impossible to solve.

5.4.2 The designation of ‘low-risk assets’ in liquidity regulation

Regulators dread markets grinding to a halt in periods of stress. As illiquidity and insolvency can be indistinguishable in crises, they want banks to hold assets that are low-risk and highly liquid, for example bonds of ‘financially sound’ governments or firms. This should reduce banks’ liquidity risks, commonly defined as the risk of not being able to sell particular assets without substantially affecting their price (market liquidity risk) or not being able to roll-over debt obligations (funding liquidity risk).
The safety of an asset, however, does not reside in the financial contract itself. There is an inevitable circularity: an asset perceived as liquid will be demanded for its liquidity characteristics, which increases its liquidity – and the other way around (Crockett 2008). Assets’ liquidity furthermore hinges on market conditions and the counterparty’s soundness and safety net (Warwick Commission 2009; Gelpern and Gerding 2016). Hence, what matters is whether other actors stand ready to buy the asset. The Banque de France (2008a: 1) calls this “the fundamental endogeneity of liquidity, which depends on confidence, i.e. the ability of depositors, institutions, and market participants to take risks on each other”. The safety of assets can change dramatically as market participants depend on collective guesses of each other’s soundness.

Market reflexivity is at the root of liquidity’s endogeneity. The concomitant regulator’s conundrum will obstruct regulators in their attempts to ensure banks have sufficient liquid assets to weather financial stress. When they attempt to safeguard individual institutions by pushing them into ‘liquid’ asset classes, they may aggravate the problems they intended to solve. Firms may shed assets falling outside of regulators’ definition of liquid assets and thereby contribute to market liquidity risk. In addition, firms’ overcrowding in asset categories defined as safe may unwittingly erode their safety and liquidity over time (cf. Minsky 2008 [1986]; Soros 2008; Gelpern and Gerding 2016). The spectacular failure of AAA-rated mortgage backed securities (MBS) during the crisis is a case in point. Favorable regulatory treatment had made MBS popular, but rampant demand unhinged the whole market segment, and a collective sell-off of these instruments during the crisis made them illiquid (Gerding 2014).

So although regulators want firms to reserve a proportion of their balance sheets for so-called High Quality Liquid Assets (HQLAs), regulatory labeling of ‘low-risk’ assets is far from innocent. On the one hand, a meaningful HQLA-category needs to be restrictive. On the other hand, such restrictiveness can be counterproductive because it reduces liquidity when it is most needed. This dilemma has hampered the post-crisis development of liquidity requirements. Regulators are torn between restrictive rules to tackle insufficient liquidity in crisis times and lax rules to undo the perverse consequences of strict rules: a collective scramble for the limited pool of officially designated HQLAs.

Liquidity standards were peripheral to advanced economies’ pre-crisis regulatory frameworks. In the Basel Accords of 1988 (Basel I) and 2004 (Basel II) regulators concentrated on banks’ capital. Although the Basel Committee on Banking Supervision (BCBS) had considered developing liquidity rules as well, it ultimately deemed them unnecessary. Capital requirements would suffice to
safeguard solvency, and solvent institutions would be resilient and could always refinance themselves through the many channels available. Regulators discounted the possibility of complete market freezes when all firms attempted to improve their liquidity position simultaneously (Goodhart 2011; Bonner and Hilbers 2014).

The crisis trashed that view. Highly rated MBS became illiquid when mortgage defaults started to increase. Banks struggled to borrow money, even short term, as lenders fretted about the value of the collateral that banks could pledge (Kowalik 2013). Micro prudence turned into macro disaster: individual banks expected continued access to cheap refinancing, but their collective reliance led to systemic meltdown (Brunnermeier et al. 2009). As these problems pertained to banks’ general funding structure and their ability to sell assets if necessary, it was also clear that the scope of the existing capital adequacy framework was too narrow (Goodhart 2009b).

In response, the BCBS included liquidity standards in Basel III (BCBS 2010a). The Net Stable Funding Ratio (NSFR) should limit maturity mismatches between assets and liabilities. More importantly here, the Liquidity Coverage Ratio (LCR) was to ensure banks would have enough liquid assets to weather short-term stress: HQLAs should cover net outflows during a 30-day period of stress. In spite of the attractiveness of the idea, the devil was in the detail. What would count as HQLAs? What was a ‘likely’ outflow in 30 days? And would banks be (temporarily) allowed to miss the minimum LCR in times of actual stress? Once again the question was to what degree public authorities would prescribe detailed answers, rather than letting banks figure out the details themselves.

The BCBS (2010a) initially proposed a rather strict framework. It suggested a narrow definition of HQLAs, incorporating cash and central bank reserves, government bonds with risk weights of 0% and 20%, and highly-rated corporate bonds. Outflow assumptions were rather drastic, assuming that banks would completely lose access to interbank markets. And banks were forbidden to sink below the minimum LCR no matter what (Bonner and Hilbers 2014).

At the same time, the BCBS deferred implementation until 2015 to create an observation period and allow modifications. These changes were presented in January 2013, and they were substantial. LCR implementation was delayed until 2019, the HQLA-definition was loosened, outflow-assumptions (particularly regarding interbank markets) were softened, and banks were allowed to miss the ratio temporarily (Gomes and Wilkins 2013; Kowalik 2013; Masters 2013). What made the BCBS change its mind?
Capture accounts would highlight successful lobbying of banks, who had criticized the measures as overly stringent (Interview 20160603; Masters and Murphy 2011). But while bankers’ concerns were certainly recognized, the regulatory problems ran far deeper. Regulators had from the start feared the unintended consequences of a stringent LCR-proposal – indeed, this was the core reason for creating the observation period (BCBS 2010a; Caruana 2011a; Gomes and Wilkins 2013).

Throughout the process, regulators struggled with the HQLA-definition. Although a narrow definition is clearly desirable – lest liquidity requirements become meaningless – the unintended consequences are potentially dire, and ultimately inescapable. The IMF fretted that a narrow definition could trigger a deleterious scramble for ‘safe’ assets: unless funding patterns substantially shifted, banks’ potential need for qualifying assets would have been $2 to $4 trillion, far above the already high post-crisis demand for them (IMF 2012). Banks would be incentivized to hold similar portfolios, creating more homogeneity and systemic risk while displacing liquidity risks to other corners of the financial sector (Wagner 2013). “A too-stringent set of rules may force banks to take similar actions to reach compliance, resulting in high correlation across certain types of assets and concentrations in some of them”, the IMF (2011: 81) feared.

A strict definition of HQLAs could also prove destabilizing during market stress: banks might collectively attempt to shed assets falling outside of the HQLA-category, effectively increasing systemic market liquidity risks. And liquidity of included assets could be reduced as firms would accumulate rather than trade them (IMF 2011; 2012; Kowalik 2013). Hence, broadening the HQLA-category, even if undesirable from a microprudential perspective, made perfect sense from a systemic one.

The problems of a narrow HQLA-definition would be exacerbated by a fixed minimum ratio. Regulators had always doubted the desirability thereof: while (again) it makes sense from a micro-perspective, it could have deleterious effects at the aggregate level. The BIS (2008: 8) itself already noted that “time- and cycle-invariant minimum liquidity requirements, especially if they take the form of hard constraints, can exacerbate procyclicality: when they are hit, or even approached, they cease to act as buffers”. In their determination to stay above minimum requirements, banks would hoard liquid assets, thereby increasing market stress (cf. Goodhart 2013). The BCBS’ response was not simply to abandon the quest to impose minimum requirements: instead, it required banks to stay above the minimum in normal circumstances, but emphasized that “during
periods of stress, it would be entirely appropriate for banks to use their stock of HQLA, thereby falling below the minimum” (BCBS 2013: §11).

The LCR-revision also reflected banks’ structural importance for the economy at large, necessitating regulatory caution. Opting for a stepwise implementation – requiring banks to gradually build up their stock of HQLA and modify their funding structure accordingly – reflected regulators’ fear that too rapid a transition would have significant procyclical effects (Masters and Nasipour 2013). Finally, softening outflow-assumptions on some (but certainly not all) intra-financial liabilities were primarily to limit central bankers’ concerns. Several key monetary policymakers feared too stringent a standard would clog interbank markets, thereby not only increasing banks’ high dependence on central bank liquidity support, but also harm monetary policy’s transmission effects (Coeuré 2012; Noyer 2012; Gomes and Wilkins 2013).

While softening the rules met banks’ concerns, especially those in France and Germany (Howarth and Quaglia 2013), regulators were not merely favoring private over public interests. Regulators’ first impulse to introduce tighter rules makes sense, but soon thereafter they themselves offered all the right reasons why such stringency might be counterproductive: it could trigger the market distress that regulators sought to avoid. Banks did not simply get their way against the preferences of the regulators, inspired by the wish for financial stability. Regulators themselves realized how the original, stringent proposals could undermine stability and – without a better alternative – opted for the laxer route.

5.4.3 Limiting market-value accounting

Up to this day, there is no consistent, let alone universally agreed, valuation technique for financial instruments. The main approaches – fair value accounting (FVA) and historical cost accounting (HCA) – have both benefits and drawbacks. For banking regulators, the central question is which approach would bolster financial stability – and there is no clear-cut answer.

Proponents of FVA argue that the current market price of any asset or liability is the best value-estimate we have given that it integrates assessments of a wide variety of observers. While banking regulators see merit in this argument, they simultaneously fear that this ‘marking-to-market’ can increase volatility in firms’ income statements, feed herd behavior and generate procyclicality (Akerlof and Shiller 2009; Enria et al. 2004). As argued by Turner (2010a: 3), then chairman of the FSA, “a fully transparent system of across the board mark-to-market accounting could simply increase the speed with which self-reinforcing assumptions about appropriate value generate cycles of irrational exuberance and then despair”. Also, the application of FVA to a bank’s
whole balance sheet, including its liabilities, has counter-intuitive effects: a bank in trouble would be allowed to record its liabilities at a discount and, in an extreme scenario, post a profit (ECB 2004).

HCA records assets and liabilities at acquisition prices and does not update banks’ books to reflect current market conditions. Regulators like HCA for being less volatile than FVA, but they have mixed feelings about other aspects. In an economic downturn, it may hide troubles at financial institutions: while this can limit short-term instability, it may make long-term problems much worse. Derivatives have exacerbated HCA’s shortcomings, as the original cost of a derivative can be a fraction of the ultimate liability. HCA then becomes a poor guide to banks’ viability (ECB 2004). A mixture for FVA and HCA is no panacea, either. Valuing assets and liabilities through different standards contravenes the match between them that defines banks’ risk management (BCBS 2000).

As in the other cases, the performativity of valuation practices is the root of the problem. Accounting standards not only provide a snapshot of corporate activity but influence that activity itself: the negative effects of any approach will strengthen the case for switching to its alternative. So even if mark-to-market valuation is a problem for financial stability, that does not make HCA the obvious long-term solution. This implies that that there is no accounting standard for financial instruments that can count on unequivocal support from banking regulators. In practice, we see policymakers adopting half-baked standards that mix both approaches. Once a particular standard is witnessed to exacerbate problems, policymakers are forced to alter it. Crafting a coherent, durable standard proves elusive.

In the EU, the subprime crisis roughly coincided with the implementation of International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), a private sector organization. Even before then, the IASB’s standard on financial instruments, IAS 39, generated conflict between the IASB and EU authorities. While IAS 39 mixed FVA and HCA, FVA would apply to a significant chunk of financial instruments. As European banks – whether from the UK, France or Germany – had become more active in financial market activities (derivatives trading, market making, etcetera), they feared IAS 39 would increase income volatility. Regulators welcomed the transparency FVA would bring, but feared that an unchecked expansion would harm financial stability (ECB 2004). They therefore asked the IASB to allow firms more flexibility in recognizing value changes for financial instruments; the IASB countered that flexibility would leave firms too much leeway to hide mounting problems. Locked into controversy, the EU simply ‘carved
out’ IAS 39 in 2005: it deleted unwanted rule sections to shield firms from market fluctuations (Mattli and Büthe 2005; Perry and Nölke 2006). But this was not simply regulators doing what banks told them to do: contrary to banks’ wishes, the carve out included rule-sections that would give firms excessive discretion in opportunistically marking-to-market particular financial instruments (Mügge and Stellinga 2015).

The crisis again pushed FVA into the limelight. When market liquidity evaporated, ‘fair values’ of complex financial instruments proved elusive. Critics added that FVA aggravated the crisis by forcing banks to translate value-changes directly into losses, triggering collective fire-sales and contributing to collapsing asset prices. Capital adequacy rules amplified this: losses would erode equity buffers, necessitating banks to raise new capital, reduce lending activities, or sell yet more assets. All three strategies were disadvantageous in an economically depressed context (cf. Financial Stability Forum and Committee on the Global Financial System 2009).

After Lehman Brothers collapsed in September 2008, public authorities tried to limit firms’ exposure to disintegrating markets (Schwarz et al. 2014: 18). EU member states advocated reclassifying assets into categories that did not require market-based valuations to give banks ‘breathing space’. The EU pushed the IASB to modify its rules, threatening yet another carve-out. In October 2008, without due process, the IASB relented and suspended market-based valuations for many assets (André et al. 2009; Stellinga 2014). It thereby allowed tens of billion euros in EU banking losses to go unrecognized in 2008 alone (CESR 2009). At least in the short term, this solution offered troubled banks some relief, thereby also limiting market instability to some extent. But for regulators it was a mixed blessing: down the road, the hidden losses could come back with a vengeance. As critics argued, “one of the few things worse than mark-to-market accounting is allowing it in booms and suspending it in periods of market decline” (Brunnermeier et al. 2009: 41).

Both banking regulators and accounting standard setters therefore argued that a more durable solution was necessary. The IASB promised a whole new standard for financial instruments, and the old debates duly resurfaced: how should financial instruments be measured, and who should decide when banks could switch between valuation methods? The IASB gave up its long-standing push for full FVA in July 2009 and announced that “measuring all financial assets and financial liabilities at fair value is not the most appropriate approach to improving the financial reporting for financial instruments” (IASB 2009b: BC13). A standard mixing FVA and HCA was now no longer presented as a temporary inconvenience, but as a long-term solution.
The BCBS, however, had shifted from cautious FVA support to skepticism, warning that the new approach “should not result in an expansion of fair value accounting” (BCBS 2009a: 1). The proposed standard (IFRS 9) would make fair value a “default category”, and “may lead to more financial instruments being measured at fair value [...] as the conditions for the amortised cost category [the alternative approach] are overly restrictive” (BCBS 2009a: 3). Banking regulators also felt that banks should retain some flexibility to switch between standards “when economic events cause markets to become dislocated and an entity’s management responds to this dislocation by changing its business model” (BCBS 2009a: 9).

Although banks had also pleaded for more flexibility (cf. European Banking Federation 2009), we should not mistake the BCBS’ proposals for evidence that it was merely doing the banks’ bidding. Fearing the manipulation of flexibility, it warned that the “business model concept should be carefully defined by the IASB (...) to avoid abuse” (BCBS 2009a: 3). Regarding reclassification, it forcefully argued that

[any] reclassification should be irrevocable and should be done in rare circumstances only. As the reclassification of a financial instrument can have a significant effect on the financial statements, it is important that such assessments are not made on an instrument-by-instrument basis and that comprehensive disclosures are provided to users (BCBS 2009a: 9).

Regulators’ inability to endorse specific standards or an unambiguous rule for switching between them demonstrates the conundrum they faced: what would be an appropriate valuation technique for financial instruments? Stringent standards may undermine financial stability if they push banks over the brink in times of distress; overly lenient ones may allow them to cook the books.

In response, the IASB (2009c) issued a new proposal that basically followed the banking regulators’ requests, allowing reclassification when a firm changed its business model (IASB 2009c: A268), thereby displacing the valuation problem rather than solving it. IASB’s chairman Hoogervorst (2011) later defended this approach by claiming that “the IASB has always remained pragmatic about which measurement techniques to adopt”, forgetting its pre-crisis push for a full fair value standard. “We know there is no one right answer”, he now admitted.

EU authorities welcomed this pragmatic approach, but to the chagrin of investor representatives and accounting standard setters the EU refused to adopt the new standard (Tait and Sanderson 2009). The European Commission still wondered whether new rules would unduly expand FVA, and banking regulators first wanted to assess other, yet to be finalized aspects of the standard (European Commission 2009). Critics highlighted additional reasons: adopting IFRS 9 could undo
the effects of the ad hoc IAS 39 modification as many instruments would have to return to the fair
value category. Without the old flexibility, many banks would finally have to declare hitherto
unrecognized losses (Tait and Sanderson 2009).

The IASB has struggled to craft a durable standard for financial instruments. Instead of 2010, it
finished work in 2014, with mandatory application postponed until 2018. As European regulators
flagged no major problems with the latest version of IFRS 9 (cf. EBA 2015c), the EU has recently
chosen to endorse it, albeit with renewed caveats (EC 2016b). But their satisfaction may prove
temporary, because the underlying problem remains unsolved: both ignoring and reflecting
changing market circumstances in firms’ accounts can undermine financial stability. Backed by
banking regulators, the IASB has tried to limit the scope for abuse, but regulators will be hard-
pressed to refuse firms ‘breathing space’ when markets turn. Past experience would therefore
suggest this is not the last word in the FVA-HCA saga.

Regulators’ enduring prevarication on financial accounting standards contradicts an excessive
influence of private interests over rule setting: the ultimate standards were not nearly flexible as
banks had hoped. If regulators repeatedly found themselves on the same side of the argument as
the banks, they also forcefully opposed bankers’ pleas for flexibility when they feared for financial
stability. Instead, the pragmatic standard we have now betrays regulators’ inability to solve the
accounting conundrum caused by market reflexivity. As any standard that fixes short-term
problems can aggravate market instability down the road, the goal of a stringent and coherent
standard for financial instruments remains elusive.

5.5 Conclusion

Why, despite the fundamental valuation and risk management problems that the financial crisis
exposed, have we seen only limited regulatory reforms? Rather than taking firm control, public
authorities have struggled with regulatory responses, frequently backtracked on earlier decisions,
or adopted half-baked solutions. In our cases these dynamics are not the results of particularistic
interests hijacking public policy – which would have implied that regulators knew which rules
would promote the public good but chose to favor private interests instead. Instead, the
intractability of financial valuation has precluded convincing answers. These valuation problems
spawn financial instability, herd behavior, the endogenous build-up of systemic risks, and periodic
crashes, and they persist even if public actors assume responsibility for determining valuation
approaches. In fact, the performative effects of publicly prescribed approaches could be worse
than their predecessors.
This conclusion is sobering, as it points to the inherent limits of governing reflexive financial markets. It adds a governance component to the Minskyan insight that financial stability, by inviting overconfidence, breeds instability (Minsky 2008 [1986]). As we already saw in the previous chapters, financial regulation offers no easy answers. Public authorities confront the valuation problems just as much as private actors do. Publicly mandated optimism, for example in the form of favorable risk ratings for sovereign debt in banking regulation, can be just as pernicious as private sector herding.

Capture accounts often treat regulatory controversies as a distraction from the real issues at stake, namely the material interest of the stakeholders. Scholars then compare initial regulatory preferences to eventual regulatory outcomes to determine who ‘won’ the regulatory competition (cf. Carpenter and Moss 2012). We argue instead that we should dive into the controversies and debates that occurred in the policy process and not only treat them as a smokescreen. Policy problems may show a much greater resistance to effective solutions than we often assume.

Two aspects deserve particular attention. First, in today’s financialized economies, public and private interests are not easily separated. When restrictive measures would seriously harm financial firms, they may well undermine the public good along the way. Scholars thus need to pry open the issues at stake, to be in a better position to ascertain when policy outcomes that benefit private financial firms are clear examples of regulatory capture and when these are in fact the best regulators could do, given the circumstances (cf. Pagliari 2012a). This in turn necessitates an analytical focus not merely on policy outcomes but also on the processes leading to them (cf. Carpenter and Moss 2012).

Second, and related, it also requires a different perspective on (international) financial regulators themselves. In the scholarly literature, they are often treated as mere vectors of competing interests (such as national governments or private sector stakeholders), not having any agency themselves. In other instances, regulators are treated as independent agents, but they are attributed the ability to know precisely the (future) real-world effects of different rule-sets (for example, Singer 2007). In both instances, regulators’ substantive dilemmas are assumed to be absent or trivial. We argue, instead, that IPE-scholars need to treat regulators as agents who are confronted with an ambiguous link between rule-sets and public interests. We have to take seriously the genuine puzzling in the regulatory community: controversy and disagreement about the appropriateness of different rule-sets, as well as the limits to what regulators can do to fix finance.
Shortly after the crisis, policymakers realized that fixing firms’ valuation routines would not suffice. Financial firms’ tendency to look at recent trends and therefore operate procyclically is not driven by irrationality, but is inherent to how financial markets operate (Goodhart 2010a: 17). Confronted by this ‘fact of life’, policymakers started to look at ways in public steering could act as a counterweight to private actors’ procyclical behavior. Attempts to introduce countercyclical policies were a key component of policymakers’ endeavor to implement macroprudential policy frameworks: frameworks explicitly designed to limit systemic risks. The next chapter discusses EU’s approach to macroprudential regulation. It will argue that similar problems as those discussed in this chapter (and the previous two) hamper macroprudential reforms. Financial markets’ reflexive nature obstructs a straightforward way to implement foolproof, countercyclical policies.
Fighting the financial cycle. Macroprudential policy, endogenous risks, and regulatory timidity

6.1 Introduction

The global financial crisis of 2007-9 was the materialization of an endogenous build-up of systemic risk in the years before. It demonstrated a key flaw in pre-crisis financial policy: by focusing on individual firms’ stability, supervisors had missed the endogenous build-up of financial fragility. It exposed the assumption that micro-stability ensures systemic stability as a classic fallacy-of-composition mistake (Borio 2009; Warwick Commission 2009; Brunnermeier et al. 2009; Seabrooke and Tsingou 2010).

In response, policymakers turned to ‘macroprudential ideas’ for help. Macroprudential proponents argued that financial regulation should tackle destabilizing feedback loops head-on, whereby policies’ implications for systemic stability should take precedence over those for individual firms. Countercyclical macroprudential policies would aim to mitigate the boom-bust nature of financial markets – increasing policy stringency when systemic risks build-up, while becoming more lenient if they turn into financial distress. In addition, structural macroprudential policies would aim to mitigate systemic risks that exist at any particular point in time, as a result of firms’ common exposures or from them being systemically important (Financial Stability Board [FSB] et al. 2011). These policies would act as a crucial counterweight to financial market participants’ inherent (if often unintended) tendencies towards creating systemic risk.

However, just like post-crisis reforms of firms’ financial valuation routines (see previous chapters), macroprudential policy reforms have been limited. Far from aiming to fight credit and asset bubbles, macroprudential authorities merely aim to increase firms’ resilience in the run-up to financial instability. The policy reforms are largely confined to bank capital requirements. To the extent we see macroprudential elements in other relevant domains – such as liquidity rules, margin requirements, and credit extension – they take the form of a-cyclical (time-invariant) backstops: limits on market participants’ room for maneuver that do not vary over the cycle. The only explicitly countercyclical tool is the Countercyclical Capital Buffer – a variable buffer add-on. But supervisors remain in the dark under what circumstances they should activate it, given continued controversy over how to identify the build-up of systemic risks. Finally, it has been operationalized as an add-on to microprudential frameworks, but the procyclical elements in these frameworks have been only limitedly addressed.
What explains these limited reforms? International political economy (IPE)-scholars have presented macroprudential ideas’ quick rise to popularity in high-level policy arenas as (tentative) evidence that of an ideational paradigm shift. Even if actual policy reforms would take some time to fully materialize, a fundamental policy shift was underway (cf. Baker 2013a; 2013b; Mackintosh 2014). If implemented reforms would fail to live up to the high hopes, this scholarship suggests external factors would be responsible; for example, self-interested lobbying of financial firms, or institutional inertia (cf. Baker 2013b; Underhill 2015).

This chapter argues that to understand the limited reforms, we must also look at factors internal to the macroprudential enterprise that hampered the materialization of an ambitious policy shift. These factors pertain to policymakers’ inability to confidently identify the build-up of systemic risks, in combination with their inability to devise reliable policies to mitigate them. Both are the result of the endogeneity of systemic risk – paradoxically a core tenet of the macroprudential philosophy. As the financial system is reflexive, complex, and highly adaptable, supervisors face hard limits in their ability to signal and flag the build-up of systemic risk.

While supervisors can identify particular factors that historically accounted for future trouble, they face fundamental uncertainty as to its precise origin, timing, and manifestation. Identifying systemic risks will thus inevitably maintain a high degree of uncertainty and guesswork, hampering the design of a bold, countercyclical policy approach. Going further, macroprudential policy itself becomes endogenous to financial market functioning, with potential unintended harmful consequences. Any suggestion that the supervisor will prevent systemic risks from emerging risks sowing the seeds for future problems. And an ill-timed, aggressive intervention might trigger the stress that supervisors aim to prevent. If bold countercyclical actions merely replace one source of systemic risk for another, supervisors will shy away from getting their hands dirty.

In short, to understand why we see limited reforms it is crucial to open the black box of macroprudential policy and study its inner workings: even if the macroprudential framework is conceptually attractive, its implementation faces hard limits. The chapter empirically illustrates this argument by focusing on key implementation issues as they played out in the EU: the policy’s objective, calibration, scope, and relation to other policy objectives (such as microprudential or competition policy considerations). On all these issues, we see that it is one thing to formulate what ideally should be done, but quite something else to translate that ideal into workable policies.
By focusing on the ‘time-dimension’ of systemic risk (the procyclicality problem), the chapter pays less attention to the so-called ‘cross-sectional’ (structural) dimension: risks lurking between financial actors at any point in time. However, this does not make the findings any less relevant, for three reasons. First, financial stability is not additive, meaning that even if we see progress on structural macroprudential policy this does not solve the boom-bust nature of financial markets. Second, by emphasizing that individual market participants face limits in grasping contagion dangers and/or benefit from obtaining a systemic importance, this aspect of macroprudential ideas closely matches onto pre-crisis worries about information asymmetries and moral hazard problems (Mügge 2013). While surely desirable, regulatory progress on such issues hardly qualifies as major policy shift. However, thirdly, structural macroprudential reforms also appear to be limited. For example, the problem of systemically important institutions has obviously not been solved by requiring additional capital buffers (Mackintosh 2014).

The chapter proceeds as follows. The next section briefly analyses why IPE-scholars expected a paradigm shift. Section 3 presents a yardstick to analyze reforms actually implemented, arguing that they fail to live up to the high hopes. Section 4 analyses in more detail the factors that have obstructed the implementation of an ambitious policy reform. Finally, section 5 contains a brief indication of possible policy implications of the chapter’s main findings.

6.2 The coming revolution in financial regulation

Political scientists have extensively studied the financial crisis’ (potential) implications for policy change (Moschella and Tsingou 2013a; Blyth 2013; Helleiner 2014). Scholars and policymakers alike argued that macroprudential ideas contained the ingredients for a fundamental policy overhaul (Borio 2009; Haldane 2009b; Lothian 2012; Baker 2013b; Mackintosh 2014). Writing in the immediate crisis aftermath, analysts acknowledged that it was too early to tell whether reforms would live up to the high expectations. Still, they pointed at three factors conducive to sweeping reforms: the crisis challenged the existing regulatory approach; alternative (macroprudential) policy ideas were available; and there was a high-level willingness to implement them (Baker 2013b).

6.2.1 Pre-crisis policy failure

First, the crisis appeared to challenge the core of the pre-crisis policy approach (Financial Services Authority [FSA] 2009b; Baker 2013a). Observers identified a fundamental flaw: it was predominantly focused on individual institutions’ stability (micro-orientation), while neglecting a
systemic focus (macro-orientation) (Bank for International Settlements [BIS] 2008; Financial Stability Forum [FSF] 2009; International Monetary Fund [IMF] 2009). Regulators generally assumed financial stability threats would come from contagion effects resulting from an individual institution’s failure (itself deemed a random, exogenous event). The policy approach was to require sufficient capital (equity financing) attuned to firm-specific risks: this would ensure firm solvency and, therefore, systemic stability (Brunnermeier et al. 2009). Believing that firms’ self-interest and risk-management techniques would ensure firm solvency, policymakers also increasingly delegated regulatory compliance to firms themselves. The Basel II Capital Requirements Accord (2004) was an exponent of this approach, giving firms greater discretion in calculating their capital charges (Tsingou 2008).

The focus on individual institutions, however, clearly failed to prevent the build-up and materialization of systemic risk. The belief that individual stability ensures systemic stability was a fallacy of composition (Brunnermeier et al. 2009). Critics argued the micro-orientation was part of the problem: making individual institutions safe can destabilize the system. Regulatory reliance on financial firms’ valuation practices reinforced procyclicality – self-reinforcing loops between individual behavior and systemic outcomes. State-of-the-art risk models extrapolated recent market trends into future estimates, encouraging firms to take on more risk in the upswing, while triggering collective sell-offs in the downturn (FSA 2009b). Firms’ increased reliance on market prices for asset valuation also contributed to procyclicality, by more directly linking overall market developments to firms’ measured profits and net worth (FSF and Committee on the Global Financial System [CGFS] 2009). As the seminal Turner Review put it (FSA 2009b: 22), such “market practices […], while rational from the point of view of individual participants, increased the extent to which procyclicality was hard-wired into the system”. The micro-focus not merely missed but contributed to the build-up of systemic risk.

6.2.2 The availability of an alternative

Second, a plausible alternative to the status quo ante seemed available. Already before the crisis, experts at the influential Bank for International Settlements (BIS) playing a pioneering role in developing macroprudential ideas (Crockett 2000; Borio 2003; White 2004; Clement 2010). The crisis was the window of opportunity to generate widespread attention. While proponents of the pre-crisis approach had a hard time explaining the crisis – after all, how could so many self-interested actors get it so wrong? – the macroprudential perspective provided a clear diagnosis: the crisis was the result of endogenous, destabilizing feedback loops within the financial system.
as well as between the financial system and the real economy (Borio 2009; Borio and Drehmann 2009).

Macroprudential proponents provided a convincing account of financial crises. Reflexive feedback loops between individual actors’ assessments and subsequent actions (micro-level) and systemic outcomes (macro-level) are key (BIS 2008). In stylized form, the process operates as follows. During expansions, asset and collateral values rise, corporate and financial profits increase and defaults decline. Initially cautious actors face a choice between forgone profits and joining the herd (Crockett 2008). Their resulting actions – expand lending, increase leverage, taking on (increasingly short-term) debt to fund the credit – contribute to the expansion. A feedback loop sets in. This raises the fragility of the system even though it appears increasingly safe (Borio et al. 2012). At one point a relatively insignificant event can be the turning point (Gerding 2014). The process then operates in reverse, but much more abruptly, amplifying financial distress (Borio 2009). In sum, the crisis was not a random, exogenous event – it was the result of feedback loops endogenous to the financial system.

Key regulatory agencies were quick to publish reports containing many suggestions on how to translate macroprudential ideas into concrete policy measures (BIS 2008; FSF 2009; IMF 2009). Observers therefore argued that the macroprudential perspective contained the cure for pre-crisis regulatory flaws:

- a whole range of proposals, which were previously out of reach, can now be placed on the table and seriously discussed. These include: counter-cyclical capital requirements; dynamic loan-loss provisioning; counter-cyclical liquidity requirements; administrative caps on aggregate lending; reserve requirements; limits on leverage in asset purchases; loan-to-value ratios for mortgages; loan-to-income ratios; minimum margins on secured lending; transaction taxes; constraints on currency mismatches; capital controls; and host-country regulation (Baker 2013b: 43).

Ultimately, the aim would be to design a policy framework that would prevent future credit bubbles, or at least ensure that those that do occur are significantly less damaging to the real economy (Yellen 2010).

What would a macroprudential paradigm shift consist of? The aim would be to design a policy framework that would prevent future credit bubbles, or at least ensure that those that do occur are significantly less damaging to the real economy (Yellen 2010). Observers hoped for hardwired countercyclicality: rules that automatically adjust in stringency when systemic risks are building up. This automaticity would be essential, as in booms supervisors frequently find it hard to use their discretionary powers to ‘take the punchbowl away’. The macroprudential mind-set would
need to be applied to a broad set of regulations, to ensure the countercyclical mechanisms would have a strong effect. Next, it would be crucial to ensure that financial stability considerations would occupy a central position in overall financial policy and if necessary trump other policy goals (such as striving for an international level playing field). Finally, it would require a thorough revision of regulatory reliance on firms’ valuation and risk management approaches. Firms’ valuation and risk-management routines would have to be reregulated to ensure they would no longer contribute to procyclicality (see Table 6.1).

**Table 6.1  The contours of a macroprudential paradigm shift**

<table>
<thead>
<tr>
<th>Policy objective</th>
<th>Fighting the financial cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rule-calibration</strong></td>
<td>Hardwired countercyclicality: rule-calibrations change quasi-automatically in response to the build-up of systemic risk</td>
</tr>
<tr>
<td><strong>Policy scope</strong></td>
<td>A broad remit: application of countercyclical instruments to a wide set of rules</td>
</tr>
<tr>
<td><strong>Place within wider regulatory framework</strong></td>
<td>Macroprudential policy considerations should be central in financial regulatory frameworks and override other regulatory objectives if required</td>
</tr>
<tr>
<td><strong>Relation to microprudential considerations</strong></td>
<td>Eliminating the procyclicality of microprudential components of regulatory frameworks</td>
</tr>
</tbody>
</table>

### 6.2.3 High-level willingness to implement macroprudential ideas

Finally, scholars identified high-level support for translating these ideas into actual policy. As extensively documented by Baker (2013a; 2013b), through various channels these new ideas travelled from a relatively small group of experts to a much broader policy community. Macroprudential proponents contributed to seminal reports – such as the *Turner Review* (FSA 2009b), the *Geneva Report* (Brunnermeier et al. 2009), and various reports published by the BIS, the FSF and the IMF. As many of them occupied key regulatory positions – for example, Claudio Borio at the BIS, Adair Turner as head of the FSA, Andrew Haldane at the Bank of England – these ideas quickly found their way to high-level political arenas. G20-leaders stressed the necessity of implementing macroprudential policies (G20 2009) and tasked leading international organizations – the BIS, the IMF, and the FSB – to push this agenda. In Europe, the influential *De Larosiere Report* argued that “[a] key lesson to be drawn from the crisis is the urgent need to upgrade macroprudential supervision in the EU for all financial activities” (High Level Group on Financial Supervision 2009: 44). There thus appeared to be broad support for a macroprudential policy shift.
The conditions seemed ideal for a fundamental policy overhaul. As policymakers’ ambitions were followed-up by regulatory reforms, scholars tentatively concluded that a ‘paradigm shift’ was well underway (Lothian 2012; Baker 2013a, 2013b; Mackintosh 2014). They did acknowledge that a full transformation would take some time: deep reforms need not necessarily come overnight (Moschella and Tsingou 2013a). The policy’s novelty implied it would take time for policymakers to gain practical experience. And reforms might be slowed down by self-interested actors – particularly financial firms – who favor not straying too far from the status quo ante. Still, a future transformation seemed likely, involving “incremental steps in the direction of an activist functioning macroprudential regulatory regime” (Baker 2013a: 430).

6.3 The paradigm shift that got stuck

6.3.1 EU’s limited macroprudential reform

Much has changed since the onset of the crisis. The EU set up the European Systemic Risk Board (ESRB), tasked with monitoring systemic risks, issuing warnings and recommendations to national authorities, and contributing to policy development. Through Article 5 of the Single Supervisory Mechanism Framework Regulation, the European Central Bank (ECB) has some macroprudential competences for Euro-area member states’ banking sectors. Member states have assigned macroprudential tasks to specific authorities – although the formal remit and the composition of different authorities vary (ESRB 2016a). The EU included explicit macroprudential instruments in banking legislation (Capital Requirements Directive [CRD] IV and Capital Requirements Regulation [CRR]) and member states have introduced additional instruments. Authorities undertook extensive research efforts and data gathering exercises to improve the monitoring and mitigation of systemic risks (see ESCB Heads of Research 2014). And policymakers modified microprudential frameworks (such as risk-sensitive capital requirements) to limit their procyclical effects.

Yet a more in-depth analysis reveals that reforms are quite limited when compared with the measures outlined in the previous section. Countercyclical elements by and large confined to bank capital requirements. In other relevant policy domains – liquidity rules, margin and haircut requirements, loan-loss provisioning rules, credit extension – there are no formal countercyclical rules yet (ESRB 2014a; ECB 2015b; Constancio 2016). Where they exist, macroprudential elements in these domains are a-cyclical (time-invariant) backstops: limits on firms’ room for maneuver that do not vary over the cycle. Maximum loan-to-value ratios are one example. While such instruments can certainly limit unsustainable credit growth, they cannot effectively constrain
systemic risk under all circumstances, and they can have procyclical effects in the downturn (Domanski and Ng 2011).

Even in capital requirements, countercyclical elements are quite limited. The most important policy tool is the countercyclical capital buffer (CCB; Articles 130 and 135-140 of CRD IV) – adopted from the new Basel III accord – that national macroprudential authorities can activate in case systemic risks are building up (ESRB 2014b). EU law also allows the microprudential supervisor to increase sectoral risk-weights for banks’ real estate exposures if deemed necessary to mitigate systemic risk (Article 124 and Article 164 of CRR; cf. EC 2016a: 7). Finally, the so-called flexibility package (Article 458 CRR) allows national authorities to deviate temporarily from EU-wide norms and introduce more stringent banking rules. Despite its name, however, it is consciously designed to be a last resort for national authorities, only to be used when all other options prove insufficient (EC 2016a). Far from occupying a central place, policymakers consigned macroprudential policy a peripheral role in the broader regulatory framework.

Macroprudential policy’s core ambition is to increase financial firms’ resilience. If countercyclical measures also lean against the financial cycle, this is a welcome side-effect, but not the prime goal. The CCB’s stated objective is to increase firm resilience, not to restrain the boom (Borio 2014). Experts argue that this buffer’s boom-restraining side-effects will be minimal: during boom times, capital is (perceived to be) abundant, so firms’ lending practices will unlikely be significantly constrained (Constancio 2014). And it does not aim to boost credit growth during a bust, but rather to “prevent unnecessary constraints on the supply of credit” (Borio 2014: 34).

Under what circumstances instruments’ stringency should be increased remains vague. While for the CCB there is a reference to a systemic risk indicator – the credit-to-gdp gap, measuring the deviation from the trend of the ratio of ‘credit to the private sector’ to ‘a country’s GDP’ – macroprudential policymakers are not required to use it. EU rules stipulate that the indicator “should not give rise to an automatic buffer setting or bind the designated authority” (CRD IV; recital 82). Authorities have instead formulated longlists of variables that are potentially relevant in deciding when to activate the buffer (see for example Financial Policy Committee [FPC] 2016). While this surely improves the quality of systemic risk analysis, both supervisors and market participants are in the dark on the circumstances that will lead to the tool’s activation. Effectively, policymakers have kicked the can down the road.

Finally, regulatory reforms to limit microprudential frameworks’ procyclical effects seem limited. Reforms of financial firms’ valuation practices constitute an adaptation of pre-crisis approaches
rather than a sweeping overhaul. The International Accounting Standards Board (IASB) – Europe’s de facto standard setter – has developed a new accounting standard for financial instruments (IFRS 9) that allows forward-looking loan-loss provisioning (ECB 2015a). Similarly, capital requirements now oblige banks to use models with a longer time-horizon and including ‘pessimistic’ loss-scenarios (EBA 2015a). But as these requirements continue to rely on firms’ risk models, they may still have significant procyclical effects (Interview 20161207b).

6.3.2 The implementation problem

Why these limited reforms? The widespread popularity of macroprudential ideas led many to believe that a straightforward alternative to the pre-crisis approach was readily available. If sweeping reforms would fail to materialize, scholars suggested external factors – such as private sector opposition, or institutional inertia – would be responsible (Baker 2013a; Underhill 2015). I argue, however, that to account for these limited reforms, we must also look at problems internal to the macroprudential enterprise. We must ‘open the black box’: the macroprudential ideas did not by themselves provide fool-proof regulatory solutions to the identified problems. It is one thing to argue for countercyclical policies; quite another one to actually design them. Policymakers had to develop ways of identifying and mitigating systemic risks. Yet these endeavors proved to be hampered by fundamental dilemmas, ultimately obstructing an ambitious policy shift.

The core of the implementation problem paradoxically is one of the main ideas of macroprudential thinking: the endogeneity of systemic risk. Three factors account for this. First, the financial system is reflexive: market participants’ beliefs about (inherently uncertain) future outcomes in the aggregate shape these outcomes. Financial markets have no firm anchor – the often-invoked fundamental values in the real economy – outside of market participants’ assessments. Put differently, there is no ‘external reality’ that market participants can rely on to know what will happen (Soros 2008; Bronk 2013). Second, the financial system is adaptive. It is constantly changing because of new products, institutions, technologies, actors and regulations – implying yesterday’s system is quite different from today’s or tomorrow’s. So while systemic risks are inherent to financial markets, their precise manifestation will change over time (Agur and Sharma 2013). Finally, the system is complex – meaning they are susceptible to unpredictable and non-linear transitions. Transgressing particular thresholds may set off feedback loops that makes the system spiral away from a seemingly stable ‘equilibrium’ and into the abyss (May et al. 2008).

Lacking an anchor, financial markets are characterized by irregular boom-bust patterns (Keynes 1964 [1936]; Minsky 2008 [1986]).
Yet these insights pose two fundamental problems for an ambitious countercyclical macroprudential policy. First, it obstructs a straightforward measurement of systemic risk. Supervisors cannot ‘step out’ of the reflexivity dynamics and assess risk from an ‘external’ point-of-view. Instead, they must determine the build-up of fragility from within the system, and there is no obvious place to look. Systemic risk indicators based on market data are of only limited use, as these are reflections of current market sentiment. Given that the build-up of risk is the consequence of collective optimism (Minsky 2008 [1986]), market data will by definition fail as an early warning device. Supervisors thus have to look at historical trends and assess whether the current situation is sufficiently different to suggest systemic risks are building up.

But market reflexivity severely complicates assessing whether market trends are unsustainable. Changes in market participants’ expectations and the adjustment of their actions may quickly transform seemingly benign conditions into a collapse in market liquidity and asset values (Beinhocker 2013). And although instability is inherent to financial markets, the precise origin, manifestation, and severity changes over time. Market distress often results from innovation (financial or otherwise), which by definition makes historical comparisons difficult (Bronk 2013). While supervisors can identify factors that generally signal the build-up of risk, there will always be a significant degree of uncertainty and guesswork. Supervisors will have to fly by sight, rather than on auto-pilot.

Second, macroprudential policy itself becomes endogenous to financial market functioning, with potentially harmful unintended consequences. The fuzziness of systemic risk measurement means inherent difficulties in linking policy tools to fixed parameters, introducing a significant amount of unpredictability in countercyclical policy. But an ill-timed, forceful intervention – whether it is through tightening or loosening requirements – can be interpreted as a signal that trouble is underway, triggering the stress that supervisors want to avoid (cf. ESRB 2014c). Moreover, especially during market distress there is very little that supervisors can do, and once again an all too ambitious macroprudential policy may add to the problems. If macroprudential leniency takes precedence over microprudential stringency, it may as well result in individual firms going bankrupt – adding to the panic. If regulatory leniency allows firms to hide losses, this postpones but also prolongs financial problems (cf. Mügge and Stellinga 2015). So unfortunately, there is no straightforward approach to countercyclical policy. This means that if supervisors fear that bold actions trigger the problems they want to prevent, they have little incentives to back sweeping macroprudential reforms.
6.4 The limits to countercyclical policy

The empirical body of this chapter details the difficulties implementing an ambitious countercyclical macroprudential policy framework – focusing on the European Union. It does so by discussing five key issues that policymakers had to address: (1) the objective of macroprudential policy; (2) its calibration; (3) its scope; (4) its place in the wider financial regulatory framework; and (5) the implications of macroprudential ideas for microprudential aspects of the rules. The goal here is not to present an exhaustive description of the political processes leading up to specific policy outcomes. Instead, each section shows that even armed with new ideas, policymakers acknowledge that fundamental obstacles hamper their ability to confidently tackle financial market procyclicality. As such, it illustrates the argument that dilemmas internal to the macroprudential enterprise are a crucial factor inhibiting sweeping reforms.

6.4.1 Determining the appropriate objective

What would be an appropriate objective for macroprudential policy? The Committee on the Global Financial System (CGFS 2012: 5) stated that in an ideal world, macroprudential policy would consist of “policy decisions [that] are guided by a general, comprehensive, system-wide risk assessment. Decisions are taken in light of an accepted model which properly captures the links between systemic risk, market dynamics and macroprudential policy choices”. In such circumstances, the hopes of macroprudential proponents to “implement intelligent policies to contain future bubbles and credit binges, and to make sure that those that do occur inflict a lot less damage on the economy” (Yellen 2010: 22-23) would have a good chance of being realized.

But the intractability of systemic risks clearly hampers an overly ambitious goal. Deputy Governor of the Banque de France Landau (2009: 2) put the problem thus: “Bubbles are difficult to detect. Asset price boom-bust cycles become clearly apparent only after the event”. Policymakers acknowledged it would be difficult circumventing the ‘paradox of instability’, identified by BIS-experts:

the system looks strongest precisely when it is most vulnerable. Credit growth and asset prices are unusually strong, leverage measured at market prices artificially low, profits and asset quality especially healthy, risk premia and volatilities unusually low precisely when risk is highest. What looks like low risk is, in fact, a sign of aggressive risk-taking (Borio et al. 2012: 10).
This paradox was at the heart of supervisors’ failure to flag the build-up of systemic risks before the crisis: if anything, supervisors appeared to believe that the system was more stable than ever (Borio et al. 2012). As a macroprudential expert puts it:

*even supervisors are very inclined to believe that when things are going well, that things are going well. So before the crisis [...] I was hearing the refrain that “banks have never been as well capitalized as they are now, they have never had as good risk management as they have now...”. It was very common* (Interview 20161124a).

To the extent that supervisors escaped from pre-crisis euphoria, they could still fail to identify the build-up of systemic risk. In the words of a banking supervisor: “back in 2006, so just before the crisis, we certainly did not think that things were getting out of control. We thought that we were still recovering from the Dot-Com Crisis” (Interview 20161103). In short, identifying systemic risk is inherently difficult.

Moreover, macroprudential experts warned that a bold objective risked becoming self-defeating. Suggesting that supervisors can prevent systemic risks from materializing risks lulling policymakers and market participants into a false sense of security. Arguably, system-wide stress tests conducted before the crisis had this effect: by indicating that the system was sound, they created an unwarranted sense of security among policymakers and market participants, thereby buttressing the boom (Arnold et al. 2012). An overly ambitious countercyclical policy – fighting the financial cycle – risks doing the same, policy experts feared. As Barwell (2013: xv) puts it: “policymakers will need to be vigilant that market participants do not act on the basis that [...] regulation has consigned financial instability to the dustbin of history – a belief which might lead to imprudent behavior, sowing the seeds of a future crisis”. The countercyclical approach could then become part of the problem: supervisor’s inaction on the countercyclical front would signal that systemic risk is low, boosting optimism, and contribute to the build-up of systemic risk (cf. Danielsson 2016).

From the outset, macroprudential experts stressed not to aim too high in terms of the policy objective (cf. BIS 2010; Borio 2011). The BIS (2008: 3) was clear on this point: “the complete elimination of ‘cycles’ is clearly an unrealistic, and arguably undesirable, goal”. In its design of the Countercyclical Capital Buffer (CCB), the BCBS thus made explicit that its primary goal is to increase firm resilience in the run-up to the crisis – and that policymakers should not aim for more with this the instrument. To the extent that it constrains the build-up of systemic risk, this must be seen as a desirable side-effect, not its primary target (BCBS 2010a). National macroprudential authorities’ mandates are also modest. For example, UK authorities made explicit that the
macroprudential objective should not aim for more than boosting financial sector resilience (Turner 2015b).

6.4.2 Hardwiring countercyclicality?

The intractability of systemic risk also hampered the development of countercyclical tools tightly linked to early warning indicators (EWIs). Policymakers agreed that a (more or less) rules-based calibration of instruments would be preferable over an open-ended policy relying on supervisory discretion (BIS 2008; Borio and Drehmann 2009; Brunnermeier et al. 2009; IMF 2009). This would act as an effective pre-commitment device: during a boom, supervisors would not need to justify increasing rule-stringency – avoiding opposition from optimistic market participants or politicians benefitting from the boom (BIS 2008: 5). Moreover, ill-timed discretionary interventions risk being wrongly interpreted, unwittingly triggering market distress (CGFS 2012; see below). The message was clear: “[in] principle, rules are preferable” (FSB 2009: 11). The Committee of European Banking Supervisors went even further, stating that “countercyclical approaches should be based on automatic rules” (CEBS 2009: 2; emphasis added).

But this requires designing reliable EWIs. The ‘paradox of financial instability’ hampers this endeavor. It limits the usefulness of two potent candidates: those based on firms’ balance sheet items (such as measures of banks’ capitalization and profits), and those based on market prices (such as volatilities and credit risk spreads) (Borio and Drehmann 2009). As both are reflections of current market sentiment, they fail as EWIs. A macroprudential expert of the BIS stressed early on that

if the underlying problem is that everything is endogenous, one can move very quickly from states where "all looks well" to a much more serious set of circumstances. [...] One lesson from this is that we must not rely overly on "market-based" indicators to identify looming problems, if it is the market itself which is being overly optimistic (White 2008: 310-311).

Indeed, the record shows that market-based indicators are very procyclical: they signal low risk in good times, and vice versa (Shin 2013). This makes them primarily useful as signals of current market distress (thermometers) rather than as EWIs (barometers) (ESRB 2014c).

This buttresses the case for indicators based on deviations from long-term trends or averages. But these come with problems of their own. Market distress often results from a period of rapid financial innovation (Bronk 2013), the very novelty of which makes historical comparisons difficult (Borio and Drehmann 2009). As IMF-researchers put it:

Since we are dealing with rare events, historical experience may [...] be of limited value. Comparisons with past occurrences may not be useful, since
with evolution of the financial system in terms of contracts, institutions, operations, technology, and regulations, the nature of the interactions among financial players and the contagion mechanisms may be quite different (Agur and Sharma 2013: 9).

While looking at historical averages is probably the best supervisors can do (cf. Goodhart 2010a), it requires the future to match the past – increasing the risk that supervisors are preparing for yesterday’s crisis. Moreover, the non-linearity inherent to complex systems means that it is hard to know when trends have become unsustainable: “threshold effects severely complicate efforts to quantify the risk of a systemic crisis, and make it particularly difficult for a warning system to be ‘early,’ and not just begin to flash red when it is too late [..]” (Agur and Sharma 2013: 8). As a macroprudential policymaker admits, “when you try to do countercyclical policy you must know and identify the cycle [..]. And this is something which is inherently difficult” (Interview 20161207a).

These limitations were key to the design of the CCB. This tool would allow national supervisors to increase capital requirements in response to systemic risks building up. The Basel Committee wanted to introduce some discipline: rather than just delegate systemic risk identification to national supervisors, it set out to design a calibration method. Given the limitations of market-price and balance sheet indicators, indicators based on deviations from historical trends and averages seemed most promising. A BIS-discussion paper, examining a range of candidates, identified the so-called credit-to-gdp gap as the best leading indicator for financial distress (Drehmann et al. 2011). It measures the deviation from the trend of the ratio of ‘credit to the private sector’ to ‘a country’s GDP’. A substantial deviation would signal abnormal credit growth, indicating future troubles.

But even though this measure seemed a reasonably good early warning indicator, BIS-analysts remained cautious: “our analysis indicates [..] that any fully rule-based mechanism may not be possible at this stage. As a result, some degree of judgement, both for the build-up as well as the release phase, seems inevitable” (Drehmann et al. 2010: 27). The problem, as a senior policymaker put it, was that “if you take multiple indicators it becomes terribly difficult to calibrate the instrument, but one indicator fails to incorporate everything you want to know” (Interview 20161207a). Other experts had pointed at significant downsides of the credit-gap. Its reference to GDP might make it operate procyclically, as a country experiencing economic growth would see its credit-gap fall, and vice versa (Repullo and Saurina 2011).
So, while BCBS-members ultimately embraced the credit-gap indicator, they steered clear of quasi-automatic reliance (Interview 20161103). The BCBS proposed a method of ‘constrained discretion’: authorities were expected to look at the credit/GDP indicator, but could also look at other variables; and they should publicly explain their buffer decisions. What role the credit/GDP indicator was to play remained vague (Agur and Sharma 2013): the accord “does not require that the specific, internationally-consistent credit/GDP guide play a dominant role […], [but] also does not imply that it should it be totally ignored” (BCBS 2010c: 4). This vagueness came back in EU’s implementation of the CCB. CRD IV requires authorities to use the indicator as “a common starting point for decisions […], but [it] should not give rise to an automatic buffer setting or bind the designated authority”. The ESRB even recommended that member states “should take into account a range of information when assessing the level of system-wide risk and set the buffer rate accordingly” (ESRB 2014b: recital 7; emphasis added).

Supervisors thus have much discretion in the calibration of the CCB. According to an EU policy official, this is an inevitable consequence of the measurement problem: “How do you measure systemic risk? Nobody knows. There is not a unique measure, so I think that discretion is not going to be overcome for the next one-hundred years, or so” (Interview 20161130). Relying on past trends to guide future actions will inevitably be limited. The same EU policy official:

\[
\text{True, there is this credit-to-GDP gap that by law you have to look at. But there are many reasons why this indicator might not give you precise indications. [...] If you look at it in different countries, the indicator is minus 25\% and it will take fifty years before it comes back. So maybe you had a trend that was not really sustainable for many years before. So it is all biased (Interview 20161130).}
\]

In other words, the bias inherent to using a historical trend may unwittingly prevent supervisors from activating the countercyclical buffer, as it may have been distorted by pre-crisis credit growth. So supervisors are looking at a wide range of indicators to guide decisions on the CCB’s activation. The UK Financial Policy Committee (2016), for example, lists 18 ‘core indicators’, without specifying how it would ultimately decide on activating the CCB. It all boils down to the inherent measurement problem: “trying to define preemptive responses to a rare event using fuzzy measures to calibrate (infrequently used) tools is going to be difficult […]” (Agur and Sharma 2013: 9).

Policymakers therefore reconsidered their initial ambitions to tightly link macroprudential tools’ calibration to systemic risk indicators. But the open-endedness of this discretionary approach to an important extent means kicking the can down the road. And it may contribute to the
unintended consequences of the other fundamental obstacle – the endogeneity of macroprudential policy. By introducing an inherent unpredictability in countercyclical policy, an ill-timed intervention could trigger the market stress that supervisors want to avoid. As a banking sector representative warns: “If a supervisor turns off [the CCB], that is like organizing a press conference [...] to say that the crisis has started. I think the economy will become more procyclical rather than less because of the countercyclical buffer” (Interview 20161205). Such concerns are also expressed by the ESRB (2014c: 110): “The announcement itself may be considered as tantamount to an official declaration of a systemic event”. In such stressed circumstances, buffer releases will be of limited help, as ‘the market’ will not allow banks to reduce their capital. As an EU policymaker fears: “it is great to require more buffers in the upswing, but who is going to use them when you really need them? No one. So it is one-sided, I am afraid” (Interview 20161207b).

Paradoxically, discretionary countercyclical measures may thus become part of the problem (cf. ESRB 2014c). This compounds supervisors’ inaction bias: if ill-timed countercyclical interventions trigger systemic stress, supervisors will have an even greater incentive to wait and see. As such, it is doubtful whether supervisors will pursue a bold countercyclical policy when needed. Ultimately, this dynamic is rooted in market reflexivity: market participants’ expectations shape future outcomes, and an ill-timed countercyclical policy risks triggering stress (cf. CGFS 2012). As the macroprudential proponent Goodhart (2010a: 3) admitted early on: “If policies to restrain financial cyclicality had been easy to devise, and were without serious side-effects […], they would already have been introduced”.

### 6.4.3 Expanding the scope beyond bank capital?

With authorities having very little experience with operationalizing macroprudential ideas, the FSF (2009: 11) initially suggested to prioritize work on adapting capital requirements. Yet from the outset it had been clear to many that the scope of countercyclical policies had to be broader:

> when there is exuberance it is very difficult to stop it with one single instrument. Because [market participants] are doing money […], and when money is involved people are like sharks smelling blood. So you don’t stop them with a countercyclical capital buffer (Interview 20161201).

Indeed, reports published by leading international institutions in the crisis aftermath agreed that a broad implementation – so including countercyclical elements in liquidity requirements, margin requirements on securitized lending (such as repo-transactions), loan-loss provisioning, and credit extension – was warranted (BIS 2008; FSF 2009; IMF 2009). Yet expanding the scope of macroprudential policy beyond capital requirements has by and large faltered.
Real estate lending is one important area where many countries have adopted macroprudential tools other than bank capital requirements (IMF 2013b). Countries have introduced caps on loan-to-value (LTV) ratios and loan-to-income (LTI) ratios to discourage excessive leverage in good times and defaults and deleveraging in bad times. Effectively, these measures target the same problem as the CCB – that is, unsustainable credit growth in the ‘real economy’ – but by specifically targeting the housing market it is more ‘focused’. Most countries have opted for time-invariant measures, especially caps on LTV-ratios (ESRB 2016a). By tying maximum borrowing limits to the collateral value (the house), research suggests these measures may constrain the build-up of financial imbalances (cf. CGFS 2012). Countries, however, have shied away from introducing time-varying requirements. Like the CCB, such requirements would inevitably require a significant role for supervisors’ judgments (ESRB 2014c: 71). Although time-invariant backstops will not constrain systemic risk under all circumstances (Domanski and Ng 2011: 91 – the potential feedback loop between rising asset values and increased lending is not broken (Turner 2013: 12) – EU member states’ authorities have been reluctant to fully delegate such discretionary measures to macroprudential regulators.

The financial crisis was very much a liquidity crisis (Brunnermeier et al. 2009). As such, it would make much sense that macroprudential policy would contain tools to mitigate systemic liquidity risks, particularly bank liquidity requirements and haircut requirements on securities lending. The first deals with banks’ liquidity risks. The BIS (2008: 8) argued that the crisis highlighted the need for “better management of liquidity risk by financial institutions, especially the need for the build-up of liquidity buffers in good times to face adverse systemic conditions”. ‘Haircuts’ can be seen as the possible leverage in secured borrowing – and since the crisis policymakers have grappled how haircut requirements could limit financial system procyclicality. The CGFS (2010) tentatively suggested the FSB should consider introducing time-varying haircut requirements, going up (limiting lending) when systemic risks build up and down when risks materialize or recede.

But identifying the build-up of system-wide liquidity risks is extremely difficult. As the crisis demonstrated, seemingly small problems – corrections in the US subprime market, a relatively small segment in the US housing market – could set off a systemic liquidity meltdown. ‘Liquidity’ is where financial market reflexivity is arguably most problematic, as it is ultimately endogenous to financial system functioning: “liquidity […] depends on confidence, i.e. the ability of depositors, institutions, and market participants to take risks on each other” (Banque de France 2008: 1). Liquidity does not refer to a stock of available funding in the financial system which could be
redistributed. Instead, “[when] liquidity dries up, it disappears altogether rather than being re-allocated elsewhere” (Brunnermeier et al. 2009: 23).

This implies that systemic liquidity risks may emerge in different places, limiting the ability of supervisors to find a small set of fool-proof EWIs. IMF-researchers acknowledged that deviations from historical trends would only provide limited guidance:

> even with slow moving “fundamentals,” changes in expectations and the resulting adjustments in risk appetites can transform market liquidity, and alter the path and volatility of asset prices (Agur and Sharma 2013: 8).

As the IMF (2011: 97-98) – investigating the feasibility of macroprudential liquidity requirements – had to admit, it is “unlikely at this stage of development that there is a single, best measure of systemic liquidity risk that can be directly translated into a macroprudential tool” (IMF 2011: 97-98).

Calibration difficulties implied that newly developed liquidity requirements – the Liquidity Coverage Ratio and the Net Stable Funding Ratio; part of the Basel III package – are predominantly microprudential in nature: they are calibrated with reference to individual firms’ liquidity risks. Developing these standards proved difficult enough: all policy attention was devoted to limiting their unintended systemic side-effects, rather than focusing on explicit countercyclical calibrations (cf. ESRB 2014). As a policymaker involved in the process recalls, “[it] was already difficult to reach agreement with what we have now. Trying to complicate it further by adding a macroprudential dimension... it would simply not have been feasible” (Interview 20161124a). EU law, however, does allow macroprudential authorities to increase the stringency of liquidity requirements in case of the build-up of systemic risks, this option falls under Article 458 of the CRR – which is meant to be supervisors’ very last resort and so very burdensome to activate (Interview 20161207b; see the next section). Moreover, there are hardly any substantive guidelines for activating this measure – except for some broad suggestions by the ESRB (2014c: 119-126) – implying that supervisors are in the dark under what circumstances they should increase liquidity requirements’ stringency.

Like liquidity requirements, time-varying haircut requirements on securities financing transactions proved too difficult to calibrate. The current approach is limited: to set (leniently calibrated) minimum haircut floors (FSB 2014; Interview 20161124b). While the ECB (2016) currently explores the feasibility of an explicitly countercyclical approach, a financial market regulator is very skeptical: “You don’t know how you would calibrate and design it. I can understand the [...] intellectual desire to develop that, but I am also an ex-supervisor, so I know the practical difficulty
associated with calibrating or designing such a mechanism” (Interview 20161124b). The problem is that arguably the best systemic risk indicators are market-based indicators of volatility and liquidity (ECB 2016), which only flag problems once problems materialize (Shin 2013). Time-varying haircut requirements would then involve a very high degree of uncertainty and guesswork on the part of macroprudential authorities. This is not without risks: as haircuts essentially constitute a limit on borrowing, supervisors fear that a discretionary significant raise in haircut requirements might prove destabilizing – effectively creating liquidity strains (Interview 20161124b). So while policymakers have not discarded the possibility of designing countercyclical haircut requirements, for the time being they settle on time-invariant minima.

So as Avinash Persaud (2014: 161) – a key macroprudential policy pioneer – laments: “a [...] problem with the current thinking on macro-prudential policy is that it is fixated with capital”. While there are still attempts to expand EU macroprudential policy beyond bank capital, there appears to be little momentum (Interview 20161130). The EU’s recently issued macroprudential policy review only touches upon the scope-issue and does so in a very open-ended way. It asks whether respondents would consider expanding the macroprudential framework beyond banking to be appropriate (EC 2016a: 12), without given any concrete suggestions what domains would be suitable to introduce additional measures. For the time being, the scope of countercyclical policies will likely be circumscribed.

6.4.4 Embedding macroprudential policy

Policymakers acknowledged that macroprudential considerations could potentially conflict with other financial policy considerations (such as microprudential or competition concerns) and with fiscal and monetary policies (BIS 2008). A key task therefore was to embed macroprudential policy in the wider regulatory framework. A particularly thorny issue in the EU was the conflict between allowing ‘national varieties of macroprudentialism’ and the long-standing wish to harmonize financial regulation (Buckley et al. 2012; Baker 2014).

Experts argued that EU macroprudential policy needed to incorporate differences in national financial cycles (Turner 2013: 20). A one-size-fits-all policy would likely be a one-size-fits-none. This was the prime reason for US skepticism towards the CCB (Masters 2011). As recalled by an EU policymaker,

they have 50 states, but one jurisdiction. [...] They cannot set the buffer at a different level for California and Nebraska. [...] It is not flexible for them. And therefore they were less keen, because they cannot differentiate among states (Interview 20161207a).
Given EU’s ability to fine-tune rule-stringency to local circumstances, countercyclical policies thus seemed to stand a better chance there. But how to reconcile such national differences with level playing field considerations?

Champions of the macroprudential approach suggested this conflict should be resolved in favor of financial stability considerations: to allow “an unlevel playing field between countries as a result of [...] economic cycles that are often less synchronised than they appear” (Warwick Commission 2009: 8). International organizations more cautiously suggested that jurisdictions should have sufficient flexibility to tailor policies to national financial conditions and circumstances. [...] A clear lesson from the crisis is that the largest spillovers occur when countries fail to act promptly to head off problems – given the interconnectedness of the global banking system, systemic risk in one country can rapidly become a problem for other countries (FSB et al. 2011: 20).

In short, macroprudential policy considerations should in certain circumstances trump international level playing field considerations, experts argued.

But the lack of clarity on how to identify and tackle systemic risks obstructed the attempt to put macroprudential policy on a firm footing. The European Commission (EC) and several Member States considered increasing the scope for national discretion very problematic. With limited consensus on the nature of systemic risks, it would be very hard to evaluate whether specific national macroprudential measures were warranted (Interview 20161130; Interview 20161201).

According to an EU policymaker,

> there was a very strong fear of misuse of macroprudential instruments for competitive reasons. [...] One has also to fully understand this, because otherwise it looks like paranoia: in the years before the financial crisis, national regulators and supervisors very often had been the bastion of financial protectionism (Interview 20161201).

The EC feared that countries’ idiosyncratic macroprudential measures would create an unfair competitive edge. This sounds counterintuitive, as normally one would consider lenient rules the source of firms’ international competitive advantages (cf. Blom 2011). But the Commission argued that superficially stringent national requirements (gold plating) would give those institutions an advantage over their competitors, forcing other countries to follow suit regardless of its desirability from a stability perspective (Nordic Working Group 2012: 11).

The EC thus pushed for limited national discretion, including on macroprudential policy. It was supported in this stance by many EC members, most notably France and Germany, and internationally active financial institutions (Interview 20161207a). In its proposal for new bank
capital requirements (CRD IV/CRR) – EU’s implementation of Basel III – the EC (2011) effectively doubled down on EU harmonization. Key prudential requirements were included in a Regulation, implying they would be directly binding to financial institutions. The EC confined the scope for national macroprudential policy to only two instruments: apart from the CCB, it allowed national supervisors to increase capital requirements for real estate exposures and/or to introduce loan-to-value (LTV) limits for such exposures.

The EC strategy was controversial. Other member states – most notably the UK, Spain and several Nordic and Eastern European member states – argued against this ‘maximum harmonization’ approach (cf. Djankov et al. 2011; European Bank Coordination Initiative [EBCI] 2012; Nordic Working Group 2012; Draghi 2012). They emphasized that the Basel Accords had always been intended to be minimum rather than maximum requirements. As Member States’ public finances bear the costs of financial instability, they should have the capacity to require more stringent requirements. Last but not least, the maximum harmonization approach would conflict with the push for a macroprudential approach to regulation (Djankov et al. 2011). As the Bank of England (2011: 8) emphasized, “the rationale for maximum standards is not clear from a prudential perspective. Indeed, the reason for allowing countries to set capital requirements above the common minimum is to allow them to prevent systemic risk”.

The compromise solution was to give national authorities more discretion on macroprudential policy, while introducing extensive procedural requirements before they could activate the tools. Most importantly, national authorities could now (permanently) require higher capital buffers for systemically important institutions – through the Systemic Risk Buffer (Article 133-134, CRD IV) and two other buffer options (the G-SII and O-SII Buffer; Article 131, CRD IV). For cyclical risks, the EC introduced the so-called Flexibility Package (Article 458, CRR). When a national regulator identifies changes in the intensity of macroprudential or systemic risk in the financial system, it may draft national measures for several domains (including the level of own funds, liquidity requirements, risk weights for real estate exposures, and intra-financial sector exposures) to address these (for a period up to three years).

But the EC designed Article 458 as the last resort for national authorities – only to be used when a national authority can justify that all other options prove insufficient (Interview 20161207b). It included a lengthy notification and consultation procedure (including the ESRB and EBA), hardly making it an attractive tool to quickly mitigate systemic risks:

this is a very burdensome and difficult procedure. Because one camp wanted that it would be difficult, [lest] the single rule book will be undermined. And
the others insisted that there should be the possibility for this flexibility. And then this procedure is [...] difficult, and it takes at least two hours to explain all this (Interview 20161207a).

The complicated procedure thus had been a purposeful countermeasure to member states’ demands for national discretion: “the Commission responded by introducing a very complicated procedure that ensured that almost nobody would want to use this Article” (Interview 20161207b). As such, Flexibility Package may be somewhat of a misnomer.

Paradoxically, whereas the macroprudential literature advocates limited discretion to force supervisors to act, the EC appears to favor discouragement. Lack of clarity over how to identify the build-up of systemic risks led to a focus on procedural rather than substantive requirements. Although national authorities’ obligation to justify the necessity of invoking Article 348 may be an implicit substantive requirement, it displaces the problem. And while the ESRB (2014c: 141-161) provides some suggestions what indicators could be looked at, it stressed that

further work should be done to assess [the indicators’] effectiveness in contributing to the identification of systemic risk (e.g. whether there are key thresholds indicating the build-up of risk) and whether they should be used more actively to guide the activation of policy instruments (ESRB 2014c: 158).

It admitted that for the time being, “the proposed indicators can be considered alongside a wider set of information, including market and supervisory intelligence, to guide the use of the instruments” (ESRB 2014c: 158). As such, continued controversy over macroprudential policy’s substantive aspects suggests it will likely continue to occupy a peripheral place in the wider regulatory framework.

6.4.5 Mitigating microprudential procyclicality

Critics of the pre-crisis microprudential approach argued that macroprudential ideas also had key implications for redesigning the micro-rules (Warwick Commission 2009; Baker 2013). They argued that financial firms’ risk assessment practices had put procyclicality in overdrive, identifying backward looking loan-loss provisioning and the short time-horizons of banks’ market and credit risk models as prime culprits (cf. Warwick Commission 2009). As these had been sanctioned or boosted by regulation, they were central in the procyclicality debate, at least initially (cf. BIS 2008): “the debate was how to adjust micro-tools – the prudential tools – in such a way that you instill a stronger systemic perspective or orientation” (Interview 20161124a). Policymakers feared that macroprudential add-ons would amount to little if risk-assessment practices were not addressed (BIS 2008; FSF-BCBS 2009; FSF-CGFS 2009; FSF 2009).
The core procyclicality problem here is the sensitivity of financial firms’ risk-management practices to recent market developments. In jargon, the debate is whether firms should make point-in-time (PIT) or through-the-cycle (TTC) risk-assessments (EBA 2015b). PIT-models assess an exposure’s riskiness based on current conditions; if market conditions change, assessments should be revised. Critics blame such cycle-sensitive outputs for inducing procyclicality (Warwick Commission 2009). They present TTC-models as more desirable alternatives. These attempt to filter out cyclical effects by using longer time-horizons, implying risk assessments should not be revised when overall market conditions change. But while TTC-models provide more stability, they may downplay market trends too much. It encourages firms to ignore mounting problems until it is too late, meaning they are unprepared for what hits them. Similarly, in the downturn it might induce them to understate problems. While this might mitigate short-term stress, it could merely make future problems worse. This creates a fundamental policy dilemma: while relying too much on recent market developments creates problems, downplaying them can be detrimental as well (cf. Mügge and Stellinga 2015).

This dilemma has hampered reform in two areas that the BCBS (2009b: 66-72) specifically labeled as key reform priorities: capital requirements’ procyclical effects, and loan-loss provisioning. Regarding the former, the core issue was regulatory reliance on firms’ risk models. Critics blamed the Internal Ratings Based (IRB)-approach of the Basel II Accord (2004) for contributing to procyclicality (Di Noia 2009). BIS-researchers more cautiously pointed out that excess cyclicality in capital requirements would make countercyclical tools less effective (Drehmann et al. 2011: 26). But Basel II was barely implemented when the crisis hit, creating uncertainty whether the approach was really misguided (FSA 2009b). Moreover, it already contained some provisions to limit procyclicality, for example by dampening the sensitivity of capital charges to changes in measured risk, by requiring stress testing, and by encouraging banks to incorporate TTC-elements in their models (cf. Tarullo 2008: 180). And Basel II was specifically designed to be more risk-sensitive, meaning that some degree of cyclical in capital requirements was inevitable (Caruana 2005). Hence, it was not obvious that the cyclicity inherent to the Basel II IRB-approach was unwarranted (cf. BCBS 2010a: 5).

Still, policymakers considered capital requirements’ potential procyclical effects a pressing issue. A solution could be to require a wholesale shift towards TTC-risk models. But regulators were reluctant to fully depart from the models’ PIT-aspects. TTC-assessments would likely increase bank discretion, increasing manipulation risks – problematic from both a level playing field and a financial stability perspective (cf. Repullo et al. 2009). An alternative option would be to adjust the
outputs of banks’ risk models with reference to indicators of the financial/business cycle (BIS 2008: 16; FSA 2009b) – comparable to CCB-approach. But this risked making the total capital adequacy framework’s strength dependent upon (national) supervisors’ ability to read the cycle; a road policymakers did not dare go down.

The BCBS (2010a: 5) therefore deferred the issue, stating it would monitor “the impact of the Basel II framework on its member countries over the credit cycle. Should the cyclicity [...] be greater than supervisors consider appropriate, the Committee will consider additional measures to dampen such cyclicity”. It stressed that banking supervisors could use the framework’s discretionary options to mitigate any perceived excess cyclicality. According to a banking representative, supervisors have done just that: “it has become much more clear that banks, at all times, need to use downturn information in their models, and if they do not have them they need to use and apply a conservative downturn factor to adjust the data. [...] Supervisors have become much more strict on these issues” (Interview 20161205). Moreover, the EBA and the ECB are working on more harmonized definitions of key concepts such as ‘probability of default’, to ensure less discretion for banks to implement model requirements too leniently (Interview 20161205).

Meanwhile, efforts to establish a clear link between the IRB-approach and increased procyclicality have led nowhere. A recent EBA (2016: 74) study finds – with some important disclaimers – “limited evidence of any significant pro-cyclical effect induced by the regulatory framework”. The EBA also points out that excess cyclicality can always be offset by countercyclical macro-tools such as the CCB – apparently downplaying the fact that the CCB’s strength depends on banks’ risk-estimates. It therefore recommends to retain the current risk-sensitivity in EU banking requirements, while stopping short of suggesting to mandate a particular rating approach (PIT or TTC). Instead, the current hybridity – where PIT-models incorporate TTC elements – seems the best compromise solution (cf. EBA 2015b: 14).

There have been more significant reforms of loan-loss provisioning rules, but also here the underlying regulatory dilemma continues to haunt policymakers (see also chapter 3). Under the IASB’s pre-crisis ‘incurred loss approach’, banks generally had to wait for losses to materialize before they could make a provision. Banking regulators blamed this approach for inducing procyclicality, although they had to admit that banks themselves had also failed to make prudent provisioning decisions (FSF 2009: 20). They argued for a more forward-looking approach (BCBS 2009c).
The IASB (2009a) appeared susceptible to regulators’ wishes. It proposed an ‘expected loss approach’, giving firms more freedom to use their risk-models to assess future problems. But the devil was in the detail. Fearing discretion would allow firms to ‘cook the books’, the IASB favored a PIT-approach, as this would be easier to verify than the more subjective TTC-approach. Banking regulators, in contrast, feared for worse forms of procyclicality: “if [provisions are] calculated by reference to current market expectations of future losses, there is a danger that the new approach could actually be more procyclical than the past” (Turner 2010a: 3). But they also recognized that firm discretion could have undesirable consequences: “[If] calculated by reference to judgements about future possible losses [...] investors might have concerns whether these [...] are based on fact [...]” (Turner 2010a: 3-4).

The final version of the expected loss approach – issued in 2014, as part of IFRS 9 – was a compromise between the demands of accountants and regulators (cf. Novotny-Farkas 2015). While the technical details are too much to go into, the short (if simplifying) message is that the IASB kept the main tenets of the PIT-approach. Although most stakeholders are in principle happy with an expected loss approach (cf. EBA 2016), IFRS 9 has nonetheless become a cause for much concern. While accountants and investors fear the increased discretionary space, many EU banks see a different problem: they expect the standard to substantially increase required provisions (Novotny-Farkas 2015; Interview 20161207b). Given recent bad economic circumstances, the PIT-estimates are quite pessimistic (Interview 2061208). As provisions are deducted from income (also affecting capital figures), banking representatives blame the standard for procyclicality (Contiguglia 2016). And as any mismatch in banks’ actual and required provisions are (up to a certain level) deducted from regulatory capital, a failure to substantially increase provisions would also deal a significant blow to banks’ capital adequacy figures (Marlin 2017). EU banks say they are stuck between a rock and a hard place.

EU policymakers dislike the idea banks’ profitability and capital adequacy ratios taking another hit: “Banking supervisors and the European Commission are getting anxious, asking themselves: ‘are we going from too little too late to too much too early?’” (Interview 20161207b). The EC has recently suggested a transitional arrangement of up to five years after IFRS 9 enters into force (this should happen in 2018), to ensure a limited impact on capital figures (EC 2016b: 264-5; cf. BCBS 2016). Yet giving banks breathing space now might merely make future problems worse. Already the aggregate level of EU banks’ provisions is deemed insufficient to address the non-performing loans problem (IMF 2015). Are regulators confident that better times are around the corner, so that they can be lenient for now? There is no way to tell. It might just as well prolong the current
malaise far into the future. Even with the new macroprudential philosophy, this is an intractable dilemma.

In sum, regulators are at a loss how to deal with the issue of the procyclicality of firms’ valuation approaches. Ultimately, they face the dilemma that cycle-sensitive and cycle-insensitive approaches can contribute to systemic risk, and policymakers see no way out but to adopt half-baked reforms that are never fully satisfactory. It is far from evident that sweeping reforms – for example, risk insensitive approaches – would make things better. Macropudential ideas offer limited guidance here. Indeed, shortly after the crisis, Goodhart (2010a: 17) had warned for too much optimism in these domains: “the behaviour of banks, and almost everyone else, that seems largely based on the extrapolation of recent trends, and hence reinforces the cycle, is not driven by irrationality. It is the best that can be done”. While macroprudential ideas surely increased policymakers’ awareness of the dangers of market-sensitive valuation approaches, this did not mean there was an obvious solution. If solving one source of systemic risk would merely create another, policymakers had little incentives to implement sweeping reforms.

6.5 Conclusion

Many scholars and policymakers identified macroprudential ideas as a potential ‘game changer’ in financial regulation. I have argued that fundamental obstacles have hampered the materialization of an ambitious policy shift. Not only do supervisors face inherent limits when trying to ‘read’ the cycle, but policymakers fear an ill-designed ambitious policy would have significant unintended consequences. The implemented reforms are far cry from the post-crisis hopes for a regulatory framework eliminating the financial system’s boom-bust nature. Ultimately, there are hard limits to what regulators can do to tame the cycle through countercyclical macroprudential regulation.

Even if the reforms appear limited from a ‘paradigm shift’-perspective, they may certainly constitute an improvement when compared to pre-crisis policy. Policy officials argue that the greatest benefit lies in the institutionalization of a systemic risk perspective in the supervisory architecture, in combination with a formalization of supervisors’ ability to intervene if they deem certain market developments unsustainable (Interviews 20161122; 20161124a; 20161201; 20161207a). Moreover, even if measurement and calibration issues severely hamper countercyclical policies, macroprudential instruments can still increase the financial system’s resilience. So loan-to-value limits may certainly limit financial fragility, even they will not prevent all problems (Agur and Sharma 2013).
On the other hand, there is a risk that overstating the significance of macroprudential reforms legitimates the status quo in other policy domains. Microprudential policy is one example. As a senior policymaker puts it: “macroprudential overlays have a greater probability of success if they are based on a very, very strong microprudential framework” (Interview 20161124). But critics warn that politicians’ misplaced trust in macroprudential policies now unwittingly legitimates a baseline microprudential policy that is in fact too weak (cf. Barwell 2014; Danielsson 2016; Blanchard 2016). Monetary policy is another example. While it is clear that central banks’ pre-crisis focus on price level stability failed to ensure macro stability (Group of Thirty 2015), monetary authorities wary of reform can now argue that “implementing an effective macroprudential policy [...] creates the conditions in which the single monetary policy is able to ensure price stability in accordance with its mandate” (Deutsche Bundesbank 2015: 71). But as the same policymaker warns: “some monetary policy authorities think that macroprudential policy is enough to deal with financial stability. I think it can help, it is definitely part of the solution, but it cannot solve the problem” (Interview 20161124). In short, macroprudential policy might unwittingly preempt policy reforms in other areas with a key impact on financial stability.

While financial markets are inherently unstable, this does not mean that their destructive potential is a constant of nature. The thirty years after World War II – a period of financial restraint – was especially remarkable for what did not happen: a major systemic financial meltdown (Minsky 1982). But financial liberalization since the 1970s onwards has weakened financing constraints, “supporting the full self-reinforcing interplay between perceptions of value and risk, risk attitudes and funding conditions” (Borio 2012: 6). The flipside of financial liberalization is households’, corporates’, and semipublic organizations’ ever-increasing dependence on the financial system – making society at large very vulnerable to the boom-bust nature of financial markets (OECD 2015). The next and final chapter will, among others, discuss the policy implications of these developments in light of financial markets’ reflexive nature.
7 Conclusion

7.1 Introduction

The crisis of 2007-9 showed the destructive potential of financial instability and crisis. It demonstrated key flaws in market participants’ assessments of financial instruments’ risks and values. Banks’ state-of-the-art risk models extrapolated rising market trends into future estimates, encouraging them to take on ever more risk. Similarly, when asset prices fell they triggered collective sell-offs, further contributing to market turmoil. The credit ratings that labelled complex structured finance instruments as ‘safe’ turned out to be off the mark. Banks’ increased reliance on market prices for asset valuation also contributed to instability, directly linking overall market developments to their measured profits and net worth. Pre-crisis valuation approaches not only missed but contributed to the crisis (Financial Services Authority [FSA] 2009b).

The crisis also demonstrated that regulatory requirements for these valuation practices had apparently failed to instill prudent routines. Worse still, in some instances they appeared to have contributed to the problems. Moreover, financial supervisors by and large missed the build-up of systemic risk, casting doubt on their own valuation routines. These governance problems have been the thesis’ central focus: what explains policymakers’ apparent inability to design coherent and effective regulatory approaches to financial firms’ and supervisors’ valuation routines?

Instead of immediately focusing on the relevant rule-making processes and the various players (regulators, politicians, firms) active therein, I have taken a different approach by first looking at valuation problems’ substance. One of my core objectives has been to gain a better understanding of valuation practices’ role in financial markets and their financial stability implications. Is it in fact true that valuation practices were simply ‘wrong’, and that alternatives conducive to financial stability were available but ignored?

I have proposed to conceptualize financial markets as a reflexive system. A reflexive system’s functioning crucially depends on participants’ assessments of its functioning. There is a two-way interaction between the system’s functioning and market participants’ beliefs. Using this perspective, we see financial valuation practices in a whole new light: rather than reflecting risks and values, they influence them. Valuation practices are, in jargon, performative. Importantly, this also changes the governance problem: if valuation practices influence financial values, how can regulators know which ones will contribute to financial stability? How can they ensure that valuation practices have the ‘right’ sort of performative effects?
Using this perspective, I have empirically analyzed various regulatory domains where financial valuation stands central, with an emphasis on the EU context in the immediate run-up to and following the crisis of 2007-9. I have studied accounting standards for financial instruments, the regulation of credit rating agencies, and bank liquidity and capital requirements. I have also studied policymakers’ post-crisis attempts to design systemic risk measurement and mitigation tools – the so-called macroprudential policy framework. These cases differ considerably in terms of the distribution of responsibilities, the actors involved, and the object of regulation. Despite this diversity, in all cases we have seen how an appreciation of market reflexivity hampers financial regulators in their attempts to design coherent and effective regulatory frameworks for financial valuation practices.

In this conclusion I recap the thesis’ main findings and put them in a broader context. I reiterate why an emphasis on financial market reflexivity helps us to understand the governance dynamics pertaining to financial valuation (section 2). In section 3, I relate these findings to the broader academic literature on financial regulation, with an emphasis on International Political Economy scholarship. I then reflect on how the thesis’ approach and insights can be applied to other financial regulatory domains (section 4). Finally, in section 5, I address the policy consequences: what does financial reflexivity imply for the governance of finance?

### 7.2 Main findings

#### 7.2.1 Financial markets as a reflexive system

I have argued that understanding the governance of valuation practices requires understanding their role in financial market functioning. In the financial system many different actors create and trade financial instruments that in their very essence link the present to an uncertain future. Entering a debt contract gives someone access to money (purchasing power) today in exchange for repayment later. This has important consequences: market participants depend on other actors’ financial solidity; and this depends on uncertain future outcomes. Further complicating matters, the financial system can be conceptualized as a reflexive system: there is a two-way feedback mechanism between actors’ assessments and actions on the one hand and the system’s functioning on the other. Put differently, actors’ assessments of how the system works shape its functioning, in turn affecting actors’ assessments (Soros 2008; Beinhocker 2013; Bronk 2013).

Keynes (1964 [1936]) and Minsky (2008 [1986]) already emphasized reflexivity’s macro-economic consequences: lacking a solid anchor, financial markets are prone to instability. A period of relative
stability can sow widespread optimism, stimulating behavior that over time will lead to instability. This claim of course has relevance beyond the financial sector in the narrow sense. As finance and money are intrinsically linked – the ‘money supply’ in advanced economies by and large consists of banks’ debt liabilities – financial reflexivity permeates the entire monetary system, introducing a tight link between financial stability and price stability. Given the key economic roles of finance and money, the entire economy is affected by the financial system’s reflexive nature (Brunnermeier and Sannikov 2014; Murau 2017; see section 5).

My central concern, however, has been the implications for financial valuation routines. As the social studies of finance (SSF)-literature has demonstrated, market reflexivity casts a whole new light on the financial valuation problem: valuation practices not merely reflect risks and values but shape them. In the SSF-literature this is called ‘performativity’: the measurement of something affects what is being measured (MacKenzie 2006; Carruthers 2013; Esposito 2013b). This is a crucial insight with major implications: being central to firms’ assessments, these valuation routines are at the core of financial markets and of key importance for financial stability. The SSF-literature’s emphasis on valuation practices’ performativity and Minsky’s argument that the system is prone to instability both derive essentially from the same theoretical origins (cf. Vogl 2015).

7.2.2 Regulatory dilemmas

My core argument is that conceptualizing financial markets as reflexive and valuation practices as performative is key to understand policymakers’ inability to design coherent and effective regulatory approaches to firms’ and supervisors’ valuation routines. Reflexivity presents regulators with a fundamental problem: not only is there ultimately no ‘objective’ basis to determine a financial instrument’s value and risk, but valuation practices shape these. It is far from obvious which valuation approaches will contribute to financial stability. Worse still, it is not obvious how prescriptive regulators should be vis-à-vis financial firms, as both flexibility and prescriptiveness can have harmful unintended consequences.

In the empirical chapters I have described how policymakers acknowledge and struggle with the ambiguous links between different valuation approaches and financial stability. Banking regulators have failed to settle on a crucial issue: what is the most appropriate valuation technique for financial instruments? The reason is that the main approaches – fair value accounting (FVA) and historical cost accounting (HCA) – both have significant drawbacks in terms of financial stability. So even if the former approach’ reliance on market prices contributes to procyclicality,
the latter may allow firms to hide mounting problems. A mixed approach also comes with significant downsides: valuing assets and liabilities through different standards contravenes the match between them that defines banks’ risk management. All this implies that there is no approach that can count on unequivocal support from banking regulators. Interestingly, this debate predates the global financial crisis – long before it, banking regulators were already debating what the scope of FVA should be and how its detrimental effects could be limited (see chapter 4).

Similar problems obstruct the design of appropriate risk-assessment technologies, hampering the regulation of credit rating agencies’ (CRAs) methodologies, banks’ risk models, and banks’ provisioning practices. Also here the key problem is how (in)sensitive actors’ risk models should be to recent market developments. The debate is whether firms should make point-in-time (PIT) or through-the-cycle (TTC) risk-assessments. The former approach determines a financial instruments’ riskiness based on current conditions: if circumstances change, assessments should be revised. Regulators embrace the PIT-approach for ensuring up-to-date assessments, yet they dislike the procyclical effects of its short-term horizon. In this sense, TTC-models are better, as they filter out cyclical effects by using longer time-horizons. But while TTC-models provide more stability, they may downplay market trends too much. If firms ignore mounting problems until it is too late, they could be unprepared for what hits them. Similarly, in depressed economic conditions the TTC-approach will understate credit problems in comparison to PIT-models. While this might mitigate stress and thus contribute to stability, it could also make future problems worse. There is no approach that is clearly better in terms of financial stability: relying too much on recent market developments creates problems; downplaying them can be detrimental as well (see chapters 4 and 6).

This suggests regulators must choose from inevitably flawed approaches. But the problem goes deeper. How prescriptive should regulators be? If regulators require all banks to use the same models, they risk steering them in the same direction, contributing to herd behavior. Yet letting firms decide for themselves comes with problems of its own, not only because of firms’ opportunism but also because of private sector induced herding. In chapter 5 we called this the ‘regulator’s conundrum’: because valuation routines are inevitably performative, policymakers cannot simply regulate their potentially detrimental effects away.
7.2.3 The regulator’s conundrum in practice

These problems affect policy dynamics in the different regulatory domains in various ways, but similar patterns emerge. First, banking regulators generally see no other option but embracing half-baked approaches that blend various valuation routines, and that combine prescriptiveness with a significant amount of flexibility. After decades of debate and regulatory controversies, EU’s new accounting standard for financial instrument (IFRS 9) still contains an uneasy mix between FVA and HCA. Where to draw the line proves difficult, however, and the standard leaves quite some room for maneuver for firms to switch from one approach to the other when valuing their financial assets and liabilities. Similarly, loan-loss provisioning requirements in IFRS 9 combine the PIT-approach and TTC-approach. Yet even this approach has become a cause for much concern, with European policymakers fearing that it is too stringent and therefore operates procyclically. Lacking a clear solution, the EU proposed to implement IFRS 9 in a stepwise fashion and postpone full adoption until 2023 (chapters 3 and 6).

Similarly, bank capital adequacy standards blend various risk-measurement approaches and contain an uneasy mix of prescriptiveness and flexibility. Banks rely on credit ratings, their own risk models, and supervisors’ risk-estimates – which all differ in valuation philosophy. Debates on whether banks’ models should all move in the direction of a TTC-approach have been going on for decades, yet they are still unresolved (chapter 6). Similarly, the post-crisis debates on removing credit ratings from banking regulation have been characterized by controversy: while credit ratings clearly have major flaws, it is far from obvious that the main alternative – market-based indicators – are better. Their reliance on market values might even create worse systemic problems. In the absence of a straightforward solution, EU policy makers opted for muddling through by encouraging banks to also look at other risk indicators and at the ratings of non-systemic CRAs (chapter 4). Securities market regulators steer clear from prescribing rating methodologies: standardizing methodologies risks boosting homogeneity in CRAs’ risk assessments, contributing to systemic risks. Regulators thus opt for a mixture of procedural and substantive requirements, stopping well short of prescribing CRAs how they should measure risk (chapter 4).

Second, regulators frequently modify financial valuation rules in an ad hoc fashion to limit their assessed (future) negative effects. This was most obvious in the FVA-HCA case. Already in the run-up to the crisis, banking regulators feared that significantly increasing FVA’s scope would lead to more instability and volatility. They therefore pressured the International Accounting Standards
Board (IASB) to introduce more flexibility in its accounting standard for financial instrument (IAS 39). While this move was celebrated by banks, policymakers were not simply doing their bidding: fearing abuse, banking regulators also pressured the IASB to make flexible parts of IAS 39 more prescriptive – much to the chagrin of banks. After the crisis, banking regulators propagate a flexible accounting standard that mixes FVA-HCA, but simultaneously demanded that the IASB would not to make the standard too flexible. All this shows the regulator’s conundrum in accounting standards: how to square the circle of mixing incompatible valuation approaches and combining prescriptiveness and flexibility? There is no other option than adapting standards continuously (chapter 3).

Ad hoc modifications also played a key role in post-crisis design of bank liquidity standards. Liquidity rules should ensure that banks’ have sufficiently stable funding sources and liquid assets to cope with stress. But assets’ liquidity depends on market participants’ assessments of their liquidity, and this in turn is affected by liquidity rules. When regulators try to push banks into ‘liquid’ asset classes, this might introduce undesirable side effects. A stringent definition of liquid assets could encourage firms to sell non-included assets, thereby contributing to liquidity risk. Moreover, if firms herd into safe asset categories this may over time unwittingly erode their liquidity. The collapse of structured finance products is a clear example of this. Regulators are thus torn between prescriptive rules to tackle insufficient liquidity in crisis times, and sufficient flexibility to limit the rules’ perverse performative effects. As the Basel Committee on Banking Supervision (BCBS) gradually found out that its original proposal would most likely have harmful unintended consequences, it saw no other option than to present a much more flexible liquidity standard (chapter 5).

Thirdly, even if financial firms’ valuation routines are fundamentally flawed, this does not mean that regulators can necessarily do much better. Regulators confront the reflexivity problem just as much as private actors. Worse still, to the extent that regulators’ risk assessments become a focal point for private actors, they may contribute to systemic risk. This problem was evident in the post-crisis debate on the desirability of setting-up a European public CRA. While policymakers deemed more diversity in the CRA-sector quite desirable from a financial stability perspective, they simultaneously feared that a public CRA would increase systemic risk. If market participants came to see the EU CRA’s ratings as official stamps of approval, it could lead to herd behavior around these indicators. As one respondent put it aptly: if the government is wrong, everybody is wrong. Ultimately, policymakers did not dare go down this road (chapter 4).
Similar problems hampered policymakers in designing macroprudential policy frameworks. These frameworks should enable supervisors to mitigate systemic risks in a top-down fashion. Crucially, supervisors would be able to mitigate the boom-bust nature of financial markets by increasing policy stringency when systemic risks build-up, while making the rules more lenient when imbalances turn into financial distress. But in this domain as well, policy reforms are much limited than initially hoped. The policy’s scope is limited: the countercyclical tools available to the European Central Bank (in its role as banking supervisor) and EU Member States’ macroprudential authorities are mainly confined to capital adequacy requirements. These authorities’ stated objective is to ensure banks can better withstand stress, rather than prevent stress from occurring in the first place.

Crucially, the countercyclical tools’ calibration is quite open-ended. While the BCBS has put forward a parsimonious indicator focusing on credit growth trends, the European Systemic Risk Board urges EU macroprudential authorities to focus on a much wider set of indicators. As a result, these authorities look at endless lists of possible systemic risk indicators, while remaining in the dark under what circumstances they should increase capital requirements. In short, it is certainly not the hardwired countercyclical calibration that was hoped for. Also here the reflexivity problem looms large. It prevents a straightforward measurement of systemic risks, as supervisors cannot ‘step out’ of the reflexivity dynamics and assess risk from an ‘external’ point-of-view. It also hampers an effective strategy to mitigate systemic risks. It is not obvious that increasing capital requirements in response to a stability threat will deliver the desired results. As the macroprudential supervisor’s actions become endogenous to financial market functioning, a forceful but ill-timed intervention might trigger the panic that supervisors wanted to prevent (chapter 6).

This leads to the fourth and final point: particularly in the domain of financial valuation, the global financial crisis was not the watershed event that many people hoped for. Even if pre-crisis valuation approaches were fundamentally flawed, regulators realized that finding better alternatives would prove quite difficult. While they set out to find better approaches, they acknowledged that any particular solution would have its own major flaws and would over time become controversial. Sweeping reforms would not necessarily improve the situation and could even make things worse. Publicly prescribed valuation approaches could have worse performative effects than their predecessors. Complicating matters, public and private interests are not easily separated, especially not in the crisis aftermath: if overly stringent measures would seriously harm
financial firms, this could also undermine financial stability. Regulators thus often embraced incremental reforms for want of something better (chapter 5).

Summing up, in the empirical parts of this thesis I showed how reflexivity problems haunted European Union policymakers in key regulatory domains, both before and after the crisis. Lacking a clear solution, policymakers often opted for incoherent approaches, and frequently revised the rules if the damaging consequences of one particular approach became evident. As such, the peculiar policy patterns do not stem from regulators’ unwillingness to design valuation rules conducive to financial stability, but from their inability to do so.

7.3 Academic relevance

My main argument put forward in this thesis is that the policy’s substance – the problem that it means to solve – is key to understand the politics of financial regulation. I aim to contribute to International Political Economy (IPE)-work that conceptualizes finance as an internal rather than external factor in policy processes. While this certainly does not exclude a focus on actors and their interests and ideas – and the political institutions that filter them – it does act as a reminder that we should not do so without taking seriously the role played by the object of regulation: financial markets and financial firms’ practices themselves. A focus on actors detached from the dilemmas and obstacles that reflexive financial markets introduce may lead to distorted accounts of policy processes and outcomes. We particularly need to reconsider the implicit assumption in IPE-research that policymakers in principle could prescribe valuation practices conducive to financial stability if they only wanted to, and that therefore only external factors – capture by the industry, flawed regulatory ideas, or lack of organizational capacity – are to blame for governance problems.

7.3.1 Using economics and sociology to explain policy dynamics

My emphasis on the intrinsic link between public policy and the economy fits well in the broader tradition of (International) Political Economy analysis. This type of analysis rejects “any separation of politics from ‘the economy’” (Johnson et al. 2013: 1015). This political economy perspective is an indispensable correction to mainstream economic perspectives seeing the existence and development of markets as a ‘force of nature’ – with regulatory intervention being an exogenous factor, typically ‘entering’ only to correct market failures (cf. Underhill 2016). It also serves as a correction to analyzing public policymaking detached from the broader economic environment – for example where political decisions on macro-economic policies are explained only through
party politics or the distribution of military power between states (cf. Underhill 1997; Mügge 2010; Schwartz 2010).

Yet perspectives differ on how public policy and the economy are mutually constitutive. The Institutionalist Economics-literature emphasizes market dynamics’ influence on the policy constellation (Underhill 2016). The famous example here is the work of Stigler on the strong incentives of a small set of producers to cooperate, aiming to steer public policy in a direction where they gain and consumers lose (Stigler 1971). The currently dominant IPE-approach – the Open Economy Politics (OEP)-approach – uses economic scholarship to theorize the preferences of actors in the political economy. Scholars use insights from trade theory to derive private actors’ interests vis-à-vis economic openness. While such explanations also focus on the role of institutions and bargaining dynamics – both at the national and international level – economic theory insights play a key role in the explanation (Oatley 2015).

In this thesis I have attempted to demonstrate that applying economics to IPE-research need not be confined to mainstream economics: we may also draw on insights from heterodox economics and economic sociology. Regarding the former, the thesis adds a governance component to the Minskyan insight that market reflexivity leads to endogenous instability (Minsky 1987; Soros 2008). Regarding the latter, it has specifically used MacKenzie’s (2006) insights on the performativity of valuation practices. The economic sociology literature on finance – social studies of finance (SSF) – argues forcefully that especially in financial markets ‘the devil is in the detail’. The calibration of seemingly technical issues such as financial models may matter greatly for financial market functioning and policy effectiveness – meaning IPE-analysis of financial regulation should pay attention to such issues (see Braun 2016; MacKenzie 2017).

I thus connected the sociological literature on the performativity of financial valuation with heterodox economics take on financial market instability to explain public policy dynamics. As such, it hopes not only to contribute to IPE-scholarship, but also to the SSF-literature – which remains curiously silent on public policy issues (Coombs 2016). This literature focuses mostly on private sector risk practices, while treating regulation as an exogenous factor. Yet given intrinsic links between public policy and market practices, such a narrow focus will lead to partial accounts of such practices. Perhaps more importantly, the SSF-focus on technical details risk losing sight of valuation practices’ broader societal implications (but see Beunza and Stark 2012; Vogl 2014). As financial regulators often must deal with the macro-effects of micro-practices, the SSF-literature
could gain more political relevance by showing more precisely how these two levels influence one another.

7.3.2 Taking policy dilemmas seriously

What does this heterodox and sociological perspective tell us about financial regulation? Among other things, it means taking seriously the dilemmas that regulators confront when designing financial policies. While IPE-research often emphasizes regulatory dilemmas, these are often localized at the level of policy objectives. Singer (2004; 2007) argues that regulators face a trade-off between stability and sectoral competitiveness. But his framework assumes that there is a clear and unambiguous link between rules and policy outcomes: stringent rules are good for stability but bad for competitiveness, and vice versa. Regulators can determine precisely the real-world effects of different types of rules and choose the one that strikes the right balance between the competing policy objectives. The analysis I have presented in this thesis, however, makes this assumption highly questionable. As emphasized above, there is an ambiguous link between different regulatory approaches and financial stability, meaning that policymakers face dilemmas in regulating financial markets that are not so much related to conflicting policy objectives, but more to problems with determining appropriate policy means.

Similarly, the results should make scholars more careful when dismissing policy dilemmas as irrelevant distractions from the ‘real’ issue at stake: the material interests of the actors involved. A telling example of the potential pitfall is Lall’s (2014) take on the FVA-HCA controversies in 2002-2005. Instead of taking seriously the financial stability problems associated with any particular valuation approach, he posits that this controversy was merely a battle between the Anglo-Saxon accountancy firms who pushed for FVA to gain market share in Europe, versus European banks who disliked the transaction costs associated with switching to a different accounting regime. From this assumption, Lall (2014: 136) wrongly concludes that European banks must have lobbied against a policy proposal – the so-called fair value option – which would expand the scope of fair value accounting. In reality, banks were lobbying in favor of this proposal, yet to no avail: regulators opposed it, for financial stability concerns (see chapter 3). As I have emphasized throughout this thesis, portraying valuation dilemmas as only a matter of competing material interests is partial at best, misleading at worst.

As a prerequisite for taking seriously regulators’ policy dilemmas, we of course must conceptualize them as actors in their own right. This is not as obvious as it sounds. The scholarly literature still generally treats international financial regulators as mere vectors of competing interests (such as
national governments or private sector stakeholders), not having any agency themselves. This is most prevalent in capture accounts of financial regulation. The institutionalist IPE-literature on financial regulation is more appropriate in this respect (see for example Kruck 2011). Yet the policy obstacles that this literature identifies predominantly revolve around *organizational problems* – for example the lack of regulatory capacity (Kruck 2016) or the existence of veto players that hamper effective policymaking for fear of losing their privileged position in the institutional framework (Moschella and Tsingou 2013b). This implies that all financial policy problems would in principle be fixable, if only there were no institutional frictions. My analysis suggests that a focus on institutional frictions is too narrow to understand regulators’ dilemmas in actual policymaking: we also need to look at the *substantive* policy issues.

Policymakers’ dilemmas are also not merely related to designing rules congruent with the dominant policy paradigm. To be sure, my analysis chimes well with constructivist scholarship that emphasizes the importance of actors’ ideas and beliefs. Yet many constructivist IPE-accounts have adopted the ‘policy paradigm’-lens to explain particular outcomes in financial regulation (cf. Baker 2013b; Blyth 2013). Such a framework may distort the analysis of the actual policy dynamic, as it risks obscuring substantive regulatory dilemmas over the right course of action. As we saw in the previous chapters, regulators are generally much more pragmatic than a paradigm perspective would have us believe. The actual policy content is also often hard to square with dogmatic policymaking. Such insights seem key to understand actual policymaking dynamics, yet when we work our way from practical policymaking towards the ‘bigger paradigm picture’ we lose these insights along the way. This suggests that a constructivist take on regulatory dynamics also needs to take actors’ ideas seriously at a lower level of abstraction – at the level where regulators debate the pros and cons of different rule-sets.

Finally, all this suggests that we may have to differentiate between the issues at stake within *particular policy areas*. IPE-research generally focusses on the institutional framework, policymakers’ ideational frames, or the constellation of different material interests for an *entire* policy domain – say capital adequacy requirements, or credit rating agency regulation (cf. Moschella and Tsingou 2013a). Such an approach implicitly assumes that the same policy dynamics are relevant for each and every ‘sub-issue’ at stake. Yet some issues may be much more tractable than others. For example, developing rules to mitigate CRAs’ conflicts of interest is a wholly different issue than finding ways to limit ratings’ procyclical effects. The ‘implementation problem’ thus need not be the same for every issue within a policy area. This suggests that
presenting a ‘one size fits all’ explanation – for example limited regulatory capacity – for all these problems can seriously distort the actual regulatory dynamics.

7.3.3 Capture revisited

The main argument hinges on regulators’ struggles to design appropriate regulatory frameworks to deal with fundamental valuation dilemmas. This should not be interpreted as a claim that private actors play no meaningful role in financial regulation. They definitely do. But to understand their role, the common analytical frame of ‘regulatory capture’ might not always be the most illuminating. This capture perspective suggests that the public interest can be clearly separated from the private interest, and that if regulators reform rules along the lines of banks’ wishes, this must be because they chose private interests over the public ones. But given financial firms’ key importance for the financial system’s functioning, it is far from obvious that societal and firms’ interests will necessarily collide – or that when they converge that the regulator was ‘captured’ (Monnet et al. 2014).

Especially in the aftermath of a financial crisis, regulators have two hearts beating in their chest. As financial market rules have clearly proved inadequate, they are determined to fix regulatory flaws and significantly increase rule stringency. Moreover, they will have to live up to political and societal calls for bold actions. Yet they simultaneously have an interest in financial firms’ viability – as post-crisis recovery and stability will depend to a great extent on restoring the banking sector’s health. As such, depressed financial and economic conditions make sweeping reforms unattractive if this harms a significant share of the sector. In today’s financialized economies, it is hard to hard to disentangle public and private interests: while it makes sense to increase rule-stringency, regulators will be hesitant to do so if it worsens economic problems in the short run. Even if the crisis reminded us that what is good for individual actors can be bad for the system – the so-called micro-macro paradox – this paradox does not apply in reverse: what is bad for the bank, may also be very bad for the system, especially during crisis-times. While such public dependence is problematic from a normative perspective, it is the reality regulators are confronted with when designing regulatory reforms (see chapter 5).

The findings also imply that the extent to which private or public actors are responsible for rule-design and implementation might not always be as crucial for policy outcomes as generally thought. Regulators’ inability to design fool-proof valuation approaches implied that post-crisis publicly mandated rules often showed striking similarities to pre-crisis privately designed ones. One key example is the Credit Rating Agency-Regulation, where the rule substance on the key
issue of rating methodologies did not differ markedly from what private actors had already been doing before the crisis (see chapter 4). Another example is accounting standards, where the private nature of standard setting seemed to be less crucial than the substantial dilemmas (see chapters 3). This throws doubt on claims that the flaws of pre-crisis accounting standards were by and large caused by the private nature of the standard setter (IASB) (e.g. Nölke and Perry 2007). Similarly, equating public steering with governing in the public interest and private discretion with regulatory capture is too simplistic. If public prescriptiveness worsens stability problems, private discretion might very well be the best course of action.

7.3.4 Normative aspirations

In this thesis I argue that we should dive into these controversies and debates that occurred in the policy process and not only treat them as a smokescreen. This also has implications for the IPE literature’s normative and prescriptive aspects. Accounts of pre- and post-crisis regulation of firms’ valuation practices often agree on at least one thing: regulators fail to do their job right. Surely in many ways policymakers do make mistakes in financial regulation and supervision; indeed, some of the strongest critiques of pre-crisis policy came from regulators themselves (e.g. FSA 2009b). Yet IPE-scholars dismissing the regulation of financial valuation as mistaken or ‘wrong’ implicitly assume that the translation of a policy ideal (prudent valuation routines conducive to financial stability) into actual policy reforms would have come easy if only the regulators had wanted to, or if they had not been led astray by mistaken policy beliefs or self-interested lobbying by financial firms. This assumption is not always warranted: some policy problems are much harder to solve than we often assume.

To be sure, regulatory capture, lack of regulatory resources, or flawed policy ideas all constitute a problem for our aim to design policies conducive to financial stability. So skewed policy input or excessive regulatory reliance on a small set of private actors who stand to gain from particular policies require our full critical attention. Yet the valuation problem that is at the core of financial markets in a way swings free of these regulatory difficulties. Regulatory capture is a problem we better seek to avoid, but even if we would take capture out of financial rule-making, regulators still must deal with the reflexivity problem.

The research shows we need to accept the possibility that market failures are not always and everywhere reducible to regulatory mistakes.Emphasizing regulatory failures fits very well in a perspective where regulators are only hampered by private sector lobbying (Lall 2012) or limited resources (Kruck 2016). It is less obvious if we emphasize inevitable limits to public policymakers’
ability to effectively regulate reflexive systems. Also, if after the crisis regulators refrained from top down steering or sweeping reforms, this need not imply that they believe that private sector practices are superior to public ones. Blaming regulators is easy but not always fair.

7.4 Suggestions for further study

To show the relevance of studying financial governance processes through the lens of market reflexivity, this study focused on several key domains that have financial valuation at their heart. The topics studied – accounting for financial instruments, CRA-regulation, and bank liquidity and capital requirements – differ in terms of the object of regulation, the actors involved, and the distribution of responsibilities. The institutional frameworks vary in important ways: a private sector agency (the IASB) is in the lead to design accounting standards, CRA-regulation and supervision is the prerogative of securities markets regulators, and banking regulators are responsible for designing capital and liquidity standards. The private actors directly affected differ. Regulation is also directed at different things: rating methodologies, the composition of banks’ balance sheets, and the valuation of instruments on these balance sheets. This diversity makes the cases suitable to illustrate the broad scope of the argument: in each case, policymakers’ appreciation that market reflexivity hampers effectively regulating valuation practices has a key influence on rule-output and governance processes.

The list of domains where similar regulatory dilemmas may appear can surely be extended. Consider three examples: (1) stress testing; (2) financial instrument trading; and (3) the asset management industry. Supervisor-led stress testing exercises seem a particularly suitable topic. Such exercises have become a standard supervisory tool to assess firms’ and the financial system’s ability to cope with potential future stress. These help supervisors and – if results are published – market participants in determining potential weaknesses, allowing them to take precautionary measures (Anderson 2016). Market reflexivity, however, likely introduces severe problems for stress testers. First, it creates market dynamics that are hard, if not impossible, to model. The very essence of financial instability is that feedback loops can turn small problems into a full-blown crisis – but modelling such effects is hardly viable (Borio et al. 2012). Second, publishing stress test results is intentionally performative: supervisors aim to trigger market responses that contribute to financial stability (Langley 2013). Yet steering everyone in the right direction can prove hard, particularly as market participants know supervisors’ intentions and will naturally second guess supervisory results (Goodhart 2016b). When failing to present credible results – as happened several times during the Eurozone debt crisis – supervisors not only risk reputational damage, but
they may increase market uncertainty and stress. Studying how such problems have affected the institutionalization of stress testing exercises seems a particularly fruitful research exercise.

Similarly, market reflexivity likely hampers regulators’ attempts to govern financial market trading activities. The issue of haircut requirements on securities financing transactions was touched upon in chapter 6 but is quite suitable for further investigation. Haircuts can be seen as the capital requirement in secured borrowing, and these are to a large extent determined by market participants’ risk assessments. As in other domains, the risk models that market participants use can have performative effects: optimistic assessments reinforce benign market circumstances, but once problems emerge margins may rise rapidly and market liquidity evaporates. This is basically what happened before and during the crisis 2007-9 (Gorton and Metrick 2012). Despite such obvious flaws, regulators appear to have refrained from directly prescribing haircut risks models. In the EU, for example, the European Market Infrastructure Regulation (EMIR) and associated Regulatory Technical Standards contain provisions to limit procyclical effects of key market participants’ risk management practices, but the rules give them much discretion on how to do this (cf. ESRB 2015a). Investigating whether regulators refrained from top-down steering for fear of unintended performative effects seems a second suitable research endeavor.

Thirdly, we may explore post-crisis attempts to mitigate instability resulting from the (rapidly growing) asset management industry. As Haldane (2014) argues, asset management funds’ (AMFs) synchronized actions – whether triggered by conventions, accounting practices, or regulatory requirements – may turn idiosyncratic risks into systemic market failures. While the asset management sector differs in important respects from the banking sector, dilemmas similar to those identified in this research could hamper regulators in addressing such problems. Regulators must determine the regulations’ prescriptiveness on AMFs’ risk-assessment strategies and they must design standards for the valuation of AMFs’ assets and liabilities. These issues likely trigger regulatory controversies that have their origin in financial markets’ reflexive nature.

Similar dilemmas that hampered EU regulators will also affect regulators elsewhere. We saw several such instances in this PhD-research, for example when addressing the US experience with the full removal of credit rating references in regulation (chapter 4). Moreover, the European focus also necessitated analyzing global regulatory developments – e.g. standard-setting by the FSB, BCBS, the IOSCO, and the IASB – given the EUs close involvement in, and dependence on global regulatory forums (cf. Mügge 2014; Quaglia 2014). Still, the focus on the EU necessitated a neglect of jurisdictions where similar dynamics may operate. Studying the extent to which such
problems affect financial regulation in the USA, Japan, or China – to name just a few – will teach us more about the argument’s scope. While the USA’s and Japan’s financial sectors are rather comparable to those in EU member states, the financial sectors in ‘emerging economies’ such as China are quite different. More comparative work in this respect would give us an idea to what extent national circumstances matter for market reflexivity’s regulatory implications.

I have emphasized how market reflexivity hampers regulators in designing effective solutions for valuation problems. In contrast, other studies have argued that an appreciation of financial markets’ self-referential nature might also inspire innovative regulatory techniques. For example, Coombs (2016) tentatively concludes that regulations aimed at financial algorithms can stimulate benign forms of performativity. Along the same lines, Langley (2013) shows how US regulators’ financial stress testing exercises were intentionally and successfully performative. As regulators had to design and implement new regulatory technologies to limit systemic risks – stress tests and early warning systems – studying the positive ways in which they dealt with reflexivity could prove useful.

### 7.5 Policy implications

The thesis’ implications for financial policymaking are quite sobering: unfortunately, there are no hard and fast ways to limit financial instability. But this message should certainly not inspire nihilism. There are definitely ways to embed market dynamism more explicitly in governance frameworks and rule-sets for financial valuation practices. But it also suggests that more restraints on financial firms’ activities are necessary to limit reflexivity’s detrimental effects. The schematic representation of the financial system (figure 7.1; also depicted in chapter 1) shows that we should not only focus on financial valuation practices, but also on financial firms’ incentives and scope for actions. It also suggests we need to go beyond financial regulation to reassess non-financial actors’ – households, corporations, and semi-public organizations – credit dependence. Finally, if instability is inherent to financial markets, we need to take further measures on distributive and social justice issues.
Figure 7.1  Schematic representation of the financial sector as a reflexive system

7.5.1  The governance of financial valuation

As the empirical chapters detailed, the governance of financial valuation practices is necessarily adaptive, as regulators periodically confront past policy choices’ negative effects. Moreover, rules often leave quite some scope for discretion, even if EU regulators also prefers one-size-fits-all solutions to level the playing field. While regulators strive for coherent and prescriptive approaches, they are often forced to abandon this quest when they are confronted by the rules’ real-world effects. This adaptiveness and in-built flexibility are predictable consequences of the financial system’s reflexive nature. Yet policymakers often treat such adaptability and heterogeneity as temporary aberrations, that will over time be resolved. They speak of ‘completing’ post-crisis reforms – as if financial regulation can ever be finished. The policy challenge here is to accept provisional and corrigeble solutions as an inevitable part of policymaking – and organize this as well as possible (cf. Sabel and Zeitlin 2008; White 2013; Gerding 2014; Zeitlin 2016).

Regulators should embrace dynamic regulation and frequently reassess regulatory instruments. This should have both a fixed element and a flexible one. With ‘fixed’ I mean that regulators should periodically – say once every five years, but this depends on the policy domain – revise rules, even
when they are not obviously flawed. The idea is that rules that are fixed for too long will reinforce valuation practices’ performative effects and will inevitably spawn evasive behavior by firm. In addition, there is the risk of “regulation-on-autopilot”, which “increases the danger of regulators falling asleep at the wheel” (Gerding 2014: 494). If stability breeds instability, as Minsky warns, then periodically shaking up the rules will perhaps reinforce vigilance on the part of both regulators and market participants. Such practices are already quite common – think for example of ‘sunset clauses’ and in-built review requirements. Yet such practices are now generally biased against regulatory requirements and they have a conservative bias: regulators need to defend existing rules or abandon them, downplaying the option of periodically modifying existing rules. There is thus “a need for a constant regulatory response to what is likely to be constant innovation in response to regulation itself, as well as other forces” (White 2013: 43).

The flexible element is that regulators should always be able to change regulatory instruments’ settings when market circumstances change. This plea for ad hoc rule-adaptation will not be welcomed by financial firms, as they generally prefer a predictable supervisor. But valuation tools shape financial markets in unforeseen ways and often with undesirable consequences. This implies that a permanent willingness and ability to change course is imperative. Regulatory vigilance requires sufficient capacities and capabilities for financial supervisors – especially when markets are booming (Gerding 2014: 495-6). They could also use some help. Finance needs watchdogs – particularly actors who do not materially benefit from market booms. The EU has implemented several initiatives that try to strengthen civil society actors (for example by supporting the critically-minded NGO Finance Watch), but more can be done to support their capacities (Anheier 2014).

Complementary to purposeful adaptive governance, financial market reflexivity suggests a preference for norm-based standards that allow for sufficiently heterogeneous valuation approaches (White 2013; Claessens 2016). The reason is that overly prescriptive and harmonized valuation rules encourage homogeneous market responses – reinforcing financial markets’ boom-bust nature. In practice, regulators already abandon one-size-fits all solutions and embrace pragmatic policy solutions. For example, in the domain of accounting for financial instruments both banking regulators and accounting standard setters have embraced mixed valuation approaches as a ‘permanent’ feature of the standards – even if the IASB does so reluctantly. More in general, banking regulators have become warier of hard-wiring market values in regulation. Purposefully striving for heterogeneous valuation rules would probably increase their quality and the processes through which they are designed (Romano 2014).
When policy requires continual adaptation, full EU harmonization of financial valuation practices may be counterproductive. To be sure, the EU obviously requires a degree of centralization and harmonization in financial governance given monetary and financial integration (Jones and Underhill 2014; Jones 2015; Zeitlin 2016). But there are limits to centralization. For some parts of financial governance, ‘unlevelling’ the playing field may be more appropriate, especially given countries’ diverse economies and the marked differences between Member States’ financial systems (Warwick Commission 2009; Creel et al. 2014). In the domain of financial valuation, harmonization figures in the EU’s ‘level playing field’ agenda and makes sense from a microprudential perspective. Yet, homogenous risk assessment procedures can amplify systemic risk. This suggests that especially in this domain, policymakers should favor ‘mutual recognition’ over rule harmonization. In other words, it would make more sense to aim for a certain degree of correspondence between different valuation approaches than to strive for maximum similarity (Danielsson 2013).

The problem, however, is not only that similar financial firms in different countries are required to use the same rules, but perhaps more importantly that firms with markedly different business models must do so. Each EU Member State’s banking sector is still populated by banks with various strategies and business models, despite the trend towards more homogeneity in the past decades (cf. Liikanen 2012; Creel et al. 2014). To be sure, it makes sense for banking regulators to apply similar valuation rules to banks – whether these are part of capital adequacy requirements, liquidity rules, or accounting standards. Particularly if we consider assessing the value and risk of an individual asset, it does not make much sense to maintain that this depends on banks’ business model. But again, too much similarity might be harmful at the systemic level. In practice, regulators already prescribe different rules for different banks. For example, in capital adequacy requirements for credit risk, banks can choose between a standardized approach and two advanced approaches (Blom 2014). Yet such heterogeneity is mainly informed by banks’ size or their capacities. Allowing for differentiated rules also with respect to banks’ various business models seems a desirable strategy to stimulate heterogeneity.

Similar considerations apply to the issue of ‘exporting’ regulatory approaches from the banking sector to non-banking actors – such as insurance companies, pension funds, asset management funds, and other entities classified as ‘shadow banks’ (Claessens 2016: 24). These actors are increasingly important in modern financial systems where capital markets are a crucial financing infrastructure, and they often interact or compete with banks. A microprudential perspective would suggest imposing similar valuation requirements on these actors. Think for example of
translating the concept of risk-based capital adequacy requirements to insurance companies regulation (Quaglia 2014). But, yet again, caution is required. From a macroprudential perspective striving for more harmonization may do more harm than good.

Striving for heterogeneous valuation approaches obviously has downsides as well. Most importantly, they allow more discretion at the firm level and hence more scope for abuse (Carmassi and Micossi 2012). Reliance on principle-based rules requires trust in financial firms to comply with the spirit rather than the letter of the rules; and this trust has been seriously undermined by the financial crisis (Black 2011). Regulatory diversity thus comes with serious negative downsides. Yet a pragmatic approach sees this as an inevitable consequence that is eclipsed by the positive aspects of variety and heterogeneity in firms’ actions (Danielsson 2013; Romano 2014).

7.5.2 The governance of the financial sector

Mitigating systemic risks will not be possible through financial valuation practices alone. Prudent valuation routines are necessary but will never be sufficient. This implies that we should not only aim to influence actors’ valuation practices, but also their room for maneuver. This also applies to non-financial firms and households (the subject of the following section), but particularly holds for financial firms. The relative stability of Western countries’ financial systems in three decades after World War II suggests that there are certainly strategies to contain destabilizing reflexive dynamics: “the controlled, constrained financial system was just a safe, but dull place” (Goodhart 2010b: 8). Even if the economic, social, and political contexts were markedly different than today’s, we can certainly draw inspiration from these regulatory approaches. A first lesson is the importance of financial sector heterogeneity to limit herd behavior dynamics. A second lesson is the importance of influencing financial firms’ ability to create and allocate credit. I address both issues in turn.

Consider banking sector heterogeneity first. In the post-war era, such heterogeneity was not only the result of market forces stimulating small scale, specialized firms, but also an explicit regulatory strategy (Bröker 1989; OECD 1992; Edey and Hviding 1995). Most countries encouraged compartmentalized credit systems, differentiating rules for different types of banks (savings, commercial, agricultural, and investment banks) and often prohibiting mergers and acquisitions. Furthermore, most governments explicitly forbade banks to acquire stakes in insurance companies or non-financial companies (Borio and Filosa 1994).
Over time, policymakers abandoned these approaches. Policymakers presented all-purpose, universal banks as both more efficient (through economies of scale and scope) and more stable (through risk diversification) than limited purpose banks. But as Haldane (2009a) points out, diversification at the firm level led does not ensure heterogeneity at the system level. If the major banks all do the same thing, this reinforces the herd behavior problem: in boom times, those banks that take higher risks will gain market share, thereby forcing their direct competitors to go along (Crockett 2008). If fierce competition between similar banks will not generate the desired results, striving for more heterogeneity would be a fruitful avenue for further reform.

In this regard, the post-crisis experience is not reassuring. The EU’s attempt at structural reform has failed. In 2014, the European Commission proposed a Regulation to introduce ‘ring fences’ within universal banks. While the Council reached an agreement, the EU Parliament failed to do so – leading to a withdrawal of the proposal in October 2017. This suggests that structural reform as initially envisaged – ‘breaking up the banks’ – is no feasible strategy in the short run. Interestingly, these structural measures have been framed predominantly as a means to address the Too Big To Fail-problem of universal banks. As such, the EC could point at the introduction of Banking Union and the associated resolution mechanisms to buttress the claim that structural reforms had become redundant (European Commission 2017). Yet this framing ignores the problem of sectoral homogeneity that is the result of the universal banks’ dominance. It suggests that structural reforms must start anew, but now with the explicit goal to increase banking sector heterogeneity. If breaking up universal banks is no feasible strategy for the foreseeable future, the obvious alternative for stimulating heterogeneity is explicitly supporting other, non-universal banks.

Second, EU policymakers should consider targeting credit growth and its allocation more directly. Credit policies were an explicit part of post-war European financial regulation. Governments deemed the financial system of key importance for economic recovery and stability. Public authorities influenced credit creation, steered its allocation, and in some instances regulated the interest rates charged on these loans (Borio and Filosa 1994; Forsyth and Notermans 1997). Such credit policies were a component of industrial policy, as policymakers wanted to ensure that the price and allocation of credit were conducive to economic growth. In some countries, credit policies were part of monetary policy: credit restrictions were to ensure that the post-war low-interest rate environment would not have excessive inflationary effects (Edey and Hviding 1995). Policymakers also relied on capital controls – limiting the in- and outflow of cross-border finance – to prevent destabilizing cross-border capital flows and to facilitate credit policies (Helleiner
In sum, steering credit was an essential part of post-war macro-economic policies. From the 1970s onwards, western governments started to abandon such direct interventions in the allocation, price, and growth of credit. They deemed such interventionist policies as inefficient and distortionary, arguing that market forces would be much more suitable. Slowly, credit disappeared from policymakers’ radar screens (Turner 2015a).

Since the crisis of 2007-9, however, policymakers have rediscovered credit’s macro-economic relevance. The most important way in which policymakers have translated this insight into policy has been through the development of macroprudential policies. As detailed in chapter 6, policymakers have shied away from striving for hardwired countercyclical policy, nor did they aim for a ‘public planner’ that would be able to prevent all systemic risks in a discretionary fashion. Given financial market reflexivity, such attempts would not merely have been unrealistic, but would likely come with significant downsides (Hellwig 2014). Still, attempts to institutionalize the financial system’s macro-economic dimension in policy are a step in the right direction. Pragmatically influencing credit growth and aiming to increase firms’ resilience if supervisors deem systemic risks to be building up is a modest, yet important objective (Turner 2015a).

Given central banks’ macro-economic expertise and close connection to commercial banks, in most countries central bank departments are in the lead on macroprudential policies. Central banks see macroprudential policy as an essential complement to monetary policy (ECB 2011b; Deutsche Bundesbank 2015). In today’s financialized societies, the interest rate tool is not really suitable to prick asset or credit bubbles, as the required interest rate hikes would be excessively harmful for the wider economy (IMF 2013c). Central bankers thus present macroprudential instruments as key to mitigate systemic risks, while monetary policy can still be directed at inflation (Constancio 2015). As such, policymakers have not departed from the pre-crisis ‘separation principle’, where monetary policy is aimed at price stability, and financial regulation is aimed at financial stability (Fahr and Fell 2017). The key difference is that financial regulation has been adapted to incorporate the systemic dimension more explicitly (see chapter 6).

This development is not without downsides, however. There is the risk of silo-thinking, in which financial stability considerations are deemed to be sole prerogative of the macroprudential authority (Caruana 2011b; George 2015). Moreover, central banks have embraced macroprudential policy responsibilities only half-heartedly, partly because of reluctance to enter the politicized domain of credit allocation: central banks fear for their independence if they opt
for a more interventionist approach (e.g. Ekholm 2014). As a result, we risk that nobody feels responsible for targeting credit growth.

If central banks are reluctant to move in this direction for fear for their independence, one option would be to move macroprudential policy further away from monetary policy. However, financial stability and price stability are intrinsically linked (Lastra and Goodhart 2015; Brunnermeier and Sannikov 2014), suggesting that the pre-crisis separation principle has major flaws. A more radical response would thus be to broaden central banks’ mandate to explicitly target both financial stability and price stability, using both macroprudential instruments and monetary policy instruments (Committee on International Economic Policy and Reform 2011). As monetary policy authorities’ primary objective after the crisis has been financial stability (Lastra and Goodhart 2015), it would make more sense just to broaden the mandate and formalize this policy objective. This would indeed have to be accompanied by a revision of central banks’ independent position, in the sense that accountability mechanisms would have to be much stronger.

To the extent that macroprudential and monetary policies will remain separate domains, there should be sufficient coherence between them. At times the two policy objectives (financial stability and price stability) will conflict, making sufficient cooperation between the relevant authorities essential. The current European institutional framework prioritizes price stability over financial stability. The actions of the ESRB are ultimately subject to approval by the ECB Governing Board that, at least formally, focuses on price stability. There should be no reason why macroprudential policy should permanently have a lower formal standing than monetary policy. Indeed, as the crisis showed, in today’s societies financial stability is likely to be as important as price stability. It thus makes sense to give macroprudential authorities in due time more formal powers and a broader policy remit.

As the measures presented above are inspired by post-war regulatory regimes, a possible counterargument is that they would undo the positive social and economic effects of financial openness. Put differently, we would be throwing out the baby with the bathwater. Surely there will be costs involved when attempting to constrain credit extension and to aim for more diversity in the financial sector. Yet in our current financialized societies, the often-posed trade-off between aiming for financial stability and boosting economic growth might no longer apply in a straightforward manner. Research by the BIS, the IMF and by the OECD suggests that many OECD-countries are now at a point where there is “too much finance” (Arcand et al. 2012; cf. Cecchetti and Kharroubi 2013; OECD 2015). Constraining finance could very well support both financial
stability as well as economic development, even though there will surely be distributional consequences. But in aiming to reduce the dominance of finance, it is not enough to focus on the financial sector. We also need to look at factors stimulating society’s dependence on financial services.

7.5.3 Finance and society

As BIS-General Manager Caruana (2011b) admitted shortly after the crisis, we cannot exclusively rely on a macroprudential policy framework to ensure the desired degree of financial stability. We could take this claim a step further: financial stability considerations should go beyond policies directly affecting the financial sector. One of the core reasons why the global financial crisis had such damaging and long-lasting effects was because many societies’ dependence on financial services had increased significantly, particularly through rising household debts. Reducing the credit dependence of many OECD-countries will therefore be just as important for financial sustainability as developing sound financial regulations. After all, even perfectly designed financial regulations will be of limited use if all other policies push in the opposite direction. The core challenge here is to build a less credit-intensive society (Turner 2015a).

Socioeconomic policies very much affect societies’ reliance on financial services. Tax policies encouraging debt finance over equity should over time be eliminated. Similarly, policymakers should ensure housing market policies do not unwittingly push households in unsustainably high debts. This implies ensuring viable alternatives (a well-functioning rental market), prudent valuation routines (conservative estimates of house price values), and caution with explicit government guarantees. It could also involve a reassessment of existing risk-distribution between creditors and debtors – for example designing mortgages where the risks and benefits of housing price changes are distributed more equitably between banks and home owners. Relegating finance to a less central role in society will be an essential part of our efforts to crisis-proof our economies (Scientific Council for Government Policy 2016).

The financial instability problem also is very much related to rising economic inequalities (Turner 2015a). As Minsky (1982) argued, fiscal policies were key to the financial system’s relative stability in the post-World War II period, as government spending provided an effective floor under falling economic activity. It thereby ensured firms’ profitability in case of a slowdown of the economy, so that they would not default on financial obligations and setting off downward spirals. In modern financial systems, household debt has become (more) dominant. To keep the financial system floating, ensuring business profitability is not enough; it requires stable income streams for
indebted citizens. Yet precisely because of rising economic inequality and increased job insecurity, households’ ability to pay off loans can deteriorate rapidly in economic downturns. The implosion of the sub-prime mortgage market in the USA is a case in point. This suggests that labor market policies and social security policies should also be key components of governments’ attempts to contribute to financial stability (Turner 2015a).

7.5.4 Legitimacy and justice

The perspective I have outlined in this thesis suggests that instability is inherent to financial markets. It therefore seems better to aim for a system periodically affected a limited amount of instability, than aiming to prevent it altogether. If stability is destabilizing, the latter strategy is doomed to fail. As White (2018: 367) puts it: “the objective of policy should be to avoid truly bad outcomes. This implies a greater willingness of central banks to accept small downturns that redress imbalances in the economy. [Much] larger downturns, with potential social and even political side effects, might [then] be avoided.”

Yet getting towards a system where instability is less devastating will take time – if we even get there. When instability reemerges, public support for financial institutions will again be necessary: in crisis times it is penny wise, pound foolish for governments to allow many banks to fail. The costs of bailing out banks is high – but the costs of not doing so is unfortunately even higher. Needless to say, public dependence on the viability of private firms is highly undesirable. It does suggest that we should ask ourselves the question: ‘what kind of system do we want to save?’ And this requires changes in financial firms’ behavior as well as in financial governance.

Even banks that are formally private institutions also have a public dimension, given their importance for the financial system’s functioning. Banks’ public-private nature needs to be thoroughly embedded in their business models. This suggests that even in good times banks should aim for modest profits, and an emphasis on reinvestment over distribution. It also means banks’ remuneration policies should match their public dimension. And it implies that banks should focus much more on their contribution to sustainable economic development, rather than aiming blindly for short-term gains. In short, it requires much more emphasis on banks’ corporate social responsibility. While such responsibility may limit future problems, it will certainly not prevent them. That is also not the purpose. The point is that banks must earn and deserve our future support.

The financial system’s hybrid public-private nature also requires changes in its governance. It suggests that we discard once and for all the notion that finance is a technocratic affair that can
best be left to experts. Public outrage over bank bailouts is quite understandable. If banks ultimately depend on implicit or explicit public support, public policy must be comprehensible for ordinary citizens and financial policymakers must be accountable to the general public. In this sense, the IPE-literature stressing the dangers of complex rules and exclusive regulatory forums is spot-on. If people perceive financial policymaking to be dominated by technocrats and powerful private interests, the system will continue to lack in legitimacy. While the financial crisis has politicized financial regulation and heightened attention for the importance of plurality and dissenting voices, this is an issue that requires much more progress. At the very minimum, it requires an emphasis on simple, comprehensible rules. It also requires better accountability measures for the rule-making authorities.

7.5.5 To conclude

This thesis started with an apt quote by Banque de France governor Christian Noyer in September 2008: “In many respects, the current crisis is about valuation”. Unfortunately, financial markets’ reflexive nature obstructs the design of fool-proof valuation practices that will under all circumstances be conducive to financial stability. A regulatory approach that looks good at one point in time might be the seed of future turmoil. Financial policymakers must therefore be vigilant and proactive, periodically modifying regulatory frameworks to deal with their inevitable unintended consequences. And they should be more supportive of heterogeneous valuation practices, to prevent regulatory induced herd behavior. Yet regulating financial valuation practices will only take us so far. As instability is inherent to financial markets, the more ambitious, if arguably more difficult, route forward is to reduce the vulnerability of our economy and society to the vagaries of finance.
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Interview list

The respondents are senior experts of public and private sector organizations located in Amsterdam, Basel, Brussels, Frankfurt am Main, London, Madrid and Paris. To ensure confidentiality I do not disclose their names nor the specific organizations they work for.

20160316 = Banking regulator (two respondents)
20160404 = Securities market regulator
20160408a = Securities market regulator (two respondents)
20160408b = Securities market regulator
20160413a = Banking regulator (two respondents)
20160413b = Credit Rating Agency representative (two respondents)
20160414a = Credit Rating Agency representative
20160414b = Banking and investment services representative
20160421 = Securities market regulator
20160422 = Credit Rating Agency representative
20160603 = Banking sector representative
20161103 = Banking regulator (two respondents)
20161122 = Banking regulator
20161124a = Banking regulator
20161124b = Financial market regulator
20161130 = Banking regulator
20161201 = Banking regulator
20161205 = Banking sector representative (two respondents)
20161207a = Banking regulator (two respondents)
20161207b = Banking regulator
20161208 = Banking sector representative (two respondents)
Summary

The financial sector is of key importance for the proper functioning of our societies. We depend on it for making payments, obtaining loans, saving, and insuring against risks. A disruption in this sector causes serious harm to society, explaining governments’ interest in ensuring financial stability and preventing crises. Within financial stability policy, regulators pay specific attention to the ways in which financial firms measure and manage risk and how they price their assets and liabilities. These valuation practices exert significant influence over firms’ behavior and, as a consequence, are crucial for stable markets.

Given the importance of financial firms’ valuation practices, one would expect policymakers to ensure that firms use practices conducive to financial stability. Yet the financial crisis of 2007-9 appears to show otherwise. Strikingly, policymakers allowed or even prescribed many of the valuation routines that contributed to the crisis. They allowed banks to rely on credit ratings or their own risk models to assess the riskiness of complex securities. Both failed to instill prudent behavior. Before the crisis, risk models signaled risks were low, boosting market confidence. During the crisis, they suddenly flashed red, contributing to the panic. Similarly, pre-crisis accounting standards allowed firms to recognize rising market prices as profits, thereby encouraging further lending. The subsequent collapse in market prices implied massive losses for banks, setting off downward spirals that could only be stopped by central banks’ bold actions. If this was a crisis of financial valuation, it was surely also a crisis of its governance.

Surprisingly, the crisis does not seem to have led to a fundamental overhaul of pre-crisis valuation routines. Despite a flurry of reforms, post-crisis valuation rules still look quite familiar. Banking supervisors allow banks to use credit ratings or their own risk models to calculate safety margins. Accounting standard setters still require banks to rely on market prices to value a substantial part of their balance sheets. Neither have policymakers’ attempts to strengthen their own risk assessments tools lived up to the high post-crisis ambitions. Policymakers were determined to develop instruments to ensure that regulation would operate countercyclically, but the results are modest. The scope of countercyclical rules is limited, and the objective is modest: to ensure banks can better withstand stress, rather than prevent stress from occurring in the first place.

Interestingly, this has not been for lack of trying: policymakers have considered and debated many different options to reform valuation practices, but they seem to have been unable to come up with something better. Moreover, many of these debates predate the crisis of 2007-9. From the 1990s onwards, banking regulators have fretted about excessive reliance on market-value
accounting and about regulatory use of credit ratings and banks’ risk models. Valuation practices seem to be of crucial importance for financial stability, but policymakers appear unable to ‘get it right’. What explains policymakers’ apparent inability to prescribe valuation routines conducive to financial stability? This question stands central in this thesis.

I argue that the key to answering this question lies in the perspective we adopt on the links between valuation practices, public regulation, and financial stability. The International Political Economy (IPE)-literature on global financial regulation often implicitly assumes a relatively straightforward link between valuation practices and financial stability: these practices can readily be ranked according to their measurement accuracy and their contribution to financial stability, implying that policymakers could in principle design prudent valuation rules. The main factors hampering public policy from achieving this are obstacles external to financial valuation, for example bank lobbying or policymakers’ misguided economic beliefs.

In this thesis, I argue that to understand these regulatory difficulties we should adopt a different perspective on financial valuation practices and their link with financial stability. This perspective draws on insights from heterodox economics and economic sociology. The first step is to conceptualize the financial sector as a reflexive, or self-referential, system. The functioning of a reflexive system depends on participants’ assessments of its functioning. Crucially, a reflexive system changes under observation, and can do so in sudden and destabilizing ways. As the American heterodox economist Hyman Minsky famously argued, reflexivity is at the core of financial markets’ inherent instability. Booming markets increase firms’ optimism, in turn reinforcing the boom. Similarly, financial turmoil can become self-reinforcing as it encourages pessimism and panic. Financial markets thus have no stable anchor outside of market participants’ beliefs.

The second step is to acknowledge that reflexivity shines a wholly different light on the nature of financial valuation: rather than merely measuring risks and values more or less accurately, valuation practices shape them, as market participants use them to guide their behavior. They are, in economic sociology jargon, performative. Performativity makes the link between valuation and financial stability ambiguous: while valuation practices may at one point in time be conducive to financial stability, their widespread adoption may overtime significantly change financial market functioning, thereby contributing to instability.

The third step, and this is my core argument, is that conceptualizing financial markets as reflexive and valuation practices as performative also changes our understanding of the regulatory
problem. It directs our attention away from obstacles *external* to valuation towards *internal* factors: not only is there ultimately no ‘objective’ basis to determine a financial instrument’s value and risk, but valuation practices shape these. It is far from obvious which valuation approaches will contribute to financial stability. Worse still, it is not clear how prescriptive regulators should be vis-à-vis financial firms, as both flexibility and prescriptiveness can have harmful unintended consequences. In short, performativity is crucial to understand policymakers’ inability to design coherent and effective regulatory approaches to firms’ and supervisors’ valuation routines. To substantiate these claims, I have empirically analyzed policy dynamics in the European Union on four valuation issues that were central to post-crisis reform efforts: accounting for financial instruments, credit rating issuance and usage, the assessment of banks’ liquidity and credit risks, and supervisors’ measurement and mitigation of systemic risks. While these issues differ in important respects, similar regulatory patterns emerged.

First, performativity stimulates regulators to embrace half-baked approaches that blend various valuation routines, and that combine prescriptiveness in one area with a significant amount of flexibility in another. For example, post-crisis debates on removing credit ratings from banking regulation have been characterized by controversy. Pre-crisis regulatory reliance on ratings contributed to their destabilizing effects. Still, switching to the main alternative – market-based indicators – might create worse systemic problems, as they would reinforce the feedback loop between market volatility and firm behavior. In the absence of a straightforward solution, EU policymakers opted for muddling through, encouraging banks to also look at other risk indicators and at the ratings of non-systemic CRAs. Regulators also backed away from prescribing rating methodologies, fearing the performative effects of standardizing rating methodologies: if all CRAs use the same models this would significantly reinforce herd behavior, thereby contributing to systemic risks. Policymakers thus opted for a mixture of prescriptive procedural and flexible substantive requirements, stopping well short of prescribing CRAs how they should measure risk.

Second, policymakers frequently modify financial valuation rules, often in an *ad hoc* fashion, to limit their assessed (future) negative effects. This dynamic was clearly visible in the accounting case. Already in the run-up to the crisis, banking regulators feared that significantly increasing the scope of market-value accounting would lead to more instability. They therefore pressured accounting standard setters to increase the standard’s flexibility. While this move was celebrated by banks, policymakers were not simply doing their bidding. Fearing abuse, banking regulators *also* pressured the accounting standard setter to make certain flexible parts of the standard more
prescriptive, much to the chagrin of banks. During the crisis, regulators again pressured standard setters to make the rules more flexible in order to limit banks’ exposure to falling market prices. Moreover, during development of a whole new standard, regulators again pressured standard setters several times to increase the standard’s flexibility. Regulators see no other option than to adapt standards when their detrimental effects become clear. Again, this dynamic is ultimately rooted in the performativity of valuation practices.

Third, even if financial firms’ valuation routines are fundamentally flawed, this does not mean that regulators can necessarily do much better. Regulators confront valuation problems just as much as private actors. The problems associated with financial market reflexivity hampered policymakers in designing macroprudential policy frameworks. These frameworks would allow regulators to mitigate systemic risks in a top-down fashion. But financial markets’ reflexive nature prevents a straightforward measurement of systemic risks, as supervisors cannot ‘step out’ of the system and assess risk from an ‘external’ point-of-view. It also hampers an effective strategy to mitigate systemic risks. It is not obvious that increasing capital requirements in response to a stability threat will deliver the desired results. As the macroprudential supervisor’s actions become endogenous to financial market functioning, a forceful but ill-timed intervention might trigger the panic that supervisors aim to prevent.

In sum, particularly in the domain of financial valuation, the global financial crisis was not the watershed event that many people hoped for. Even if pre-crisis valuation approaches had harmful performative effects, regulators realized that finding better alternatives would prove quite difficult. While they set out to find better approaches, they acknowledged that any particular solution would have its own major flaws and would over time become subject to further reform. Sweeping reforms would not necessarily improve the situation: the performative effects of publicly prescribed approaches could be worse than their predecessors. Regulators thus often embraced incremental reforms for want of something better.

With this thesis I hope to show the fruitfulness of applying insights from heterodox economics and economic sociology to the study of global financial regulation. The perspective allows us to see that regulatory problems with financial valuation are inherent to the reflexive nature of financial markets. These problems may thus show a much greater resistance to effective solutions than we often assume. From this I draw the following policy implications. If a regulatory approach that looks good at one point in time can be the seed of future turmoil, it would make sense to rely more on in-built regulatory review requirements. Policymakers should also be more supportive of
heterogeneous valuation practices, to prevent regulatory induced herd behavior. Yet regulating financial valuation practices will only take us so far. If instability is inherent to financial markets, the more ambitious, if arguably more difficult, route forward is to reduce the vulnerability of our economy and society to the vagaries of finance.
Samenvatting

De financiële sector is van fundamenteel belang voor het functioneren van de samenleving. We zijn ervan afhankelijk voor betalen, sparen, kredietverlening en verzekeren. Een verstoring binnen de sector kan grote negatieve maatschappelijke gevolgen hebben. Overheden proberen dan ook sinds jaar en dag met regulering en toezicht de stabiliteit van de sector te waarborgen. Binnen dit beleid hebben beleidsmakers en toezichthouders in het bijzonder aandacht voor de manier waarop financiële instellingen risico’s inschatten en managen (risicomodellen) en hoe zij hun bezittingen en verplichtingen beprijzen (boekhoudmethodes). De manier waarop instellingen risico’s en waardes bepalen heeft grote invloed op het handelen van deze instellingen en daarmee ook op financiële stabiliteit.

Gelet op het belang van deze ‘financiële waarderingsmethodes’ zou je verwachten dat beleidsmakers ervoor zorgen dat financiële instellingen methodes gebruiken die bijdragen aan stabiliteit. De financiële crisis van 2007-9 lijkt echter het tegendeel te bewijzen. Veel van de waarderingsmethodes die aan deze crisis bijdroegen waren door beleidsmakers toegestaan of zelfs voorgeschreven. Toezichthouders stonden banken toe om op basis van kredietbeoordelingen door externe bureaus (ratings) of hun eigen modellen de risico’s van complexe financiële producten te bepalen. Zowel de ratings als de risicomodellen bleken echter inadequaat. In aanloop naar de crisis gaven ratings en bancaire risicomodellen aan dat risico’s zeer laag waren, wat bijdroeg aan het optimisme onder marktspelers. Tijdens de crisis verlaagden ratingbureaus echter plotseling veel ratings en lieten interne risicomodellen alle alarmbellen afgaan, wat bijdroeg aan paniek. Boekhoudregels zorgden voor vergelijkbare problemen. Voor de crisis was het banken toegestaan om stijgende prijzen van bezittingen (activaprijzen) als winst in te boeken, wat bijdroeg aan de hausse. De daaropvolgende neergang in marktprijzen betekende dat banken hun bezittingen moesten afwaarderen, met grote verliezen als gevolg. Dit droeg bij aan een neerwaartse marktspiraaldie alleen kon worden tegengehouden doordat centrale banken resoluut ingrepen. Dit was niet alleen een crisis van waarderingsmethodes, maar zeker ook een crisis van de regulering daarvan.

Verrassend genoeg heeft de crisis niet geleid tot een fundamentele hervorming van regels op het gebied van financiële waarderingsmethodes. Ondanks tal van beleidshervormingen lijken de huidige waarderingsregels verdacht veel op die van voor de crisis. Toezichthouders staan banken nog steeds toe om ratings of hun eigen risicomodellen te gebruiken om benodigde veiligheidsmarges te berekenen. Boekhoudregels verplichten banken nog steeds dat zij
marktprijzen gebruiken voor het beprijzen van een groot deel van hun balans. Ook lijken pogingen van beleidsmakers om instrumenten te ontwikkelen die beleid anticyclisch zouden maken niet de hoge post-crisisambities waar te maken. Om systeemrisico’s tijdig te signaleren en tegen te werken probeerden toezichthouders nieuwe risicomodellen en -indicatoren te ontwikkelen. Op basis van die indicatoren zou beleid automatisch strenger kunnen worden als systeemrisico’s zich aandienen. Maar het meten van systeemrisico’s bleek ingewikkelder dan gedacht, waardoor de reikwijdde en de ambitie van de ontwikkelde anticyclische instrumenten beperkt zijn.

Interessant hieraan is dat de beperkte veranderingen niet het gevolg lijken van een gebrekkige hervormingsbereidheid. Beleidsmakers hebben tal van hervormingsopties besproken en overwogen, maar ze lijken niet in staat om met iets significant beters te komen. Daarbij valt het ook op dat veel van deze debatten al voor de crisis werden gevoerd. Vanaf de jaren negentig maakten toezichthouders zich al zorgen over de mogelijk destabiliserende werking van op marktwaarden gebaseerde boekhoudregels en over te grote afhankelijkheid van ratings en bancaire risicomodellen. Waarderingsmethodes zijn van cruciaal belang te zijn voor financiële stabiliteit, maar beleidsmakers lijken er gewoon niet uit te komen. Waarom is het zo moeilijk voor hen om waarderingsmethodes voor te schrijven die bijdragen aan financiële stabiliteit? Dat is de hoofdvraag van deze dissertatie.

De sleutel tot de oplossing van dit vraagstuk zit in ons perspectief op de relatie tussen waarderingsmethodes, financiële regulering en stabiliteit. De Internationale Politieke Economie-studie van financiële regulering neemt over het algemeen impliciet aan dat er hiertussen een eenduidige relatie bestaat. Waarderingsmethodes kunnen gerangschikt worden naar hoe goed zij risico’s meten en financiële bezittingen beprijzen en dus in welke mate zij bijdragen of afbreuk doen aan stabiliteit. Dit betekent dat beleidsmakers in principe via regelgeving de methodes kunnen voorschrijven die zullen bijdragen aan financiële stabiliteit. De verklaring voor het feit dat dit in de praktijk niet gebeurt moet gezocht worden in externe beleidsobstakels, zoals een agressieve bankenlobby of een verkeerde beleidsfilosofie.

In mijn dissertatie betoog ik dat we een heel ander perspectief – dat is ontleend aan inzichten uit de heterodoxe economie en de economische sociologie – moeten hanteren om te begrijpen waarom beleidsmakers zo worstelen met het reguleren van financiële waarderingsmethodes. De eerste stap hierbij is om de financiële sector te begrijpen als een reflexief systeem. Het functioneren van een reflexief systeem hangt af van hoe spelers binnen dit systeem denken dat het functioneert. Er is hierbij sprake van een continue interactie tussen de verandering in de

De tweede stap is dat reflexiviteit ook een heel nieuw licht werpt op de aard en rol van waarderingsmethodes. Zij doen veel meer dan alleen simpelweg risico’s en waardes meten: wanneer genoeg marktspelers bepaalde methodes gebruiken om hun strategie te bepalen, *beïnvloeden* zij risico’s en waardes. In het jargon van de economische sociologie: waarderingsmethodes zijn *performatief*. Dit betekent dat hoewel bepaalde methodes op een bepaald moment kunnen bijdragen aan stabiliteit, het wijdverbreide gebruik ervan na verloop van tijd het functioneren van financiële markten kan veranderen, waarmee deze methodes zelfs een stabiliteitsgevaar opleveren. Performativiteit verstoort de ogenschijnlijk eenduidige relatie tussen waarderingsmethodes en financiële stabiliteit.

De derde stap, en dit is mijn hoofdargument, is dat de reflexiviteit van de financiële sector en de performativiteit van waarderingsmethodes ook leidt tot een heel ander begrip van het beleidsprobleem. Hoe moeten beleidsmakers omgaan met het vraagstuk van de waarderingsmethodes? Reflexiviteit en performativiteit betekenen immers niet alleen dat er uiteindelijk geen ‘objectieve’ basis is om de prijs of het risico van een financieel instrument te bepalen, maar dat waarderingsmethodes deze prijs en risico beïnvloeden. De consequentie hiervan is dat beleid op het gebied van waarderingsmethodes prijzen en risico’s beïnvloeden, maar dat het verre van duidelijk is welke beleidsaanpak bijdraagt aan stabiliteit. Het is bijvoorbeeld niet evident hoe prescriptief beleidsmakers moeten zijn. Prescriptief beleid kan de performativiteit versterken, maar flexibel beleid heeft weer andere nadelige bijeffecten, aangezien het marktspelers in staat kan stellen om mogelijke problemen te verhullen. Ook betekent het dat een effectieve beleidsmethode na verloop van tijd juist ongewenste effecten kan hebben. Kortom, dit perspectief maakt duidelijk waarom het zo moeilijk is voor beleidsmakers om waarderingsmethodes te ontwikkelen die bijdragen aan financiële stabiliteit.
Om deze argumenten te onderbouwen heb ik empirisch onderzoek gedaan naar EU-beleidsontwikkelingen op vier terreinen waar waarderingsvraagstukken centraal staan: boekhoudregels voor financiële instrumenten, ratingbureaus en het gebruik van hun ratings, de risicomodellen die banken gebruiken om krediet- en liquiditeitsrisico’s in te schatten en, ten slotte, de instrumenten die toezichthouders hebben ontwikkeld om systeemrisico’s te meten en tegen te gaan. Hoewel deze kwesties in veel opzichten verschillen, vertoonden de beleidsdynamieken sterke overeenkomsten. De drie hieronder besproken overeenkomsten vinden hun oorsprong in de reflexiviteit van markten en de performativiteit van waarderingsmethodes.

Ten eerste zien we dat beleidsmakers vaak kiezen voor ambigue regels waarin verschillende waarderingsmethodes worden gemengd en waarin striktheid op bepaalde onderdelen wordt gecombineerd met grote flexibiliteit op andere onderdelen. Beleid op het gebied van ratings is hier een duidelijk voorbeeld van. Het pre-crisisbeleid leunde op ratings en droeg daarmee bij aan hun destabiliserende effecten. Maar wat was het alternatief? Een eventuele overstap naar risico-indicatoren gebaseerd op marktprijzen zou mogelijk leiden tot nog grotere systeemrisico’s, vanwege de sterke volatiliteit van deze indicatoren. EU-beleidsmakers kozen er dus voor om ‘door te modderen’, waarbij zij banken toestonden ratings te blijven gebruiken mits zij ook van andere risico-indicatoren gebruik zouden maken. Performativiteit blokkeerde ook de regulering van ratingmethodologieën. Als alle ratingbureaus dezelfde methodes zouden moeten gebruiken zou dit kuddegedrag versterken, met gevaar op systeemrisico’s. Beleidsmakers kozen dus voor procedurele regels voor ratingbureaus, maar zijn uiteindelijk niet overgegaan tot het voorschrijven van de inhoud van ratingmethodologieën.

Ten tweede moeten beleidsmakers vaak – en dan ook nog eens redelijk ad hoc – regels voor waarderingsmethodes aanpassen, om (toekomstige) negatieve effecten te verminderen. Deze dynamiek was het meest zichtbaar in de boekhoudcasus. Zelfs voor de crisis maakten banktoezichthouders zich zorgen over de stabiliteitsrisico’s van een wijdverbreid gebruik van marktwaarde-beprijzing. Ook toen al zetten zij de organisatie die de boekhoudregels ontwikkelt onder druk om op bepaalde punten de standaarden te versoepelen. Hoewel banken hier blij mee waren, waren toezichthouders hier zeker niet simpelweg de woordvoerder van de bankenlobby: tot ongenoegen van banken pleiten zij er namelijk gelijktijdig voor om bepaalde flexibele onderdelen veel strenger te maken. Tijdens de crisis drongen toezichthouders aan op tijdelijk flexibeleres regels, zodat imploderende marktprijzen minder heftige gevolgen zouden hebben voor het bankwezen. Ook de nieuw ontwikkelde boekhoudregels zijn nog een aantal maal onder druk van banktoezichthouders aangepast of flexibel geïnterpreteerd. Kortom, beleidsmakers zien vaak
geen andere mogelijkheid dan het aanpassen van regels als de negatieve effecten duidelijk worden.

Ten derde vormt reflexiviteit een probleem voor het ontwikkelen van beleid specifiek gericht op het bestrijden van systeemrisico’s: het zogenoemde macroprudentieel beleid. Een eerste probleem is het *meten* van systeemrisico’s. Aangezien reflexieve markten (plotseling) veranderen door aanpassingen in de verwachtingen van marktspelers, zijn systeemrisico’s maar zeer beperkt meetbaar. Toezichthouders kunnen immers niet van ‘buiten’ het systeem op een objectieve manier de risico’s meten. Een tweede probleem is het zoeken van een geschikte strategie om systeemrisico’s tegen te werken. Beleidsmakers kunnen er niet zeker van zijn dat het aanscherpen van beleid na het signaleren van gevaar zal leiden tot het beoogde resultaat. Aangezien marktspelers reageren op de acties van de toezichthouder, kan een krachtige maar slecht-getimede interventie juist de paniek veroorzaken die de toezichthouder wilde voorkomen. Kortom, ook hier helpt het perspectief ons te begrijpen waarom macroprudentieel beleid veel minder ambitieus is dan we zouden verwachten.

Op het gebied van financiële waarderingsmethoden, was de financiële crisis dus niet het breekpunt waar veel mensen op hoopten. Hoewel de pre-crisisregels bijdroegen aan de problemen, hebben beleidsmakers ondervonden hoe moeilijk het is om iets beters te vinden. Hoewel zij zeker hebben geprobeerd om alternatieven te vinden, moesten zij gaandeweg accepteren dat ieder alternatief met nadelige bijeffecten zouden komen, wat op termijn weer verdere hervormingen zou vereisen. Ook zouden zeer ingrijpende hervormingen niet noodzakelijkerwijs de situatie beter maken: zoals hierboven aangegeven zou zeer strikt beleid wel eens veel schadelijkere effecten kunnen hebben dan het pre-crisisbeleid. Bij gebrek aan duidelijk betere alternatieven kozen beleidsmakers dan ook vaak voor beperkte beleidsaanpassingen.

Met deze dissertatie hoop ik te laten zien dat aandacht voor de reflexiviteit van financiële markten een toegevoegde waarde heeft voor ons begrip van beleidsdynamieken op het gebied van financiële regulering. Het bepleite perspectief laat zien dat beleidsproblemen op het terrein van waarderingsmethodes inherent zijn aan de reflexieve aard van financiële markten. Deze problemen zijn daarmee veel moeilijker op te lossen dan vaak wordt aangenomen. De meer normatieve beleidsconsequenties van dit perspectief wijzen vooral in de richting van aanpassingsvermogen en het belang van diversiteit in het financiële systeem. Als een bepaalde beleidsaanpak altijd mogelijk later tot problemen kan leiden, impliceert dit dat beleidsmakers meer gebruik moeten maken van het automatisch periodiek herzien van de regels. Het suggereert
ook dat beleidsmakers over het algemeen meer moeten inzetten op heterogene waarderingsmethodes, om zo niet onnodig bij te dragen aan kudgedrag onder financiële spelers. Toch toont het perspectief ook de inherente beperkingen van de regulering van waarderingsmethodes. Als instabiliteit inherent is aan financiële markten, is een ambitieuzere, zij het moeilijkere, weg voorwaarts om onze afhankelijkheid van de financiële sector te verminderen.
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