Andrew G Haldane: Accounting for bank uncertainty

Remarks by Mr Andrew G Haldane, Executive Director, Financial Stability, Bank of England, at the Information for Better Markets conference, Institute of Chartered Accountants in England and Wales, London, 19 December 2011.

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The views are not necessarily those of the Bank of England or the Financial Policy Committee. I would like to thank Alan Ball, Verena Bracke, Antony Ford, Priya Kothari, Vasileios Madouros, Colin Miles and Peter Richardson and Paul Tucker for comments and contributions.

Introduction[1]

Fair value accounting principles are under attack from all quarters – accountants, regulators and politicians. The paper by Christian Laux is a welcome attempt to shed some analytical light on this heated debate. It represents a staunch defence of fair value accounting principles, as the least-worst means of measuring and managing financial risk. It makes a compelling case. In these comments, I will focus on three issues.

Linking these issues is the idea that the special characteristics of banks might require a special accounting treatment, perhaps even a distinct accounting regime. As context for that, the fair value debate is first placed in some historical context. Accounting rules for banks have not stood the test of time, especially at crisis time. Better recognition of the uncertainties associated with bank assets, and the fragilities associated with bank liabilities, might make for a more durable accounting regime.

Fair values and financial crises

The fair value debate is not a new one. It has a history stretching back at least a century. The fortunes of this debate have been shaped importantly by financial crises. Indeed, a clear historical pattern has emerged: fair value accounting principles have waxed when asset prices and banks are rising and waned when both are falling.[2]

Consider experience in the United States either side of the Great Depression. Fair value principles were rolled-out progressively during the early part of the 20th century. This move was led by the banks who held marketable securities as assets. As these securities rose in value ahead of the Great Crash, marking them to market allowed profits to be booked. Rising asset prices and bank profits went hand in hand, with fair values playing the role of matchmaker. That was one reason why the "roaring '20s" roared.

The stock market crash of 1929 put paid to this happy marriage. Falling asset prices, marked to market, crushed bank profits and balance sheets. In the United States, around 10,000 banks went bust between 1929 and 1938. Fair values were now seen as more troublemaker than matchmaker. Pressures to suspend fair values, from banks, regulators and politicians, began to mount.

By 1938, after an initial recovery from the Great Crash, the United States was bracing itself for a double-dip recession. In response, under pressure from the Federal Reserve, President Roosevelt suspended fair valuation of investment bank assets. He instructed bank regulators

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[1] These remarks were given at the Institute of Chartered Accountants in England and Wales *Information for Better Markets* conference on 19 December 2011, in response to a paper by Christian Laux. Both the paper and remarks are forthcoming in *Accounting and Business Research* (July 2012).

[2] Simonson and Hempel (1993), Plantin, Sapra and Shin (2008), Haldane (2010).

to revert instead to what today would be called amortised cost. This was regulatory forbearance on a system-wide scale. And a suspension of fair value accounting rules lay at its heart.

Fast forward half a century. During the 1970s, fair value principles began again to extend their reach. The United States Savings and Loans crisis in the mid-1980s provided further impetus. One of the major contributors to the downfall of the thrifts was amortised cost valuation conventions, which hindered the recognition of interest rate risk. This allowed systematic over-reporting of the health of the thrifts. In response, the United States developed and introduced a prompt corrective action regime, the Federal Deposit Insurance Corporation Improvement Act (FDICIA), with fair values at its core.

But the wind was again about to shift direction in response to financial pressures. From the early 1990s, the United States was facing severe financial headwinds. A real estate crash placed US bank balance sheets under acute stress.[3] Falling asset prices, marked to market, added to these financial pressures. Questions about fair values resumed. In response, and echoing Roosevelt in 1938, President Bush granted the SEC authority to suspend fair value rules. Although this authority was not invoked, it demonstrated a willingness to provide system-wide forbearance through fair value accounting rules.

Today, the self-same cycle is in motion. During the long pre-crisis boom, fair value principles gained ground, in particular in the valuation of debt, equity and derivatives: in the US, through Statement of Financial Accounting Standard 157 (SFAS 157); internationally, through International Accounting Standard 39 (IAS 39). As in the roaring '20s, rising asset prices, marked to market, inflated bank profits and balance sheets. Between 2000 and 2007, major international banks recorded accumulated gains in their trading book totalling over £200 billion.

But as the crisis tide has turned, with falling asset prices and failing banks, so too has the fair value debate. In 2008, under intense pressure from an ailing banking community, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) eased back on fair value accounting rules. For example, banks were allowed to switch financial instruments from trading to holding to avoid mark-to market requirements.

So, historically, fair value accounting principles have gained ground when the going has been good, and lost it when it has got tough. From a financial stability perspective, this is a cause for concern. To see why, consider how banks' balance sheets then appear to investors. During the asset upswing, fair value gains ground. Mark-to-market gains are booked as profits. To the extent that asset prices are over-inflated, so too are the recorded profits of the banks.

During the downswing, fair value principles are rolled back. Potential losses are then hidden from view. Today, some of the uncertainty around global bank valuations stems from the difficulty in gauging these losses, obscured by provisioning practices in banking books. Regulators and investors alike fear the fog created by such forbearance.

In sum, accounting rules in general, and fair value principles in particular, appear to have played a role in both over-egging the financial upswing and elongating the financial downswing. They have tended to over-emphasise return in the boom and under-emphasise risk in the bust. That is not a prudent approach. Indeed, it is a pro-cyclical one. We need accounting rules for banks which are crisis-neutral, valuation conventions for all seasons.

What accounting regime might best deliver this robustness? A reasonable starting point would be to recognise the clear differences between bank and non-bank balance sheets, in

[3] Bernanke and Lown (1991).

particular valuation uncertainty associated with assets and maturity mismatch associated with liabilities.

Bank assets and valuation uncertainty

Banks' asset portfolios are not just larger and more complex than for non-financial companies. The business of banking is predicated on banks' capacity to screen and monitor these assets more accurately than capital markets. Banks serve as a "delegated monitor" for investors.[4] This means the risks and uncertainties around the valuation of bank assets are fundamentally different than for non-financial firms.

To willingly finance loans to banks, however, investors need to be capable of monitoring and pricing these risks (known unknowns) and uncertainties (unknown unknowns).[5] Risks to banks' balance sheets include the credit, market and liquidity risks associated with different asset classes. Pricing these risks is, in some respects, the less difficult task. Standard asset pricing models, such as the Capital Asset Pricing Model (CAPM), put the pricing of risk at their core.

Pricing uncertainty is an entirely different kettle of fish. That uncertainty arises in part from the absence of a single, well-defined model for pricing some assets. When there is model uncertainty, the equilibrium price of an asset is no longer uniquely defined. Instead equilibrium prices are defined by a range.[6] The wide range of prices at which similar-risk assets have recently been carried on the balance sheet of banks is testament to the scale of this model uncertainty (Chart 1).

To price that uncertainty, investors would need information on the potential range of valuations, looking across sets of models and classes of assets. Historically, that information has not been made available to investors. Post-crisis, this may have contributed to investor aversion to bank instruments. Pre-crisis, it may have contributed to a lack of timely action by banks themselves to restrict exposures to assets with significant valuation uncertainty.

In the light of this, the Bank of England has recently helped initiate a programme to enhance information on the valuation range of banks' fair-valued assets, working alongside the Financial Services Authority (FSA) and the auditing profession. A framework for capturing such uncertainty was put forward in an FSA consultation paper on "Proposed Regulatory Prudent Valuation Return", published in December 2011.[7]

This framework suggests that an upside and downside range for fair-valued assets be identified, categorised into distinct buckets.[8] This would give a guide to the potential variation in a bank's solvency position arising from model uncertainty. It also asks banks to identify portfolios where valuation uncertainty is so severe that it is not possible to provide a plausible bound and to make disclosures around portfolios of particular interest to regulators. A VaR-equivalent figure needs also to be disclosed for each asset class, with reconciliation to the net and gross values of all fair-valued assets and liabilities.

This initiative can be seen as a first, but important, step towards quantifying the intrinsic uncertainty around the valuation of banks' asset portfolio. For perhaps the first time, it provides confidence intervals around banks' balance sheets – what some have called

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4 Diamond (1984).

5 In the language of Knight (1921).

6 Epstein and Wang (1994).

7 Financial Services Authority (2011).

8 These buckets would provide additional granularity, and allow greater comparison across banks, over and above the classification employed by, for example, the IFRS Levels 1, 2 and 3.

"confidence accounting".[9] The stage is now hopefully set for such principles to be rolled out across Europe. For example, the European Banking Authority (EBA) is developing binding technical standards on a prudent valuation methodology by end-2012.

These developments are a significant departure from past practices in reporting bank balance sheets. At present, this prudent valuation information will form part of the regulatory return, which may be publicly disclosed. But in time, it would be desirable if it formed part of banks' reported annual accounts to maximise investor transparency and consistency. This would parallel the approach used in other realms of public policy to capture economic uncertainty – for example, the "fan charts" for inflation and GDP published by the Bank of England.

Bank liabilities and maturity mismatches

A second dimension along which banks' balance sheets are different is the structure of their liabilities. Typically, these have a considerably shorter duration than their assets – in others words, banks engage in maturity transformation. This is one of the main reasons for separate regulatory and resolution rules for banks. But it has a bearing, too, on appropriate accounting rules.

To see why, consider a bank with 50-year assets funded by overnight deposits. The bank intends to hold these assets to maturity. Under current rules, holding intent, alongside the characteristics of the assets themselves, is the arbiter of valuation. So those intentions would enable the bank to hold the asset in its banking, rather than trading, book for regulatory purposes.

But the liability structure of banks means that holding *ability* may in practice matter much more than holding intent. For the stylised bank, its 50-year best intentions could be invalidated within 24 hours. In that event, amortised cost would be a very misleading valuation convention. The bank's entire asset portfolio ought really to be valued at market (and potentially fire-sale) prices.

For a bank with long-maturity illiquid assets, these differences in valuation convention could have a material impact on solvency. They may even be the difference between solvency and insolvency. Had their loan books been marked to market during the crisis, UK banks would have had significantly negative net worth for a protracted period (Chart 2). Most global banks would have been in a similar position. As the maturity of banks' liabilities was low and falling during this period, this marked-to-market thought-experiment is not as fanciful as it may sound.

Three implications follow. First, it underscores the importance of liquidity regulation. This aims to close any maturity mismatch across the balance sheet. For example, the purpose of the net stable funding ratio, agreed as part of Basel III, is to correct mismatches calculated across the whole balance sheet.

Second, there is a debate underway internationally about the appropriate criteria for defining the boundary between banks' trading books and banking books for regulatory purposes. Currently, the regulatory boundary is based on banks' trading intent. Yet as the stylised example demonstrates, holding intentions may be an economically incoherent basis for valuation. There is a strong economic case for moving away from the existing intent-based convention for differentiating banking and trading books. Indeed, there is a strong case for basing asset valuations more systemically on the characteristics of banks' liabilities, as well as their assets.

[9] Giffords and Mainelli (2009).

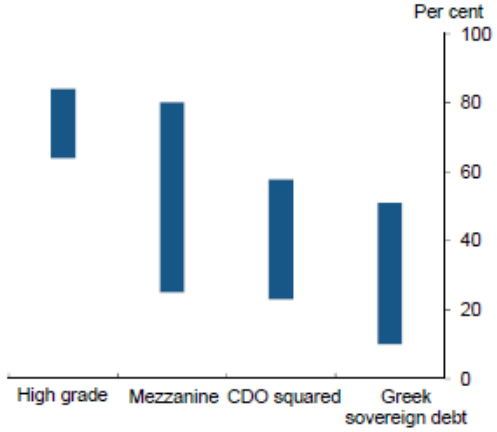
Third, the maturity mismatch on banks' balance sheets generates an inherent fragility. This makes assessments of "going concern" by the auditing profession problematic. A run on a bank with short-duration liabilities could call into question a going concern assessment in very short order. The situation is made worse by the fact that, at present, the options open to auditors when summarising a firm's going concern status are effectively binary: either issue a "clean" report or not.

For auditors, this can be an invidious choice. A clean verdict runs the risk of that judgement being quickly invalidated if maturity mismatches are exposed by a liquidity run. But anything other than a clean report might itself provoke that very run and hence become self-fulfilling. A more graduated, less binary, approach to classifying banks' accounts may be needed if auditors are to avoid finding themselves stuck between the devil and the deep blue sea.

Conclusion

To date, accounting rules for banks have bent with the financial stability wind in ways which have amplified investor and regulatory uncertainty. To lean against the prevailing wind, accounting rules for banks may need to recognise more explicitly their differences. It is, after all, precisely these differences that justify separate regulatory and resolution regimes for banks. A distinct accounting regime for banks would be a radical departure from the past.[10] But if we are to restore investor faith in banking sector balance sheets, nothing less than a radical rethink may be required.

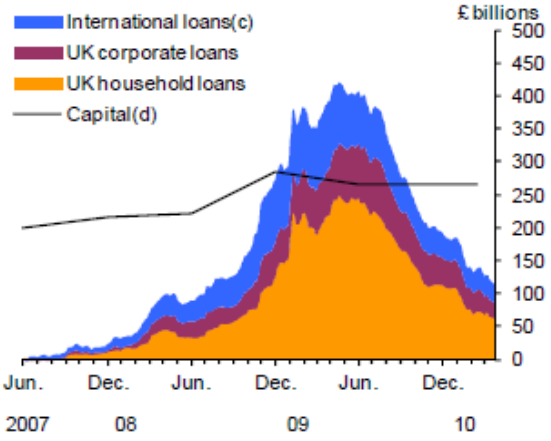
Chart 1: Ranges in reported valuations of structured credit products and sovereign bonds[(a)(b)]



Sources: Citigroup, company reports, SEC filings and Bank calculations.
(a) Implied or reported marks on selected structured credit products by five banks at end-2007. The range of implied marks is not based on a like-for-like comparison of individual exposures, which might differ in their precise characteristics. So the chart should only be interpreted as an illustrative indicator of valuation uncertainty.
(b) Impairment charges on available-for-sale holdings of Greek sovereign debt by 24 European banks as of 2011 Q2.

[10] Sharman (2011).

Chart 2: Market value discount to face value of major UK banks' loan books[(a)(b)]



Sources: Bank of England, Bloomberg, published accounts, UBS Delta, Merrill Lynch, JPMorgan Chase and Bank calculations.
(a) Based on weekly moving average prices of traded instruments as proxies for market value of similar banking book exposures.
(b) Group comprises of Barclays, HSBC, Lloyds Banking Group, Nationwide, Northern Rock, Royal Bank of Scotland and Banco Santander, with aggregate banking book exposures of £2.2 trillion.
(c) International exposures include United States and Europe only.
(d) Held fixed from last reported data at end-2009 H1.

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