OXFORD

Liquidity Lost

The Governance of the Global Financial Crisis

Paul Langley

Liquidity Lost

Liquidity Lost

The Governance of the Global Financial Crisis

Paul Langley

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Great Clarendon Street, Oxford, OX2 6DP,
United Kingdom

Oxford University Press is a department of the University of Oxford.
It furthers the University's objective of excellence in research, scholarship,
and education by publishing worldwide. Oxford is a registered trade mark of
Oxford University Press in the UK and in certain other countries

First Edition published in 2015

Impression: 1

Published in the United States of America by Oxford University Press
198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data
Data available

Library of Congress Control Number: 2014938486

ISBN 978–0–19–968378–9

Printed and Bound by
CPI Group (UK) Ltd, Croydon, CR0 4YY

For Grace and Tom

Preface

Sparked by the first months of the contemporary global financial crisis, the project that became this book began over six years ago. The initial focus for the project was upon the performativity of crisis management; that is, how re-iteratively naming and acting on the crisis as one of 'liquidity' served to affirm and keep in place the prevailing organization of global financial markets. I was interested in how the rendering of the crisis as a technical matter of money market liquidity enabled governance that treated the crisis as a temporary blip, as a momentary pause in three decades or so of global financial innovation centred on Wall Street and the City of London.

In early 2008, I applied for a Visiting Fellowship to study liquidity at Durham University's Institute of Advanced Study (IAS), with a view to contributing to the IAS 2009–10 research theme of 'Water'. I was very fortunate that my application for an IAS Fellowship was successful. The Institute provided a wonderful research environment during the winter months of 2010. However, much had changed in between times. The crisis entered a period of such intensity in the autumn of 2008 that the edifice of global finance genuinely appeared to be on the brink of collapse. From the point of view of my project, the spiralling crisis produced a sprawling array of crisis governance initiatives that went far beyond the so-called 'liquidity injections' of the central banks. By June 2009, for instance, the Bank of England calculated that the cost of the complex and multiple public commitments made in the course of crisis management in the United States, United Kingdom, and Eurozone already ran to US$14 trillion, equivalent to around half of the combined annual gross domestic product (GDP) of these economies.

Given that crises of banking and finance are typically defined in economic theory and market practice as liquidity crises, it was especially revealing that the contemporary crisis could not be contained through the terms and techniques of liquidity. The loss of liquidity proved to be much more than merely an abrupt and momentary halt to global financial circulations that was amenable to the long-established last resort lending facilities of the central banks. When liquidity was lost in the contemporary crisis, that which made the flows of global finance possible—narratives, confidences, business models, monetary policies, regulatory policies, and so on—also unravelled and ruptured. As it transpired, then, the Visiting Fellowship at Durham's IAS provided an opportunity for me to pause and reconsider the parameters of my project, and to do so amid the ongoing struggle to control the crisis. I would like to thank Susan J. Smith for encouraging my application to the Water theme, and the IAS Directors and the other Visiting Fellows of 2009–10—especially Ash Amin, Colin Bain, Stefan Helmreich, and Marilyn Strathern—for our conversations.

The completion of *Liquidity Lost* is the result of the support I have subsequently received from a large number of people. Most recently, since October 2011, I have benefitted greatly from the rich intellectual environment provided by my colleagues and students at the Department of Geography, Durham University, and a period of research leave from teaching and administrative duties within which to complete the book. Thanks are also due my previous colleagues at the University of York and Northumbria University. Jacquie Best, Donncha Marron, and three anonymous advisers provided very helpful feedback on my initial attempts to write an introductory chapter, and to frame the book's enduring contribution. David Musson from Oxford University Press again showed great faith in my work, and Clare Kennedy ensured that the book passed through the final stages.

The fieldwork that contributed towards this book included a total of twenty-two research interviews. Representatives of HM Treasury, the Financial Services Authority, and the commercial banking and investment management industries provided interviews in London during September 2011. Representatives of the Federal Deposit and Insurance Corporation, Federal Reserve Bank of New York, *New York Times*, Securities and Exchange Commission, and the banking, fund management, and securitization industries provided interviews in New York and Washington, DC, during March 2012. Confidentiality prevents me from thanking the individuals concerned. I hope this book does justice to the understandings and sharp insights that they were kind enough to share with me.

Many draft papers, individual chapters, and less formal presentations upon which this book is based have been delivered in various settings since 2008. These have included: Association of American Geographers annual conferences in 2009, 2012, and 2013; the 2008 CRESC Annual Conference, and the CRESC conference on 'Finance in Crisis/Finance in Question' in 2010; conferences of the Critical Finance Studies network, hosted by University of Amsterdam (2010) and Stockholm Business School (2013); a number of workshops and seminars hosted by the Department of Politics and International Studies, Warwick University, most notably, 'Political Economy of the Sub-Prime Crisis' (2008) and 'Financial Resilience in the Wake of the Crisis' (2013); 'Political Economy, Financialization, and Discourse Theory', Cardiff University Business School, 2009; the Social Studies of Finance Association Conference held in Paris in 2010; the Royal Dutch Academy of Science

Interdisciplinary Summer Course of 2010, organized by Ewald Engelen of the University of Amsterdam; the School of Geography Seminar Series, Nottingham University, 2011; 'Economization of Uncertainty', University of Helsinki, 2011; 'Understanding Crisis in Europe Workshop', University of Bristol and University of the West of England, 2012; 'Methodologies of Everyday Life and International Political Economy', University of Copenhagen, 2012; 'Temporalities of Debt and Guilt', COST Action ISO902 Workshop, University of Hamburg, 2012; and 'Regulation, Law Enforcement and the Financial Crisis', Max Planck Institute for Foreign and International Criminal Law, 2012. I would particularly like to thank the following people for their invitations to speak, supportive comments, questions, provocations, and private correspondence: Ben Anderson, Thomas Bay, Nina Boy, James Brassett, Chris Clarke, Stephen Collier, Adam Dixon, Ismail Erturk, Shaun French, Daniela Gabor, Csaba Gyoery, Marieke de Goede, Joyce Goggin, Sarah Hall, Eric Helleiner, Laura Horn, Mark Kear, Turo-Kimmo Lehtonen, Martijn Konings, Andrew Leyshon, Bill Maurer, Randy Martin, Liz McFall, John Morris, Ben Rosamond, and Hugh Willmott.

Earlier versions of some of the material contained in the book has also been published previously: 'The performance of liquidity in the sub-prime mortgage crisis', *New Political Economy*, 15, 1: 71–98 (doi:10.1080/13563460903553624); 'Toxic assets, turbulence, and biopolitical security: Governing the crisis of global financial circulation', *Security Dialogue*, 44, 2: 111–26 (doi:10.1177/0967010613479425); and 'Anticipating uncertainty, reviving risk? On the stress testing of finance in crisis', *Economy and Society*, 42, 1: 51–73 (doi:10.1080/03085147.2012.686719). In all cases, the journal editors and anonymous reviewers who commented on my submissions pushed me to tighten up my arguments in the course of publication, so I would like to express my gratitude to them. The author would also like to thank Taylor & Francis and Sage for permission to reproduce copyright material.

My final words of thanks must go to my family: Lou, Grace, and Tom. This book has benefitted immeasurably from Lou's knowledge of social theory and burgeoning book collection, as well as her unwavering love and support. She also knows a thing or two about the logic of the derivative. Grace has moved into double-digits during the time that it has taken to complete this book. She is kind, wise, and, thankfully, very patient. My enduring memory of the 2008 high point of the global financial crisis will always be of watching it unfold on late-night television news, accompanied only by our newborn son Tom. He has since had to ask, on far too many occasions, 'have you finished your book yet, Dad?'

PL

Contents

List of Abbreviations

ABS	asset-backed securities
AIG	American International Group
A-IRB	Advanced-Internal Ratings-Based
AMLF	Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility
APF	Asset Purchase Facility
BCBS	Basel Committee on Banking Supervision
BHC	bank holding company
BIS	Bank for International Settlements BRF Bank Recapitalization Fund
BRF	Bank Recapitalization Fund
CAP	Capital Assistance Program
CBO	Congressional Budget Office
CCAR	Comprehensive Capital Analysis and Review
CDOs	collateralized debt obligations
CDS	credit default swaps
CEBS	Committee of European Bank Supervisors
CFTC	Commodity Futures Trading Commission
CMBS	commercial mortgage-backed securities
COLR	capital of last resort
CPFF	Commercial Paper Funding Facility
CPP	Capital Purchase Program
DMO	Debt Management Office
EBA	European Banking Authority
ECB	European Central Bank
EU	European Union
FCIC	Financial Crisis Inquiry Commission
FDIC	Federal Deposit Insurance Corporation
FPC	Financial Policy Committee
FRB	Federal Reserve Board

FSA	Financial Services Authority
FSOC	Financial Stability Oversight Counsel
FSB	Financial Stability Board
G-7	Group of 7
G-20	Group of 20
G-30	Group of 30
GDP	gross domestic product
GMAC	General Motors Acceptance Corporation
HBOS	Halifax Bank of Scotland
IASB	International Accounting Standards Board
ICB	Independent Commission on Banking
IMF	International Monetary Fund
LCR	liquidity coverage ratio
LIBOR	London Interbank Offered Rate
LOLR	lender of last resort
MBS	mortgage-backed securities
MMIFF	Money Market Investor Funding Facility
MMLR	market maker of last resort
MPC	Monetary Policy Committee
NAO	National Audit Office
OBR	Office for Budget Responsibility
OCC	Office of the Comptroller of the Currency
OECD	Organization for Economic Cooperation and Development
OIS	overnight index swaps
OMO	open market operation
OTS	Office of Thrift Supervision
OWS	Occupy Wall Street
PDCF	Primary Dealer Credit Facility
PERAB	President's Economic Recovery Advisory Board
P-PIP	Public-Private Investment Program
PRA	Prudential Regulation Authority
QE	quantitative easing
RBS	Royal Bank of Scotland
RTC	Resolution Trust Corporation
SCAP	Supervisory Capital Assessment Program
SEC	Securities Exchange Commission

SIV	structured investment vehicle
SLS	Special Liquidity Scheme
SNB	Swiss National Bank
SSF	social studies of finance
STS	science and technology studies
TAF	Term Auction Facility
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Assets Relief Program
T-bills	Treasury bills
T-bonds	Treasury bonds
TSLF	Term Securities Lending Facility
UK	United Kingdom
US	United States of America
VaR	value-at-risk
VAT	value-added tax
VIX	Chicago Board Options Exchange Volatility Index

1

Introduction

Present across official, popular, and critical academic imaginations, a consensus prevails in understandings of the governance of the contemporary global financial crisis. While debates rage over the causes and consequences of the crisis that began in the summer of 2007, the means and ends of the initiatives which sought to manage the crisis have been consistently explained in essentially the same terms. The governance of the global financial crisis appears to be a set of emergency and historically unprecedented actions undertaken by sovereign state institutions, especially the central banks, treasuries, and regulatory institutions in the United States of America (US) and United Kingdom (UK). The purpose of these interventions would also seem apparent: to rescue the markets, the banks, and finance capital. In short, the consensus holds that the governance of the contemporary global financial crisis was a matter of the state saving capitalist markets from themselves, and of the public socialization of private losses.

This book provides an alternative account of the how the global financial crisis was governed from 2007 through to 2011. It shares with the prevailing perception a focus upon the management of the crisis in the US and the UK: not only was the crisis 'made in America', but the global dominance of the US dollar and the global reach of Wall Street and the City of London is such that, in effect and in the first instance, Anglo-American crisis governance was global crisis governance. The book's remit thus does not extend to the ways in which the crisis was governed as the eye of the storm travelled latterly to the Euro currency area. It also does not look elsewhere—to interstate groupings (e.g. the Group of 20, G-20), international organizations (e.g. the Bank for International Settlements, BIS), and private transnational associations (e.g. the Group of 30, G-30)—in order to explore the principal mechanisms through which the crisis was managed (Germain 2010; Helleiner et al. 2010; McKeen-Edwards and Porter 2013; Porter 2014). Rather, the book offers an analysis that will make Anglo-American global crisis management intelligible in a different way. It will show that the consensus, which casts sovereign state institutions as salvaging markets, serves to conceal a great deal more than it reveals about how the global financial crisis was governed. And, although one of the results of crisis management has indeed been that its costs are now being unequally and unevenly socialized on both sides of the Atlantic, the book will show that to understand crisis governance in these terms is to confuse its consequences with the contingent processes and practices through which it was enacted.

The book's challenge to the consensus over the governance of the crisis of global finance is also a challenge to the deeply engrained frameworks of thought upon which that consensus is founded. Economics and political economy feature fundamental disagreements over whether stabilizing actions in times of crisis can and should be avoided, or whether they are indeed inherent to capitalist finance. Yet, these otherwise sharply contending fields contain significant shared assumptions about financial crisis management that, whether explicitly acknowledged or not, lead to startlingly similar accounts of the governance of the contemporary crisis. As Chapter 2 will outline, for both economics and political economy, it is the sovereign institutions of the state which are the agents that engineer crisis management, and the perennial aim in moments of rupture is to restore the circulations of the markets, banking, and finance capital. As will be encountered across Chapters 3 to 8, moreover, this consensus tends to frame explanations of the specific interventions that were made in an attempt to control the contemporary crisis, from the so-called 'liquidity injections' of central banks as monetary sovereigns, to the austerity programmes of treasuries as fiscal sovereigns.

The book's analysis of the governance of the global financial crisis is grounded not in economics and political economy, then, but in the field of cultural economy. Cultural economy is an interdisciplinary academic venture which primarily covers sociology, human geography, anthropology, and business and organizational studies (Amin and Thrift 2004; Bennett et al. 2008; du Gay and Pryke 2002). Gaining momentum over the last decade or so, it is the outcome of diverse responses to the implications of the 'cultural turn' in social theory for understandings of economy. It features, but is certainly not limited to, an interest in the efficacy of the theories and methods of science and technology studies (STS) for the study of economy (e.g. Callon 1998; Pinch and Swedberg 2008; Woolgar et al. 2009). Cultural economy has also achieved particular traction through research into financial markets that, reflecting the strong imprint of STS, is often labelled as 'the social studies of finance' (SSF) (Kalthoff 2005; Knorr Cetina and Preda 2005, 2012; MacKenzie 2009). Cultural economy and SSF do not provide, however, a ready-made and established set of conceptual tools for thinking anew about the governance of the global financial crisis. The book's analytical motivations are thus intertwined with a further purpose: to develop the conceptual means by which the management of financial crises can be understood in the terms of SSF and cultural economy.

The severe turbulence of the contemporary crisis caught the SSF somewhat off-guard. SSF consolidated during a period of financialized economic growth. Intensifying across three decades or so, and propelled by compounding asset bubbles which centred on stock markets and latterly on real estate and debt markets, these processes came to an abrupt halt in the crisis. While finance was booming, there was little to question the preoccupation of SSF with the socio-technical processes through which markets are made, and with what Calişkan and Callon (2009, 2010) define as the research agenda of 'economization' and 'marketization'. Government programmes and regulatory authorities did occasionally feature in SSF accounts of these processes in new markets, but tended to remain an unopened 'black box' while the seemingly self-regulating financial markets being studied were forging ahead (MacKenzie 2005). Explanations of regulatory change, and the politics therein, were largely left to political economists, although not all in that field were satisfied with such a division of labour (e.g. Konings 2010). As a consequence, and despite being in a position to provide insightful and distinctive accounts of the unravelling of markets once the crisis hit (e.g. Langley 2008a; MacKenzie 2011; Poon 2009), SSF developed something of an analytical blind-spot to the kinds of governance interventions which held finance together as boom turned to bust.

The actions of crisis management can be conceived of, however, in the terms favoured by the SSF. There was, for example, no blueprint for controlling the crisis; governance was typically tentative and incremental, and often featured the kind of *in vivo* experiments that are also present in processes of marketization (Beuneza et al. 2006; Muniesa and Callon 2007). Crisis management also brought together fragments of old and new ideas, techniques from the past, and long forgotten and freshly minted institutional and legislative provisions; in other words, like marketized actions, governance actions had to be assembled (Hardie and MacKenzie 2007), and were put together in a process akin to the *bricolage* of financial market innovation (Engelen et al. 2011). Attempts to control the crisis were also marked by the materiality and power of 'market devices' (Muniesa et al. 2007)—such as, for instance, bank balance sheets—that actively calculated and literally figured the crisis; again, similar to marketization processes, governance was thoroughly socio-technical (MacKenzie 2009; Preda 2009). Therefore, it is by broadening the vision of the SSF, and by reaching out to what Michael Pryke and Paul du Gay (2007) call a 'cultural economy of finance' to enable this task, that the book develops an alternative account of the management of the global financial crisis.

As it targets the consensus view on crisis governance, the book's analytical and conceptual motivations also fold into a political purpose. For the philosopher Jacques Rancière, 'the essence of consensus . . . does not consist in peaceful discussion and reasonable disagreement, as opposed to conflict and violence' (2010: 42). Instead, as he continues, at the core of consensus is 'the distribution of the sensible' and 'the annulment of dissensus'; that is, limits are placed on what is thinkable, sayable, and doable by dominant perceptions which serve to close down political space for dissent. Thus, the consensus on crisis governance certainly did not prevent debate in the course of the crisis, and neither does it prevent ongoing deliberations. As will be shown throughout Chapters 3 to 8, how best to govern the problems of the crisis was the subject of considerable uncertainty and dispute among economists, media analysts, bureaucrats, and politicians. And, at the time of writing at the end of 2013, the consensus continues to create scope for disagreement: on either side of the Atlantic, politics now centres on how the state can best be configured in response to a vast array of post-crisis problems, whether monetary, fiscal, or regulatory. Consider, for example, present debates over curtailing the so-called 'quantitative easing' (QE) of 'unconventional' monetary policy, the effectiveness and consequences of fiscal austerity, and achieving the right balance between regulatory capital requirements and the supply of credit in banking.

Nonetheless, by separating out hierarchical domains of practice and functions in such a way that crisis governance is taken to be, by definition, the sovereign institutions of the state acting upon malfunctioning markets, the consensus produced (and continues to produce) a closure of the space for political dissent. What this boiled down to was 'the assertion that there is a specific place for politics' that 'can be nothing but the place of the state' (Rancière 2010: 43). 'Conflicts' over how the crisis should be governed were reduced to technical and liberal pluralist questions over the 'problems to be resolved by learned expertise and the negotiated adjustment of interests' (2010: 71). Revealing, in this respect, is the bewilderment and frustration that was typically provoked by the most significant expression of dissent that emerged to contest Anglo-American global crisis governance: the Occupy Wall Street (OWS) movement.

Media coverage struggled to explain the OWS encampment at Zuccotti Park from mid-September to mid-November 2011, largely because it did not articulate a clear set of demands and interests that could be translated into specific policy actions, or reconciled through the political processes of the state (see Catapano 2011). Some academic supporters of the claims that OWS made on behalf of 'the people' and 'the ninety-nine per cent' also cast doubt on the efficacy of the movement because it spurned leadership hierarchies and a strategic agenda for future action (e.g. Žižek 2011). However, in the terms of

Rancière (2011: 13), 'the framing of a future happens in the wake of political invention rather than being its condition of possibility'. Emancipatory politics is a matter of opening up new possibilities and the prospects for the creation of political subjectivities, and not the designing of a new order to come. Indeed, as a range of academic analyses suggest, what was radical and significant about OWS was precisely that it interrupted and disturbed the precepts and practices of crisis governance (e.g. Douzinas 2013; Harcourt 2013). As a contribution to this dissensus, the book is clearly modest. Yet, when offering a creative, analytical, and conceptual contribution that unsettles how the governance of the global financial crisis might be understood, the book also seeks to be an inventive, political contribution towards the redistribution of the sensible in the post-crisis organization of global finance.

By way of an overview of what follows, Chapter 2 begins by elaborating upon the methodological and conceptual tools that are employed throughout. Underpinning the book's research and analysis is Michel Foucault's (2003a) method of problems and problematization. Emerging in his later work, this is a method that extends the archaeological and genealogical approaches that Foucault (1972) previously developed, after Nietzsche, in order to interrogate power-knowledge relations and discursive formations. It is a method that explicitly directs inquiry to consider the ways in which problem-objects are abstracted, such that they can be acted on through apparent solutions. Putting the method to work here, crisis governance is not explored as a set of institutional interventions taken in the face of materially evident crisis circumstances. Rather, researching how the crisis was rendered governable requires careful attention to the contingent manner in which it was made up and managed, as a number of relatively discrete technical problems that each required their own dedicated response and which delimited and depoliticized crisis governance.

Chapter 2 also begins to develop the conceptual anchor point for the book's analysis of financial crisis governance; that is, the concern with agency and action which intersects a variety of approaches to cultural economy (McFall 2008; Pryke and du Gay 2007). For cultural economists, what is typically thought of as 'agency', 'as the capacity to act and to give meaning to action' (Callon 2005: 4), is not centred upon and possessed by institutions and persons, such as firms, managers, banks, financial market traders, and consumers. Instead, cultural economy research employs a variety of categories that are broadly united in conceiving of agency as decentred and distributed, relational and compounded. Agency is thus a processual hybrid that requires connections between 'human beings (bodies) as well as material, technical and textual devices', all of which are 'mobilized' and 'take part in the action' (Calişkan and Callon 2010: 9). As extant research in SSF attests, cultural economy conceptions of agency have significant implications for the analysis of marketized actions. As the book will show, these implications extend to understanding crisis governance actions which apparently centre on the agency of sovereign state officials and institutions.

Across Chapters 3 to 8, the book is structured to make visible an overarching argument: the global financial crisis was not governed as a given development, as a crisis of markets, banking, or finance capital. Rather, the crisis was abstracted as a range of provisionally figured and relatively discrete problems; namely, and primarily, as technical problems of liquidity, toxicity, solvency, risk, regulation, and debt. As Table 1 summarizes, the book's main chapters will analyse how, from summer 2007, the crisis of global finance was turned into six specific problems, each with dedicated solutions to be ostensibly

Table 1 The problems and solutions of crisis governance

Problem	Solution	Principal actions
Liquidity (money and capital markets)	Liquidity from central banks ('liquidity injections' and 'liquidity facilities')	Open market operations (OMOs) and discount window lending; programmatic interventions in money and capital markets; and quantitative easing (QE) (Federal Reserve and Bank of England, from 08/07)
Toxicity (sub-prime assets)	Temporarily remove toxic assets from circulation ('bad banks')	Maiden Lane LLC I, II, III (Federal Reserve, 03/08 and 11/08); and Troubled Assets Relief Program (TARP) (US Treasury, 10/08)
Solvency (banking)	Recapitalization of banks ('bank bailouts')	Bank Recapitalization Fund and allied actions (HM Treasury and Bank of England, 10/08); Capital Purchase Program and allied actions (US Treasury and Federal Reserve, 10/08); and ad hoc bailouts of individual institutions in both US and UK
Risk (probabilistic risk management)	Anticipatory techniques ('stress testing')	Supervisory Capital Assessment Program (Federal Reserve, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, 02/09)
Regulation (banks and depository institutions)	Structural regulatory reform ('Glass–Steagall lite' and separation of retail from 'casino banking')	'Volcker rule' (President's Economic Recovery Advisory Board (01/10), Dodd–Frank Wall Street Reform and Consumer Protection Act, 07/10); and 'Vickers' ring-fence' (Independent Commission on Banking, 09/11, Banking Reform Act, 12/13)
Debt (sovereign debt)	Fiscal deficit reductions ('austerity')	'Emergency budget' (HM Treasury, 06/10); 2011 Budget and National Commission on Fiscal Responsibility and Reform (02/10); and Budget Control Act (08/11).

enacted by the state. Chapter 3 begins at the beginning, so to speak, by analysing how the crisis was rendered and governed as a seizure of liquidity in money and capital markets. Financial crises are typically understood—by definition, and by economists of various hues—as liquidity crises. That the crisis could not be controlled as a liquidity problem, even when it was acted on in ways that broke the mould of the established last resort lending practices of central banks, was thus especially telling as to its depth and magnitude. The loss of liquidity was not merely an abrupt halt in the circulations of global finance that authorities sought to repair. It was also a moment when that which made those circulations possible—narratives, confidences, calculations, business models, monetary policies, regulatory policies, and so on—also unravelled and ruptured.

Although Chapters 4 to 8 address the ensuing struggle to forge and manage the crisis in other ways and once liquidity had been lost, this series is only chronological in broad terms. It is certainly not the intention of the book, as is the case in some official and academic accounts (e.g. BIS 2008, 2009, 2010; Thompson 2012), to present the crisis as a number of identifiable phases to which authorities marshalled their corresponding responses. The diagnosis and treatment of the crisis as problems of liquidity and toxic assets did indeed largely precede the puzzle of bank solvency, for instance, and the crisis has settled-out most recently as a problem of sovereign debt which apparently requires fiscal austerity measures by way of obligatory solution. However, and alongside the problems of liquidity, toxicity, and solvency, the attempts to govern the crisis as problems of both risk and regulation that eventually gained traction during 2009 had been largely ongoing from the end of 2007.

To underline the contribution of the book in another way, it does not seek to be an exhaustive empirical survey of financial crisis management, as enacted in its Anglo-American heartland between 2007 and 2011. Not only would this arguably be beyond the scope of any single book, it is also not my motivation here. Neither does the book offer technical assessments of the success, or otherwise, of this or that intervention in achieving a resolution to the crisis. This is not a book that is concerned with making an academic contribution to lesson learning about how future crises might be managed more effectively (cf. Davies and Green 2010; Goodhart 2009; Griffith-Jones et al. 2010; Turner et al. 2010; Wolf 2008a). Instead, as it works towards a cultural economy account of how the crisis was governed as a series of problems, the book develops a line of inquiry set out by Peter Miller and Nikolas Rose in their agenda for the study of 'governing economic life'. As they understand it, given the tendencies for the liberal governing of economic life to be 'eternally optimistic' and 'a congenitally failing operation', 'The "will to govern" needs to be understood less in terms of its success than in terms of the difficulties of operationalizing it' (1990: 10–11). Thus, and as Chapter 9 underscores by way of conclusion, what is of interest here is how crisis governance emerged as an achievement in and of itself, and not whether it can be said to have functioned successfully or to have achieved its stated ends.

What the book will show is that the governance of the global financial crisis was enacted with great difficulty through relatively distinct, problem-orientated apparatuses of governance. As provisional and multiple attempts to prevent the unravelling of global finance, these apparatuses were strategic but distributed and relational forms of agency. They clearly featured sovereign state institutions, but were certainly not reducible to them. As they framed and acted upon the crisis, each governance apparatus mobilized and assembled a number of specific elements in relation. Chapters 3 to 8 will draw out these specificities: what did it take, for example, for an apparatus to come together which rendered the crisis governable as a technical problem of liquidity? Across these chapters, moreover, the book will also argue that the discrete apparatuses of crisis governance had certain tendencies which they shared to a greater or lesser degree. That which the consensus on sovereign states salvaging markets conceals is, therefore, not merely the contingent and fragmented ways in which the crisis was governed as a series of problems. It also obscures the very character and content of crisis governance; that is, the proclivities that were typically present as each apparatus of governance was assembled, and the ordering preferences that were largely common across them.

As state institutions were mobilized in crisis governance apparatuses, what was especially notable was how sovereign monetary, fiscal, and regulatory techniques were reconfigured. The prevailing perception of crisis management imagines dormant sovereign powers—'sent to the oblivion of history by the apologists of market fundamentalism' prior to the crisis, according to Castells et al. (2012: 3)—being wielded on an unprecedented scale by state institutions. The crisis thus appears to usher in a 'return of the state' (Eppler 2009; Grewal 2010; Plender 2008), and to produce a welcome shift in the 'balance' between state and market, or public and private authority, in favour of the former (e.g. Germain 2012). As the then President of France, Nicolas Sarkozy, put it in a speech made at the height of the crisis in September 2008, 'Self-regulation is finished. *Laissez faire* is finished. The all-powerful market that is always right is finished' (in Thornhill 2008). What this dichotomous thinking obscures, however, is not only the 'permanent activity, vigilance and intervention' of the state during the preceding boom years (Foucault 2008: 246), but how sovereign monetary, fiscal, and regulatory techniques were dynamically transformed in order that they could be put to work in the governance of the bust.

The apparatuses of crisis management also did not stand apart from and govern over the economy of markets and banks, but actually enrolled the discourses and devices of economy. The crisis was certainly a moment of disaster for economic science as a discipline that, over the last forty years in particular, perfected theories that made powerful explanatory claims about the financial markets (e.g. *Economist* 2009b; Fine and Milonakis 2011). But, the same cannot be said for economics that, in its original and ancient formulation of *oikonomia*, is a practical and managerial disposition for administering order (Agamben 2011; Mitchell 2008). The knowledges, terms, and techniques of economics were immanent to the administration of the crisis. This is not to argue, however, that crisis governance should be understood simply as the imposition of a consistent economic theory, ideology, and political programme. It is in these instrumental terms that, following a roughly twelve-month period of 'Keynesian schadenfreude' at the peak of the tumult (Elliott 2009; Stiglitz 2008a), the persistence of neo-liberal economic policies tends to be explained by much critical academic commentary on the crisis (e.g. Crouch 2011; Gamble 2009; Hall 2011; Harvey 2010; Mirowski 2013, Peck 2013a). Crisis management was broadly neo-liberal in orientation, to be sure: when extensively mustering sovereign techniques, it held firm ordering preferences not only for the market exchange of classical liberalism, but for the competitive and entrepreneurial market society of neo-liberalism (Foucault 2008: 145–7). However, crisis governance revealed more about the power of economics as a means of administration than it did about the grip of neo-liberalism as a coherent body of economic thought. The specific economic discourses that were activated, as governmental apparatuses both framed problems and proffered solutions, were multiple, fragmented, and, at times, contradictory. And, significantly, crisis management also mobilized a diverse array of calculative devices of economy that were already at large within the financial markets when crisis came, not least because they provided quantitative, material indicators of the extent and nature of the problems at hand.

While the management of the crisis was replete with all manner of measures and metrics, what also characterized the relatively discrete governance apparatuses was that they sought to elicit an affective atmosphere of confidence. The contemporary crisis certainly gave impetus to academic explanations that seek to bring emotions and collective affective energies to front and centre in the study of financial markets, typically as a corrective to orthodox economic assumptions about the rationality of market agents. For instance, behavioural economics, which stressed tendencies to 'irrational exuberance' in the 'new economy' stock market bubble at the turn of the millennium (Shiller 2001), again had ample grist for its mill when the crisis hit (Heukelom and Sent 2010; Shiller 2008). Longer-standing Keynesian insights into the 'animal spirits' that move markets were also given a new lease of life and scientific sheen when combined with the psychological methods of behaviouralism (Akerlof and