

# SYSTEMIC FINANCIAL RISKS AND HOW TO COPE WITH THEM

BY GRAHAME THOMPSON

**ACCORDING TO MICHAEL WOODFORD** (2009) modern macroeconomics has seen a convergence of views centred around the 'efficient market hypothesis' (EMH). This theoretical position posits that all unfettered markets clear continuously thereby making disequilibria, such as bubbles and crises, highly unlikely. Indeed, in terms of the EMH framework, economic policy designed to eliminate bubbles would lead to 'financial repression': resulting in higher interest rates, the unnecessary rationing of credit and the loss of profitable investment opportunities. That such views about a cosy consensus could have been announced just as the deepest meltdown in financial activity since the 1930s was maturing is perhaps testament to the complacency of conventional economic analysis. But it has not shaken the conventional belief in the virtues of such a framework amongst the mainstream macroeconomic modelling community. Rather the crisis has been interpreted as a simple 'random error' within a still robust EMH framework for economic analysis (Minford 2009). On the other hand the crisis has had some impact on the regulatory and policy making community, as will be discussed in a moment.

One of the key features of this EMH framework in its view of the underlying systemic stability of the economy as a whole is that this leaves little room for the separate consideration of the operational stability of the financial system. Once systemic macroeconomic stability is secured this also provides the necessary conditions for systemic financial stability: these two levels are fused together. But in the wake of the 2007-09 crisis an earlier position has come to challenge this view, namely that associated with Hyman Minsky's 'financial instability thesis' (Minsky 1982, 1986). Minsky's argument was that the more stable the macroeconomic conditions, the more *unstable* becomes the financial system: systemic macroeconomic stability breeds systemic financial instability. This is because as the macro economy seems to stabilize and present continuous growth prospects (the 'long moderation' of 1995-2007) financial players in particular are encouraged to take on more and more risks, which precisely destabilizes the financial system and then the general economy beyond. It lulls financial players into a false sense of security. And this is precisely what seems to have happened in the run up to the 2007-08 financial crisis.

The lessons from this episode are two-fold: first, macroeconomic and financial systems need to be separated out but considered along-side each other in terms of their stability properties; and second, that there is a problem of the systemic risks that continue to pervade just the financial system. *Systemic risk* is associated with the way the entire financial system is interlinked or interdependent so that a problem in respect to a single financial institution (or small cluster of institutions) can cause a cascading and paralysing failure across the whole system. Whilst single markets or institutions may be exposed to *systematic* risk, this can be mitigated by diversifying into a portfolio so as to minimise this on an individual basis. But systemic risk poses the issue of interdependencies across markets which cannot be tackled simply by aggregating individual exposure to market risks. There are several

approaches to deal with this, all of which have received a renewed interest in the post crisis period (deBrandt & Hartman 2000). And this is a very current research agenda for both domestic and international regulatory authorities.

In the international arena the gradual replacement of the Basel II regulatory requirements by a new Basel III system represents the leading edge of this change in emphasis. The Bank of International Settlements (BIS) is charged with regulating the big international banks, and under its pre-crisis Basel II system this concentrated on prudential capital requirement for *individual* banks, which were left more or less to themselves to assess the extent of this as they were charged with implementing their own internal risk assessment models, providing them with an incentive to minimize prudential equity capital held in their account books, so as to maximise the profitable use of thereby freed resources. As a result systemic banking risks escalated. The new Basel III system is designed to address this by concentrating on the *interrelationship* between bank risks ('stress testing' at the systemic level) and by beefing up necessary capital adequacy ratios accordingly (Fender & McGuire 2010). Whether this initiative is enough to prevent further systemic banking collapse remains suspect (Orléan 2010): the capital requirements still look to be minimal and the system is not to be fully implemented until 2019.

A second approach is to concentrate upon modelling 'contagion' between one financial market and another, or between one market in one economy and that in another (Duney 2008). Contagion represents the extent of externalities or spill-overs between such markets and in principle can estimate the likely systemic impact of a disturbance emerging in a single market on the system of interrelated markets as a whole. This approach involves operationalizing the covariance between 'values at risk' (coVaR) across markets and institutions.

A final overarching approach—which to some extent provides an encompassing framework for all these other initiatives—is to set the financial system within a different paradigmatic universe: to view it as akin to a network operating in the context of an ecological system (Haldane 2009). Systemic risks are modelled, as a result, in a 'non-rationalistic' and 'non-mechanical' operational framework involving complex adaptive feedback mechanisms displaying non-linear reflexive network properties. Whether this can ever be successfully or fully operationalized, or provide the necessary stabilizing regulatory outcome conditions, remains at issue. By and large it still represents a 'top-down' process driven by an all encompassing calculative logic emanating from a single calculative centre. It rather proposes another technical fix for what is at heart a problem of the mobilization and adaptation of 'bottom up' distributed initiatives arising from a series of centres the branching together of which requires continual political mobilization and attention. □

---

**GRAHAME THOMPSON** is at Open University and Copenhagen Business School.

## THE TOWER

Bank for International Settlements in Basel, Switzerland.