



Understanding and Addressing the CRISIS IN FINANCIAL REGUL

Peter Bonisch discusses some of the broader lessons of the financial crisis for risk and regulation of the financial sector. He looks at how the failure of critical aspects of economics indicates a complete rethink of the role of economics in financial regulation and risk.

In the introduction to the last book he wrote before his death in October 2010, the great Polish-born American mathematician Benoit Mandelbrot gave a depressing assessment of the state of financial economics. It is, he said, 'as a discipline, [sic] where chemistry was in the sixteenth century: a messy compendium of proven know-how, misty folk wisdom, unexamined assumptions and grandiose speculation' (Mandelbrot and Hudson 2008).

Despite a system of international regulation, which produces thousands of pages of rules and interpretation of rules designed to make the financial system safe, the financial crisis has engulfed the world. The crisis event began with the collapse of a couple of hedge funds operated by Bear Stearns in 2007. The resulting contagion brought down three major global investment banks; one such bank, Lehman Brothers, was entirely destroyed; the others were bailed out, as were many of the world's largest financial institutions. By the middle of 2010, the crisis that had started as a sharp decline in house prices in the US had brought an original member of the eurozone, Greece, to the point of an EU-IMF bailout. By the end of the year, the crisis had claimed a second sovereign scalp: Ireland. While the financial sector in the US has recovered a good proportion of its value, as yet taxpayers have not. And things do not look so rosy on this side of the Atlantic. This was exactly the sort of thing that global financial regulation was meant to prevent. It did not and the global financial regulatory structure failed in its principal task.

So what of Mandelbrot's claim and how does it relate to the efficacy of financial regulation? Firstly, from the outset, the current global approach to regulation of banking firms' capital known as the Basel II framework, promulgated by the Basel-based Bank for International Settlements, had its critics. At the time of its initial publication, several papers identified shortcomings. An excoriating attack by LSE academics (Danielsson et al. 2001), for instance, accurately identified the sources of many of the problems that would subsequently give rise to the crisis which began in 2007 onwards. The opening sentence of that paper stated that the Basel II approach had '... failed to address many of the key deficiencies of the global financial regulatory system and even created the potential for new sources of instability... The proposed regulations fail to consider the fact that risk is endogenous'.

Secondly, and more fundamentally, there is the presumption, central to the Basel II framework, that regulating financial *firms* is the correct approach to regulating a financial *system*. There are two purposes of financial regulation: (i) depositor protection and (ii) prevention of systemic contagion from failure of a single financial institution. The latter aim led to the Basel emphasis on strict prudential capital rules – initially based on credit, market, and operational risk assessments. The resulting framework was an attempt to protect the *system* – the focus of the regulation – by preventing failure of *individual firms*. Yet this is contrary to any sound approach to market performance and capital deployment. Firms must be subject to the 'gale of creative destruction'; they must be allowed to fail, and their capital and business relationships be reallocated, for the system to operate efficiently. As a consequence, the system has *not* been operating efficiently: the regulatory regime has reinforced the capital-related and administrative barriers to entry, entrenching existing players, promoting increasing returns to scale (ie favouring larger firms), and allowing the extraction of economic rent through super-normal profits. The latter are channelled into the 'bonuses' that are now the bane of the political class.

Thirdly, the financial crisis has exposed the analytic underpinnings of the regulation, namely general equilibrium assumptions (in the form of 'DGSE models') that have driven thinking on development of financial instruments and models for regulatory intervention. These models, which form the core of modern macroeconomics, are founded on a series of restrictive assumptions about market conditions that do not stand up even to limited scrutiny. It is the intellectual antecedents of those models, in the form of Arrow-Debreu formulations, that give rise to the assumption that 'market completion' is always beneficial. Arrow and Debreu postulated that, if we have sufficiently comprehensive 'contingent contracts', as they called them – later structured as 'derivatives' based on options pricing mathematic of the mid 1970s – markets would be more 'complete' in that risk would be allocated more efficiently across economic agents. At least they would in a two-period model without any self-interest by those agents (such as banks). Yet if these assumptions were valid, there would be no proprietary trading and no need for an agonized debate about the Volcker Rule to separate banks' own trades (proprietary) from those made on behalf of clients (flow trades).

All this would not be so damaging had not almost every policy advisor, regulator, central bank economist, investment firm economist, MBA graduate, and bank senior executive been schooled in the conclusions that come from these flawed models in which agents' own self-interested behaviour is assumed away. Recently, a group of US and European economists described the problems well (Colander et al. 2009). They called the financial crisis a systemic failure of academic economics, arguing that current approaches to economics '... lose [sic] track of the inherent dynamics of economic systems and the instability that accompanies its complex dynamics... leading [sic] researchers to disregard questions about the coordination of actors and the possibility of coordination failures'.

After the financial crisis hit, most political leaders were left 'flying by the seat of their pants' (Farmer and Foley 2009). Economics was of little or no help. In summary, the global financial regulatory

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architecture was flawed in logic and focus, and was ineffectually implemented. Where does this leave financial regulation?

The problems which the Dahlem Report's authors identify attack the core of financial regulation, already beset with problems. The financial crisis represents both a series of specific *anomalies* and a general *crisis* in terms of the current economic and regulatory paradigms in the Kuhnian sense; re-imagination and reformulation of both are urgently needed. Both must change – both must 'shift paradigms' in Kuhn's terms – to incorporate the behaviour of agents and markets into their models; to link the 'macro' to the 'micro' – the operation of the economy to the behaviour of its constituent actors; to focus on the logic for intervention in the system where risk is endogenous. This refocusing will necessitate changes to the way that risk is modelled both at firm and system level. It will involve drawing on insights from a range of behavioural disciplines and analytical approaches which incorporate complexity from the physical sciences (see, for example, Haldane and May 2011). It will require more and better data, which must be more readily available to supervisors, and better risk visualization technologies for decision makers. Mandelbrot could come back into fashion.

Regulators must begin this reformulation by making explicit their core purpose and regulatory logic: to protect against contagion of the system, rather than to promote the health of individual firms or prescribe their operating or control routines. Firms must be allowed to fail without creating contagious reverberations in the system. The decision that a firm has 'failed' must be based on timely information and well understood and consistently enforced criteria. It must be rapid and managed, minimizing disruption to creditors. Equity holders must be on

their own with residual claims which are satisfied only after the system has been protected. Much work has begun in the area of firm resolution but it has been unimaginative and its progress has been half-hearted. Instead, the principal regulatory response has been to attempt to shore up the existing, flawed approaches to firm-level capital.

Because central bankers lack omniscience, the use of banking regulation to address stability of the economic cycle – the 'big idea' in the UK – is fraught with risk and is unlikely to succeed. Of course, we won't know that positively until it is too late. The government already operates fiscal policy and the central bank can operate monetary policy to effect stability of the economy. But economies will, and should, naturally be subject to cycles. What central banks need is a better understanding of the indicators of economic cycles, such as metrics that incorporate asset price inflation – or what we might call a good system of 'bubble metrics'. What trading and investment banks need – and taxpayers need for them – is to eliminate the *moral hazard* that comes with expectation of a government bail-out, now so clearly reinforced by recent interventions. Governments have exhausted the credibility of posturing their unwillingness to intervene; without wholesale regulatory change, it cannot be recovered. Eliminating the moral hazard requires clearer, market-based incentives for firms to manage their risk effectively and clear knowledge that supervisors and central bankers will not prop them up to minimize their impact on the economy. Instead, if firms satisfy failure conditions, they must expect that supervisors and central bankers will break them up with losses first to their shareholders, then to their bondholders.

In the UK, 'the banking problem' has been kicked to an independent commission as a simple political

expedient. That forum has yet to show that it can either identify the issues holistically or define workable and meaningful solutions. What is really needed domestically, regionally, and globally is the political vision and leadership to recognize that we are fighting, in Toffler's terms, 'third-wave' problems with 'second-wave' ideas and solutions. A massive, generational shift is required to address these problems – problems of fiscal discipline, regulatory structure and implementation, supervisory efficacy, tax complexity and international misalignment, and financial economic modelling and application. As Mandelbrot suggests, economics must progress to being a twenty-first century discipline that seeks its answers in, and validates them with, observed reality. Economists need to step up and accept the need for change; politicians need to lead; and regulators, policy makers, and supervisors need to follow.

References

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