



# Market-Based Bank Regulation

Creating incentives that promote responsible banking

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## Summary

Financial services industry regulation has a poor track record in controlling risk-seeking behaviour by bank executives. Moral hazard, embedded in the banking system, has allowed bankers to seek high-risk lending and investment strategies that have resulted in a number of banking crises since the Great Depression. Drawing on historical evidence from the American National Banking Era (1864-1913), this paper proposes a market-based regulatory framework to incentivise responsible decision-making by bank executives. The new framework is based on a double liability shareholding structure that dominated the US banking system during the period of the National Banking Era.

## Introduction

On both sides of the Atlantic politicians and regulators are considering structural reforms to the banking sector to promote greater financial stability and limit the potential for a financial crisis similar to that of 2008. A banking system that is permitted to hold taxpayers to ransom to cover losses incurred as a result of poor managerial decisions that have resulted in excessive risk-taking does not operate within the letter, or the spirit, of free enterprise. The precarious state of the financial services industry is in danger of damaging the very foundations of the capitalist market values of the economy it purports to uphold. Thus, there is a sense of urgency in this discourse, as the current structure of the global banking system has become both economically and politically unsustainable.

The default position among politicians and the public has been a unanimous call for a combination of tougher regulation, breaking banks into smaller units, limiting the scope of their activities to minimize the economic impact of future failure, and forcefully scaling back executive compensation, either through political or public pressure, or legislatively created shareholder activism. Implicit, in

this rather heated debate, has been the assumption that market forces alone are not strong enough to discipline bank executives to behave responsibly.

Drawing on econometric research (Grossman, 2001, 2005), and evidence from the American National Banking Era of 1864-1913 (White, 2011), this paper argues that a market-based alternative to orthodox bank regulation may offer a more viable means to increase accountability and promote responsible decision-making behaviour by the banks.

## The problem of bank regulation

Banking is one of the world's most heavily regulated economic activities. It is, therefore, surprising that there is no coherent branch of economics that deals with bank regulation. Rather, there are "...various patches of economic theory which, more or less successfully, attempt to analyze certain aspects of banking regulation from the economic point of view" (Baltensperger in Grossman, 2005). Much of economic research is focused on the impact of bank reserve requirements, deposit insurance, and capital adequacy requirements to reduce system risk, resulting in a more balanced and stable market economy. However, there is ample historical evidence that bank regulation, and the creation of lenders of last resort, have had a poor track record in preventing banking crises. The global financial crisis of 2008 and the Savings & Loans debacle in the US in the 1980s are the most recent examples of this regulatory failure.

One of the main issues that bank regulation seems incapable of solving is moral hazard that arises from a situation where there is a tendency by an institution to take undue risks because the costs of failure or loss are not borne by the party taking the risk. Moral hazard results from asymmetric information, and it is a cause of market failure. In the US, the creation of the Federal Deposit

Insurance Corporation (FDIC) after the Great Depression in 1933, can, at least to some extent, be held responsible for the emergence of moral hazard in the banking industry that has plagued the sector ever since. Deposit insurance can encourage banks to take on more risk than they would otherwise do, as the insurance facility reduces the cost of banks' risk-taking (Grossman, 2001). Similarly, the very existence of lenders of last resort, central banks, is predicated on the possibility of a market failure, thus compounding the problem of moral hazard.

Bank regulation, designed to reduce complexity and instability of the banking system, has not been able to deal with moral hazard. Moreover, rather than simplifying the financial system, and making banking practices more transparent, it has had the opposite effect. The underlying regulatory assumption is that the financial services industry is such a unique and complex economic activity that market forces alone are incapable of effective regulation. The regulatory emphasis has been on limiting the choices available to banks in order to restrain them from making decisions that may create instability. However, rather than focusing on the incentives that drive risky managerial behaviour, such as a desire for ever increasing levels of executive compensation and higher shareholder returns, these regulations have led the banks to create new financial instruments and devise off-balance sheet accounting practices to circumvent the very rules aimed at limiting the choice available to them (White, 2011). The problem is further compounded by ineffective corporate governance frameworks and limited shareholder involvement in holding executives liable for their actions.

Banks are usually wealthier, more nimble, and smarter than their regulatory bodies, and they are good at finding loopholes in regulations (Cowen, 2012). According to White (2011), few observers, therefore, believe that the new regulatory framework in the United States, The Dodd-Frank Act of 2010, will provide a lasting reform to the US banking system. Indeed, many suspect that the Act will sow the seeds of the next financial crisis, as banks are driven to invent even more complex financial instruments and trading strategies to circumvent the new regulations. Instead of simplifying the banking system, the unintended consequence of the new regulatory frameworks could be that they will make some banking activity even more opaque and risky.

In the UK, the Independent Commission on Banking, The Vickers Report of 2011, proposes that banks should separate their high street and investment banking operations, effectively breaking up the banks in order to ringfence retail and small business deposits and overdrafts from the so called 'casino banking' activities. Banks

will be free to place other activities, including lending to consumers and businesses, on either side of the fence. Some critics suggest that the ringfencing of retail operations may encourage banks to take greater risks with activities that are grouped inside the fence, such as mortgages and corporate and personal loans, because they are confident of being bailed out by the UK government, e.g. the taxpayer. According to Financial Times (12.09.2011) the value of assets that would be held within the ringfence is estimated between £1,500bn and £2,300bn, and the annual costs to the banking industry for implementing this new regulation are estimated to range between £4bn - £7bn. A great proportion of these costs will come in a form of increased funding costs, mainly in the non-ringfenced businesses.

The emphasis of these regulatory proposals is to limit managerial choice to reduce risk to the banking system, rather than to focus on regulating the drivers for managerial decision-making. The value of the assets and the costs involved in restructuring the UK financial services industry may well drive banks to invent business strategies that increase managerial and organizational complexity which may, in turn, result in the emergence of new forms of risk, unanticipated by either the banks or the regulators. One should also remember that banks do not come in easily divisible bite-sized pieces. Should any one of the spun-off units become financially unviable, because of the way they were structured or the types of activities they carry out, this could trigger another round of bailouts that the regulation was intended to prevent.

Concrete evidence of recent unintended consequences of bank regulation and the availability of funds from a lender of last resort is offered by a University of Michigan Ross School of Business study of US banks that received federal government bailout money under the 2008 'troubled asset relief program' (TARP). According to the authors of the study, Duchin and Sosyura (2010), these banks ended up making riskier loans and investments; the study found that the overall risk level in TARP banks increased by 10 percent. One explanation, the researchers say, is that a shift in the riskiness of the loan portfolio, rather than an increase in loan volume, may reflect banks' strategic response to federal capital requirements. Unlike the origination of new credit, a shift toward riskier lending practices within the same asset class does not affect the capitalization ratios monitored by banking regulators. As a result, banks can achieve better capitalization levels. The average capital-to-assets ratio for TARP banks improved from about 10 percent in the third quarter 2008 to 11 percent in the first quarter 2009 after receiving federal money. However, the reduction in gearing was more than offset by an increase in earnings volatility associated with riskier lending.

The research also focused on the changes in the bailed-out banks' investment strategies. The study found that after receiving federal money, banks increased their investments in risky securities, such as mortgage-backed securities, long-term corporate debt, and equities. These investments were acquired to profit from short-term price movements, by 9 percent, displacing safer assets, such as Treasury bonds, short-term paper, and cash equivalents. *"Our analysis suggests that TARP participants actively increased their risk exposure after receiving federal capital. In particular, recipients invested capital in riskier asset classes, tilted portfolios to higher-yielding securities, and engaged in more speculative trading, compared to non-recipient banks"* (Duchin and Sosyura, 2010).

Bank regulation, combined with anticipated funding availability from the lenders of last resort, e.g. ultimately the taxpayer, has a questionable track record in regulating managerial decision-making. Rather than focusing on limiting managerial choice, a new regulatory paradigm that targets the underlying motivation for risky decision-making is required. Banks have been playing a game of "I win, you lose" with the public, where losses, as a result of poor managerial decisions, have been covered by the taxpayer. This will need to be replaced by a fair game of "I make a poor decision, and I will need to pay for my loss".

## Double liability shareholding

Modern day economists, politicians, and businesses often ignore historical examples as the means of providing valuable insight for solving present day problems. A recent paper by E. N. White of Rutgers University (2011), offers evidence from the American National Banking Era (1864-1913) that a double liability shareholding structure provided *"superior alignment of liabilities and incentives for shareholders and managers so that the risk-taking temptations of managers were controlled"* (ibid.). Similarly, econometric analysis of bank performance for the same period shows that double liability shareholding in banks resulted in lower failure rates, higher capital ratios, and higher liquidity ratios compared to single liability banks (Grossman, 2001, 2005).

The double liability structure was commonplace for federally chartered state banks prior to the establishment of deposit insurance and the emergence of the Federal Reserve as a lender of last resort.<sup>1</sup> Under the double liability structure, shareholders of a failing bank could lose, in addition to the initial purchase price of shares, an amount equal to the par value of shares owned.<sup>2</sup> Expanded shareholder liability provided shareholders with a powerful incentive to take a keen interest in the risk-taking activities of the bank management. Furthermore, senior bank executives, outside directors, and even relatively junior employees

were often bonded. The possibility, under the terms of bonding, of having to face substantial personal losses in a case of bank failure, ensured that banks' risk profile were manageable, and banks were frequently closed down by managers before losses could spiral out of control. As a result of this shareholding and bonding structure, conservatism was the by-word of banking.

More recently, investment and merchant banks were unlimited partnerships well into the 1970's. As the capital requirements of modern banking institutions became greater than individual partners could provide, the floatation of Goldman Sachs into a limited liability bank in 1999 put an end to banking partnerships. However, a partnership structure provided a natural control mechanism for management's decisions. When Goldman Sachs was a partnership, retiring partners were required to withdraw their capital over a ten-year period. During this time the retired partners, and a stream of newly retiring partners, took an active interest in the business decisions of working partners so that their capital would not be put in jeopardy.

It is unlikely that a double liability shareholding structure could be reintroduced into modern banking. This would restrict the amount of capital that is required by a modern economy and a global banking system. It is also unlikely that shareholders have the expertise to effectively control the risks taken by bank executives. However, a variant of double liability shareholding and bonding that targets bank executives' decision-making motivations by making them personally liable for the risks they take on behalf of their shareholders, has considerable merit. Instead of increasing shareholder liability, liability provisions would be directly applied to managers in order to incentivize responsible risk taking.

Serious proposals for using the logic of double liability and bonding have been recently put forward both in the US (Leijonhufvud, 2010) and in the UK (Record, 2010). At the heart of these proposals is the creation of a mechanism to incentivise bank executives to limit excessive risk taking by making them personally liable for the cumulative amount of bonuses they receive either in cash or equity. The US proposal is the creation of a special class of employee shares that become convertible to common shares at the prevailing market value after five years, at a rate of one employee share to one common share. Should the bank fail before the strike date, bank executives would be held responsible for the losses up to the value of their shares on the date that they were received. The UK proposal suggests attaching a restriction to executive bonus payments that make them subject to a 'claw-back' clause for a predefined period of time, up to 10 years. Restricted bonuses... *"would sit between equity holders and other creditors of the*

*bank – and so would be called upon should any bank find that its equity capital is wiped out by losses... this would mean their liability would be triggered by a government or other (private sector) [sic.] rescue”* (Record, 2010). The liability should be set at the level of a pre-tax bonus, but should a payment have to be made, the executive would receive tax relief on the amount that has been paid. Finally, either resignation or dismissal would not absolve the bank executive of his or her liability (ibid.).

For double liability and bonding mechanism to be fair, it should be targeted at only those executives who have the power and authority to make decisions that have a material impact on the bank’s risk profile. The vast majority of bank employees are not able to influence the risks taken by the institution. Therefore, their compensation should be based on either wholly in cash, or with a limited element of common shares. However, at some combined salary and bonus compensation level, any additional compensation would have to be in restricted employee shares or subject to the ‘claw-back’ clause. Lejnhufvud (2010) has proposed that the first \$150,000 would be exempt from liability. Beyond this level an increasing proportion would be paid in employee shares, rising to 80 percent at CEO and CFO level.

The direct consequence of the above mechanism would be the emergence of greater managerial oversight over the risk-seeking activities of employees. Additionally, managers would develop a greater interest in the activities of other departments and divisions, beyond their own areas of responsibility. Finally, it is conceivable that banks could reduce the number of lines of business they operate in, as senior executives, especially executive board level directors, would be held personally liable for all business activities of the bank, regardless of their level of expertise in these areas. This latter outcome could signal the end of universal banking and the emergence of smaller, more specialized, institutions.

## Conclusion

The concept of double liability and bonding to incentivise sound executive decision-making makes sense. As we have seen, traditional capital adequacy based banking regulation has been unable to cope with the risk seeking behaviour of bankers and the moral hazard that is embedded in the modern banking system. The same applies to regulatory policy incentives that legally restrict certain banking activities and sets limits to executive compensation levels. Most regulatory efforts are in reality punitive both at the institutional and personal level. However, a market-based regulation that does not punish excellence, but incentivises bankers to seriously think through the risk-return implications of their business

decisions, will be good for the financial services industry and the economy as a whole. The introduction of this type of market-based regulation will not prevent future banking failures. It will, however, reduce the need for excessive micro-management and excessive regulation of banking activities and ensure that executives are at least partially liable for the costs that bank failures and losses impose on society.

## Endnotes

1. Since the Great Depression, the USA and other leading economies have relied on capital and reserve requirements, forms of deposit insurance, and a lender of last resort to promote financial stability.
2. Some states adopted triple liability laws, under which shareholders could be liable up to twice the par value of their shares. Some states also operated unlimited liability laws.

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