

THE DISMAL STATE OF BANKING

Rede uitgesproken bij de openbare aanvaarding van het ambt van hoogleraar
“International banking and corporate finance” aan de Faculteit Economie en
Bedrijfswetenschappen van de Universiteit van Tilburg op vrijdag 3 september 2010.¹

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Mijnheer de Rector Magnificus, zeer gewaardeerde toehoorders:

Volgaarne aanvaard ik het ambt van gewoon hoogleraar “International Banking and Corporate Finance” aan de Faculteit Economie en Bedrijfswetenschappen van de Universiteit van Tilburg met het uitspreken van de openbare rede getiteld “The dismal state of banking”, dat zich in slecht Nederlands laat vertalen als “De ellendige staat van het bankwezen”. Staat u mij toe over te gaan in het Engels, de universele wetenschappelijke taal van tegenwoordig.

Let me first take you back in time to another period of decadence and irrational exuberance – the roaring 1920’s of the United States – with a quote from F. Scott Fitzgerald’s famous novel *The Great Gatsby* that could equally well have applied to bankers in modern times:²

“They were careless people, Tom and Daisy — they smashed up things and creatures and then retreated back into their money or their vast carelessness, or whatever it was that kept them together, and let other people clean up the mess they had made...”

Banks are problematic. They take risks that few understand, including their owners. They are hard to close when they fail, mostly for political reasons. And worst of all, they charge exorbitant fees for keeping what is after all our money!

Yet, this is not how the academic literature has generally portrayed banks. Banks serve an important function in the economy by pooling resources from the public to invest in large-scale, risky projects. In so doing, they transform short-term claims on the public into long-term investments. This maturity transformation exposes banks to liquidity risk: they may not have sufficient cash at hand to honor cash withdrawals from the public. This makes banks prone to panics.³ Banks are also highly leveraged: they fund themselves mostly with debt and hold little equity capital to absorb unexpected losses. This exposes banks to solvency risk and makes them prone to failure. We accept this risk of failure because of the important role that banks play in channeling funds to their most productive use.

In the words of economist Fischer Black: “banks are special”. “Banks have a cost advantage in making loans to depositors. The ongoing history of a borrower as a depositor provides information that allows a bank to identify the risks of loans to depositors and to monitor the loans at lower cost than other lenders”.⁴⁵ More generally, banks collect private information from borrowers to make valuable relationship loans, thereby enhancing borrowers’ welfare. This information would be lost if banks fail. Bank failures therefore create negative externalities – side effects – for the failed bank’s customers in the form of an increase in borrowing cost.

Bank failures also generate negative externalities for other banks in the form of a loss of confidence in the stability of the financial system as a whole, losses from interbank exposures to failed banks, and losses from assets that the failing bank is forced to sell. This is different in other industries, where competitors generally gain from the failure of another firm. For banks, the Dutch proverb “de een zijn dood is de ander zijn brood” does not apply. These negative externalities associated with bank failures offer the main rationale for financial regulation: to prevent socially costly bank failures.

But there are more reasons why banks are (and should be) regulated. Financial regulation also intends to protect the interests of the bank’s customers in an environment where information about the risk profile of the bank is difficult or costly to obtain, and mistakes could devastate the savings of ordinary people. This has been the main rationale for the insurance of household deposits in most advanced economies. And financial regulation aims to prevent banks from anti-competitive practices to ensure that financial products are offered at a reasonable cost. But clearly something has been missing from the regulatory safety net for banks, as evidenced by the current crisis, during which even the most sophisticated banks experienced major liquidity and solvency problems, with the failures of some threatening to bring down entire financial systems. What has been missing? What has gone wrong? To answer this, it makes sense to first briefly review the underlying causes of the crisis and how it unraveled.

Over the decade prior to the crisis, the United States and several other advanced economies experienced an uninterrupted upward trend in real estate prices. What originated

the crisis mounted, so did the policy responses, with many countries announcing bank recapitalization packages and other support for the financial sector in late 2008 and early 2009, including guarantees on the asset values and debt of banks. For example, Dutch authorities guaranteed the value of part of ING's mortgage portfolio, and Ireland went as far as guaranteeing the liabilities of all its major banks. When banks were found to suffer from solvency problems, they were generally bailed out or nationalized by the government.

While some aspects of this crisis appear new, such as the role of asset securitization in spreading risks across the financial system, it broadly resembles earlier boom-bust episodes, many of which followed a period of financial liberalization.¹¹ One commonality among these crises is a substantial rise in private sector indebtedness, and when banking crises erupt, they generally trigger losses that spread rapidly throughout the financial system by way of downward pressures on asset prices and interconnectedness among financial institutions. These broad patterns repeated themselves this time around when losses in the U.S. real estate market triggered general runs on the U.S. shadow banking system, which ultimately hit banks everywhere.

This synopsis of the crisis shows that excessive leverage and buildup of risk had become a widespread phenomenon, and that the reliance on asset securitization as a vehicle to spread risks through the system had back-fired by creating large cross-exposures between financial institutions. Moreover, loopholes in bank capital regulation had shifted activity away from regulated banks to non-regulated entities. These activities were mostly financed by the banks themselves and therefore posed significant risks for the system as a whole through potential spillovers and externalities. As a result, while individual banks appeared well capitalized, the financial system as a whole was exposed to great systemic risk and severely undercapitalized. Clearly, bank regulation had failed and bank regulators and supervisors had much to explain.

Regulatory shortcomings and the need for macroprudential regulation

The problem with the current regulatory framework for banks is threefold.

- First, financial regulation has been focused too much on the risk of individual financial institutions rather than the system as a whole. Prudential regulation has been too much micro-focused, insufficiently macroprudential.
- Second, the regulatory framework suffers from the lack of a credible mechanism to intervene early on in failing banks to minimize the cost to taxpayers of bank failures. This problem is particularly pronounced for large banks that are deemed too big to fail.
- Third, financial regulation has displaced market discipline, rendering corporate governance of banks to be weak. This has strengthened the position of bank managers who enjoy large private benefits.

Let me turn to each of these shortcomings of financial regulation in more detail.

The main tool that regulators have used to prevent bank failures has been capital regulation in the form of minimum capital requirements. Yet, the crisis has shown that this approach is insufficient to prevent costly financial crises. Under current capital regulations, capital adequacy levels are set on the implicit assumption that by creating buffers to absorb unexpected shocks at individual banks, the system as a whole is safer. Yet, this need not be the case. By responding to capital regulations with only their own interest in mind, banks can potentially behave in ways that collectively undermine the system as a whole. Macroprudential regulation concerns itself with the stability of the financial system as a whole.

A related problem with the current regulatory framework for banks is its procyclical nature. During boom episodes, when risk appetite is large and asset values rise, banks appear overcapitalized and respond by expanding their business and increasing leverage. In the words of former Citigroup chairman Chuck Prince “as long as the music is playing, you’ve got to get up and dance”. By contrast, during busts when asset prices collapse and measured risk rises, banks try to maintain capital adequacy ratios by shrinking their balance sheets, as capital has become scarce and expensive, thereby reducing access to finance for firms and households. As a consequence, credit cycles tend to closely follow economic cycles.

By seeking to align capital levels at individual banks with a bank's own risk exposures, bank regulation has done too little to restrain bank expansion and the buildup of systemic risk in the upswing, nor has it been able to provide much support against the downfall of the system as a whole.¹² To dampen the procyclical nature of the current regulatory framework for banks, macroprudential regulation is needed.¹³

Countercyclical capital requirements – raising bank capital requirements significantly in good times, while allowing them to fall somewhat in bad times – have been proposed by many as a form of “cycle-proof” regulation¹⁴, and such form of macroprudential regulation is currently under consideration by the Basle Committee on Banking Supervision.^{15,16}

Yet, the effectiveness of countercyclical capital requirements is not without doubts. By forcing banks to hold more capital during booms than the market demands, they will shift activity to unregulated intermediaries. Similarly, forcing banks to hold less capital than the market demands during crisis times is bound to fail “as the will of the market will naturally prevail”¹⁷. Such unintended consequences need to be taken into account when crafting new regulations.

Even countercyclical regulations themselves may not be immune to the cycle. At the height of a crisis, when blood runs down the street, a popular call for tougher regulations is counterproductive to the desire to implement countercyclical regulations. And, once memories of the current crisis abate, the political pressure to relax regulations or their enforcement will increase. We should not reform under the assumption that the regulatory environment will not adjust over the cycle.

An alternative to countercyclical capital requirements is to raise capital requirements permanently. While this will undoubtedly reduce the risk of bank failures, it will impose a tax on banks that will in part be passed on to end-consumers, and is therefore a costly solution to enhance financial stability.

In my view, a more promising proposal is to impose contingent capital arrangements that would infuse new capital into banks when the institution or the system as a whole is in trouble. For example, banks could be forced to issue debt that can be converted into equity, based on supervisory assessments or objective indicators such as the bank's capital ratio. As with countercyclical capital requirements, though, contingent capital measures that rely on supervisory assessments are prone to regulatory forbearance.¹⁸

In general, one should not ask too much from bank capital alone. It cannot serve both as a

buffer for banks' own idiosyncratic errors and as a countercyclical measure to meet macroeconomic objectives without compromise. In the words of Jan Tinbergen, the most famous Dutch economist to date: “two objectives require two policy instruments”.

To be effective, macroprudential regulations should apply comprehensively to all levered institutions, so that heavily regulated banks do not have an incentive to shift activities to lightly regulated institutions during an economic boom. This raises the issue of the boundary of financial regulation.

Identifying the boundary of regulation is a challenging task, because the regulatory perimeter will naturally shift as banks respond to new regulations by shifting activity to lightly regulated or unregulated parts of the financial sector. The intensity and span of regulation should be guided by a financial institution's size, leverage, and interconnectivity with the rest of the financial system, and be balanced against the desire not to distort the allocation of private capital. There is a tendency to overregulate at the height of a crisis!

Complacent regulators and the too big to fail problem

Banking crises are a costly affair, in part because regulators find it politically difficult to intervene in banks early on. It is rare that countries confront a banking crisis early on with a comprehensive containment and resolution package. By allowing problems to linger and using a piecemeal approach to crisis management, the ultimate fiscal and economic costs associated with a banking crisis can be multiples higher.¹⁹

In work with my colleague Fabian Valencia, I have found that the average banking crisis cost the taxpayer a staggering 10.0% of GDP, and this does not even include taxpayer money put at risk (but not used) to contain the crisis.²⁰ This cost figure also does not take into account that accommodative macroeconomic policies in response to banking crises typically imply a massive wealth transfer from the taxpayer to the banking sector.

An important reason why banking crises end up being costly is that interventions in large banks are delayed for too long or altogether do not take place. The most recent financial crisis has shown evidently that large banks are deemed too big to fail and, when they do fail, too complex to close. Or at least, this is what the bankers and some regulators make us believe. They claim that the failure of any of these large institutions would create havoc in financial markets and cause a loss of confidence in the banking system with disastrous

effect on the health of other banks and the economy as a whole. After all, large banks are by definition systemically important. According to this view, large banks therefore deserve preferential regulatory treatment in case of distress. George Orwell could have said: “All banks are created equal, yet some are more equal than others.”

The too-big-to-fail problem in banking is not new. For example, U.S. regulators allowed large U.S. banks to grow out of the Latin American debt crisis of the 1980's by temporarily not enforcing regulatory rules, known as regulatory forbearance. In my own work, I have found that regulatory forbearance was present in the majority of banking crises.²¹ However, with banks growing ever larger and more complex, the too-big-to-fail problem has become ever more pressing. Today's banks engage in complex financial transactions that most of us don't fully understand, including, I would argue, some of the bankers themselves. This makes it difficult to assess the risk that banks take, and gives regulators an excuse not to intervene in case of distress.

In an ideal world, the too-big-to-fail problem would be solved by appointing regulators with sharp teeth. However, such abnormal human beings are hard to find. Another obvious solution would be to cut banks to size, such that none has a critical mass in lobbying politicians and regulators alike in case of distress. However, this is not a desirable outcome if scale-economies are present.

A more promising approach would be to reduce the temptation of regulatory forbearance. Although supervisors have plenty of discretion to intervene in banks, they find it hard to use because of the politics of economic booms. Almost everyone wants a boom to last: consumers and politicians because of the availability of cheap credit; regulators because banks appear stable; shareholders because banks are profitable; and bank managers and loan officers because their options are in the money. As a consequence, regulatory discipline is often weak, especially in bad times and for large banks. Bank regulation should therefore become more rules-based rather than left to discretion, especially at times of crises. Failure to conform to minimum rules would require prompt corrective action that could range from removal of management, suspension of dividends, and an order to find additional capital. Rules-based macroprudential tools, such as contingent capital, could also give a helping hand to a supervisor that otherwise would find herself ill-armed to end the party, and could give debt holders an incentive to discipline the bank to reduce the probability of failure.

The responsibility of bank supervision should also move to the country that is to suffer the most should a bank fail. This is a very different setup from the home-host model

of supervision that is currently in force in Europe, where branches of a foreign bank are supervised by the home regulator, even though the home country could stand to lose the most from failure of such a bank.

Market discipline and governance of banks

The current regulatory framework has very much relied on the market giving a helping hand to the regulators to keep banks in check and safeguard financial stability. Unfortunately, not only the regulator but also the market itself has been weak.

In principle, shareholders and debt holders of banks are supposed to discipline the manager from taking risks that are not in their own interest. This is known as market discipline. Given that shareholders only stand to gain when the bank does well, they will encourage bank managers to take more risk than is socially optimal. It is therefore up to debt holders who stand to lose the most from a bank failure to ensure that the bank takes prudent risk. However, with depositors enjoying protection of their investment in the form of government deposit insurance and uninsured debt holders enjoying implicit government protection from government bailouts, banking regulation has largely displaced debt holder discipline.

Market discipline of banks is also difficult because bank risk is hard to assess by outsiders. Banks are opaque and engage in complex financial transactions. This makes it difficult to assess the risk that banks take, including for the banks' shareholders and debt holders that are supposed to discipline bank managers from taking excessive risks. In a recent paper with Tilburg University professor Harry Huizinga, I show that shareholders were able to distinguish between good and bad banks only during the onset of the crisis, in other words too late into the game, and that accounting information of banks during the crisis had deteriorated to the point of becoming a misleading guide for investors.²²

Moreover, market discipline has been little defense against the macroprudential risks that come with the economy cycle. Markets too are complacent while the music plays. In the boom, almost all financial institutions look good, and differentiation among banks is poor. Market discipline is therefore generally too lax during good times when asset prices explode. As Warren Buffett, the world's most famous investor, remarked: “you see who is swimming naked only when the tide runs out”. During busts, when asset prices implode, the market often punishes banks too severely, as illiquidity problems and asset fire sales result in an overreaction by the market.

Efforts to better align the interests of bank managers with those of bank shareholders will be insufficient to restore financial stability because shareholders are protected on the downside by limited liability and therefore do not internalize the cost of bank failures. Requiring owners to provide bank capital under unlimited liability would reduce risk taking but would dramatically increase the cost of bank capital and is therefore not an attractive solution.

What is needed therefore is an improvement in debt holder discipline. Depositors are unlikely going to exert effort to monitor bank managers as long as their investments are protected by government deposit insurance.²³ Reducing deposit insurance is not a political solution. The burden of disciplining bank managers therefore falls on the shoulders of uninsured debt holders. To give them an incentive to monitor bank management, we need to make sure that uninsured debt holders are no longer bailed out in case of bank failures. Forced debt to equity conversions are one way to impose losses on creditors of failing banks. And deposit insurance should become risk-based and fairly priced, such that banks who take more risk pay a higher insurance premium to the government.

The recent crisis has also raised questions about the sensibility of executive compensation packages at banks. The bonuses that Wall Street bankers received on top of their base salaries reached a staggering \$200,000 per employee in 2007.²⁴ One popular view is that bank managers took too much risk because their stock options gave them steep incentives to invest in short-term oriented risky strategies. Such strategies may have been in conflict with shareholders' objective of value maximization. More generally, the recent crisis has also reinvigorated a debate about whether banks are properly governed.

Research offers few insights into these pressing governance issues. Traditional models of banks and financial regulation assume benevolent regulators and no governance problems. Moreover, little is known about how private governance mechanisms interact with national regulations to shape bank risk taking. Rather, researchers and policymakers have focused on using regulations to induce sound banking, while largely ignoring how owners, managers, and debt holders interact to influence bank risk.

In a series of papers with my co-author Ross Levine from Brown University, I have contributed to our limited understanding of the corporate governance of banks.²⁵ We found that private governance mechanisms exert a powerful influence over bank risking – for example, banks with more powerful owners tend to take greater risks – and that the same regulation has different effects on bank risk taking depending on the bank's governance structure. Since governance structures differ systematically across countries, this implies

that bank regulations must be custom designed and adapted as financial governance systems evolve. Regulations should be geared toward creating sound incentives for owners, managers, and debt holders, not toward harmonizing national regulations across economies with very different governance structures.

Banking research The regulatory shortcomings and complexities that have come to light during the current financial crisis deserve further research, and there is a sense of urgency as regulatory action is imminent. Regulators find it hard to resist the temptation to overregulate after a financial crisis! The task for researchers is challenging. Banking research is complex because banks operate in a changing regulatory environment. Some have even argued that banks are more opaque and complex than nonfinancial companies. The largest financial institutions are certainly complex, both in terms of global reach, organizational structure, and complexity of the financial assets they hold.

Not surprisingly given these complexities, banking research has offered conflicting predictions about key policy questions. For example, should minimum capital requirements be increased to reduce bank risk taking? Standard models would say yes, as higher capital increases the cost of failure, but in a setting where banks compete with nonbanks to maintain certain returns on their equity, increasing capital requirements could actually have unintended consequences and force banks to take on more risk to maintain returns on capital.

Or, should bank activities be restricted in order to curtail risk taking, as advocated by Paul Volcker, the former chairman of the Federal Reserve? My own work suggests that such rules could indeed reduce risk taking. However, they would also limit banks from taking advantage of economies of scope and could therefore negatively impact access to credit.²⁶

Or, did lax monetary policy contribute to bank risk taking? Based on my own work I would say “probably yes” although the effect depends on the financial health of banks.²⁷

Or, should one limit the pace of financial innovation? My own work suggests this would be detrimental for economic growth in the long run, as the financial sector needs to continuously innovate to foster productivity growth and economic welfare, though I would not rule out that some forms of financial innovation are dangerous as financial innovators do not internalize the cost of faulty innovations.²⁸

The lack of knowledge on these complex matters in part reflects the lack of active re-

search in the area of banking. With few exceptions, such as my co-author and former boss Raghuram Rajan (now back at the University of Chicago), the academic profession largely failed to warn against the buildup of excess and foresee the looming crisis, and even to this day, three years from the first signs of stress and almost two years from the height of the crisis, the profession has still not been able to offer clear guidance to much needed financial reforms. In the words of the late, Nobel prize winning economist Paul Samuelson: “What we know about the global financial crisis is that we don’t know very much.”

Finance professors have for too long preached that markets are perfect. Yet, markets do fail, and when they do, government interventions are needed to restore confidence. Finance professors need to take market failures more seriously.

Economics professors have for too long ignored banks. Most macro models do not even include a financial sector, and those monetary models that do include banks treat them merely as mutual fund-like institutions without agency problems. Economics professors need to model financial systems more seriously.

Future of banks The role of banks going forward will very much depend on the changes that will be made to the current regulatory framework for banks.

There are several calls to force banks to become smaller and less leveraged, and therefore less risky, either by curtailing bank activities or by increasing capital requirements. While such regulation would make banks less risky and profitable, its unintended consequence would be that bank activity would shift away to non-banks. Without additional regulation, risk could become concentrated in unregulated entities and take systemic proportions.

There are also calls for banks and other financial institutions to maintain minimum liquidity positions in order to contain the risk of liquidity shortages. Such regulation would favor traditional retail banks whose large deposit bases offer a stable source of funding.

The balance for banks will depend on what new regulations are in stock. Let’s hope that the new bank regulatory framework will:

- Be more macroprudential
- Be less prone to regulatory loopholes
- Improve bank resolution frameworks and the too-big-to-fail problem
- Strengthen market discipline

- Not impose excessive costs on the regulated
- And above all, not place complete faith in the ability of regulators and supervisors to discipline banks

There is no reason to blame the crisis on the banks alone and to punish the banks beyond reason. Banks matter. When banks efficiently mobilize and allocate funds, this lowers the cost of capital to firms and accelerates capital accumulation. Of course, banks are double-edged: Banks that collect deposits with one hand and lend to friends and political cronies with the other stymie innovation and growth, while enriching the elite²⁹; and banks that gamble, protected on the downside by a generous government safety net, can spark devastating crises that have exacted enormous human costs on society. The task of policymakers is to strike the right balance between financial stability and economic growth, and to ensure that the cost of regulation and the losses from financial crises are distributed fairly across society.

Ik ben nu aan het einde van mijn rede gekomen. Maar voordat u wordt bevrijdt, wil ik graag allen bedanken die aan mijn benoeming als hoogleraar aan de Universiteit van Tilburg op directe of indirecte wijze hebben bijgedragen. Daarbij dienen enkelen met name genoemd te worden: Hein van Oorschot en Philip Eijlander van het College van Bestuur; Kees Koedijk, de dekaan van de Faculteit Economie en Bedrijfswetenschappen; mijn collega’s Thorsten Beck, Harry Huizinga, en Steven Ongena; mijn echtgenote Olga; en bovenal mijn ouders Hub en Lucy Laeven.

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Endnotes

- ¹ The views expressed herein are my own and should not be attributed to the IMF, its Executive Board, or its management.
- ² This quote has also been used by Simon Johnson and James Kwak for the preface to their book “13 Bankers: The Wall Street Takeover and the Next Financial Meltdown”.
- ³ See Diamond and Dybvig (1983) for a model of so-called bank runs.
- ⁴ See Black (1975).
- ⁵ Fama (1985) in subsequent work added: “There must be something special about bank loans that makes some borrowers willing to pay higher interest rates [on bank loans] than those on the other securities of equivalent risk. Moreover, there must be something special about banks that prevents other intermediaries, like insurance companies and finance companies, whose liabilities are not subject to reserve requirements, from competing with banks to assure that it never pays to finance loans with certificates of deposits”.
- ⁶ See, for example, Keys et al. (2010), Obstfeld and Rogoff (2009), Taylor (2009), and Claessens et al. (2010b).
- ⁷ See, for example, Gorton (2008), Brunnermeier (2009), and Acharya and Richardson (2009).
- ⁸ See Adrian and Shin (2008).
- ⁹ See Mian and Sufi (2009).
- ¹⁰ See Dell’Ariccia, Igan, and Laeven (2008).
- ¹¹ See Reinhart and Rogoff (2009), Laeven and Valencia (2010), and Claessens et al. (2010b).
- ¹² See Brunnermeier et al. (2009).
- ¹³ See, among others, Claessens et al. (2010a).
- ¹⁴ See, for example, Brunnermeier et al., (2009).
- ¹⁵ Similarly, countercyclical liquidity requirements have been proposed to deal with systemically important liquidity risk arising from maturity mismatches and funding risks at banks (see, for example, Brunnermeier et al., 2009).
- ¹⁶ Similarly, dynamic loan loss provisioning rules, as applied in Spain, are currently being considered to force banks to build up cushions during good times that can be drawn on to absorb loan losses during bad times; see also Laeven and Majnoni (2003).
- ¹⁷ As emphasized by Rajan (2009).
- ¹⁸ Another version of contingent capital is for systemically important financial institutions to buy private insurance that would infuse capital in event of a systemic crisis (see Kashyap, Rajan, and Stein, 2009), though I have my doubts that such risk is insurable by the private sector.
- ¹⁹ See Honohan and Laeven (2005).
- ²⁰ The fallout of banking crises on the economy is also massive. On average, economies experienced an output loss of 20% of GDP and an increase in public debt of 16% of GDP following a systemic banking crisis (see Laeven and Valencia, 2010).
- ²¹ See Laeven and Valencia (2008).

- ²² See Huizinga and Laeven (2009).
- ²³ See Demirguc-Kunt, Kane, and Laeven (2008).
- ²⁴ See Philippon and Reshef (2008).
- ²⁵ See Laeven and Levine (2007, 2009).
- ²⁶ See Caprio, Laeven, Levine (2007) and Laeven and Levine (2007, 2009).
- ²⁷ See De Nicolo et al. (2010).
- ²⁸ See Laeven, Levine, and Michalopoulos (2010).
- ²⁹ See Claessens, Feijen, and Laeven (2008).