Introduction: rethinking the crises–complexity nexus

Matthew Hollow

Crisis and complexity – since the turmoil of 2007–8, these two terms seem to have been twinned together by economists, financial commentators and academics on an increasingly frequent basis (Caballero and Simsek, 2009; Christophers, 2009). Indeed, so common has this conceptual coupling become that one is now almost surprised to find an article or opinion piece about the financial crisis of 2007–8 that does not mention the word ‘complexity’ at least once in its analysis of the events leading up to the crash.

Of course, it is worth pointing out that the financial crisis of 2007–08 is far from the first financial crisis to be described in this way. Countless other crises – ranging from the Asian Crisis of the late 1990s to the 1929 Wall Street Crash – have also been (and continue to be) categorized as ‘complex’ events by many learned commentators (Kindleberger, 2000). Indeed, as far back as 1873, one can find commentators such as the influential British journalist Walter Bagehot using such terms to describe these periodic episodes of financial upheaval (Bagehot, 1910).

What is notable about this most recent crisis, however, is the degree to which the events that unfolded have not only been described through the lens of complexity, but also the extent to which they have been attributed to complex processes (Blackburn, 2008; Davies and McGoey, 2012; Leyshon and Thrift, 2007). Perhaps unsurprisingly, this tendency to blame the 2007–8 crisis on increased levels of complexity in the financial system has been particularly pronounced in journalistic circles, where it seems that it is now almost standard practice to preface any article or opinion piece on the crisis with some sort of (usually disparaging) comment about the ‘bizarreness’ or ‘indecipherability’ of modern financial markets (Christophers, 2009). Typical examples in this respect include the Financial Times columnist, John Gapper, who has written how the ‘bizarre degree of complexity in financial markets was bound to lead to trouble’,1 or the New York-based financial commentator, Lee C. Buchheit, who in the aftermath of the crisis suggested that: ‘We have reached the point where some
financial engineers have managed to baffle even themselves. Along the way, though, they seemed to have befuddled their boards of directors, risk management committees, lawyers, accountants, customers and regulators’ (Buchheit, 2008, p. 24).

In a similar but slightly different vein, there has also been a growing number of calls for economists and financial regulators to pay more attention to the ideas and methods of complex system theorists (Duit and Galaz, 2008; Gilpin and Murphy, 2008). Underpinning such calls is a belief that, in today’s increasingly interconnected financial market, such tools will not only allow governments and regulators to make better-informed decisions, but will also hopefully help them better understand the potential (unintended) consequences of their actions (Goldin and Vogel, 2010; Haldane, 2009; May, Levin and Sugihara, 2008).

Given this strong and pervasive interest in issues of this sort, we felt that it was both timely and necessary to produce a text that would not only provide a more in-depth assessment of the relationship between financial crises and complexity levels in financial systems, but would also critically interrogate the way in which these sorts of terms have been used by scholars and financial commentators in recent years. Although we did toy with the idea of producing a text written from a global perspective, we eventually decided to narrow the geographical focus of this book down to the US and UK financial markets. The rationale for this US–UK geographical focus was as follows: first, New York and London have, historically, been the two most important financial centres in the global economy (Ferguson, 2001); and, second, the origins of the current global financial crisis can most obviously be linked back to developments in the financial sectors of these two countries (Casey, 2011).

We also decided that, if we wanted to fully probe the nature of the relationship between crises and complexity in the US and UK financial markets, we would need to try to break free of traditional disciplinary boundaries and look at these issues from a wider and more holistic perspective. To achieve this goal, we consciously brought together as wide a range of academics as we could from across the disciplines of law, history, economics and business – each with their own unique perspectives on the events of 2007–8 and the evolution of the US and UK financial systems more generally. Together, they have helped us to produce a book that is not only remarkably wide ranging, but – as the following summary demonstrates – also truly interdisciplinary in both its scope and content.
PART I: COMPLEXITY AND CRISES IN FINANCIAL SYSTEMS

As many readers of this volume will no doubt be aware, in the last few years there has been an extraordinarily wide variety of (often contradicting) explanations put forward to explain the global financial crisis of 2007–8 (see Jickling, 2009; Lo, 2012; Pinnuck, 2012). From a critical perspective, however, one thing that has tended to be lacking in most of these accounts is any real sense of historical or longer-term perspective regarding the events of 2007–8 (Daunton, 2011; Hsu, 2013). This has been problematic not only in the sense that it has made it hard for readers to get any real sense of the historical significance of this most recent crisis, but also in the fact that it has made it that much harder to accurately compare and contrast this crisis with previous ones (Kobrak and Wilkins, 2011).

Tackling this continued lack of historical insight into the events of 2007–8 is one of the underlying goals of the first chapter in this edited volume, written by Bruner, Carr and Mehedi. Unlike most contemporary accounts, their contribution does not just focus on the immediate short-term causes of the crisis of 2007–8, but rather tries to understand the longer-term dynamics and forces that have contributed to the seemingly timeless cycle of crashes, panics and crises in the US banking sector. At the heart of their argument is something that they call the ‘Innovation–Complexity hypothesis’. In simplified terms, this hypothesis posits that, under certain conditions, the introduction of new innovations to the financial sector can increase the likelihood of crises occurring by amplifying complexity levels in financial markets. To test the validity of this thesis, they provide six micro-case studies of previous banking crises in the US – revealing how financial innovation of one form or another has been present during each episode. Based on these findings, they conclude that, whilst innovation by itself may not always cause crises, it does tend to heighten complexity and uncertainty in financial markets (which, in turn, increases the risk of crises occurring).

Building on this theme of innovation and crises is Casson’s entry on entrepreneurial failure and economic crises in the UK. Like Bruner, Carr and Mehedi, Casson adopts a long-term historical perspective in his work, going back as far as the Tulip Mania of the seventeenth century in order to understand the underlying trends and patterns at work in the UK market. Amongst the key issues that he sets out to investigate is the question of why market participants behave as they do both during and in the build-up to economic crises. To achieve this goal, he adopts a novel approach based upon applying theories of entrepreneurship to a range of quantitative and qualitative sources. Ultimately, what this approach demonstrates is that – contrary to much perceived economic wisdom – the origins of economic...
crises can often be traced back to real economic factors (most notably poor investment choices and overvaluations of new innovations).

Similarly long-term in its approach to the crisis of 2007–8 is Michie’s chapter, which provides the third entry in this first section. The primary focus of Michie’s chapter is on the changing demographics of the UK and, to a lesser extent, US financial systems over the course of the modern and early modern eras. To measure these changes, Michie utilizes a series of newly created databases that chart the total number of UK banks, building societies and savings banks on an annual basis, as well as a number of pre-existing datasets on the US financial sector, to produce a series of population timelines. What Michie concludes from these results is that, like most complex ecosystems, financial markets are inherently fragile entities that can be hugely (and often negatively) affected by external stimuli. Leading on from this finding, he also suggests that governments and regulators ought to give more thought to the impact that their regulations and legislations have upon the dynamics of these financial ecosystems.

Complementing Michie’s demographic investigation is the following entry by Bond. Like Michie, Bond’s interest is in the long-term evolution of the British banking sector and, in particular, the manner in which its population has changed over time. In order to assess these changes, Bond has developed a new and – compared with previous efforts – much more comprehensive database that not only tracks the total numbers of banks in the UK, but also the annual entries and exits from the market. Thanks to such robust data, he is able to draw out the key characteristics of different eras in British banking history and identify the long-term processes that have shaped – and continue to shape – the UK banking sector.

PART II: LEGISLATIVE AND STRUCTURAL CHANGES IN THE FINANCIAL SECTOR

Alongside the question of who exactly was to blame, one of the subjects that continues to feature heavily in discussions about the financial crisis – particularly in the popular press – is the issue of why so few of those involved in the catastrophic events of 2007–8 have faced any form of criminal prosecution or legal sanction (Rakoff, 2014). Central to these debates has been a general sense of unease about the current state of financial regulation, with many taking the current lack of convictions as a sign of impotence on the part of lawmakers in the US and the UK: ‘Despite the financial crisis and the spate of mis-selling scandals, we still have not seen anybody sent to jail. Is that because nobody ought to go to jail, or because there is a fundamental failure in the sanctions regime or the legal system?’
The result of this increased focus on the level of shady behaviour in the US and UK financial markets has been an upsurge of interest – both academic and popular – in questions relating to the role and value of financial regulation (Goodhart, 2008; Moloney and Hill, 2012). Particularly apparent in this respect has been the increased level of interest that has started to be shown in the historical roots of the regulatory frameworks that were in place in the US and the UK at the time of the crisis, and whether or not there was anything notable that changed in the years prior to 2007–8 (Wilson and Wilson, 2013).

This second section of the book provides a welcome complement to this burgeoning body of work by offering up a series of readings on the various legal and legislative changes that have taken place in the US and UK financial sectors over the past two centuries. Amongst the key questions that it asks are: have legislative changes had any impact upon the stability and security of the US and UK financial systems? Why were there more prosecutions for fraud and financial crime in the past? Are modern (complex) financial systems inherently harder to regulate?

The first chapter to deal with these fundamental issues of power and control is Mitchell's insightful analysis of the changes that have taken place in US corporate law (particularly with respect to notions of directors’ duties) since the late nineteenth century. To investigate these changes, she focuses on a number of landmark US cases – including Briggs v. Spaulding (1891), Graham v. Allis-Chalmers Mfg Co. (1963) and In re Caremark International (1996) – each of which reveals something about the changing role of the corporation in the US in modern times. Ultimately, what she concludes is that, although in recent years the US courts may have adopted a rhetoric of care and responsibility (primarily to reassure shareholders about the competency of their executives), what has really been happening is a gradual erosion of corporate liability and responsibility in favour of a greater emphasis on unrestrained free-market growth.

Another chapter that critically engages with the raft of free-market reforms that have been passed in the UK and the US since the 1980s is the following entry by Campbell and Dahlgreen, which focuses on the history of the building society movement in England and the legislative changes that have shaped its structure since the nineteenth century. Conceptually, the authors’ main goal is to try to understand why and how so many building societies opted to demutualize during the late twentieth century and what impact this has had on the stability of the UK financial sector. In the end, what they suggest is that, whilst the original concept of the permanent building society may have been somewhat outdated by the 1980s, the basic idea of providing working-class savers with a safe and protected place to deposit their earnings still remains as relevant as ever.
The next chapter by Taylor then shifts the debate somewhat by considering the role that the criminal law (and the threat of criminal sanctions) played in regulating the UK financial sector during the nineteenth century. As Taylor himself points out, this is an area that has generally received little attention from banking historians, most of whom have tended to focus their attentions instead on the major legislative changes that took place during this era. What Taylor skilfully shows, however, is that, though the number of convictions may never have been especially high, the criminal law did still play an integral role during this era (particularly towards the end of the century) in both regulating the behaviour of market participants and preserving the stability of the banking sector as a whole.

Building on the themes and ideas raised by Taylor is the final chapter in this section by Hannah and Foreman-Peck. Like Taylor, Hannah and Foreman-Peck choose to focus on the role that the law – in this case, company law – played in regulating the behaviour of market participants in the UK between 1845 and 1914. What they show is that laws such as the Companies Clauses Consolidation Act of 1845 (supplemented by moral codes and other private order reinforcements) did actually play a significant role in regulating the corporate economy during this era. This, in turn, leads them to suggest that what is needed to deal with the regulatory problems thrown up by the crisis of 2007–8 is a rigorous application of the law, employed in conjunction with a similarly tough ethical framework.

The final chapter in this section is provided by Tomasic and Akinbami. As in many of the other chapters in this volume, their underlying aim is to try to understand why so many banking organizations failed to predict or foresee the financial crisis of 2007–8. To do this, they predominantly focus on the relationship between risk management and corporate governance in financial markets, looking not only at the role of risk in the financial industry, but also exploring some of the various risk management failures that took place in the UK financial sector (notably at Northern Rock and HBOS) both during and in the build-up to the global financial crisis of 2007–8. Ultimately, what they conclude is that effective corporate governance can go a long way towards achieving more effective risk management in the financial sector.

PART III: MANAGING AND REGULATING COMPLEX FINANCIAL SYSTEMS

Whilst the emphasis in the first two sections of this book is predominantly on the historical roots of the crisis of 2007–8 (and the evolution of the US and UK financial systems more generally), the focus in the third and final
section of this volume is much more centred on the issue of how best to respond to and deal with such disruptive events. Unsurprisingly, this is a research area in which there has been a lot of activity since the crisis of 2007–8 (Posen and Changyong, 2013; Taylor, 2009). Alongside issues of corporate governance and corporate accountability (Sun, Stewart and Pollard, 2011), a great deal of this work has been focused on the role of central banks and whether, in today’s complex and increasingly globalized financial system, they are still capable of effective action in times of crises (Davies and Green, 2010; Eijffinger and Masciandaro, 2012).

What the chapters in this third and final section all try to do is enhance and broaden our understanding of how best to respond to the unique challenges that are posed when financial and/or banking crises take place in complex financial systems. Getting this process started is Bent, whose entry on the history of the US government’s responses to economic and financial crises forms the first chapter in this section. In terms of its structure, his work is organized in a chronological fashion, with the initial sections looking at the government’s responses to the crises of the late nineteenth and early twentieth centuries, and the latter sections focusing more on the crisis of 2007–8. Amongst the key points that he touches upon in his analysis is the issue of whether or not governments ought to play an interventionist role in the financial system and how far rising levels of complexity in the financial sector have affected the government’s ability to respond to financial crises.

Complementing Bent’s chapter is the next entry by Arvind, Gray and Wilson, which provides a detailed comparison of mid-nineteenth-century legal responses to bank failures in the UK and the more recent regulatory response to the crisis of 2007–8. Methodologically, the authors’ analysis expertly weaves together historical and legal approaches, looking not only at the events surrounding the various crises under discussion, but also at the legal narratives and moral frameworks that built up around each of these debacles. In the end, what they show is that, despite the huge structural differences between modern finance and nineteenth-century finance, there are still a number of important lessons that can be learned from how the Victorians responded to banking crises.

Offering another historically orientated approach to financial crises is the following entry by Billings, which examines the changing relationship between financial reporting, banking and financial crises in the UK during the twentieth century. Conceptually, his entry is motivated by a desire to understand whether or not the ending of nondisclosure by the ‘Big Five’ UK banks and the subsequent introduction of fair value accounting (FVA) has actually helped enhance the stability of the UK financial sector by making it more transparent. Overall, what he concludes is that, whilst FVA
may be beneficial to certain markets, the unique and complex nature of the banking industry makes it much harder to apply a single financial reporting framework capable of satisfying the needs of every stakeholder.

Concluding this section is the final entry of the volume by Singleton, which uses the Disaster Management Cycle (DMC) framework to examine and understand different responses to financial crises. Used primarily for responding to natural disasters, the DMC framework provides an interesting lens through which to approach financial crises in that it shifts the focus onto the stages through which disasters unfold and develop. As Singleton convincingly argues, this not only helps highlight possible areas of weakness in crisis response strategies, it also makes it easier for economists and those working in the natural sciences to compare notes and share ideas.

FINAL REMARKS

Before we embarked upon this book project, we were all well aware of the many challenges and pitfalls inherent in trying to pursue an interdisciplinary research agenda (Montuori, 2013; Strober, 2011). Yet, at the same time, we were also aware that, if we were ever going to start unpicking the nature of the relationship between financial crises and complexity levels in financial systems, we would need to ask questions and deal with issues that did not sit comfortably within any one academic discipline. The only option, therefore, was to eschew the traditional disciplinary boundaries and take on the challenges that inevitably accompany any attempt to produce a fundamentally interdisciplinary piece of work.

The book that you see before you is the end product of our efforts in this respect. As you will see, we have resolutely stuck to our original cross-disciplinary research agenda, bringing together a range of academics and practitioners from across the disciplinary backgrounds to look in more depth at the historical and institutional aspects of the relationship between financial crises and complexity levels in the US and UK financial sectors. Taken together, their respective contributions have helped to produce a book that not only challenges many often taken-for-granted ideas about the nature of financial crises, but also offers something truly unique to the flourishing literature on the long-term causes (and consequences) of the global financial crisis of 2007–8.
NOTES


REFERENCES


and the Failure of Northern Rock, Cheltenham and Northampton, MA: Edward Elgar.


