



The Current Crisis: Comments and Perspectives

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Introduction

The financial crisis that first became apparent in 2007 has caused major ructions in world markets and has caused bankers, regulators and academics to revise their prescriptions for appropriate behaviour. Michael Bordo (2008, 2009) summarises the events and many of the causes of the crisis admirably. His historical approach is important for understanding the context in which crises occur. Financial crises are neither rare nor inexplicable. Furthermore, Bordo shows that the United States has been the progenitor of many (but not all) of history's major international financial crises. Each crisis has its own peculiarities, but the fundamentals are often shared across crises.

Bordo very usefully distinguishes between banking crises, currency (exchange rate) crises and twin crises involving both these aspects. The post-2007 crisis has, for most affected countries, primarily been a banking crisis (or, more broadly, a financial markets crisis also involving non-bank deposit-takers, hedge funds and insurance companies). He also usefully distinguishes between asset and liability driven crises. Most crisis episodes since the Second World War, especially in the United States, have arisen from problems on the asset side of the balance sheet, rather than from liquidity short-falls. In part, this reflects successful interventions by central banks with regard to the emergency supply of liquidity in an incipient crisis. Nevertheless, it should be noted that the Asian financial crisis of the late 1990s involved significant liquidity problems for affected countries. That experience reminds us of the potential dangers for heavily indebted countries in the event of a "sudden stop" in foreign liquidity provision.

Associations and Causality

In the current episode, Bordo shows that the precipitating factor for the crisis was the collapse of the US housing market. This collapse fed through to the financial sector via the sub-prime (and wider) mortgage market. The consequent hit to the banks' balance sheets led to a credit crunch resulting in liquidity supplies drying up to other borrowers, particularly those that were heavily leveraged. The required decline in leverage for those borrowers led to asset sales and hence to declines in other asset values, causing further financial market and real economy losses.¹

Having traced through these events, Bordo cites international evidence that housing busts tend to be associated with deep recessions as do credit crunch episodes. Housing busts almost invariably follow housing booms, while credit crunches generally follow periods of prolonged low policy interest rates. Undoubtedly, these associations are observable both across countries and across history.

Nevertheless, these observed associations do not necessarily imply causality. Conceptually, for instance, one could observe 100 housing booms, 90 of which "fizzle out" to a period of house price stagnation while 10 are followed by housing busts. Each of these busts might be associated with a major recession, but it could be the recession that causes a bust rather than a "fizzle". Likewise, one may observe multiple episodes of prolonged low policy interest rates, but only a small minority of these may be associated

¹ This amplification of crises through the banking system is reminiscent of (much more severe) amplification processes in the Great Depression (Bernanke, 1983).

with subsequent credit crunches and recessions, with recession again determining the existence (and/or severity) of the crunch.

The evidence that Bordo cites in these respects is useful for understanding the severity of the current financial crisis. It also points to the need to undertake further cross-country historical analysis of house boom and low interest rate episodes to see how many (and which ones) result in subsequent recessions and whether the associations are causal or not. The paper by Luci Ellis (2009) at this conference is of assistance here. A key reason for understanding these issues relates to the debate on whether central banks should target asset prices as well as prices of goods and services when implementing monetary policy. If housing booms (especially those associated with periods of low interest rates) frequently cause housing busts and recessions, there may be a strong case for such asset price targeting; if the causal link is weak, there is a much reduced case for targeting housing and other asset prices.

Supervision and Deposit Insurance

One reason that US banks have not suffered major liquidity runs by depositors through this crisis is that those banks have been covered by deposit insurance. Bordo contrasts this situation with that of Northern Rock in the UK which was beset by such a run. He links that run to an inadequate deposit insurance regime within the United Kingdom. On the liability side, this observation appears reasonable. However, one could reverse the case by arguing that the asset problems of US banks have, at least in part, been exacerbated by the existence of deposit insurance in the United States. The existence of deposit insurance means that depositors do not monitor the prudent behaviour of their banks. Successive US-sourced crises stemming from the asset side of bank balance sheets, as cited by Bordo, imply that this is more than an isolated issue for the United States.

Regulatory forbearance is another problem that has been observed in the United States. Bordo cites the example of the bail-out of Bear Stearns prior to the Lehman Brothers collapse. It is perhaps doubtful that other institutions' decisions to undertake risky activities were altered by the Bear Stearns bail-out, given the short time-frames involved and the prior onset of the financial crisis. More pertinent (and problematic), perhaps, was the bail-out of Long Term Capital Management in 1998 which under-pinned the subsequent appetite for risk of financial market firms.

In the face of successive problems with the asset side of US (and other countries') bank balance sheets, are there other mechanisms that could be considered to improve the quality of bank lending behaviour? Calomiris and Mason (1997) show that private market mechanisms may be of assistance. They demonstrate that during the Chicago bank panic of June 1932, in which 40 banks failed in a single month, banks operating through the private bank clearing house were able to distinguish (albeit imperfectly) between *ex ante* 'good' banks and 'bad' banks in terms of asset quality. They document at least one episode where solvent banks cooperated to save another *ex ante* solvent bank from a run, while allowing banks with *ex ante* poor assets to fail.

Regulatory requirements could be used to underpin a more effective market-based supervision process. A well-known problem of the banking industry is that equity holders have unlimited upside risk to returns but limited downside risk (where the limit is the value of their equity). Incentive contracts tend to align management's distribution of returns with that of equity-holders. Depositors, who are less well-informed than management and equity holders, have zero upside risk to returns but sizeable downside risk (to the extent of their deposits).² Thus there is an asymmetric incentive between equity-holders and debt-holders to take risk. This asymmetry exists for other firms as well, but the distinguishing feature of the banking system is that debt-providers are typically forced by circumstances to deposit with at least one bank and are small; they do not have the incentives or the resources to monitor the bank's soundness. Non-financial corporates, by contrast, have loans supplied by large, professional debt-providers.

One possibility that could more closely mirror the non-financial case within the financial system is for authorities to require banks to have at least one large subordinated debt holder (where 'large' is defined by the regulator in relation to the size and riskiness of the bank's balance sheet). The subordinated debt holder would have no expectation of insurance and in effect would be the vehicle to accept any haircut on deposits in the event that the bank became insolvent. As a result, the subordinated debt holder has an incentive to monitor the bank closely and would charge the bank (through the rate on its subordinated debt) for this activity and for the resulting risk. This option was outlined in Grimes (1996, 1999) and has been studied by Board of Governors of the Federal Reserve System (1999) and Shadow Financial Regulatory Committee (2000). Calomiris (2008) indicates that its potential adoption in the United States was killed in 1999 by bank lobbying, but he argues that this mechanism merits reconsideration.

Australasian Experience and Forward-Looking Observations

Hess et al (2009) provide a link between the international experience of bank crises and Australasian crisis experience (Hunt, 2009). They analyse the annual credit loss experience of 32 Australian and New Zealand banks from 1980 onwards. As expected, macroeconomic conditions (proxied by GDP growth and unemployment changes) affect the extent of credit losses. In addition, certain bank characteristics (e.g. bank size and nature of activity) affect credit loss propensity.

Controlling for all these factors, one other factor stands out: the degree of a bank's loan portfolio growth relative to its peers. *Ceteris paribus*, fast-growing banks have tended to incur greater credit losses reflecting the dangers of buying market share from existing banks. While Australasian banks have not indulged in material sub-prime lending, this pattern of fast credit growth being linked to greater credit losses (after controlling for the nature of the bank's lending activities³) reflects US experience that chasing market share can result in higher credit losses.

² For a comprehensive treatment of these issues see: Dewatripont and Tirole (1994).

³ This proviso is important; for instance a fast-growing housing lender may be subject to less risk of credit loss than a slower growing lender to risky corporates.

The United States, Australasian and other international experiences with banking crises indicate that some form of supervisory arrangements for financial institutions is required. Furthermore, Michael Bordo's work demonstrates the importance of taking a long historical view when considering the nature of risks in the financial markets. Crises do not happen frequently in most countries but, by definition, are large when they occur. The historical record indicates that quantitative models must be estimated over long time periods in order to capture the true risk of lending to certain activities.⁴

In addition to ensuring that quantitative models provide accurate indications of credit risks, regulators could usefully look to requirements that increase the level of market supervision on financial institutions. One candidate in this regard is imposition of a minimum large subordinated debt requirement on banks (and possibly on other deposit-takers).

While bolstering the stability of the asset side of the balance sheet is important, the liability side is equally important. This is particularly so for a heavily indebted country such as New Zealand in which banks intermediate the supply of foreign savings to domestic borrowers. Consequently, maintenance of appropriate liquidity standards for such intermediaries is important.

Finally, the historical record that Bordo portrays is also useful for considering the design of regulatory institutions. Goodhart (1988) demonstrates that central banks began as banks in their own right that provided banking services to other financial institutions. In doing so, central banks became the natural lender of last resort and natural prudential supervisor of banks. Monetary policy was only added as a central banking function with the collapse of the gold standard. New Zealand has preserved this historically apt conjunction of activities within the Reserve Bank of New Zealand; it could be a useful model for other countries to reconsider when they look to reorganise their regulatory bodies following the current crisis.

⁴ In this regard, value at risk models must be estimated over multiple cycles to fully capture the likelihood of certain major events. For instance, New Zealand farm values halved in 1984 and suffered similar drops in the Great Depression. These experiences need to be captured in models of agricultural lending risk.

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