Will better regulation and better supervision contribute to a more stable banking sector? [1]

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Abstract

In this paper we highlight the roles of banks in the economy, banking risks and developments in regulation and supervision of banks. We pay particular attention to systemic risks, ways to minimize tax payer risks and to determine preconditions for effective supervision. We also discuss the main policy responses to the crisis in the Dutch banking sector, of which many have their origin in international reforms. We conclude that they will increase stability, though certain provisos are in our view necessary. The main point we make is that it is important to strike the right balance between a preventive and a curative approach in the reforms, and between regulation and own banks measures in response to the crisis. We furthermore argue in favor of cross-sectoral approaches in regulation, integrated impact studies and more global coordination, as many financial institutions have multiple business lines and are active in different jurisdictions. This would also limit the risk of shifts to less regulated shadow banking sectors.

1. Introduction

The Dutch banking sector's structure and mode of operation changed significantly between 2007 and 2013. Within a timeframe of less than six years, two large financial institutions had to be nationalised (Fortis/ABN Amro and SNS Bank), a large bank-insurer (ING) was able to survive only with state aid, as was the insurance company Aegon, two small banks collapsed (DSB Bank and IceSave), another small bank (Friesland Bank) was saved from toppling over by being taken over by a large bank (Rabobank) and that same large bank was forced into an extensive settlement owing to the undesirable conduct of some of its employees.

Not a single Dutch bank of any significance has managed to escape negative media coverage in the past few years. Nor is the image of the way the banking sector operates very different abroad either. Governments abroad have likewise had to intervene vigorously to shore up banks. In some cases, such as in Ireland and Spain, the governments then experienced financial problems themselves following the support they had extended to the banks. Confidence in the sector has been severely shaken by all the negative publicity of recent years.

[1] Contribution to *Jaarboek Overheidsfinancien 2014*, edited by Donders and De Kam, Nederlandse Willem Drees Stichting voor Openbare Financiën [Dutch Willem Drees Foundation for Public Finances]. Wim Boonstra is Chief Economist of Rabobank Nederland, Utrecht, and Professor by Special Appointment on Economic and Monetary Policy at VU University Amsterdam. Bouke de Vries is Advisor to the Board at Rabobank Nederland. Prior to that he served as head of the Financial Sector Research team.

Every bank has its own story. This can range from a hapless strategy pursued by its board, a lack of scale and/or outright misfortune to unacceptable conduct on the part of its employees. The recurrent theme, however, is that each of those stories underlines the risk that is inherent in the banking business. Every bank can flounder, as a result of risky policies pursued by directors, of financing 'bubbles', of the pursuit of personal gain by employees, or of a shift in customer perception. In the end, even the strongest banks are vulnerable if customers turn their backs on them.

But of course it is far from true that banks do nothing right. Banks play a crucial part in the operation of the economy. Every day, they grant loans to consumers and businesses. Banks help customers to mitigate their risks. Banks give their customers financial advice. Every day, banks also settle many millions of cashless payments swiftly, virtually without error and very cheaply. All these services are essential to the operation of our economy. A modern economy cannot function without an efficient and secure circulation of money.

But in the wake of the crisis, the question whether banks are in fact doing the right things is refusing to go away. The idea has taken hold that banks unnecessarily take large risks on board in their pursuit of profit maximisation while, if things go wrong, the general public will have to foot the bill. Although that idea may suggest a simplification, the past few years have seen every large bank, whether expressly prompted to do so by supervisory authorities or not, engage in a rigorous review of its own activities. The financial crisis and its causes have already been discussed extensively elsewhere.[2] We will therefore not rehearse the pertinent arguments in this chapter. Instead, we will limit ourselves to the banking sector and its supervision. Section 2 provides a concise discussion of the role of banks and section 3 describes the attendant risks. Section 4 focuses on the supervision of the banking sector, and section 5 on the policy responses by governments and supervisory authorities to the financial crisis. The closing section presents our conclusion and looks ahead.

2. The role of banks

David Hume (1752) described the role of money as 'the oil which renders the motion of the wheels [of trade] more smooth and easy'. In terms of this image, banks in effect function as modern 'oilers', as they are the financial institutions that handle the settlement of payments, playing a crucial role in facilitating the operations of modern market economies.
Banks also provide a large part of lending to consumers, businesses and other institutions. Banks manage the savings of consumers and businesses. They supply their customers with services in foreign currencies for international transactions. Banks need to be able to raise money in the financial markets if the volume of savings available to them is insufficient to fund their lending operations. Banks also assist their customers in hedging their financial risks, such as interest rate and currency risks. Banks moreover need to be able to buy and sell foreign exchange and interest rate derivatives to improve their own risk management (more on this follows below). Customers of banks seeking to source cash directly in the financial markets by issuing shares and/or debt instruments rely on their bank's help. To serve them effectively, their bank must be able to temporarily take positions in these securities on its balance sheet. Lastly, banks need to be able to hold and manage a securities portfolio for their liquidity management.

It is essential to understand that by providing this extensive range of services, banks play an important but also fairly invisible role in the economy. Banks generate secondary rather than primary benefits for their customers. Customers are never happy about their mortgage loan as such, but they are about the house it helps them to buy. The house provides

[2] See for instance Blanchard (2009); Acharya *et al*. (2010); Bernanke (2009); Cecchetti (2010), Blinder (2013) and Kamalodin (2012).

the direct benefit, the loan is a necessary enabling condition for procuring this benefit, but is a dissatisfier in itself. The same is true for payment services, which are likewise no more than a tool to be able to carry out transactions. Many customers realise the importance of the error-free settlement of their payments only when these stagnate, due to an electronic disruption of payment services for instance. Banks therefore continually need to spotlight their added value to society.

Banks' main mission is accordingly to provide the financial lifeblood of the economy. This imposes a great responsibility on them, since the importance of this infrastructural role of banks means that the government cannot allow a large bank to fail without severely damaging the real economy. Obviously, this is relevant mainly for the 'systemically important banks'. These are often large banks, though smaller banks can be systemically important to a certain extent as well. Because governments cannot afford to allow them to fail, given the damage to the real economy that would arise from a collapse of any one of their number, systemically important banks effectively operate under an implicit government guarantee.[3] This imposes additional responsibilities on them as their failure would affect society as a whole. Conversely, society also benefits from the implicit guarantee it provides to the banks. Banks are able to obtain their financing at a lower cost owing to these implicit guarantees, and in a competitive environment this will mainly benefit their customers. This also means that limitation of those guarantees will lead to higher funding costs for banks, which could in turn tend to push up the cost of banking services.[4] It should be noted that a 'bail-in' significantly reduces the implicit government guarantee. The bondholders, which are the principal providers of loan capital for banks, will co-finance the rescue of banks via this 'bail-in' mechanism.[5] The government will only step in after the shareholders and the unsecured bondholders (the holders of assets that can be bailed in) have lost their investment in the bank. In exchange for the higher risk consequently incurred by bondholders, they will demand higher returns. Simultaneously, a bail-in potentially pares back the return requirement for the senior secured bonds, as these are afforded extra protection by the higher capital buffer that is created. This is discussed in more detail in section 5.

3. Banking risks

Substantial risk is inherent in banking.[6] That is true for even the most basic forms of financial services. Payment services, one of the key tasks of today's banks, require a high degree of reliability. Every year, 9.5 billion transactions pass through the banking sector's payment systems in the Netherlands.[7] The percentage of error needs to be extremely low, otherwise thousands of people will immediately be adversely affected. These services always involve operational risk, which is the risk that transactions will not be executed on time or not correctly at all due to human or technical failure.

Lending operations involve credit risks or bad debt exposure. These arise because unforeseen circumstances can sometimes cause borrowers to fail to meet their obligations, or because of fraud. Banks therefore need to carefully ascertain whether their customers can sustain the debt obligations they take on. This is not just clearly in banks' own interest, it is also in their customers' interest. That is why this is an integral part of their duty of care, with banks being required to clearly draw their customers' attention to the risks their products and services involve. The risks of bad debts can never be fully excluded, however. Market

[3] Bijlsma and Mocking (2013).
[4] Boonstra and Treur (2013).
[5] Obviously, savers also provide loan capital to banks, but savings are largely covered by the various national deposit guarantee schemes.
[6] Mishkin *et al*. (2013).
[7] See the website of the Dutch Payments Association (www.betaalvereniging.nl).

conditions may change to a customer's detriment, or people with a residential mortgage loan may lose their jobs.

Liquidity risk is one of the most significant risks incurred by banks. This arises because the term to maturity of a bank's liabilities (debts, particularly savings entrusted) will often be shorter than that of the bank's assets (particularly loans provided). In fact, liquidity risk is a direct consequence of the intermediary role of banks, as part of which they endeavour to simultaneously serve divergent customer requirements by means of 'maturity transformation'. Borrowers, such as homeowners, require certainty about the long-term availability of their mortgage loans. When these loans are taken out, they usually have a maturity, in terms of liquidity, of thirty years. At the same time, savers want to be able to withdraw their savings immediately, if necessary. In the Netherlands, over 80 percent of savings can be withdrawn on demand.

Naturally, banks maintain liquidity reserves, in the form of balances in their accounts with the central bank or in the form of readily marketable securities, which they can convert into cash quickly and without losses. Banks can also convert their less readily marketable assets into liquidities by pledging them to the central bank. Nonetheless, the liquidity reserves of an individual bank will usually always be lower than its liabilities payable on demand. Accordingly, a bank must be able, if withdrawals exceed its liquidity reserves, to raise capital in the financial markets or, if that is not possible, to fall back on support by the central bank. In normal times, the latter is required to be able to act as 'lender of last resort'.[8]

Banks incur market or price risks on any marketable securities they hold, such as bonds and equities. Foreign currency transactions can lead to currency risks. Banks are also exposed to interest rate risks. This arises from mismatches between the assets and liabilities sides of the bank's balance sheet not only in terms of liquidity schedules, but also of interest rate schedules. Interest rates on savings, for instance, are highly variable, whereas those on mortgage loans are usually locked in for a number of years.

Systemic importance

Banks differ greatly from one another. Their differences are reflected in their size (the balance sheet total), the nature of their services and their governance. More specifically, banks that are large in terms of their size are so deeply interconnected with the economy in which they operate that they are designated as systemically important (see above). The cross-border activities of large banks in particular result in an international interlocking of financial systems that can mean that problems in one country will spread very quickly to other countries as well.[9]

What this means is that the government cannot afford to let a systemically important bank fail if it totters. It is simply 'too big to fail'. As emphasised above, this imposes extra responsibilities on the board and employees of a systemically important bank. The crisis has demonstrated that systemically important banks in the Netherlands also proved to be exposed to risks that, in retrospect were irresponsibly large, meaning the government had to bail them out. In every single case, the government took on substantial risks to do so; and only in one (ING) has the government so far been rewarded with solid returns on the amount it invested to support the bank concerned. But more importantly, owing to the government's intervention the financial markets and customers retained confidence in banks.

[8] Bagehot (1873).

[9] This international interlocking underlines the importance of close cooperation between the various national supervisory authorities and the importance of supranational structures.

Minimise risks for the taxpayer

Clearly, in view of the above, it should be imperative for systemically important banks in particular to avoid taking unnecessary risks. Insofar as they do incur risks, these must arise from their core banking business, be transparent for the general public and be optimally managed. A bank's financial buffers must be sufficiently strong for it to absorb potential losses itself. The risks for the taxpayer can be minimised in further, mutually reinforcing ways.

Firstly, it is necessary for systemically important banks to have sufficient equity capital to absorb even large losses. This required capital must not just be defined on the basis of risk-weighted assets, such as the BIS ratios,[10] but also be supplemented on the basis of a non-weighted capital ratio.[11] The Dutch government takes the view that the Basel 3 requirement of 3 percent equity capital of the non-weighted balance sheet total is likely to be too low. The government has therefore proposed a requirement of 4 percent, but some economic researchers advocate upping this even further.[12] Raising this requirement for the non-weighted leverage ratio too rapidly would be problematic, however, as explained below. Moreover the level playing field between banks will be tilted if European countries, and in fact this also applies worldwide, start using different ratios. It would also run counter to the developments in Europe to introduce a Banking Union, with the associated regulations and European directives, and thereby adopting a single set of standards and requirements for all European banks.

In addition to equity capital, banks are required to maintain an extra capital buffer in the form of subordinated loan capital. They can do so for instance in the form of 'contingent capital'(coco) or bail-inable liabilities. With a 'coco', subordinated loan capital is automatically converted into risk-bearing capital if the 'trigger' is set off, i.e. if equity capital is in danger of falling below a specific limit. This extra capital must of course be activated long before a bank has entered the danger zone. The 'coco' is therefore an instrument for use in a 'going concern' scenario. By contrast, bail-in is an instrument that will be deployed in the resolution phase of a bank. If it is, the bank will already no longer have a future as an autonomous entity, i.e. it will have entered a 'gone concern' scenario. The time when a bank is beyond saving is determined in the proposals for large banks by the European resolution authority for the 130 or so largest European banks, while it will be primarily determined by national governments for the smaller banks. This option of recourse to loan capital in winding up a bank provides an extra buffer for absorbing setbacks.

Besides this subordinated capital, it is important for banks to raise more long-term funding in order to narrow maturity differentials between their assets – loans issued – and their liabilities. Basel 3 introduced the Net Stable Funding Ratio (NSFR) for that purpose. Its application requires banks to maintain more long-term funding and/or reduce the maturities of the loans they provide[13]. This means that the maturity transformation function of the banks will be restricted, which in turn reduces their liquidity risk. Banks must obviously hold comfortably sufficient liquidity reserves to meet withdrawals of credit balances. It has even been proposed to oblige banks to maintain a liquidity reserve of 100 percent for their

[10] BIS = Bank for International Settlements, established in Basel.

[11] The leverage ratio is determined by dividing capital by the gross (i.e. non-risk-weighted) assets. Since a non-weighted leverage ratio is not affected by the risk models applied by the banks, which can diverge significantly, this ratio provides an unequivocal floor for the minimum capital required. The drawback is that by definition this ratio does not reflect differences in risks associated with the available assets, although those differences do in fact exist in reality. In addition, this ratio is not hard to circumvent.

[12] Admati and Hellwig (2013); Boot and Van Wijnbergen (2013).

[13] Smolders (2011).

liabilities payable on demand.[14] This idea, known as the Chicago Plan, which dates back to the thirties of the previous century, cannot be effectively implemented nowadays.[15] It is very expensive in terms of its cost to society; prices for services will rise while the availability of credit will decline, particularly for longer maturities. But it does underline the importance of having *adequate* liquidity buffers, in combination with the backstop of a central bank able to operate effectively in its role as lender of last resort. This requires, in turn, that the central bank is able to distinguish between a solvent bank with a liquidity issue on the one hand and a bank with a weak balance sheet on the other that has run into liquidity problems as a result.

Supervision of the banking sector alone is not enough. Relations between the regulated banking sector and the 'shadow banks'[16] must likewise be closely monitored by the supervisory authority. The system of shadow banking includes, for instance, the activities of financing companies (including those engaged in leasing), of special purpose vehicles (SPVs), hedge funds, money market funds and traders in financial instruments – such as credit derivatives, bonds and structured financial products. It is impermissible for systemically important banks to be endangered by financial ties with financial institutions of this kind that are not or only lightly regulated. In addition, banks can sidestep regular supervision by transferring activities to the shadow banking system. Therefore the supervisory authority must have the tools to take timely and preventive action. Banks take positions with shadow banks as counterparties, which leads to a better spread of risks and greater liquidity in the market but also entails counterparty risk. The scope for shadow banking has been significantly widened in the past few decades by the internationalisation of the financial markets. This is attributable to a combination of financial innovation, regulatory arbitrage and tax arbitrage.[17]

Despite the risks unmistakeably involved in shadow banking it is important to note that parts of those activities are in fact regulated. This applies to the supervision of securities trading for instance. Nor do all those activities always entail significant risks by any means. The way in which mortgage securitisations, despite mortgages being investments with a very stable return , are assigned to the shadow banking sector in the Netherlands is an example. The European Commission and the Financial Stability Board are currently carrying out a detailed analysis of the shadow banking sector following which they will consider whether and – if so – where further regulation or more supervision is required.[18]

Risk management

The activities of systemically important banks must therefore in principle serve their customers or arise from the bank's own risk management. Risk management is a core competence in banking operations. Even the most elementary banks are exposed to substantial risks. The very fact that banks incur them contributes to the effective operation of the real economy, as many of those risks arise because banks take on risks from customers and manage them professionally. Aiming for risk-free banks would accordingly be counterproductive; it would only mean that the risks would revert to the customers. An instructive example of this is the Chicago Plan, referred to above. One element in this approach is that savings can no longer be withdrawn on a near-term basis, let alone immediately. The plan increases banks' stability by shifting the liquidity risk to the savers.[19]

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[14] Benes and Kumhof (2012).
[15] Boonstra (2013).
[16] The Financial Stability Board (2011) defines shadow banking as the system of credit intermediation involving entities and activities outside the regular banking system. They provide credit – directly or as part of a chain – or facilitate the process of credit intermediation.
[17] Broos *et al*. (2012).
[18] See also: Smolders (2012); Broos *et al.* (2012) and Kerste *et al.* (2013).
[19] Boonstra (2013).

The greatest risks arise in a bank's core business, i.e. in lending (credit risk) and maturity and interest rate period transformation (liquidity and interest rate risk). But the possibility of splitting banks into 'retail banks' and 'investment banks' produces fully risk-free banks neither in lending nor in maturity and interest rate period transformation. On the contrary, certain activities akin to those of investment banks are essential to a bank's own risk management. It has already been explained above that loans issued by banks and their liabilities generally have mismatched interest rate periods. That is a consequence of the divergent needs of customers regarding the maturity of their loans and the availability of their savings. The consequence for the bank is not just the liquidity risk referred to above, this also entails interest rate risks for the bank. Without using derivatives, banks would not be able to manage this risk properly.

4. Supervision of banks

In the Netherlands, the Minister of Finance, together with the Dutch Central Bank (*De Nederlandsche Bank* – DNB) and the Netherlands Authority for the Financial Markets (*Autoriteit Financiële Markten* – AFM) ultimately bears responsibility for the supervision of the banking sector. Since 2007 the Netherlands has been using the 'Twin Peaks' model, under which DNB exercises prudential supervision and the AFM business conduct supervision. Prudential supervision concerns the stability of the bank and the financial system and is embodied for instance in regulations on solvency and liquidity. Business conduct supervision concerns, for instance, the way banks deal with their customers. In addition, the Netherlands Authority for Consumers and Markets (*Autoriteit Consument en Markt* – ACM), into which the former Netherlands Competition Authority was integrated, exercises supervision over competition in the market for financial services. The ACM assesses, for instance, whether there are economic dominant positions, restrictive agreements or cartels, and whether newcomers have sufficient access to the market for financial services.

The legal basis for supervision in the Netherlands is provided by the Financial Supervision Act [20] and in a range of European regulations on supervision.[21] Europe's influence on the supervision of banks has been increasing sharply over the past few years, so much so that primacy now lies in Brussels. The proposed creation of the Banking Union, scheduled to be introduced in 2015 for the large banks, is an apt illustration of this. The Banking Union is being created to a significant extent on the basis of European regulations that have direct effect. An example is the Capital Requirements Regulation (CRR). This does not permit national exceptions or interpretations and thereby safeguards uniform application and a level playing field throughout Europe. Because the European financial markets have become increasingly integrated over the past few decades and there is a significant risk of spill-over effects between the member states, the banks and their supervisory authorities have also become increasingly dependent on each other. For that reason, a uniform European approach has become a key precondition for effective banking supervision.

[20] In the Netherlands the Financial Supervision Act is the overarching supervisory act. The Financial Supervision Act was enacted in 2006 and combines eight former acts on sectoral supervision. It has been repeatedly updated since 2006.

[21] Examples of European regulation are the banking directives – which now include CRD IV (implementation in Europe of Basel 3; see below) – and accounting directives. Prudential supervision of the effectiveness of those directives in the Internal Market is exercised by the European Banking Authority (EBA). This institution is also tasked with developing standards for supervision. Supervision of individual banks is exercised by national authorities and – for the large banks – by the ECB. Business conduct supervision is still organised at a national level.

Preconditions for effective supervision

The Basel Committee (2012) has formulated six general conditions that effective banking supervision must meet:[22] (1) sound macro-economic policies, (2) a well-established framework for financial stability policy formulation, (3) a well-developed system of laws and regulations, including corporate, bankruptcy, and consumer protection laws, (4) a clear framework for crisis management, recovery plans and resolution, (5) an appropriate level of systemic protection or a public safety net and (6) effective market discipline. While the first four conditions are fairly self-evident, the last two require a little more explanation, after which we will examine how the Netherlands scores on the conditions. With regard to condition 5) the Basel Committee considers it important that the following factors are properly addressed: the risk of a loss of confidence in the financial system, limiting risks of contagion, minimising disruptions of market signals (aid might for instance limit competition and thereby affect pricing), maintaining market discipline wherever possible: no bail-outs, therefore, and aid measures must be accompanied by stringent requirements for restructuring.

According to the Basel Committee, market discipline, the sixth condition, depends on the availability of market information for market parties, of suitable incentives for managers of financial institutions, on the governance of institutions and on whether or not government guarantees to stimulate lending are handled responsibly or not. If the government 'forces' institutions to provide credit and this credit involves above-average risks, market discipline will be disrupted. The Basel Committee therefore advises governments to transparently communicate the conditions for incentives in this area and to be prepared in those cases to compensate institutions if the 'forced' loans do not perform properly. This last measure is designed to prevent and if possible exclude forced lending as much as possible.

In June 2011 the International Monetary Fund (IMF) reviewed the extent to which the Netherlands complies with those preconditions formulated by the Basel Committee.[23] In the IMF's opinion that is largely the case. The IMF does find, however, partly on the basis of DNB's own reports, that banking supervision needs to become more stringent. The IMF identifies a need for a culture change in supervision. This should for instance include a more proactive use of the powers and sanctions already available to the DNB. Another conclusion is that the allocation of the available supervision capacity for the financial sector needs to be more closely aligned with the extent of the risk potentially posed by the various institutions and subsectors for the financial system as a whole. The IMF finds, for instance, that DNB deploys a relatively large part of that capacity for supervision of insurers and pension funds, while capacity for monitoring the foreign activities of the large banks is comparatively limited.

Just as important as prudential supervision and proper monitoring of potential systemic risks is the supervision of market conduct. If financial institutions operate on the basis of a non-sustainable earnings model, or breach their duty of care, this can likewise lead to major problems. An instructive example is DSB Bank, which ran into trouble owing to the very high fees charged for insurances it sold and owing to mis-selling and overextension of credit. The IMF establishes in this connection that in the past few years the AFM has given a great deal of priority to improving consumer protection and transparency in the market for financial services. Not for nothing is the supervision of market conduct the second pillar in the Twin Peaks supervision model.

Another element of the IMF report to be highlighted here is the 'three lines of defence' model applied by DNB. The first line of defence comprises internal controls, the procedures and prevailing culture of the business units of a bank. The second line is the risk management

[22] Basel Committee (2012).
[23] International Monetary Fund (2011).

of the bank. The third line of defence is the audit function that is tasked with overseeing the business units and the risk management. The report does not elaborate on this in detail but current developments at SNS, Rabobank, ING and ABN Amro have shown that – despite the three lines of defence – things can still go wrong. This underlines the importance of learning lessons from past experience. Two of those lessons would in any case appear to be: the need to increase transparency and the need to simplify the structure of organisations.[24]

In its report, the IMF recommends expanding the currently available tools for combating a crisis, to strengthen the supervision of internationally operating groups and to record data more systematically. It is also important for supervision to be performed in an independent manner. Additionally, the IMF recommends limiting the potential legal liability of the supervisory authorities.[25]

Apart from the six preconditions summarised above, several further conditions for effective supervision can be formulated. First, it is important that the requirements imposed on banks, such as the tougher solvency requirements, are introduced gradually and that there is enough time to implement them. This applies both to the path towards higher BIS ratios and to the higher non-weighted capital ratio currently advocated by many.
In principle, there are three ways for banks to increase their capital ratios.

The first option that a bank has to supplement its equity capital is to retain profit. This requires sufficient profitability not only to support lending growth but also to achieve additional equity capital growth. In a time when high provisions for credit losses are pressuring banks' profitability, profits can only be increased by raising the interest rate margin, charging a larger portion of the costs to customers or cutting back costs. The first two options are to the disadvantage of clients and, moreover, they are difficult if mutual competition is squeezing banks' profit margin. Bank directors must therefore, in any possible way, cut costs. This needs to be done very conscientiously with regard to labour costs in particular, and in consultation with representatives of the trade unions.

By definition, the second option for banks to strengthen their equity capital, issuing shares, is open mainly to banks listed on the stock exchange. Existing shareholders will not be pleased about this, as it will trim earnings per share. While it is conceivable that the government might impose share issues and a dividend stop if a bank does not yet meet the capital requirement(s),[26] maintaining a level playing field would require an internationally uniform approach. Even more than is the case today, this will have to be achieved by European banking supervision. Cooperative banks are in a special position with regard to the possibilities for strengthening their capital. They too can raise additional capital, as illustrated by the recent announcement by Rabobank that its member certificates will be tradable on the stock exchange as of the end of January 2014. These certificates count towards the Core Tier 1 capital. Owing to the stock exchange listing institutional parties such as pension funds can also trade in those certificates, in addition to the members of the Rabobank. This expands the market for these instruments and hence also their scope for placement. Nonetheless, cooperative banks cannot source limitless volumes of risk-bearing capital via this route. Compared to strengthening the buffers by means of retained earnings, this is a relatively expensive form of capital. Secondly, this is capital that does not give its providers any control. Control at Rabobank Nederland depends on membership and therefore lies with the Local Member Banks and not with the holders of certificates. This limits the potential scope of the instrument.

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[24] Knot (2013).
[25] The legislation to limit the liability of supervisory authorities has now been enacted in the Netherlands.
[26] Bijlsma and Zwart (2010).

The second option is also limited for state-owned banks. Strengthening equity capital of banks owned by the state or lower government authorities requires multi-billion capital injections from public funds.

The last option for boosting capital ratios is to shorten the balance sheet. This can be achieved by divesting assets, such as participating interests and foreign operations, by securitising loans or – if all of this proves to be insufficient – slowing growth in the activities – i.e. reducing lending. Selling activities is not easy these days, even if the experience of both ING and Rabobank shows that it is feasible. This route does have its own drawbacks, however. Divesting activities can mean surrendering diversification benefits, as a result of which a bank will become less stable overall.

In practice a bank will, if possible, opt for a combination of the three possibilities outlined above. All these options cost time. Rushing the introduction of higher capital requirements for banks in particular may lead to pressures on lending. Further, any measures should not provide new but mistaken incentives. This comes into play in connection with the deposit guarantee scheme, for instance (see below). Also, new measures must not result in what was good in the former regime being pushed into the background. In this context the emphasis on the non-weighted leverage ratio can entail a disregard for the fact that a supervision system based on risk-weighted assets provides effective incentives for banks to align the buffers with the risks of activities. Owing to these new rules, general banks will increasingly focus on activities involving less risk.[27] There are also banks that deliberately choose a higher risk profile and maintain more buffers.

Furthermore, it is important that the underlying principles of supervision are upheld. This means: a consistent use of powers, with the supervisory authority opting, wherever possible, for uniform standards and uniform compliance with them. The principle of *same business, same rules,* applying a Single Rule Book and the standards for supervision that the European Banking Authority develops, are key elements serving that purpose.

At the same time, banks need to retain sufficient scope for offering their customers customised services. In terms of business conduct supervision this requires a combination of both uniform, detailed rules with more open standards, which the bank itself is free to shape in detail in its customer services. A good example is that of tailoring a mortgage loan to a self-employed person without personnel, if the latter has no fixed income but can demonstrate a sufficiently long track record of income and an order portfolio of sufficient quality and volume. Strict application of rules will not be adequate in those cases. A better approach is for banks themselves to carry out a risk assessment and identify successful self-employed persons without personnel. The financing of a business plan is a similar case. Assessment of the loan application is best performed on the basis of experience, the outlook for the sector and the confidence a bank has in a business and its owner.

Lastly, effective supervision requires a diligent consideration of the costs versus the benefits of supervision.[28] More supervision does not always equal better supervision. Excessive supervision can lead to costs to society and an overzealous insistence on zero tolerance and risk aversion. The key is to find an adequate balance.

5. Policy response

As a first response to the outbreak of the global financial crisis, several ad-hoc measures were initially taken in the Netherlands that were intended to allay the prevailing acute panic. These were an increase of the amount of the guarantee under the deposit guarantee scheme, the nationalisation of ABN Amro, the provision of capital to shore up ING,

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[27] Dutch Banking Association (2013).
[28] Boonstra and Bruinshoofd (2012).

SNS Bank and the Aegon insurance company, and the introduction of a guarantee for interbank loans. This was subsequently followed by a second round of financial support for ING, as well as a government guarantee for its portfolio of US Alt-A mortgages (January 2009). Subsequent measures included the introduction of a bank tax (2012), capping of bonuses in the financial sector (2013) and the introduction of a crisis levy, whose proceeds were intended to finance the nationalisation of SNS Bank (2013). Not all those measures are equally important. The bank tax is mainly a penalising measure and has no positive effect on the stability of the banking sector. Furthermore, because of its negative impact on profitability, and therefore on the banking sector's capacity to set aside reserves, the bank tax may hamper lending growth.[29] The recent interventions in the remuneration structure of the banks that emphasise long-term goals and the 'claw-back' of remuneration if things go wrong can be expected to eliminate some of the incentives for excessive risk-taking. Examples include the elimination of rewards for transactions that generate benefits for the persons entering into them without subsequently entailing negative consequences for them in the event of later losses. This is being addressed by European regulations and the Netherlands will also introduce those rules. Banks are in fact already introducing those rules in anticipation of formal regulation. The Dutch banks are concerned however that the cap on variable remuneration proposed in the Netherlands at 20% of the fixed income will disproportionally hamper Dutch banks competing in the international labour market to recruit high-quality specialists.

Several 'major' interventions in the supervision of banks are discussed below. These concern the modifications of the deposit guarantee scheme, the new Basel 3 regime and the proposals of the Commission on the Structure of Dutch Banks (the 'Wijffels Committee').

Modifications of the deposit guarantee scheme

Op 3 October 2008, the Dutch government intervened by proceeding to nationalise the severely endangered Fortis/ABN Amro bank. This was the first step in a series of aid measures. Shortly thereafter, the first systematic measure in response to the outbreak of the financial crisis was introduced: the limit applying under the deposit guarantee scheme (DGS) was increased to € 100,000 per account holder per bank with immediate effect. This measure was subsequently enacted in law. Proposals were also developed to reform the Dutch DGS from an *ex post* allocation system to a system financed *ex ante*. This measure was designed primarily to protect consumers and restore the severely rattled confidence in the banking sector. Viewed from the perspective of financial stability, it is a mixed blessing. A DGS involves both advantages and drawbacks.[30] The key advantage is of course that savers have no need to be concerned about the safety of their savings up to the guaranteed amount (the guarantee ceiling). This is not just important for consumers' peace of mind but also benefits financial stability in itself. The drawbacks of a DGS for financial stability are however also considerable. It reduces the risk alertness among savers when choosing a bank at which to place their savings. This reduces the discipline exerted on banks by the savings market, which in turn can prompt banks to increase their risk appetite. Lastly, the presence of a DGS can attract bad banks.[31]

Academic research has shown that the balance between the advantages and drawbacks tends to shift as the guarantee ceiling increases. The higher the ceiling, the greater the drawbacks become. Beyond a certain level, the drawbacks outweigh the advantages.[32] The

[29] KPMG (2012).
[30] Boonstra (2011); Groeneveld (2009).
[31] Kool and Gerritsen (2010).
[32] Barth *et al*. (2004); Ioannidou and De Dreu (2006).

current ceiling of € 100,000 is too high from a stability perspective, as it increases moral hazard risk. But other reforms of the DGS initiated since 2008, such as putting in place *ex ante* financing of the system with risk-differentiated premiums, reduce risk, which showcase opportunistic behaviour of banks. They mean that all banks, even those that eventually run into trouble, will have paid proportionate premiums for the insurance in the period before those problems manifested themselves.

The new capital and liquidity regime: Basel 3

The new, more stringent requirements of the Basel Committee on Banking Supervision (Basel 3) and their enactment in European legislation (CRD IV) will to a large extent already provide for a more stable banking sector.[33] The principal requirements concern, first, the phased introduction of tighter capital requirements for all banks. The previous regime applied a minimum capital requirement of 8 percent of the risk-weighted assets (RWA). Compared to the previous regime, banks are also required to maintain more equity capital with regard to derivatives transactions. Previously, half of the equity capital was required to consist of Core Tier 1 capital (retained earnings and shares issued). Basel 3 applies an effective minimum solvency requirement of 10.5 percent of the RWA, of which 6.5 percentage points must be Core Tier 1 capital. The banks of the supervisory authorities have until 2019 to build up those buffers. In an economic upswing, banks must form extra capital buffers, referred to as anticyclical buffers. The pressure on banks to build up stronger buffers is however much greater than this timetable would suggest, because lenders require this percentage to be achieved much earlier. In practice, the banks are aiming for substantially higher solvency. On top of this, the supervisory authority now also requires total equity capital of the banks to equal at least 3 percent of the non-weighted balance sheet total. This requirement is the ‘leverage ratio’.

Basel 3 introduces further internationally harmonised liquidity requirements, revolving around the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The requirement relating to the LCR ensures that banks hold sufficient highly liquid assets to be able to absorb the outflow of funds for a period of thirty days in a severe stress scenario. The requirement relating to the NSFR limits the maturity transformation of the banks by requiring maturities of banks’ funding to be more closely matched with those of their lending. This is somewhat self-contradictory: transformation of maturities by borrowing short term and lending long term is in fact nothing other than a core activity of banks. On the other hand a business model that relies too much on short-term financing is not tenable. Here too, striking the right balance is crucial.

Proposals of the Wijffels Committee

The report of the Wijffels Committee provides a specific complement to the Basel 3 proposals and other measures already introduced (see below) for Dutch banks.[34] It would exceed the framework of this chapter to refer to all recommendations of the Committee individually, let alone to discuss them. The most relevant recommendations are discussed below.

Firstly, the Committee advocates a stable banking sector in the sense that the banks and the banking sector perform their roles effectively and are resilient against shocks. To achieve this, banks need to be capitalised and structured in such a way that the probability that they will again require state aid is limited to the greatest possible extent. It is acknowledged in this context that Dutch banks must be able to finance and support the international activities

[33] Bank for International Settlements (2012); Smolders (2011).
[34] Commission on the Structure of Dutch Banks (2013).

of business and industry. Risks that are unrelated to serving customers, by contrast, need to be avoided as much as possible. This will require general banks that raise deposits but also have a large investment banking division to segregate the investment banking activities. The Wijffels Committee agrees with the proposal of the Liikanen Group appointed by the European Commission to require segregation if investment banking operations exceed € 100 billion (or more than 20% of the balance sheet). The Liikanen report also advocates a banking sector that is as diversified as possible in terms of sizes of banks, target groups, national or international orientation, ownership structures and country of origin. The Wijffels Committee advocates privatisation of the banks that are currently owned by the state as soon as circumstances permit. It also seeks to eliminate the implicit state guarantees and associated funding advantages for systemically important banks wherever possible, via an appropriately structured 'bail-in' regime. As discussed above, bail-in increases banks' capacity to absorb external shocks and incidental large losses, and the taxpayer's interests are better protected as a result. The downside is that bail-in entails higher costs, as investors in debt instruments issued by banks will demand a higher risk premium. It is conceivable that this will be reflected in higher charges for services. The higher absorption capacity may, by contrast, reduce the risk premium on other subordinated securities. What the outcome of these effects will be on balance remains to be seen in practice.

The Wijffels Committee also looks closely at the way in which banks serve their customers. In this context, it advocates the development and mandatory adoption of standard products for specific consumer products, such as mortgage loans and pension schemes. To make banks' funding more stable and possibly reduce mortgage interest rates, the Committee recommends establishing a National Mortgage Institute. This institute can transfer mortgage loans from banks to institutional investors, such as pension funds. With regard to the housing market, the Committee advocates a lower statutory maximum standard for mortgage loans ('*loan-to value*' ratio, LTV) of 80 percent of the value of the property. This measure, it should be noted, is far removed from current practice and its introduction in the Dutch housing market is not really possible at present.[35] The Committee recommends a gradual phasing-in of this lower permitted LTV, in combination with targeted reforms of the housing market and the introduction of a form of saving for housing with building societies.

Lastly, the Committee advocates, in line with Basel 3, strengthening the capital buffers in a way that does not lead to curtailed lending. It also proposes a reconsideration of the bank tax, because that has an adverse effect on the build-up of more equity capital by banks. Overall, the proposals of the Wijffels Committee, in combination with the new Basel 3 supervision regime, can certainly be expected to contribute to a more stable banking sector. A few aspects are highlighted below in more detail.

European Banking Union will contribute to stability and competition

Completion of the European Banking Union is a building block underpinning the European reform of the financial sector. More European supervision of the banking sector will contribute to a levelling of the playing field and lead to a more stable banking sector, as the same standards will apply throughout Europe in the future and the authorities can take more vigorous cross-border action. Again, careful tailoring is extremely important.

Firstly, a factor in establishing the European Banking Union is that there are still weak banks in Europe. It is important that the member states first act to improve the health of their banking sector on a long-term basis, before integrating their banks in the Banking Union. A key step in this process is the Asset Quality Review, initiated in the autumn of 2013. In addition, there is a strong and immediate financial connection between national government

[35] Boonstra and Van Dalen (2013).

authorities and banks in member states of the Economic and Monetary Union. This means that if a government's finances become a problem, it will pull down the banking sector – which has invested in bonds issued by that national government – with it, while a weakened banking sector will conversely soon come knocking on that same government's door for help. As long as this situation persists, in which governments and banks remain stuck in a potentially lethal embrace, European guarantee mechanisms will involve drawbacks.[36] The Banking Union is a step in the desired direction of a disentanglement of governments and banking sectors. At present however, the ECB and the European resolution authority are not expected to be able to wind up the really large systemically important banks at a European level in case of an emergency, because the resolution funds still need to be built up and because bail-in has not been introduced yet. Systemic problems with a whole category of banks, like those in the commercial real estate crisis, are also still difficult to resolve in this way. But clearly another instrument has been added to the arsenal available.

A key addition to the toolbox of instruments for supervisory authorities and governments for intervention in the event of problems will be provided by the introduction of a European resolution procedure, which will be followed later by a single European resolution fund. This can be deployed if a bank needs to be wound up. Naturally, this does elicit fears among the financially stronger member states that they will, through this fund to be financed centrally, nonetheless have to foot the bill for the cost of winding up banks in weaker member states. The latest news in this debate is in fact encouraging. The most likely implementation boils down to a division of this resolution fund into national compartments, and in the event of an intervention, the national compartment of the member state concerned will be utilised first. This 'first loss' in the fund provides a substantial incentive to seek a solution at the national level. The other member states will only start contributing financially as well once the national compartment has been emptied. There will only be a single shared European resolution fund when all national compartments are well filled, which will only be the case after around ten years. In the meantime, implicit state guarantees will continue to apply, although the measures initiated will significantly increase the banking sector's stability. In addition, a Banking Union can only be effective if not just the supervision of the banks but also the authorisation to intervene (resolution) is organised at a European level.

Furthermore, establishing the European Banking Union calls for the introduction of a possibility to appeal against decisions of the European Central Bank, for instance by establishing a special section at the European court for appellate cases in the banking sector.

Financial biodiversity

Financial biodiversity increases the stability of the financial system by offering an 'insurance' against choices – that turn out to have been wrong in retrospect – to let some business models grow excessively. It is not certain beforehand which model will prove the most solid, but fostering sufficient diversity will optimise the starting scenario. The impact of the present crisis across the various business models has been diverse. The 'originate to distribute' model has clearly been hit hard, as have banks that relied too much on short-term funding of their long-term lending. The results of cooperative banks can be said to be less volatile than those of commercial banks, owing to the generally limited scale of their investment banking activities.[37] This derives from the nature of cooperative banking operations, with their strong focus on serving consumers in the small and medium-sized business segment. The relative prioritisation of their core business does also mean that their results are comparatively sensitive to economic trends. Cooperative banks generally apply a

[36] Boonstra (2012).
[37] Mooij and Boonstra (2012).

conservative risk profile, in part because they have to submit their strategic choices to the members of the cooperative, who often tend to be relatively cautious. Moreover, compared to banks with shareholders, cooperative banks have fewer options for rapidly increasing their equity capital. Retention of earnings is the main source of equity capital for them. That means caution is a necessity, quite apart from any considerations regarding the meaning of the ownership structure. Another factor is the significant influence that the members have in the governance of cooperative banks.[38] 'Returns' for them consist mainly in the continuity of high-quality services at attractive prices. The aim of short-term profit maximisation and its inherent higher risk profile are not in their long-term interest.[39]

It is in any case essential for the stability of a financial system that it should comprise banks with a diverse range of business focuses. That kind of financial biodiversity contributes to the quality of a financial system. A diverse system that consists of diversely premised banks in terms of their risk profile, customer orientation, governance, size and activities is fundamentally more stable than a more uniformly structured banking sector.

Putting customers' interests first

The past few years have repeatedly shown that not all financial institutions act primarily in their customers' interest. To restore confidence in the sector it is essential that all financial service providers put their customers' interests first again. That will require a different approach, and sometimes also a different culture within the banks. The Netherlands Authority for the Financial Markets (AFM), which was established to supervise business conduct, naturally plays an important part in this respect. Putting customers' interest first is not straightforward, as the interests of diverse customer groups are not always conveniently aligned. A saver sets store by ready access to his funds, a borrower will by contrast want a guarantee from the bank that the borrowed money will be at his disposal for a long time. Savers want to maximise their interest income, while borrowers will seek to minimise their interest expense on their loans. Those interests obviously collide to some extent and banks are required to steer a suitable course between them.

Banks also need to ascertain that customers' activities are not themselves socially irresponsible. Refusing a loan to cut down rainforest may not be in the interest of the customer (the applicant for the loan), but it is socially responsible. In practice, 'putting customers' interests first' means mainly that a bank must in good faith weigh up the diverse interests, both of the customers and the wider social interest, and be transparent about the choices it settles on with regard to them. A bank's product range must be developed from a customer needs perspective, underpinned by transparent and fair terms and conditions. And customers must assume their own responsibilities.

The changed stance of supervisory authorities, which are increasingly reverting to 'rule based' supervision in response to the crisis, to a certain extent restrict a bank's scope for providing customised services to its customers. It is to be hoped that in due course the chances of an alternative approach will increase, with more room being given to banks again to provide added customer value by means of customisation, but also – if customers experience problems due to demonstrably reproachable conduct by their bank – tougher sanctions for the bank.

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[38] In practice this will be more complicated than described here. Rabobank for instance has a finely calibrated governance structure in which the collective comprising the Local Member Banks has substantial power on the one hand, but the central governance body (Rabobank Nederland) exercises supervision of the individual Local Member Banks on behalf of that same collective on the other. In doing so, it exercises supervision over the Local Member Banks. This adds up to a complex balance of power. A detailed analysis of the governance of Rabobank would go beyond the framework of this contribution. See Vogelaar (2012) for a more extensive description.

[39] Llewellyn (2012).

6. Conclusion

Will the measures that have now been taken in the field of supervision, both national and international, lead to a more stable banking sector? In principle, this question can be answered in the affirmative, though several provisos are in our view necessary.

Firstly, much is expected from a range of divergent culture programmes that all the large banks have launched. The recent past has shown that the banking sector is by no means immune to malpractices. At the same time, drawing a caricature of the banking sector is not justified. The people it employs are, by and large, ordinary people, unfortunately sometimes also with the less positive motives that are typical of our species. While a culture programme can therefore certainly make a contribution to the ethical awareness of banks' employees and a keener awareness of the impact of their conduct, it cannot be expected to offer a panacea. It is accordingly important to facilitate greater control of risks, to strengthen buffers of banks and to create the conditions that can increase the speed with which supervisory authorities are able to act. A mix of a preventive and curative approach is therefore required. The speed with which they can act can be raised by measures including recovery and resolution plans and by enlarging supervisory authorities' powers. Major progress is being achieved on all these fronts, as attested above.

Secondly, many of the proposed policies are yet to be implemented. Effectively introducing the large volume of regulations recently issued constitutes a major challenge for policymakers, supervisory authorities and the banking sector itself. A precipitate introduction or a fixation on complying only with regulations is in any case certain not to eliminate the risks, and may shift them to less regulated sectors.

Thirdly, it is important to apply a cross-sectoral approach in both regulation and supervision. There has so far been an overemphasis on subsectors within the financial system, with separate rules for banks, insurers, investment institutions and pension funds. Many financial institutions combine two or more of those activities and are consequently faced with multiple rules and supervision regimes. These activities, and the risks and returns to which they give rise, are also interconnected in the perspective of investors and consumers. Many of today's mortgage products for example consist not just of a loan but also a form of savings (via the repayments) and an investment product, with which capital is built up in relation to the loan, as is the case with savings-based mortgages and investment mortgages.[40] Investors in credit securitisations are likewise subject to multiple regimes. This issue represents a significant challenge for supervisory authorities.

Fourthly, better international coordination of regulation and supervision is required. Not just coordination in Europe, but also between the large blocks of Europe, the US, Asia and Russia. That the G20 is increasingly becoming the driver of substantial reforms in the financial sector is a very welcome development in this context. Financial markets are so closely interwoven that financial arbitrage is a very much reality, and so too is the risk of contagion if things go wrong anywhere in the world. That is nothing new in itself. Cross-border financial crises already occurred decades and even centuries ago.[41] But the international financial interlocking between countries has become closer than ever during the most recent wave of globalisation.[42] Increasing capital requirements, tackling the issue of 'too big to fail', central clearing of derivatives, shadow banking and the policy with regard to rating agencies demand an international approach and are rightly on the G20 agenda.[43]

[40] It should be noted that mortgage products are being simplified, as only the traditional annuity mortgage is still tax-privileged for first-time homebuyers.
[41] Reinhart and Rogoff (2009).
[42] Boonstra (2008).
[43] Financial Stability Board (2013).

Despite these provisos, the financial system can be expected to have become more stable after when all the proposed measures have been introduced. More highly capitalised banks, which in addition adopt a more conservative approach in their operations, will by definition involve less risk than many banks did prior to 2008. Tighter supervision in combination with a remuneration policy geared to the attainment of long-term objectives will also help banks to stumble less quickly. If a bank nonetheless unexpectedly runs into trouble, the option for 'bail-in' and a robust deposit guarantee scheme at a European level will ensure that taxpayers will be protected from having to foot the bill for a very long time.

All of this is good news. But the current and potential future measures cannot eliminate financial crises once and for all. Risk-free banking is a contradiction in terms. Some risks are increasing, including the risk of cybercrime. New banks with perhaps entirely different earnings models will crowd weak banks out of the system. If systemically important banks divest certain high-risk activities, these will shift elsewhere within the system and may still unexpectedly become problematic at some point in time. And banks are by no means always required for hypes to be exposed as mere financial bubbles. Financial markets can also be a major source of financial cycles. Cyclical economic trends are inherent to market economies. Sometimes a downtrend will be accompanied by a financial crisis. The likelihood that this will never happen again is virtually zero.[44] But this does not detract from the fact that, if the introduction of all the proposed measures is carefully calibrated in terms of their impact and timing, the banking sector of the future will be less vulnerable than before 2008 and should be able to absorb most setbacks itself.

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