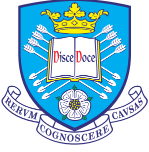

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Political Economy and the Paradoxes of Macroprudential Regulation.

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Introduction

Systemic risk, or more precisely the relatively new public policy field of financial systemic risk management (macroprudential regulation), has a distinctive emerging political economy. Prior to the financial crash of 2008 few economists and even fewer financial policy makers thought in terms of systemic risk. The dominant approach to financial regulation was almost exclusively microprudential in nature. It involved evaluating the safety of individual institutions, including their individual risk profile and risk management systems. Intellectual reinforcement for this approach came from simplified versions of Eugene Fama's efficient markets hypothesis (Fama, 1970), while the dominant strains in macroeconomic modelling paid little or no attention to financial and credit cycles as sources of macroeconomic system wide instability (Borio, 2011; Goodhart, Tsomocos and Shubik, 2013; Drehmann *et al.,* 2012). The re-discovery of systemic risk in the fraternity of academic and policy economists after 2008 is embodied by the now infamous tale surrounding the reigning British monarch's visit to the London School of Economics on 5 November 2008, when she posed the question: why did nobody see this coming? The subsequent British Academy response, emphasising that the one thing that economists had missed was systemic risk (British Academy, 2009), also had a counterpart in the policy world. Central bankers and regulators discovered macroprudential regulation as a series of policy instruments and techniques that could potentially contain and curb systemic financial risk (Borio, 2009, 2011; Baker, 2013a). In 2009 G20 leaders called on regulators to start developing macroprudential regulatory regimes for this purpose (G20, 2009).

Macroprudential efforts to mitigate systemic risk involve a series of policy interventions in financial and credit markets, comprising a variety of largely untested countercyclical stabilisation techniques that are designed to influence price formation and/or direct credit and investment flows away from certain areas into other areas. In this sense macroprudential is more explicitly and conspicuously distributional than monetary policy. At times it will be unpopular and is likely to be the subject of political opposition and criticism. It also involves handing much greater powers to technocratic regulators, usually central banks. However, macroprudential policy is so new as a policy field that we have no evidence or data on how it will play out politically in different contexts, in terms of reactions from politicians, from major industry players and the attitudes of the wider public to the execution of the variety of macroprudential policy instruments. Assessing how the institutional design of macroprudential policy frameworks will interact with the wider political process – the question of macroprudential regulation's emerging political economy, and how this will be justified and explained to the public and by whom, the social purpose of macroprudential regulation – inevitably requires some degree of speculation. In assessing the political economy of macroprudential regulation we quite simply have very little to go on. As a highly experimental and (relatively) new field of public policy, macroprudential regulation has an emerging and uncertain political economy.

This paper argues that early analysis of this emerging political economy is best conducted in the first instance by dissecting the ideas that constitute the macroprudential perspective and their constituent claims. In this respect, the paper claims there are advantages in viewing macroprudential through what political scientists

refer to as a constructivist lens (Abdelal, Blyth and Parsons, 2010). Constructivist accounts contend that in periods of economic crisis it is imperative to attend to the economic ideas of key economic agents, because those ideas are required to navigate, diagnose and interpret uncertainty and in the process generate new institutional blueprints and new institutional arrangements that in turn empower and disempower different actors and groupings (Blyth, 2002). Ideas are therefore prior in driving institutional change and understanding the political economy of crisis and change (Blyth, 2002; Widmaier, Blyth and Seabrooke, 2007).

Part one of the paper argues that the rise of macroprudential regulation can be conceived as a period of ideational change at a time of crisis (Baker, 2013a, 2013b). The second part argues that macroprudential regulation is inherently paradoxical. It suggests that a macroprudential perspective identifies and seeks to address three paradoxes that characterise the financial world. In turn, macroprudential generates a further two distinctly political paradoxes. Each of these five paradoxes is discussed in turn. The final section of the paper dissects the fifth paradox in more detail, suggesting that this is the ultimate bankers' (or central bankers') paradox that is the most difficult for policy makers to resolve. It is suggested that the future political economy of macroprudential regulation will revolve around how this fifth paradox is handled by policy makers, particularly central bankers. The argument here is intended to be applicable to macroprudential regulatory regimes throughout the world, although it is most applicable to the UK case, and most examples are drawn from the UK case, particularly in the final section.

Macroprudential as an Ideational Shift

Generally, macroprudential regulation can be defined as policy makers varying prudential measures (regulatory requirements, such as loan to income/loan to value ratios, and capital requirements, adjusted through the cycle in response to system-wide measures of excessive systemic risk) in an effort to prevent system-wide financial instability (Haldane, 2014). In this respect, macroprudential regulation has been described as a new third arm of policy to sit alongside more traditional fiscal and monetary policies, that exists somewhere between monetary policy and the supervision of individual financial institutions (Jones, 2011). The current primary macroprudential indicator is a credit to GDP ratio (this is referenced in the Basel III agreement) (Drehmann, Borio and Tsatsaronis 2011). As one central banker has put it, the aim of macroprudential policy is to increase the 'macroeconomic ambidexterity' of public authorities (Haldane, 2014). This is to be achieved by giving regulators a greater capacity to moderate financial cycles by varying regulatory requirements according to circumstance in a differentiated fashion, without necessarily resorting to the blunter instrument of interest rate adjustments. In short, macroprudential involves the use of prudential measures for macroeconomic ends to tackle potentially destabilising and deleterious financial bubbles (Haldane, 2014). Few major financial centres and monetary authorities operated recognisable macroprudential policy instruments prior to the crash of 2008. Exceptions were to be found in the case of Spain's system of dynamic provisioning and similar countercyclical capital requirements in India, while some South East Asian economies, notably South Korea, used loan to value ratios to limit property lending and placed levies on banks' foreign currency liabilities. However, in the United States, the UK

and in the Euro zone as a whole there was nothing approximating macroprudential regulation of the financial system as a whole based on calculations of systemic risk. One of the primary reasons for this was that the conventional pre-crisis wisdom, shared by regulators, central banks and the risk management departments of large banks, rested on a simplified version of efficient market theories that was antithetical to, and rejected the case or need for, macroprudential regulation. For example, the assumption that financial markets were largely efficient and tended towards equilibrium was not just accepted at the UK's Financial Services Authority (FSA) prior to the crisis, but had 'become part of the institutional DNA' (Turner, 2011). In this context, macroprudential regulation appeared an unnecessarily cautious and costly set of proposals. Whether or not we accept Adair Turner's view that simplified versions of the efficient market theory had become part of the institutional DNA in the world of financial regulation, there is plenty of evidence to suggest that such theory provided a basic intellectual platform for much actual pre-crash regulatory practice.

Pre-crash regulatory practice was heavily informed by the notion of 'enhanced transparency' (Baker, 2006). The fundamental issue in financial governance was generally constructed in terms of a need to maximise information available to market actors, through information release from governments and financial institutions themselves, which could in turn be fed into the risk management models of banks and financial institutions. This was based on a belief that, if financial markets had adequate information and data, they would process it efficiently. Instances of financial disturbance tended to be seen as the result of inadequate available information, meaning that a lack of transparency in either public authorities or corporate governance practices for information release tended to be blamed for instances of financial crisis, as in the case of the Asian financial crisis (Blyth, 2003; Baker, 2006). Regulators or supervisors in turn concentrated on looking at and evaluating the risk management practices of individual institutions to ensure they were following best practice and could therefore be considered safe (Tsingou, 2008). Such an approach was ensconced internationally through the Basel II agreement which, as several scholars have shown, placed a growing emphasis on banks' own Value at Risk (VaR) models as a basis for calculating banks' minimum capital requirements, with larger banks perceived to have the most sophisticated risk management models and subsequently allowed to have lower capital requirements (Tsingou, 2008; Underhill and Zhang, 2008; Lall, 2011). As Eleni Tsingou has pointed out, this translated into a practice of regulators, or more precisely supervisors, essentially asking large banks what they did, and evaluating their processes and techniques of risk management, rather than considering the business models of these institutions (Tsingou, 2008). A very micro view of the world ensued in which it was assumed that rational agents would efficiently use information to produce a market equilibrium, provided that sophisticated risk management systems and IT capacity were in place.

The rise of macroprudential regulation represents an ideational shift, because it rebuts four central claims of the efficient markets approach and provides us with a series of diametrically opposed assumptions from which to build public policy regimes. In this respect, Paul Tucker when Deputy Governor of the Bank of England referred to moving to a position of thinking of financial markets as inefficient, riddled with preferred habitats, imperfect information, regulatory arbitrage and herd-

ing and inhabited by agents with less than idealised rationality (all characteristic of a macroprudential perspective) as a *Gestalt* flip (Tucker, 2011, pp.3-4). The use of such language immediately conjures images of a Kuhnian-style paradigm shift. It remains premature to equate the emergence of a macroprudential perspective with a paradigm shift, but it is clear that underlying assumptions about the nature of financial markets and how they relate to wider macroeconomic performance have been heavily challenged and revised by the emergence of a macroprudential perspective in the regulatory community, when compared to the assumptions that dominated in the 1990s and the first half of the 2000s (Baker, 2013b). In this sense regulators' cognitive filter has been switched to a quite different setting by the macroprudential ideational shift as financial instability is now viewed as a cyclical, endogenous and endemic characteristic of modern financial markets (Baker, 2013a).

The macroprudential perspective's four key foundational concepts all challenge aspects of efficient market thinking. Fallacy of composition challenges the notion that the rational incentives and decisions of individual actors are sufficient to generate financial stability. Procyclicality raises the prospect that financial market prices are prone to extreme swings rather than usually being correct. Herding challenges the notion that individuals have the capacity and inclination to rationally evaluate all information, and complex systems analysis indicates that complex innovative financial systems can be a cause of systemic instability and fragility, rather than enhancing durability by diversifying risk and producing market completion (Baker, 2013b; Haldane and May, 2011). These premises raise some very serious implicit questions about financial activities, suggesting that they can produce extreme movements and are often characterised by an endogenous and dynamic cyclical instability that can be a source of macroeconomic harm. There was little acceptance of these premises in the pre-crash period, at least in terms of actual regulatory practice and public policy.

Two further contextual factors should guide our thinking about macroprudential regulation as an ideational shift. The first is that the acceptance of macroprudential regulatory philosophies has been somewhat uneven across countries and the extent of the diffusion of the macroprudential regulatory turn, while extensive, is still evolving, due to the fact that macroprudential policy development remains in a highly experimental phase. As Bank of England of officials have noted, 'the state of macroprudential policy resembles the state of monetary policy just after the second world war, with patchy data, incomplete theory and negligible experience, meaning that [it] will be conducted by trial and error' (Aikman, Haldane, and Nelson, 2011). Nevertheless, the process of macroprudential regulatory regime building has commenced and is very much underway. For example, the Financial Stability Oversight Council (FSOC) in the United States is to have responsibility for macroprudential oversight; the Financial Policy Committee (FPC) at the Bank of England has macroprudential policy responsibility in the UK; and the European Systemic Risk at the European Central Bank will set a framework for macroprudential policy in the EU. Early evidence suggests that there are at least three different emphases or types represented by emerging macroprudential regulatory regimes.

First, in the United States the emphasis is on how macroeconomic shocks and disturbance will impact on the stability of individual financial institutions and financial

sector stability as a whole. This approach involves less focus on the financial sector as a transmitter of endemic instability and more focus on how events in the rest of the economy impact on individual institutions, as revealed in the US focus on stress testing individual institutions (Haldane, 2013a). Arguably, this approach remains highly micro in focus and involves merely monitoring systemic risk and considering how it impacts upon individual institutions. One reason for this is that, for many macroprudential advocates, the notion that financial markets are characterised by procyclicality has not resonated in the United States for intellectual, cultural and historical reasons (Persaud, 2010; Correspondence from official to author). The result is a greater faith in financial markets' capacity to clear and produce stable and efficient outcomes. This has also been evident in a greater focus in the US on seeking to address the 'Too Big To Fail' issue as a measure to enhance competition and market functioning, rather than questioning the relationship between market dynamics and instability in a more fundamental way (Persaud, 2010).

Second, in the United Kingdom the focus is reversed and concentrates on how the financial system can act as a transmitter of macroeconomic instability that impairs the performance of the wider economy. This reflects a number of factors, including financial sector size and higher leverage levels amongst UK institutions, meaning that a greater threat is posed by financial instability in terms of the impact on growth and fiscal costs.[1] However, the UK position also reflects a greater philosophical and intellectual acceptance of procyclicality as a dynamic in financial markets that relates to the history of how macroprudential thinking developed and emerged, with many pioneering macroprudential thinkers having UK connections. Notably many pioneering macroprudential policy makers identify the LSE's financial markets group as a particular important early hub of macroprudential thinking that enhanced the intellectual credibility of the policy enterprise, as well as the important early support of Andrew Crockett, former Bank of England official and General Manager of the Basel-based Bank for International Settlements (BIS) (interviews with officials). Consequently, there is more emphasis in the UK regime on countercyclical system-wide policies, particularly countercyclical capital buffers, which are increased by regulators in accordance with balance sheet and credit expansion, and reduced as they contract, giving institutions access to more funds at times of system-wide distress. A countercyclical capital buffer is designed to act as a dragging anchor, tempering market extremities. This reflects less faith in the equilibrium dynamics of financial markets, with public authorities playing a more activist corrective and countercyclical steering role.

A third emerging approach is symptomatic of South East Asia and in particular South Korea. While, in the UK, there is a greater emphasis on price-based instruments such as countercyclical capital buffers, in South Korea there is more emphasis on quantity-based instruments such as loan to value (LTV) and loan to income ratios (LTI), as well as efforts to limit foreign exchange exposure through the use of levies and charges (Lim *et al.*, 2013a; Haldane, 2013). This is a series of more direct interventions that are believed to have a better track record in countering financial bubbles (Lim *et al.*, 2013a). In an Asian context, this has chimed with a history of greater scepticism of the merits attracting foreign financial inflows and financial liberalisation more generally, and a coalitional politics and set of cultural values that attach less importance to property prices as a measure of wealth and a source of growth. However, because macroprudential policy is still very new, these emerging

distinctions between regime types are still somewhat fluid. For example, the UK has been considering LTVs since the summer of 2014, while US policy makers are said to be observing the UK's emerging countercyclical policy regime with keen interest (confidential interview with official). There is consequently much potential for experimentation and cross fertilisation between these broad types of macro-prudential regulation.

A fourth and entirely hypothetical type of macroprudential regulation has been identified by Tamar Lothian in the journal *Global Policy*. According to Lothian, macroprudential regulation has the potential to assume a much more transformative logic in which macroprudential regulation is put to work in the name of a fundamental reformation, with macroprudential techniques and instruments used to put finance at the service of production, restructuring political economies and power relations so that finance becomes 'the servant rather than the master' (Lothian, 2012). However, as discussed in the final section of the paper, there are political and institutional difficulties that inhibit debates about how macroprudential could be used for such purposes.

A second important contextual factor for understanding the emerging political economy of macroprudential regulation, beyond its evolutionary experimental nature, is the process through which the approach emerged. The macroprudential ideational shift had the characteristics of an insiders' *coup d'état*, propelled by insiders or well connected individuals within the transnational central banking policy community (Baker, 2013a). The story of macroprudential regulation is that the term was first used informally in the Basel Committee on Banking Supervision (BCBS) in 1979. It was subsequently referred to in BIS documentation, the so-called central bankers' bank, during the 1980s and was further developed by officials at this institution in a research programme that took off after the Asian financial crisis of 1997-98 (Clement, 2010). A small inner circle of officials and economists developed macroprudential arguments and analysis in the pre-crash period (first half of 2000s), but these made little headway due to prevailing sentiment in policy circles that held that financial markets were largely efficient. This was particularly the case at the BIS, where some officials were early macroprudential pioneers and were quite public in their support for a macroprudential approach, but their arguments were met with a lack of interest, particularly from Federal Reserve Chairman Alan Greenspan (Balizil and Scheissl, 2009). Advocates were also to be found at the Spanish central bank, the Bank of Canada and in some emerging economies in South East Asia and India, as well as at the Bank of England, although in the latter case, they kept their macroprudential research quiet and largely in-house. After the crash macroprudentialists, recognising that the wider context was now much more amenable to their arguments, engaged in inter-organisational and professional networking to promote macroprudential ideas and analysis with some success. Reflexive critical intellectual reassessment and learning was the order of the day in elite regulatory networks such as the Financial Stability Forum (FSF) (later to become the Financial Stability Board (FSB)), the G20, the BCBS, the G30 and amongst national regulatory agencies and central banks. The macroprudential shift involved officials from the BIS, some officials from national central banks, the Bank of England, Bank of Canada and the Reserve Bank of India prominent among them, together with some well networked private sector and academic economists such as Charles Goodhart, John Eatwell, Avinash Persaud, Hyun Song Shin, Markus Brun-

nermeir, Martin Hellwig, Jose Ocampo and Stephanie Griffith-Jones (Brunnermeir *et al.*, 2009; Hellwig, 1995; Persaud, 2000; Goodhart and Segoviano, 2004; Griffith-Jones and Ocampo, 2006), pushing the case for macroprudential regulation (Turner, 2011; Baker, 2013), in a spate of specialist technical reports that called for the establishment of macroprudential regulatory regimes (Brunnermeir *et al.*, 2009; G30, 2009, 2010; FSF, 2009; De Laroisiere 2009; FSA, 2009). In the language of International Relations scholars this spate of reports resembled an irresistible 'norm cascade' (Finnemore and Sikkink, 1998). According to one prominent macroprudential pioneer, the crucial breakthrough in cementing the macroprudential philosophy as a way forward came with the publication of the G20's Working Group 2 report on financial regulation, chaired by the deputy governor of the Canadian Central Bank and of the Reserve Bank of India (confidential correspondence from official; Baker, 2014a) and published on 25 March 2009.

Crucially, virtually all of the figures involved in instigating this insiders' *coup d'état* were economists, either employed by or with links to central banks who had not bought into the efficient markets approach and were critical of the Value at Risk (VaR) models adopted by large banks because of their procyclical nature (Hellwig, 1995; Persuad 2000; Goodhart and Segoviano, 2004).[2] These figures also often possessed varying degrees of scepticism towards the absolute benefits of unfettered financial liberalisation (Rajan, 2005; Griffith-Jones and Ocampo, 2006.) Crucially, a critical reflexive response in central banking networks allowed elements from within the existing transnational central banking policy community not only to exercise such a *coup d'état*, critiquing the existing efficient-market-derived orthodoxy, but also to re-establish the hold of central bank professionals on financial regulatory policy and carve out new roles for their constituent organisations (Baker, forthcoming). In this respect, macroprudential regulation is a technocratic regulatory project developed and conceived by central banks that is in large part about central banks developing new mathematised control technologies for steering financial markets (Engelen *et al.*, 2011; Erturk *et al.*, 2012).

The Five Paradoxes of Macroprudential Regulation

These latter two contextual factors are important for how we approach analyses of the political economy of macroprudential regulation. First, the new, fluid, evolutionary and experimental nature of macroprudential regulation makes empirical analysis difficult. However, one way of illuminating some of the political economy issues associated with macroprudential regulation is to dissect some of the central concepts and claims of the macroprudential perspective and consider the political and institutional issues to which they give rise. Second, understanding where macroprudential is heading requires an appreciation of where this regulatory project has come from, how it was created and by whom. In the main, as we have seen, this has been by central banks with the direct impact of increasing the powers of central banks to engage in a technocratic control project. Arguably, this is the central defining feature of macroprudential regulation. The rest of this paper considers some of the institutional and political issues associated with macroprudential regulation as a form of central bank empowerment instigated by central banks themselves. The argument made here is that macroprudential regulation is inherently paradoxical

and is itself bound up with a number of paradoxes that are central to its political economy. In particular, the macroprudential perspective identifies and seeks to respond to three paradoxes in the financial world that, in turn, lead to a further two political and institutional paradoxes, the resolution and management of which will be at the core of the future political economy of macroprudential regulation.

Paradox 1: Fallacies of composition

Recognition of the potential for and need to avoid fallacies of composition is the starting point in the intellectual case for macroprudential regulation and the identification of systemic risk as a real-world phenomenon (Crockett, 2000; Borio, 2011a, p.4; Brunnemeir *et al.*, 2009, p. 11, XV, p.15). A fallacy of composition in very simple terms is the notion that a system is more than the sum of its parts, or that the properties of a system cannot be ascertained simply by identifying the properties of the individual agents within that system and engaging in a crude process of aggregation. What is true for individual agents is therefore not necessarily true for the system as a whole. The most well-known fallacy of composition in economics is Keynes' notion of the paradox of thrift, where an individual quite rationally makes a decision to spend less and save more (Keynes, 1936, p.84; Samuelson, 1948). In the paradox of thrift scenario, because many individuals make the same decision at the same time, the result is a decline in aggregate savings across the economy as a whole due to falling economic activity, all brought about by simultaneous decisions to increase savings and reduce spending. The broader point contained in the paradox of thrift as an example of a fallacy of composition is that individual units and agents alone possess too little knowledge of systemic patterns and dynamics. Therefore, what makes sense for an agent through their individual lens of self-interest and calculation is not necessarily good, either for the system as a whole, or ultimately for their own well-being and economic security, because individual actions can generate negative system wide feedback effects. As Keynes himself put it, 'it is not a correct deduction from the principles of economics that enlightened self interest always operates in the public interest. Nor is it true that self interest generally is enlightened, more often individuals acting separately to promote their own ends are too ignorant, or too weak to attain even these' (Keynes, 1931, pp.287-288).

Acknowledging fallacies of composition essentially tells us that modern financial and economic systems are complex adaptive systems in which straightforward linear causation does not apply (Haldane, 2009). In finance this relates to the cross-sectional dimension – namely, the complexity of interconnections and feedback loops between institutions, and the time dimension, which is how perceptions of risk and the reality of risk change over time (Borio, 2009). Both the cross-sectional dimension and its complexity, and the question of how risk profiles change over time, can combine to create blindness and myopia in individual decision making.

Crucially, the notion of the fallacy of composition also illuminates the need for a systemic regulator to monitor and seek to curb the build-up of systemic risks. A macroprudential perspective is essentially asserting that social entities and forces possess an autonomous standing, as the aggregate is more than the sum of individual parts. In contrast, while notions like the public or the common good do not disappear completely in microclassical analyses, they do become merely additive,

because of their almost exclusive focus on individual agents. Under a macro perspective, derived from an acknowledgement of the potential for fallacies of composition, an individual's responsibility for his or her wealth is always complicated by broader systemic forces. Because of this, public forms of economic action become necessary to stabilise macro-level processes. In this universe, responsibility for economic success or failure is not borne alone by individuals but instead is shared by the social collective and rests on the legitimacy of a public authority pursuing interventions to protect a wider public interest, or social purpose. In other words, the ontological foundations of macroprudential, based around the acknowledgement of fallacies of composition, open up distinctive macro moralities and ethics closed off by microclassical pessimism concerning the possibilities for public interventions in the economy (Best and Widmaier, 2006). The basic point here is that rationales as to when such interventions are justifiable and defensible, the basic circumstances and principles to be adhered to, and the wider public interest benefits accruing from such interventions have hardly been pursued, in either the scholarly literature, or the world of policy. Crucially, this position concerning the responsibility of authorities to pursue system-wide management also has much deeper ontological foundations than simply being a normative claim due to the foundational role fallacy of composition plays in the macroprudential perspective. The upshot of a greater awareness of fallacies of composition as a paradoxical feature of the financial world is a recognition that public authorities have to undertake systemic risk management and assume a systemic remit and purview, because, without this, the system itself will be prone to costly bouts of instability generating society-wide costs. In the words of one official closely associated with the macroprudential turn, public authorities have to display a greater willingness to act as 'benign enlightened regulatory planners'(Haldane, 2011).

Paradox 2: The procyclical paradox of credit

The phrase the banker's paradox (singular, as opposed to the plural of a number of central banks and their officials, as used in the title of this paper) was first used by two evolutionary psychologists in a contribution to the proceedings of the British Academy in 1996 (Tooby and Cosmides, 1996). Succinctly put, it referred to the phenomenon that bankers will only lend money to those who do not need it, or have least need of credit, due to the low risks these individuals represent. There is a 21st century version of this phenomenon which the macroprudential perspective identifies. It is the observation that, due to modern risk management techniques based on Value at Risk models (VaR), credit is most available when the system as whole has least need of it, and is least available when the flow of credit is most required from a systemic perspective. This is due to an inherent and endemic procyclicality that market-based financial systems display, or an inherent financial instability, to borrow from Hyman Minsky, with modern VaR techniques hard wiring this procyclicality into financial markets (Minsky, 1977; Eatwell, 2009). The procyclical paradox of credit is linked to fallacies of composition, because the system of credit creation and allocation is governed by the risk management models of private institutions. These models calibrate and assess risk in response to changes in asset prices. If prices are falling risk rises, meaning that selling of assets commences, fewer investments are undertaken and credit becomes scarcer on a system-wide basis. If prices are rising, risk falls and credit expands. From the perspective of

individual institutions this process of price-based risk assessment makes perfect sense, but from the perspective of the system as a whole it can drive prices and credit supply to extremes, generating long-run credit cycles of around fifteen years (twice the length of business cycles) that can run to extremes in both directions, with disastrous consequences dwarfing the costs of business cycles (Aikman *et al.*, 2010; Borio, 2012; Drehemann *et al.*, 2012; Claessens *et al.*, 2008; Jorda *et al.*, 2011). Macroprudential regulation is consequently about mitigating the procyclical paradox of credit through countercyclical policy measures that essentially involve public authorities providing greater direction to and sometimes constraining private decision making.

Paradox 3: The paradox of financial instability

The paradox of financial instability is a concept developed by one of the pioneers of the macroprudential perspective, Claudio Borio, an official at the BIS, the so-called central bankers' bank, which also conducted early conceptual macroprudential work (Borio, 2011, Clement, 2010). The notion of a paradox of financial instability draws on Minsky's insights that risk and instability are borne in periods of stability (Minsky, 1977). In other words, the paradox of financial instability identifies that stability begets instability, because the system as whole is at its most dangerous and riskiest at precisely the point when it appears to be safest to a critical majority of actors from their individual perspective. In this sense, the paradox of financial instability is a result of the phenomenon of fallacies of composition. When risk appears low and market asset prices are rising, credit is extended, pushing those prices still higher (the procyclical paradox of credit) and further risks are pursued by private investors in pursuit of yield, precisely because periods of perceived low risk are often accompanied by low interest rates – further encouraging risk taking (Borio, 2011). This is often accompanied by what Carmel Reinhart and Kenneth Rogoff refer to as a 'this time is different narrative,' where society as a whole convinces itself that, in this period of financial expansion, asset price increases and credit growth is different from earlier periods of financial expansion – usually due to technology, or some improvement in productivity, meaning that a current period of financial hubris can be sustained (Reinhart and Rogoff, 2011). When risk is assumed to be low by a critical mass of actors, further risks are pursued, as increasingly risky investment decisions are taken as financial institutions become increasingly leveraged pursuing the returns offered by rising asset prices. High risk investments and periods of resulting instability thus emerge from conjunctures in which risk appears to be low to a majority of actors in a period of apparent stability.

Ultimately, macroprudential regulation involves a conceptual frame that identifies the existence variously of fallacies of composition in the financial world, of the procyclical paradox of credit and of the paradox of financial instability, and seeks to respond to these phenomena by equipping regulators with a systemic remit to adjust the requirements and rules with which market participants have to comply in response to system-wide cyclical developments and patterns. However, countercyclical policy of the type prescribed by the macroprudential perspective raises tricky political and institutional issues.

Paradox 4: The political paradox of countercyclical policy

The financial instability paradox produces a specific political paradox that is at the heart of the emerging future political economy of macroprudential regulation. It is that countercyclical measures are most required from the perspective of the system as a whole at precisely the point when there is least political and social appetite for them, because they appear to the majority, from an individual perspective, to be unnecessary due to perceived low risks. The 'this time is different' narrative adds to such political difficulties in taking unpopular actions that lean against prevailing market, social and political sentiment. It is for this reason that regulators need to be empowered to take tough unpopular decisions at times of financial buoyancy. In other contexts, countercyclical policy, notably in fiscal matters, has proved politically difficult, because there is little appetite and incentive to tighten at times of growth.

At the heart of the emerging political economy of macroprudential regulation is that it suffers from a political constituency problem. As Claudio Borio of the BIS recounts, 'there is no ready-made constituency against the inebriating feeling of growing rich' that is characteristic of a financial boom (Borio, 2013, p.5). Of course, there is a political and institutional solution to this paradox and it is well-known. It is called Central Bank Independence (CBI) (Rogoff, 1985). A similar well-known argument has been applied to monetary policy since the 1990s. This argument runs that the responsibility for setting monetary policy should be assigned to central banks, not politicians, because they are less likely to be swayed by forthcoming elections (Cuikerman, Webb and Neyapti, 1992; Crowe, 2008; Broz, 2002). Independent central banks do not have to worry about participating in popularity contests, and are therefore more likely to take appropriate action based on system-wide data (measures of inflation in the case of monetary policy, or credit to GDP ratios, as an emerging guide in macroprudential policy). In other words, the argument is that macroprudential policy needs to be conducted by institutions one step removed and insulated from the political process. Whether we accept that creating such institutions is possible or not, this is the current argument emerging from many prominent macroprudential advocates within central banks themselves (Lim *et al*., 2013b; Haldane, 2013).

Paradox 5: Technocracy's depoliticisation and legitimacy paradox

The proposed solution to the political paradox of countercyclical policy, central bank independence, creates a potentially fundamental institutional and political paradox that is much more difficult to resolve, but will be central to the emerging political economy of macroprudential regulation. First, the macroprudential regulatory project's primary characteristic and principal strength (that has given it credibility and made it appealing), as the CRESC group at the University of Manchester has argued, is that it is an attempt to execute a technocratic and mathematical control project to curb financial excess and its socially deleterious consequences (Engelen *et al*., 2011; Erturk *et al*., 2012). Its technocratic nature, especially the fact that it was developed by those well connected in the central banking policy community, made it well positioned in terms of policy debates, supported by credible voices. It also meant it was relatively non-threatening, or controversial, because in its inception macroprudential was presented as a series of relatively narrow technical interven-

tions driven by technical readings of systemic data patterns. More fundamental questions concerning the purpose of macroprudential regulation and the kind of financial system and economy it should contribute to and support have largely been avoided in debates on macroprudential. When macroprudential advocates were seeking to gain widespread acceptance for such a perspective it made sense to remain silent about such matters and present macroprudential as a series of technical answers to financial instability, so that it could develop political and professional support at the peak of the 2008 crash. But whether this remains politically sustainable over the medium term is questionable and this is the focus of analysis in the rest of this paper. Here it is argued that the technical strengths and status of the macroprudential project are also the potential primary political weakness, or Achilles heel, of the macroprudential project, potentially undermining its political sustainability and long-term legitimacy (Baker, 2014). Another way of framing this paradox is that efforts to further depoliticise central bank policy making (by assigning macroprudential powers) actually have the opposite effect and increasingly politicise central banks in ways which may potentially undermine their claims to apolitical technical authority.

Central bank independence during the 1990s and 2000s was based on a simple delegation contract (Crowe, 2008; Broz 2002; Keefer and Stasvage, 2003). Sovereign governments created mandates for a non-elected agency and assigned control over a particular instrument to meet that mandate. Such arrangements were referred to as operational independence and in monetary policy usually involved a central bank being given control of interest rates to meet an inflation target set by the government (Crowe, 2008; Mihailov, 2006). Such inflation-targeting regimes were a neat political device that worked politically for two principal reasons. First, they were relatively easy to understand. One instrument – interest rates – was adjusted to meet one target – an inflation target. It was relatively easy to judge performance and, in the UK, the Governor of the Bank of England was obligated to write a letter to the government if the target was missed, explaining the failure. In this sense accountability relationships were relatively clear cut and there was a clear benchmark for evaluating central bank performance. Moreover, individuals appeared to grasp intuitively that rising prices could damage their own material welfare by reducing their purchasing power, irrespective of the actual realities of this and any gains obtained from higher inflation. Unlike the intellectual justification for macroprudential policy which invokes a series of quite complex counter intuitive paradoxes (as we have seen), the case for inflation targeting and giving politically insulated arms' length central bankers control of interest rates to meet a specified inflation target was a relatively simple case. Such an argument appealed directly to an individual's own welfare (the benefits of constraining the rate of price rises in the economy as a whole) in straightforward terms. In contrast, a macroprudential perspective alludes to systemically beneficial and desirable outcomes that are much more difficult to communicate and translate into straightforward individual material gains. Moreover, in the short term at least, macroprudential policy can often appear to run in the opposite direction by potentially constraining an individual's access to credit and assets.

Second, those at the very bottom and very top of the income stream both had different reasons to fear inflation. At the top of the income stream individuals with high net accumulated wealth fear that high inflation will erode their accumulat-

ed wealth. At the bottom of the income stream empirical evidence shows that it is those with the smallest disposable incomes that suffer most when prices rise sharply, as a large share of their income is devoted to basic subsistence costs (Albanesi, 2007; Erosa and Ventura, 2002). Notionally at least, this gave inflation targeting the basis for some cross-class appeal and a broad constituency that would identify with it as an objective protecting their interests (Goodman, 1991). Notably, the argument in favour of having operationally independent central banks target inflation has not created a political backlash from publics in established democracies, and few political parties have openly challenged the principle, suggesting that at the very least inflation targeting has not proved electorally disadvantageous to date (Bodea and Hicks, 2014).

Unfortunately, macroprudential regulation does not share these political advantages. The benefits of macroprudential relate to reducing the hidden long-term costs generated by systemic risk and financial instability. These are much more difficult to articulate and communicate in terms of near-term individual benefits. Moreover, the case for macroprudential regulation rests on a series of counter-intuitive claims about the paradoxical nature of financial risk taking. Again, these are much more complex arguments that are less easy for the public at large to grasp than references to harmful price rises. Macroprudential arguments and rationales would appear to have much lesser intuitive appeal than their monetary policy equivalents, although public attitudes to macroprudential policy is an area in which there is need for more research and data collection. Furthermore, macroprudential policy involves interventions to reduce liquidity in the financial system in boom periods (and increase it in contractionary periods), but also making access to credit more difficult for certain groups at certain times. Countercyclical macroprudential policy can therefore be expected to be unpopular and explaining its long-term benefits in lowering the hidden costs of future financial crises is problematic, precisely because macroprudential policy is intended to prevent future uncertain costs that are difficult to calculate and quantify, or to explain to the public at large. In this sense, the constituencies supportive of macroprudential policy are less easily identifiable than in the case of monetary policy. Furthermore, the material benefits of such policies are less easy to explain.

The delegation contract and accountability relationship is similarly complicated in the case of macroprudential policy. Whereas monetary policy involved a straightforward arrangement whereby one instrument targeted one objective, there is no ready equivalent in the case of macroprudential policy. The primary reason for this is that the macroprudential perspective views financial risk as systemic, dynamic and endogenous, with financial bubbles taking subtly different and evolving forms. One of its primary purposes is to increase the capacity of authorities to respond to emerging financial bubbles in an increasingly differentiated fashion without having to resort to interest-rate adjustments, which may have undesirable wider macroeconomic effects, thereby increasing authorities 'macroeconomic ambidexterity' (Haldane, 2014). The potential macroprudential policy armoury is wide, including: countercyclical capital requirements; dynamic loan loss provisioning; countercyclical 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; and capital controls (Elliot, 2011). Not

all policy makers will want to avail themselves of all instruments to the same extent and political, social, institutional and cultural context will have a bearing on this. These differentiated responses will need to be further documented and explained in future research, but this wider range of instruments and the increase in macroeconomic ambidexterity of policy makers complicates the task of institutional design of macroprudential policy. Certainly, one likely outcome is that increasingly differentiated and calibrated responses to changing conditions will require technically adept policy makers having plenty of room to exercise discretion, rather than a one-size-fits-all policy target, if flexible policy responses are to be designed and executed, at least during the current experimental phases. Given this undoubted complexity and the varied and highly experimental nature of macroprudential policy, it is very hard to replicate inflation targeting with a single catch-all policy objective and mandate. It is difficult to imagine how an equivalent could or would operate, and arguably a single policy target may defeat the objective of increased macroeconomic ambidexterity.

The likely need for increased policy discretion in the case of macroprudential policy puts legitimacy and accountability centre stage. It also means central banks need to give attention to how they build and sustain legitimacy by cultivating public support for macroprudential policy. Without this, political questions about the discretion unelected central bankers enjoy are sure to follow. As officials from within the broad central banking community have acknowledged, the most difficult challenge facing macroprudential policy is its political economy (Borio, 2013; Haldane, 2013b). This relates to the lack of a readily identifiable constituency and the fact that macroprudential policy will involve making highly unpopular decisions that run against prevailing public and market sentiment. Consequently, for leading voices within the macroprudential perspective, giving responsibility for macroprudential policies to independent central banks insulated from political interference and pressures becomes an even more important and pressing issue than it was in the case of monetary policy (Borio, 2013; Haldane, 2013b).

Dissecting the case for giving macroprudential powers to central banks, as made by the central banking community itself, illustrates some of the tricky issues the political economy of macroprudential regulation throws up. This case essentially revolves around two claims. First, the public is expected to have a limited collective memory and preferences for financial stability that will wane the further away we move from specific instances of financial disturbance (time inconsistency) as societal-wide 'this time is different' narratives take hold (Haldane, 2013b; Kyland and Prescott, 1977; Barro and Gordon, 1983; Reinhart and Rogoff, 2011). In contrast, central banks as long-lived institutions are said to have a considerable 'collective institutional memory', enabling them to react accordingly to threats to financial stability (Haldane, 2013b). The literature on credit cycles suggests they run to a 15-20 year time period (Aikman *et al.*, 2010; Drehmann *et al.*, 2012). Given such a time span, disaster myopia amongst publics and policy makers is said to be highly likely (Haldane, 2013b). Moreover, today's asset-rich generation is a powerful and vocal constituency that is said to crowd out tomorrow's indebted and asset-poor generation, who are non-voting, non-vocal and often unborn. The justification for having highly independent central banks is that a myopia trap amongst a broad range of actors is likely to be more acute in finance than in other areas of policy (Haldane, 2013b). The wider public's preferences are therefore thought to be acutely time-

inconsistent in the area of finance and the political pressures for inaction on financial growth are expected to be considerable.

A second claim is that macroprudential policy is more explicitly and starkly distributional (more so than monetary policy even), which means it is best handled by a politically and institutionally insulated, arms-length body that will not be as susceptible to popular pressures from vested interests. The Bank of England's Andy Haldane has acknowledged that macroprudenial policy instruments, especially the FPC's sectoral capital requirements, have the potential to be infinitely granular in distributional terms, and especially in terms of regional and geographical variation. Macroprudential's more explicit distributional quality can therefore be expected to provoke a political reaction from those adversely affected by such distributional interventions. Questions will surely be raised about the appropriateness of supposedly apolitical and technocratic central banks taking actions that will disadvantage some groups and are likely to be perceived as producing outcomes that are political in nature. The seeming requirement for macroprudential policy makers to have high levels of discretion is also likely to increase the political scrutiny and political pressures to which central banks will be subjected. In this sense, efforts to depoliticise macroprudential policy by allocating power and responsibility to unelected central banks, whose claims to authority are based on technical expertise, actually runs the risk of not only politicising macroprudential policy, but also politicising central banks themselves. In other words, depoliticisation begets politicisation, which is in turn macroprudential's ultimate central bankers' paradox.

These two arguments in favour of giving central banks macroprudential powers also contain some important inconsistencies that have as yet not received the consideration they deserve. These difficulties relate to the all-important question of how macroprudential policy is explained and justified to the public and the electorate at large. The publicly articulated rationales for macroprudential policies have not gone much beyond iterations of the importance of financial stability. For example, in the UK the formal mandate of the Bank of England's FPC set by the government is suitably vague – to 'enhance the resilience of the UK financial system'. The very case for giving the Bank of England macroprudential powers rests on the argument that the public at large suffers from financial stability myopia (Haldane, 2013b). In other words, simply using enhanced financial stability and resilience as a policy justification is unlikely to build long-term public support and constituencies for macroprudential regimes, precisely because the public is expected to have a blind spot in recognising the important benefits of financial stability over the long term. The difficulty of building public support for macroprudential policy regimes is compounded by the expectation that these policies will have a distributional impact and at times prove unpopular with the public at large. Public discontent with central bank interventions can therefore be expected to grow. If public discontent grows as expected, politicians and legislators will surely come under pressure and have an electoral incentive to review the delegation of macroprudential powers, especially given the, as yet, unclear and vague mandates. Powers that have been delegated to central banks under the terms of a delegation contract can similarly be revoked by politicians, especially when existing macroprudential mandates remain vague and allow considerable room for discretion.[3] Paradoxically, high levels of central bank discretion and empowerment are likely to increase the questions asked of central banks and the levels of political contestation and scrutiny they can expect.

The upshot of this combination of issues and difficulties is that, if central banks are to build public support for macroprudential regulation, they will have to give attention to how they can best explain the public and social purpose that macroprudential regulation is supposed to serve. As already explained, simply resorting to exhortations about the importance of financial stability is unlikely to be successful in this regard in the terms of central banks' own arguments concerning the public's financial stability myopia and time-inconsistent preferences. If macroprudential policy is, as expected, likely to prove politically unpopular, then so too questions concerning the entire purpose of the macroprudential project can be expected to grow in the minds of the public and other political institutions over time (the stability blindness argument). Macroprudential policy, it has been acknowledged, will require central banks to be more transparent about their aims, objectives and thinking and engage in more public diplomacy and explanation than ever before. In this sense, central banks have seen a vast increase in their powers, but are now in uncomfortable territory, precisely because explaining the purpose of macroprudential policy in a way that will articulate its benefits (public good) and build public support will require some vision of how it contributes to a more socially useful financial system that serves the public at large to better effect. Articulating the benefits of macroprudential policy, therefore, requires a vision of what a socially useful financial system would actually look like and some conception of how best to explain and articulate the kind of macro moralities that arise from a recognition of the existence of fallacies of composition. For central banks, this would require connecting their conceptual, empirical quantitative analyses as to how the financial system as a whole is constituted and behaves, with more normative analyses relating to how public policy can and should respond to produce better outcomes for the system and for society as a whole. This may include reaching verdicts on the appropriate size of the finance sector (Cecchetti and Kharroubi 2012; Haldane, 2012), the worth and contribution of certain financial activities to macroeconomic stability and growth, whether financial activity of certain kinds fuels destabilising and growth-retarding inequality (Haldane, 2012; Galbraith, 2012; Rajan, 2010; Piketty, 2014) and, most crucially of all, what macroprudential policy contributes to differing answers to these questions.[4]

Ultimately, the question that has remained off the table for central banks and their hinterland policy communities is whether macroprudential is a conservative project designed to preserve the existing system, or, in Terrence Casey's terms, 'saving neoliberalism' by dealing with its Achilles heel – the propensity of highly financialised systems to generate huge, damaging credit bubbles (Casey, 2014);[5] or whether, alternatively, macroprudential is a transformatory project in accordance with the role envisage by Tamara Lothian, in which macroprudential re-establishes finance as a servant, rather than the master, the role it played in the pre-crash period (Lothian, 2012).[6] Making finance into a servant would entail restructuring the financial industry, its ethos, its structure and incentives (possibly restricting some shadow banking and other *rentier* activities), but also its relationship to political, economic and social institutions more generally. In the Anglo-Liberal world (the US and the UK) in which access to credit has become part of social settlements (Langley, 2007; Seabrooke, 2006; Crouch, 2009; Rajan, 2010), this implies a much more fundamental societal transformation altering the existing growth model. Central banks can present data and evidence that would inform such a debate, but, due to their sta-

tus and delegation contract relationships, it is impossible for them to lead such a debate. Politicians across Western democracies have not played a leadership role on macroprudential policy questions to date, beyond initial legislation on policy frameworks and institutional design questions that central banks have fed into via their testimonies, written recommendations and advice to various parliamentary committees. Whether due to inhibition related to poor understanding of the technical and conceptual issues surrounding macroprudential, or deeper-lying motives relating to the short-term political advantages of the turn-to-credit expansion, the question of what the broader social and political objectives of macroprudential regimes should be has not been picked up by politicians (especially in the UK and the US). Yet, taking clear positions on such questions and explaining this to the public would seem central to the political future of macroprudential and its long-term sustainability. For the time being macroprudential debate has remained technical and has been extracted from both its social and political context and implications.

Central banks, perhaps understandably, have been very reluctant to address these political questions in anything other than an implicit fashion, because of fears of perceptions of creeping politicisation. The claims to authority of independent central banks come from their technical expertise and skill sets, based on data collection and analysis and the policy implications arising from this, derived in turn from a conceptual map and understanding of how the wider economy actually functions and interacts with the financial system. The delegation contracts on which the authority of 'independent central banks' has been based allocates decision making to them based on technical capacity and career structures that are supposedly insulated from political pressures and popularity contests. The terms of such delegation contracts have until now (and the emergence of macroprudential) been narrow, creating clear disincentives for central banks and their staff to stray into political and normative areas. Their focus has been empirical and analytical – responding to what is, not advancing more normative and political arguments about the good society and the role of public policy in producing such a vision. But the point is that the macroprudential project is incomplete and unfinished, precisely because these kinds of questions of the purpose of macroprudential interventions and the role of the state in producing a socially useful financial system and what that would look like – the question of social purpose (Ruggie, 1982) – have been left unanswered. Moreover, it remains unclear who should answer these questions and who has the technical capacity and political authority to answer these questions. In this sense, cultivating constituencies and public support for macroprudential policy potentially places central banks delegation contract under strain by taking them into territory that goes beyond their traditional narrow technical remit. The politics of macroprudential is further complicated because the relationship and communication between finance ministries and central banks on macroprudential questions is still evolving, given that many decisions will have fiscal as well as financial and monetary implications and institutional politics is at play in different ways in different national settings between finance ministries and central banks.

To date, the central bank delegation contract has been based on acknowledgment of technical capacity to perform narrow mandate defined goals. Macroprudential has partially challenged that because mandates are much less clear cut than in the case of monetary policy, but the most fundamental problem is that, to date, the macroprudential project lacks a clear sense of social purpose. It suffers from

an identity crisis in relation to the question of whether it is supposed to be conservative or transformative. Central banks have displayed a reluctance to raise the question of social purpose because doing so would involve moving outside of their supposed narrow technical functions and remit. Taking explicit positions on these questions would make authority claims based on technical expertise, above, beyond and outside of politics, look hollow. Central banks face clear disincentives in articulating a sense of social purpose. Yet, at the same time, based on the analysis developed here, in the absence of a sense of social purpose, macroprudential regulation's long-term political sustainability looks questionable. Central banks face a dilemma. Failure to build broader rationales and constituencies will damage their capacity to perform their new regulatory role, yet cultivating constituencies and a broader sense of purpose for this regulatory project potentially erodes their claims to technical impartiality and non-political authority. This is the ultimate central bankers' paradox unleashed by the rise of macroprudential regulation. The primary danger from a central bank perspective is erosion of hard-won independent status.

Conclusions

Macroprudential regulation is inherently paradoxical and based on a series of counter-intuitive propositions. Counter-intuitive ideas invariably have political problems. What macroprudential policy regimes require, therefore, is a sense of social purpose that is plausible and intuitive to the public at large and thus politically saleable. The difficult question facing macroprudential regulation is who should articulate and develop this sense of wider social purpose. Contemporary political and regulatory systems have been characterised by an effort to create a clear demarcation and divide between evidence-based technical analysis and big-picture normative reasoning about a desirable society and the values and principles on which it should be based. In reality, such divisions are not clear and the boundaries are always blurred. In the UK context, technocratic voices who have been intellectually radical, such as Andy Haldane at the Bank of England and the former FSA chair Adair Turner, have embodied this dilemma. Both have critiqued socially useless finance, referencing unfair shares, arguing against short termism and highlighting market failures, but they have also been constrained and inhibited and have yet to flesh out fully a clear vision of a desirable financial future (Haldane, 2012, 2014b; Turner, 2011, 2013). This dilemma reflects the key tension at the heart of macroprudential regulation. It has a regulative function. That is to say, it seeks to regulate and correct faults in the existing system, yet there is also an underdeveloped transformatory logic at work in some accounts of macroprudential regulation which alludes to the need for a great reformation of finance for macroeconomic reasons of sluggish growth, rising inequality, poor productivity, financial crowding out, poor wages in the non-financial sector, brain drain, impatience and short-termism (Haldane, 2012). Technical instruments, including a range of taxes, licensing arrangements, prohibitions, caps on aggregate activity and sliding adjustable capital requirements to direct finance into areas neglected by current market short-termism by creating publicly licensed infrastructure, research and development and green technology banks, have been alluded to and can all be justified using a macroprudential frame that illuminates how active liquid financial sectors can cause wider macroeconomic harm, crowding out alternative sectors (Haldane, 2012; Turner, 2013). In this sense, any debate about the social purpose of macropru-

dential has to be led by evidence and research into the dynamic processes alluded to above and it is here that central banks can inform the debate on social purpose. However, as the analysis here has also indicated, they cannot deliver it alone.

The analysis here reveals essentially that there are political limits to technocratic-led change. The post-crash political economy of the early part of the 21st century is characterised by a dilemma, or a tension. Those who have the evidence, analysis and understanding to advance a sense of social purpose for post-crash financial reform efforts are located in institutions that cannot be seen to be doing that kind of thing. Those located in institutions that can do that kind of thing, such as in legislatures and political parties, have to date lacked the capability, understanding and inclination to do so. Debates about the purpose and end-product of reform efforts in the mainstream party political arena, notably in the UK, but also in other states, have been concerningly thin to date. A reading of the history of the interwar period and of the political economy of the 1930s and the 1970s quickly reveals that political parties have not been performing the transformative role they did in these earlier eras. During these periods fundamental questions about the lessons from the crisis, the role of regulation and the state in the economy were thoroughly debated and new ideas were embraced in the name of social and political transformation, as parties acted as mechanisms for the mediation of competing ideas and the accommodation of pluralistic interests (Blyth, 2002; Hall, 1993). The reasons for contemporary political parties' current 'muddling through' approach based on limited thinking and superficial sound-bite approaches to the crash of 2008 are the subject of an entirely separate research programme, but to date this has had an inhibiting effect on macroprudential regulation. Political leadership is essential for macroprudential regulation in terms of defining social purpose, but has to date been minimal in the field of macroprudential. The political economy of macroprudential regulation therefore points to an uneasy growing co-dependence between central bankers and political leaders. As macroprudential regulation continues to evolve in its experimental phase, it will require ongoing and more intense forms of collaboration and communication between politicians and central bankers than we have been used to, with highly uncertain consequences.

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Notes

1. The combined balance sheets of the UK's three largest institutions in 2013 was placed at between three and four times UK GDP.
2. It is worth noting that officials who promoted and developed macroprudential thinking all cite the work of the LSE's Financial Markets Group as a key hub of individuals who added academic credence to their development of the concept of procyclicalty.
3. The literature suggests that a combination of legal transparency, checks and balances and political competition in democracies has prevented the delegation contract being revoked and overturned in democratic states in the case of monetary policies (Broz, 2002; Bodea and Hicks, 2014). But the lack of a clear mandate in macroprudential policy and the greater discretion required means that the same institutional incentives and public acceptance of monetary policy frameworks are unlikely to translate across to macroprudential policy for some of the reasons discussed here.
4. Some research (Cecchetti and Kharroubi, 2012) indicates that once a bank goes above 100% of GDP it starts to act as a drag on growth. This becomes a macroprudential issue because such research is implying that, once the financial sector as a whole goes above a certain size, it starts to crowd out and suck human and financial capital from other sectors, exercising a suction pump or vacuum cleaner effect, distorting and inhibiting wider macroeconomic performance. Haldane 2012 has touched on some of these issues in a limited way. Haldane is amongst the more radical central bank voices, but his dilemma reflects the 'bankers' paradox'. Intellectually, he has challenged the status quo and called for a great financial reformation, the biggest in 80 years, but he has stopped short of sketching a view of what 'socially useful banking' would look like and how macroprudential can contribute to its delivery. Inhibition and caution is the result of a recognition that, professionally as a central banker, there are limits to how far he can go in making reform arguments for reasons of professional norms and credibility and the maintenance of the entire authority base of central banks based on delegation contract arrangements – precisely again the bankers' paradox.
5. For a response, see Baker and Widmaier (2014).
6. In the following video at 1.28.50 the Bank of England's Andy Haldane argues that the purpose of macroprudential regulation is to make finance the servant rather than the master. See http://speri.dept.shef.ac.uk/2014/03/07/video-conversation-andrew-haldane/

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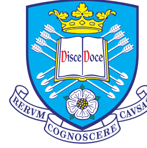

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