

Ministerie van Financiën

Policy directions for a resilient banking sector

19 March 2024

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Summary

In March 2023, turmoil gripped parts of the global banking sector, particularly in the United States and Switzerland, bringing back memories of the 2008 financial crisis. Banks in the Netherlands and the EU withstood this turmoil without difficulty. The events in the United States and Switzerland nevertheless once again exposed vulnerabilities in banks. They also showed that governments could still feel compelled to provide support for banks. These events are the immediate backdrop to this report examining the resilience of banks and exploring possible policy options to strengthen the resilience of banks.

As a result of the worldwide reforms in the banking sector after 2008, the resilience of the banking system was strengthened. For example, capital and liquidity requirements for banks were raised, a resolution framework was developed for failing banks, the position of the supervisor was strengthened and the financial infrastructure was made more secure. All these measures contributed to more robust financial institutions and a more stable financial system. They were also intended to reduce the implicit government guarantee for banks which were deemed too big to fail (TBTF) and ensure that taxpayers were no longer on the hook for bank risks. At the same time, the role of non-bank financial institutions (NBFIs) in the system has increased, probably in part as a result of stricter rules for banks. Although the situation of the problematic US banks and Credit Suisse is not directly comparable to the situation in the euro area, the events do illustrate the vulnerabilities which are inherent to the banking model.

This report identifies four focal areas for the resilience of banks: 1) persistent inherent vulnerabilities, 2) digitalisation as a potential risk catalyst, 3) continuing risk of government intervention and 4) increasing regulatory complexity. First, the banking sector still has inherent vulnerabilities. These are related to banks' business models (such as liquidity and solvency risks) and the crucial role of trust. Second, digitalisation may act as a catalyst for these vulnerabilities, by allowing even faster outflows of deposits and the spread of information (or disinformation) through social media. Third, TBTF problems and contagion risk remain relevant risks that may lead to government intervention. Finally, regulation is better geared to the risks, but at the same time there is increasing regulatory complexity. Regulatory complexity may encourage increased scale and evasion and complicate market discipline and supervision.

This report explores the effectiveness of policy options aimed at improving the resilience of banks. The policy options are detailed in the information sheets included as Annex 2 to this report. The sheets describe the expected effects of the policy option on i) financial stability, ii) the real economy, iii) banks' competitiveness, iv) public costs and risks, and finally the policy options are tested for v) feasibility. The desirability of a policy option ultimately requires careful consideration (political and otherwise). To prevent an uneven playing field and leakage effects, adequate regulation of NBFIs is a prerequisite for a resilient financial system.

An important point is that most of the policy options cannot be implemented at a national level by the Dutch government. Those policy options can serve as Dutch input into international negotiations, for which support will then have to be found amongst other countries. A further point is that where there is space for policy options at the national level, their implementation may be undesirable due to concerns relating to the level playing field or other negative side effects. For example, national policy may suffer from leakage effects and may affect the national or international competitive position of banks. Furthermore, the resilience of Dutch banks would benefit from a strengthening of international regulation limiting European and global risks, as the interconnectedness of the global financial sector means that Dutch banks are also exposed to risks outside the Netherlands.

Policy options that are aligned with one or more focal areas in the analysis, and for which the overall picture is not predominantly negative or risky, are included in a policy direction. To help the reader assess the policy options and understand the coherence between them, the report outlines four policy directions. These policy directions contain measures that have a common policy objective and contribute coherently and consistently to addressing the focal areas in the analysis. Measures do not only have a combined effect; each measure can also contribute individually to the objective of the policy direction.

The base direction in this report includes measures that are largely in line with the current Dutch position, but that would also mean taking a further step to strengthen the resilience of banks. This base direction could serve as Dutch input in European and international negotiations. Examples of measures in this direction are tighter liquidity requirements, a continued focus on implementing the Basel standards in Europe without permanent exceptions, greater harmonisation of a number of macroprudential buffers, the creation of a European deposit guarantee scheme (EDIS) without risk-sharing, and the further development of the capital markets union. The measures in this direction collectively contribute to strengthening the resilience of banks and reducing public risks.

The 'better buffers' policy direction contains measures that reinforce the shock resistance of banks and aim to decrease the risk of failure. This policy direction contains measures that raise the capital requirements and buffers, further tighten liquidity requirements and phase out the use of certain complex capital instruments (Additional Tier 1, AT1). These measures would make banks more resistant to unexpected losses or rapid outflows of deposits. At the same time, they may lead to higher financing costs for households and businesses. Some measures may also reduce the complexity and differences between Member States in the application of the prevailing rules to banks, with possible benefits in terms of market discipline and supervision.

The 'strengthening of recovery and resolution' policy direction contains measures aimed at limiting the negative impact of bank failures. The measures contribute to the bail-in principle, whereby risks and any losses are borne as much as possible by shareholders and creditors rather than by the government (and hence the taxpayer). The measures in this direction also contribute to limiting the risk of contagion between banks.

The 'focus on market structure' policy direction contains measures that could strengthen competition in the banking sector and take into account both the benefits and risks of consolidation in the financial sector. TBTF problems and the risk of contagion remain real risks, particularly for the European banking sector. The implicit government guarantee for systemically important banks therefore remains in place to some extent. By focusing on the further development of the capital markets union, a public alternative to the functions of banks and devoting attention to factors that influence market structure when making policy choices, the measures in this policy direction can contribute to competition and diversity in the European banking sector. This will not immediately lead to greater resilience of individual banks, but it may contribute (over the longer term) to the shock resistance of the financial system as a whole.

SHEET	POLICY OPTION
Base direction	
1.	Tightening liquidity requirements
2b.	Variant b: Tightening requirements for high-quality liquid assets (HQLA)
4b.	Variant b: Faithfully implementing Basel standards

Table 1. Policy options in the policy directions

5a.	Variant a: Introducing capital requirements for high concentrations of government bonds
7b.	Variant b: Adjusting the AT1 capital framework
8b.	Variant b: Increasing macroprudential buffers
9b.	Variant b: Harmonising buffers for systemically important banks
15.	Prohibiting issuance of MREL to non-EU investors
16.	Public guarantees for liquidity in resolution
19b.	Variant b: Introducing a European deposit guarantee scheme (EDIS)
24.	Further developing the capital markets union (CMU)

	Policy direction 1: 'better buffers'	
	2a.	Variant a: Tightening requirements for high-quality liquid assets (HQLA)
	3b.	Variant b: Increasing the minimum leverage ratio
	4a.	Variant a: Faithfully implementing Basel standards
	7a.	Variant a: Adjusting the AT1 capital framework
	8a.	Variant a: Increasing macroprudential buffers
	9a.	Variant a: Harmonising buffers for systemically important banks
1		

Policy direction 2: 'strengthening of recovery and resolution'	
10.	Possibility of system-wide restrictions of dividend payments and share buybacks
13.	Introducing a MREL floor
14.	Subordination requirement for the entire MREL buffer
19a.	Variant a: Introducing a European deposit guarantee scheme (EDIS)

Policy direction 3: 'focus on market structure'	
23.	Central bank digital currency as a means of saving
24.	Making competition in the banking sector a secondary mandate of DNB
25.	Assessing stability and resolution risks in consolidation

Introduction

Background

The banking sector fulfils an important role in the economy and in society. For example, banks offer a secure means of saving and making payments, provide mortgages for home purchases and enable businesses to invest by granting them loans. Bank lending is the main form of financing for Dutch businesses. Banks are also an important link in the monetary policy transmission chain, as they play a part in determining the financing conditions.¹

These key economic and social functions makes banks' resilience extremely important. Bank failures during the 2008 financial crisis had enormous consequences for countries' economic and financial stability. In response, an extensive reform agenda was implemented worldwide with the aim of increasing the resilience of the banking sector and avoiding the need for government bank bail-outs. These fundamental measures include stricter capital and liquidity requirements, the development of a resolution framework, a stronger position for the supervisory authority and a more secure financial infrastructure. All these measures contributed to more robust financial institutions, a more stable financial system and fewer risks for taxpayers.

The turmoil in the banking sector in the spring of 2023, however, shows that problems amongst banks may still lead to broad market stress and government intervention. The problems with the US regional banks and Switzerland's Credit Suisse led to intervention by the respective national central banks and governments. Once again, taxpayers were exposed to the risks incurred by commercial banks and their shareholders. Moreover, the Swiss authorities chose not to resolve a global systemic bank that had gotten into difficulty, but instead opted for a government-facilitated acquisition by another systemic bank. This raises the question of whether the current framework of regulation, supervision and resolution for banks is adequate.

Events in the United States and Switzerland also show that the banks' business model still has inherent vulnerabilities, even though Dutch and EU banks withstood this turmoil well. These vulnerabilities are due in part to the volatility of deposits and the high leverage with which banks operate. These factors may be exacerbated by the impact of digitalisation, which enables individuals, businesses and other market participants to anticipate turmoil in the financial system even faster. The global interconnectedness of banks also contributes to the risks in the banking sector, which was reflected in falling share prices of banks worldwide. It is therefore important to continuously evaluate the system of regulation, supervision and crisis management and see whether any strengthening is required.

Objective

This report presents an analysis of the financial resilience of banks in the light of the recent turmoil. It starts with an analysis of the events of the spring of 2023. The report looks at how robust the banks and the banking sector are at the present time and identifies vulnerabilities in the banking sector. It then assesses policy options, including both adjustments to the current system of regulation, supervision and resolution, and alternative policy options involving more fundamental changes in (or outside) the system. For these policy options, the report then examines the expected impact on financial stability, the real economy, the competitiveness of

¹ Monetary transmission is the process whereby monetary policy feeds through to the economy. This transmission takes place through various channels, of which banks' financing conditions are an important one.

banks and public costs and risks. It also considers the feasibility and coherence of the various policy options.

The objective of this project is to explore the advantages and disadvantages of policy options to strengthen the resilience of the banking sector. It focuses on exploring policy options that can serve as input for Dutch engagement in international negotiations or implementation at national level.

Many policy options are difficult to achieve in the short term, because banking regulations are mainly drawn up in a European or wider international context. Policy options are thus often not a national competence. The Netherlands can nevertheless advocate for policy options internationally. Furthermore, the Dutch and European banking sectors are interconnected with the global financial system, and some policy options involve complex transition issues. In the long term, the Netherlands can promote policy options by placing them on the agenda and seeking support for them in international and European policymaking forums. When considering policies that fall within national competencies, the impact on the international playing field and spillover effects should be taken into account.

Finally, this report describes policy directions. Policy directions comprise measures that are to some extent connected and make a coherent and consistent contribution to a common objective. These policy directions are intended to provide guidance in the choice of measures.

Reader's guide

Chapter 1 discusses developments in the financial sector since the crisis of 2008 as well as the financial turmoil in March 2023. Chapter 2 draws lessons from the events and analyses the current vulnerabilities of the banking sector. It leads to the identification of four focal areas that give rise to policy options. These are explained in Chapter 3. Here the policy options are categorised under a base direction and three additional policy directions, each of which includes options pursuing the same policy objective. Annex 1 contains an overview of all the analysed policy options. Annex 2 contains the set of information sheets detailing the individual policy options. Annex 3 contains the terms of reference for the project group.

1. Context: crisis, reforms and recent turmoil

This chapter describes developments in the resilience of the banking sector since 2008. It describes how the 2008 financial crisis exposed vulnerabilities in individual banks and in the financial system (Fout! Verwijzingsbron niet gevonden.). This crisis changed the thinking about banks and their supervision and was a catalyst for large-scale reforms of the supervision and resolution framework aimed at making the system more resilient. The next part of the chapter (Fout! Verwijzingsbron niet gevonden.) describes how the turmoil in the banking sector in the spring of 2023 once again sparked a public debate on bank regulation and supervision. The final section (1.3) describes the current state of the Dutch banking sector.

1.1 The 2008 financial crisis

The financial crisis in 2008 exposed vulnerabilities in the banking sector. Governments and central banks around the world had to intervene to rescue financial institutions. These interventions were necessary to maintain critical functions of financial institutions such as lending, to protect savers and to prevent contagion between institutions. It became clear that major banks may be too big to fail or systemically important. Governments nationalised banks, provided capital and liquidity support and either guaranteed or acquired risky assets. Central banks also had to support banks on a massive scale with emergency liquidity while substantially easing the normal requirements. In the Netherlands, the banks Fortis/ABN AMRO and SNS Reaal were nationalised and various banks received capital or liquidity support both during and after the crisis.²

The deficient regulation and supervision in the banking sector had major financial and economic consequences for national governments. Before and during the financial crisis, there were only limited agreements on the orderly winding up or rescuing of banks and the associated financing. This therefore depended on *ad hoc* government measures. The public had to bear the risks and costs of the banking crisis. Shareholders and particularly creditors of banks that got into financial difficulty often remained out of harm's way or sometimes even benefited from the government intervention.³ Hence there was renewed talk of bail-outs of banks, shareholders and creditors. The major cost of the banking crisis for governments was one of the causes of the subsequent sovereign debt crisis in the EU. In addition to the direct costs resulting from government intervention, it also demonstrated that financial crises lead to a considerable loss of economic growth.⁴

The financial crisis spurred major reforms in regulation and supervision aimed at reducing risks to the economy and the government. Risks amongst banks, and for governments, were limited by a tightening of policies on regulation, supervision and resolution. These included increased capital and liquidity requirements under the Basel 3 standards, strengthening capital buffers and restricting banks' leverage (see also Box 1). The market infrastructure was also reformed, with an emphasis on greater transparency, central resolution of failing banks and the use of collateral haircuts. Rules were also introduced to make shareholders and creditors jointly responsible for bank losses in the resolution of failing banks (referred to as a bail-in) and supervision was improved to achieve better control of systemically important banks.

² Netherlands Court of Audit (undated) Kredietcrisis. Accessed December 2023

³ The gains or losses for shareholders and creditors differed from case to case. A full nationalisation generally results in shares losing almost all of their value. In cases where support actions led to a bank rescue without nationalisation, shareholders generally benefited: after all, without a rescue the institution might have gone bankrupt. Creditors are largely indemnified against losses (apart from possible falls in the value of securities) in cases of government intervention.

⁴ Furceri, D. and Mourougane, A. (2012). The effect of financial crises on potential output: New empirical evidence from OECD countries. Journal of Macroeconomics, 34(3), 822-832.

Box 1. Reforms of the Basel prudential standards

The Basel 3 standards were established in the years after the financial crisis. They provide an international regulatory framework for banks that must be implemented worldwide by the affiliated jurisdictions. The framework was completed in 2017 with a package also known as Basel 3.5, which restricts banks' ability to use their own models to determine their capital requirement.⁵ The first Basel 3 standards were implemented in EU legislation (CRR and CRD) with a number of material deviations.⁶ The final Basel 3 standards (Basel 3.5) are currently being implemented in the EU by means of a revision of the CRR and CRD, again with deviations.⁷

In the EU, the Basel standards were implemented through the single rulebook for European banks. This rulebook (harmonised EU regulations for banks) aimed to guarantee transparency and a high-quality level playing field while also allowing joint supervision.⁸ The post-crisis reforms of the Basel standards include the following:

- A substantial tightening of the minimum prudential requirements applying to each bank (Pillar 1).⁹ In the case of capital, this tightening is both qualitative, in the form of stricter requirements governing what counts as capital, as well as quantitative, i.e. higher capital requirements for risk-weighted assets. A minimum leverage ratio of 3% in relation to (risk-)unweighted assets was also introduced.¹⁰ Consequently, the Basel framework consists of a combination of primarily risk-weighted requirements and the leverage ratio as a backstop.¹¹Liquidity requirements were also introduced: the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR).¹²
- A tightening of supervisory powers, including means whereby the supervisory authority can impose bank-specific requirements (Pillar 2). These powers include the possibility for supervisory authorities to set additional requirements to cover risks that are disregarded or not sufficiently taken into account in the (Pillar 1) minimum capital requirements (Pillar 2 requirement – P2R). They also include the possibility for supervisory authorities to examine banks' specific vulnerabilities in certain scenarios by means of stress tests and, on that basis, to state expectations with regard to the capital to be held by banks in addition to their binding capital requirements (Pillar 2 guidance – P2G).
- In addition, there are tighter, revised reporting requirements (Pillar 3) to facilitate market discipline. These stricter rules apply to the transparency that banks must maintain, for example with regard to their risk management and capital structure.

The Basel Committee concluded that the European implementation of the Basel 3 standards was "materially non-compliant". BIS (2023). RCAP Jurisdictional assessments: regulatory implementation consistency.

¹⁰ The leverage ratio restricts leverage by requiring a minimum amount of equity.

⁵ Also known as internal models. An internal model is an in-house statistical model used by a bank to determine how much capital is required on the basis of past losses.

 ⁷ European Commission (2023a): Latest updates on the banking package.
 ⁸ The introduction of the single rulebook significantly reduced differences in bank regulation between member states compared

to the situation before the 2008 crisis.

⁹ Prudential requirements are intended to guarantee the stability of banks and the banking sector.

¹¹ The minimum ratios for core capital (CET1), Tier 1 capital and total capital ratios are 4.5%, 6% and 8% respectively. These requirements apply in respect of risk-weighted assets, i.e. the weight for which assets count depends on their risk, as reflected in a risk weighting expressed as a percentage. No risk weighting is used to calculate the leverage ratio.

¹² While capital requirements concern a bank's solvency, liquidity requirements in relation to assets concern the ability to meet short-term liabilities.

These requirements are intended to strengthen market discipline by better enabling investors and other stakeholders to assess the financial health and risk profiles of banks.

Macroprudential requirements were also introduced, including releasable buffers, to address systemic risks.¹³ In addition to a uniform capital conservation buffer of 2.5%, these include macroprudential requirements related to the systemic importance of a bank, endogenous cyclical risks and other systemic risks. The use of capital buffers to supplement firm minimum requirements also provides a protective layer, an 'airbag'. If a bank falls below threshold values for a buffer, it can continue to operate without having to be declared 'failing or likely to fail' (FOLTF) by the supervisory authority (but with strict measures such as restrictions on dividend payments.)

Bank supervision was also fundamentally reorganised in the euro area, with the launch of the banking union and the establishment of the European Single Supervisory Mechanism (SSM). This joint supervision was aimed at more independent, consistent and critical supervision of banks and a level playing field between banks from different Member States. In addition, the supervisors and competent authorities were assigned macroprudential duties and powers to look not only at bank-specific risks but also at system-wide risks.

Rules and institutions were also created to facilitate the resolution of failing banks at a European level. The Single Resolution Mechanism (SRM) was established, consisting of a regulatory framework and institutions to ensure orderly resolution of failing banks. In the case of orderly resolution, the intention is to continue the critical functions of failing banks, protect savers (including those covered by the deposit guarantee scheme) and guarantee financial stability. The Single Resolution Fund (SRF) was also established, enabling the resolution authority to recapitalise banks in the event of resolution.¹⁴ The SRF is funded by contributions from the banks themselves.

Banks must now prepare themselves better for a situation in which they fail or might fail, partly to provide clarity for their shareholders and creditors. Banks are required to make preparations to be resolvable in the event of their failure ('living will'). Even more importantly, banks must hold special buffers (minimum requirement for own funds and eligible liabilities, MREL), which can be written down in the event of a bank failure. These buffers can be funded with equity and/or specific debt that investors know may be written off in the event of the failure of the bank. The intention is that the losses in the event of a bank failure can then be absorbed by shareholders and creditors . In contrast to a bail-out in which shareholders and creditors are unaffected (or partly unaffected), this is known as a bail-in.

The protection of savers was also improved by strengthening the deposit guarantee scheme (DGS). After the crisis, the protection afforded by various national DGSs in the EU was harmonised and raised to $\leq 100,000$. This means that savers get back up to $\leq 100,000$ of their savings when a bank collapses. It was also agreed that each Member State must set up a deposit guarantee fund (DGF), to be funded by banks. This fund would be used to pay for any distribution by the DGS. The intended European Deposit Insurance Scheme (EDIS) has not taken off for various reasons.

¹³ Whereas microprudential requirements are intended to protect an individual bank against individual (idiosyncratic) risks, macroprudential requirements are intended to limit system-wide risks that may arise because risks manifest themselves simultaneously in multiple banks or because banks exacerbate the risks through their actions.

¹⁴ Resolution is the orderly winding up of a bank that is failing or threatens to fail.

In addition, measures have been taken in various countries to price in the implicit government guarantee of systemically important banks. In the Netherlands, the bank tax was introduced for this purpose in 2012. As a result, banks (partly) pay for the risks that the government incurs as a result of the implicit guarantee. This tax is not explicitly intended as an insurance premium and does not therefore intend to price in exactly the same external effects.

Similar measures have also been taken in many countries outside the EU in order to tackle the TBTF problem. A resolution mechanism, bail-ins of shareholders and creditors, the obligation to set up specific buffers to allow bail-ins, funds for the recapitalisation and protection of savers financed by the sector: these are all best practices in the major Western jurisdictions resulting in part from internationally coordinated work by the Financial Stability Board (FSB).

At the same time, and probably also partly as a result of stricter regulations for banks, the role of non-bank financial institutions (NBFIs) in the system has increased. These institutions, such as pension funds and insurers, are partly interconnected with banks and partly competitors for certain services, as, for example, in the case of mortgage lending in the Netherlands. The liability profile of such operators with long-term liabilities generally also lends itself well to such long-term investments. In recent years, however, the financial world has also been shaken a number of times by turmoil caused by non-banking financial institutions. In September 2022, the strategies of certain pension funds and asset managers in the United Kingdom triggered a crisis in the British bond market.¹⁵ A year earlier, in March 2021, the collapse of the Archegos investment firm and the bankruptcy of the financial service provider Greensill led to losses of billions of dollars amongst global banks, in both cases also involving Credit Suisse.¹⁶ Even before that, at the beginning of the coronavirus crisis in March 2020, acute, high demand from investors for liquid assets caused market stress and sharp price falls on stock and bond markets in the United States and Europe.¹⁷

1.2 The turmoil in the banking sector in the spring of 2023

In March 2023 the world was again confronted with turmoil in the banking sector. This time it stemmed from a number of regional banks in the United States. Silicon Valley Bank (SVB) in the United States had a combination of rapid balance sheet growth with a large dependence on uncovered deposits and a specific customer group. In particular, its interest rate risk was not properly managed. SVB invested mainly in long-term bonds, on which unrealised losses had accumulated due to the rapid rise in interest rates.¹⁸ The bank got into liquidity problems when savers (particularly large, professional ones) withdrew large volumes of deposits within a short period. Increased digitalisation, combined with largely uncovered deposits, led to a much faster cash outflow than had been previously seen. In just one day, more than \$40 billion (around 25%) of deposits flowed out of SVB, with forecasts that as much as \$100 billion could flow out on the following day.¹⁹

The financial turmoil in the US rapidly spread to the European continent, leading to the forced acquisition of Credit Suisse by UBS in Switzerland. Credit Suisse had long been affected by various problems concerning integrity, its business model and its profitability, as a result of which investors no longer had much confidence in the bank. After a large shareholder in Credit Suisse publicly announced that it would no longer provide financial support for the bank, the

¹⁵ Pinter, G. (2023). An anatomy of the 2022 gilt market crisis.

¹⁶ ESRB (2021a). EU Non-bank Financial Intermediation Risk Monitor 2021, NBFI-risk monitor no. 6, August 2021

¹⁷ Duffy, D. (2023). Resilience redux in the US Treasury market, Federal Reserve Bank of Kansas City.

¹⁸ The price/market value of a bond moves inversely to the interest rate. An interest rate rise thus causes a fall in value of issued bonds. Due to the regulatory framework in the United States, those losses had not yet been absorbed, or realised, in the capital.

¹⁹ Federal Reserve (2023). Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank, 28 April 2023

share price and the value of the bonds dropped sharply. Depositors also began to withdraw their money. The Swiss supervisory authority, central bank and government found themselves compelled to intervene by having Credit Suisse sold to UBS with government support.

The winding up of Credit Suisse was not fully in line with generally accepted principles of bank resolution.²⁰ According to the Swiss authorities, winding the bank up in accordance with the steps of the resolution plan could have triggered a global financial crisis.²¹ Taking the bank into resolution would have given too little guarantee of restored trust in the bank. The supervisory authority also considered the possible application of the resolution instruments "extremely drastic", with harmful effects on the Swiss economy and the financial sector, potentially being the first domino of a financial crisis.²²

Although no bank failed in the EU during that period, turmoil also briefly surrounded Deutsche Bank. Shares in Deutsche bank plummeted by 14% on 24 March, after it became clear that the German bank would have to pay higher interest on its credit default swaps, a form of insurance for bondholders against default. The price fall stopped, particularly after soothing words by European leaders rejecting the comparison between Credit Suisse and Deutsche Bank and reassuring the market about the resilience of European banks.

The turmoil showed that taxpayers could still be exposed to risks in banks. The authorities in the United States and Switzerland acted decisively and tried to quell the financial turmoil with government guarantees (including temporary ones). Although the problems and rules were materially different in the United States and Switzerland, it is not inconceivable that similar problems could also arise in the EU and that governments could also be required to intervene. The cases show that TBTF problems are still present in the financial sector.

It is important to note that the situation in the EU is different from the situation that affected the American banks and Credit Suisse. In the United States, the banking sector had been deregulated since 2018. Exceptions were made to the banking rules for small and medium-sized banks (with a balance sheet total of less than \$250 billion), including with regard to interest rate and liquidity risk and stress tests. The former are strict requirements in the EU and apply to both large and smaller banks. In Switzerland, the problems at Credit Suisse had been going on for some time, but the supervisory authority had limited capacity and powers to intervene. In the EU, the supervisor has more powers and capacity to intervene in an appropriate and timely manner when banks encounter problems. This certainly also applies with regard to integrity supervision and supervision of the business culture and governance. In the SSM and in the Netherlands specifically, this is an important focal area for the supervisory authority for which actual intervention is possible, whereas the analyses concerning Credit Suisse showed that the Swiss supervisory authority had too little focus on these problems and too few powers.²³

1.3 State of the Dutch banking sector

By international standards, the Netherlands has a relatively large and concentrated banking sector. The combined balance sheet total of the Dutch banking sector is more than two and a half times as large as the Dutch economy. It has shrunk substantially in recent decades, however; before the financial crisis of 2008, the banking sector was more than five times the size

²⁰ In Switzerland, it was decided to not to declare Credit Suisse failing or likely to fail (FOLTF) and take it into resolution to ensure an orderly winding up, which would have been the usual process in the resolution mechanism. Instead, it was decided to have another Swiss bank, UBS, acquire Credit Suisse and to write off part of the sums owed to shareholders and creditors and to provide guarantees and liquidity support from the government and central bank.

²¹ Jones, S. (2023). Rules for winding up big banks do not work, Swiss finance minister warns. Financial Times.

²² Armstad, M. (2023) Address by Marlene Amstad, Chair of FINMA's Board of Directors. FINMA; Bern.

²³ ECB (2023a). ECB Banking Supervision: SSM supervisory priorities for 2024-2026. Accessed December 2023

of the economy. The Dutch banking sector nevertheless remains relatively large in European terms, with four member states having a larger sector relative to the size of their economy.²⁴ The concentration in the Dutch banking sector is also very high, with three major banks whose joint balance sheet total makes up 78% of the Dutch banking sector. DNB has designated five Dutch banks as systemically important at the national level: ING, Rabobank, ABN AMRO, BNG Bank and Volksbank.

Dutch banks mostly have a universal business model, with relatively large volumes of mortgage financing. Almost 50% of loans that banks grant to the private sector consist of mortgages. This percentage is higher in five other European countries.²⁵ Since banks are relatively dependent on this mortgage financing for their profit and are heavily exposed to developments in the Dutch housing market, this leads to concentration risks. This dependency applies to the bulk of Dutch banks and reflects a lack of diversity in business models and the associated vulnerability to shocks. Risks for mortgages are partly limited by borrowing rules. The Dutch 100% limit on the maximum mortgage relative to the home value is high by international standards. Due to the systemic risks of mortgages and the housing market for Dutch banks, DNB has imposed additional capital requirements on banks.²⁶

Dutch banks are mainly dependent on deposits for their financing. The liability side of the bank balance sheet consists of equity and debt. Equity includes the capital invested by shareholders and retained profits. On average, slightly over 5.5% of liabilities in European and Dutch banks consist of equity.²⁷ The remaining liabilities are debt. For Dutch banks, around 70% of debt capital comprises deposits, whereas for European banks this level is just over 65%.²⁸ Deposits are freely available and thus constitute a liquidity risk for banks. In addition, banks finance themselves to a lesser extent with loans, such as bond issues. In the case of Dutch banks they make around 22% of debt, while for European banks the figure is 19%. Loans are often a longer-term form of financing. The remainder of the debt consists of a residual category that includes derivatives, tax liabilities and provisions.

Although bank lending to businesses has decreased, it remains an important source of financing in the Dutch economy. Whereas the percentage of outstanding bank loans relative to GDP at the beginning of 2013 was still 127%, by the beginning of 2023 it was 90%. This fall was not caused by substitution of non-bank financing, however. In the same period, total outstanding credit to the private sector decreased from 280% to 215%.²⁹ Although bank financing remains the main source of financing for Dutch business, the share of non-bank financing for SMEs rose from 5% in 2017 to 11% in 2022.³⁰ The Interdepartmental Policy Study (IBO) on business finance will be published by June 2024 at the latest.³¹ This IBO will identify constraints in the corporate finance market and examine policy options in this area.

Dutch banks are in a relatively good financial position. The average core capital and leverage risks in mid-2023 were 16.0% and 5.6% (Figures 1 and 2), well above the statutory minima including buffers for systemic risks, and on a par with the European average (despite differences between Member States).³² Dutch banks' liquidity risks are also well above the

²⁴ ESRB (2023). ESRB risk dashboard (Issue 45). 14 September 2023)

²⁵ See footnote 24.

²⁶ DNB (2022a), Financial Stability Report, autumn 2022 and Article 2:2 of the regulations on specific provisions in the CRD and CRR.

²⁷ EBA (2023a). Risk Dashboard, data as of Q2/2023

²⁸ EBA (2023b). Risk Dashboard, data as of Q3/2023

²⁹ BIS (undated). Data Portal. Accessed January 2024.

³⁰ Stichting MKB Financiering (2023) and Stichting MKB Financiering (2018).
³¹ Ministry of Finance (2023a). Budget Memorandum 2024, September 2023

³² EBA (2023a). Risk Dashboard, data as of Q2/2023. The core capital (CET1) ratio reflects the amount of capital of the highest

quality relative to risk-weighted assets. The leverage ratio shows the degree of leverage, i.e. the amount of capital bank has relative to assets.

statutory minima, with an LCR averaging 160% (the same as the European average).³³ The financial resilience of Dutch banks can also be seen in the different stress tests conducted by the European Banking Authority (EBA) and DNB.³⁴ These show that a plausible 'bad weather' scenario could have a substantial impact on the capital and liquidity position and earning capacity, perhaps even more so than in the case of European competitors. Nevertheless, it is clear that Dutch banks would also be able to absorb these substantial shocks. The IMF reached a similar conclusion in the Financial Sector Assessment Program (FSAP) conducted in 2023.³⁵



*Figure 1: Core capital ratios and leverage ratios of Dutch and European banks (source: EBA interactive dashboard)*³⁶



Figure 2: average capital ratios per Member State (source: EBA interactive dashboard)

Dutch banks are more resilient than before the financial crisis in 2008. Reforms to the capital framework after the financial crisis contributed significantly to better capitalisation. The

³⁴ DNB (2023a) and DNB (2023b).

³⁶ During the pandemic there were temporary exceptions for the method of calculating the leverage ratio, so the leverage ratio in these years presents a different picture.

³³ EBA (2023c). EBA Report on Liquidity Measures under Article 509(1) of the CRR, EBA/Rep/2023/04. The LCR is a ratio that measures whether a bank has sufficient assets that could rapidly be liquidated to meet liabilities in the event of an outflow over a stress period of 30 days.

³⁵ IMF (2024), Kingdom of the Netherlands–The Netherlands: Staff Concluding Statement of the 2024 Article IV Mission

introduction of resolution rules also made an important contribution to the more orderly winding up of failing banks. Attention has also focused on the supervision of conduct and culture in recent years. Supervisory authorities have carried out a lot of work to strengthen the risk control and prudent decision-making amongst banks.³⁷

Dutch banks outperform other European banks with regard to earning capacity. In a recent study, DNB concludes that the Dutch sector is not only financially resilient but also increasingly cost-efficient.³⁸ The interest margin, the difference between interest income and interest expenditure, remains the foundation of the Dutch banking sector's business model. In past decades, the average return on equity (RoE) of Dutch banks averaged 8-10%, compared to 5-7% for European banks (Figure 3).³⁹ The European banking sector has for some time had to deal with low profitability, despite the recent higher profits due to the rapid rise in interest rates (see Box 2). There has also been intense debate on how the European banking sector – which has low market valuations – could be made more attractive to investors, and how overbanking could be tackled.^{40 41} Solutions are often sought through greater competition, including by non-banks, or through more consolidation. Consolidation, however, may also lead to larger and less easily resolvable banks.⁴²



Figure 3: return on equity (RoE) of Dutch and European banks (source: EBA interactive dashboard)

Box 2. Recent profits of Dutch banks

A healthy and profitable business model supports the resilience of banks and contributes to financial stability. Profitability enables banks to build up buffers and strengthen their capital position. A healthy and profitable business model also offers banks

³⁸ DNB (2023). Dutch banks are resilient but need to step up their ambitions. DNB press release, 28 November 2023

³⁷ DNB (2023c). From reflex to reflection, news item on supervision. 30 January 2023

³⁹ EBA (2023a). Risk Dashboard, data as of Q2/2023. As capital buffers increased at the same time, the return on their assets (RoA) rose more sharply.

⁴⁰ Overbanking is the term generally used to describe the excess of banks (particularly weak ones) in Europe or excessive dependence on the banking sector, which is relatively large compared to the real economy.

⁴¹ ESRB Advisory Scientific Committee (2014). Is Europe Overbanked?, Report No. 4/June 2014, p. 42.

⁴² Nouy, D. (2017). Too much of a good thing? The need for consolidation in the European banking sector. Speech by Danièle Nouy, Chair of the Supervisory Board of the ECB, at the VIII Financial Forum, Madrid, 27 September 2017.

the possibility to continue investing. For example, banks can operate more efficiently, reduce costs and provide better service for their customers.

Dutch banks have reported high profits in recent quarters. Figure 3 shows that the average RoE in the third quarter of 2023 rose considerably compared to previous years, to 12.5%. It has consequently risen faster in recent quarters than the average in Europe. The net result of all Dutch banks in 2022 amounted to almost \in 13 billion, while in the first half of 2023 the figure was already \in 10.5 billion.

Higher interest margins are the basis for the rapid rise in recent profits. Interest rates on variable new business loans and mortgages have risen sharply, while savings rates have risen less fast. The delayed impact on savings interest rates can be explained in historical perspective and can also be seen in other member states. The impact in the Netherlands is even stronger than elsewhere in the eurozone.⁴³ A possible explanation for the delayed impact on savings interest rates is a lack of competition in the Dutch savings market. ACM is currently investigating this at the request of the Minister of Finance.⁴⁴ Historically low provisions and higher commissions have also contributed to the high profitability.

Dutch banks only have limited exposure to their own government.. That means Dutch banks have few assets on their balance sheet that are directly related to the Dutch government, such as government bonds. The direct interconnectedness between Dutch banks and the government is consequently limited. For example, around 3% of the total assets of Dutch banks comprise government bonds issued by the Dutch government.⁴⁵ Exposure to other European banks in terms of equity can also pose a risk for the Netherlands, however, due to the interconnectedness between Member States in the eurozone. Banks in southern Europe in particular are more exposed to their own government. In Italy, a large part of banks' total assets, around 17%, comprise exposures to the Italian government. Banks' large exposure to their own government may give rise to a negative spiral in which financial problems amongst banks and governments reinforce each other.

DNB has actively used macroprudential instruments in recent years. For example, DNB revised the framework for the countercyclical capital buffer (CCyB) during the pandemic and raised the buffer from 0% to 1% in 2022 and again from 1% to 2% in 2023 (effective in May 2024), in the light of cyclical systemic risks.⁴⁶ In addition, in 2022, DNB introduced a lower limit for the risk weighting of Dutch mortgage loans for banks using internal models, due to increased financial stability risks.⁴⁷

⁴⁶ DNB (2023e). DNB raises countercyclical capital buffer (CCyB) from 1.0% to 2.0%, DNB news item on supervision, 31 May 2023

⁴³ Gilbert, N., Klaver, I. and Sleijpen, O. (2023) and ECB (2023b)

⁴⁴ Ministry of Finance (2023b). Letter to Parliament on bank profits and ECB monetary policy, 12 September 2023

⁴⁵ CPB (2023). Risicorapportage financiële markten 2023, CPB Netherlands Bureau for Economic Policy Analysis, The Hague

⁴⁷ DNB (2022a). Financial Stability Report, autumn 2022. Amsterdam

2. Analysis of banks' resilience

This second chapter contains an analysis of banks' resilience. It first analyses the current vulnerabilities of banks (2.1). These are largely known vulnerabilities, but the recent turmoil has provided new insights in various areas about how risks may manifest themselves. Lessons can be drawn from these for the framework of prudential regulation and resolution; these are discussed in the following section (0 and 2.3 respectively). This chapter concludes with a summary of the focal areas that result from the analysis and that can possibly be addressed with policy options.

This analysis focuses on the banking sector in general, not only on the Dutch banking sector. The Dutch banking sector and the economy are strongly interconnected with the international financial system, both within Europe and globally. That makes the Netherlands sensitive to instability and crises in foreign financial markets. It is therefore important to look not only at the resilience of the Dutch banking sector, but also the banking sector at European and international level. This international perspective is also important because the bulk of regulations and supervision of banks is negotiated internationally.

2.1 Vulnerabilities

Banking activities are inherently associated with risks, including risks with regard to liquidity, credit and interest rates. First, there are liquidity risks. Banks largely financing themselves with short-term deposits that can be withdrawn immediately (liquid funds). They use these to finance their customers in the form of long-term assets such as business loans and mortgages (illiquid funds). This combination of activities is known as liquidity transformation. These activities make banks sensitive to a bank run - a sudden large outflow of deposits. Second, there are credit risks, because banks are sensitive to fluctuations in the economy and in the financial markets. If customers cannot repay their loans, for example due to an economic recession, this leads to losses for banks. Third, banks face interest rate risks. They earn money by means of the difference between the interest rate they pay on deposits and the interest they receive on loans (the interest margin). If short-term interest rates rise, this can reduce banks' interest margin, impairing their profit. Fourth, there are market risks because fluctuations in market prices can lead to losses of market value of financial assets on the bank's balance sheet. Ultimately these risks can result in difficulties relating to long-term liabilities, which is also known as solvency risk. Banks may also be exposed to operational, legal and reputational risks, and risks may arise due to poor corporate governance or risk management. The current supervisory framework for banks is focused on these vulnerabilities with the aim of mitigating risks.

It is very important for a bank that savers and investors have confidence in its financial **position**. For example, if there is unease about the bank's financial position – regardless of whether it is objectively justified – a self reinforcing dynamic may arise amongst savers and investors. A loss of confidence may prompt investors to sell their shares in the bank and savers may withdraw their deposits. A negative spiral can arise as savers and investors see falling share prices and liquidity problems as confirmation of their lack of confidence in a bank, leading to even greater unease.

Vulnerabilities of banks pose a risk to the real economy. Banks are dependent on, but also influence the economy. In an economic downturn, defaults can increase, causing credit risk to materialise posing difficulties for banks. Conversely, banks can contribute to excessive credit growth and the formation of bubbles in the economy, exacerbating the risk of an economic crisis, In the event of setbacks, banks can restrict credit, which can lead to bankruptcies and a slowdown of economic growth. In the Netherlands, the housing market may play an important role in

strengthening this procyclicality given the high levels of private debt. For example, there was a sharp fall in consumption amongst homeowners who found themselves in negative equity after the financial crisis.⁴⁸

There is also an interdependence between banks and governments.⁴⁹ First, as described above, banks in some countries have a large volume of bonds of their own government on their balance sheet. A downgrading of the government's credit rating therefore has a direct negative impact on the value of the assets on the bank's balance sheet. In the Netherlands, the direct exposure of banks to their own government is limited. Second, due to the crucial role of banks in the economy, there is still a risk that governments will have to intervene to rescue banks, leading to larger government debt. The interdependence between banks and governments may give rise to a negative spiral in which financial problems amongst banks and governments negatively affect and reinforce each other. The negative spiral is also referred to as a doom loop. During the European debt crisis there was a risk of a doom loop particularly in countries with high debt levels and limited fiscal headroom. Due to the risk of contagion between banks and between Member States, this may have consequences for the rest of the European banking sector. In the latest ECB report on financial stability in the euro area, the ECB points to the increased risk of government debt in the EU, particularly in the medium term.⁵⁰

Direct and indirect interdependences in the financial system contribute to structural systemic risks, with problems in one bank potentially affecting the whole system. Both individual banks and the banking sector as a whole fulfil crucial functions in the financial system and the economy and society. Those banks are thus systemically important. Vulnerabilities in individual banks can rapidly spread to other banks due to interconnectedness, for example through interbank financing. In particular, vulnerabilities in systemically important banks can affect the whole of the financial system, with the failure of one financial institution triggering a chain reaction that threatens the stability and operation of the banking and financial system as a whole.⁵¹ A loss of confidence on the part of savers and investors in financial institutions can lead, for example, to bank runs or falling share prices.

Interconnectedness with NBFIs also contributes to systemic risks Banks have links to NBFIs, such as investment funds or insurers, through ownership, loans, investments and derivative positions. NBFIs are less strictly regulated than banks. The interconnectedness with NBFIs exposes banks to liquidity, market and credit risks, in a sector where these risks are less transparent and less regulated. Financing by NBFIs is an important source of liquidity, but also a potential channel of contagion for banks. NBFIs mainly hold their liquidity buffers in the form of deposits and very short-term transactions with banks.⁵² Dutch banks obtain 13% of their financing from NBFIs. International and European policymakers appreciate the importance of strengthening the resilience of NBFIs. This is because NBFIs have a growing role in the system, NBFIs were involved in various stress episodes in recent years and supervisory authorities want to prevent risks shifting from banks to NBFIs instead of being reduced (waterbed effects).⁵³

Diversity in business models in the financial sector contributes to economic growth and financial stability. The Dutch economy is relatively bank-oriented.⁵⁴ This means banks play a dominant role in financial services and lending more specifically. This orientation on banks also

⁵³ FSB (2023a). FSB Work Programme for 2023.

⁴⁸ Teulings, R. and Zhang, L. (2019). Huishoudens met hoge hypotheek bezuinigen tijdens recessie. CPB Memorandum. April 2019.

⁴⁹ Dell'Ariccia, G., Ferreira, C., Jenkinson, N., Laeven, L., Martin, A., Minoiu, C. and Popov, A. (2018). "Managing the sovereign-bank nexus", Working Paper Series 2177, European Central Bank ⁵⁰ 5CB (2023b). Financial Stability, Paview, Newmon, 2023.

⁵⁰ ECB (2023b), Financial Stability Review, November 2023.

⁵¹ FSB (2011), Policy Measures to Address Systemically Important Financial Institutions. 4 November 2011

⁵² ECB (2023c). Financial Stability Review, May 2023

⁵⁴ CPB (2019), Dutch SME bank financing, from a European perspective

applies to most other EU countries. The banking landscape in the Netherlands is also heavily concentrated and banks' business models present a very similar picture.⁵⁵ This homogenous market structure can entail risks. Diversity in business models in the financial sector leads to competition, innovation, efficiency and freedom of choice for individuals and businesses and thus contributes to economic growth and a more shockproof financial sector.⁵⁶

Both a larger banking sector and a large market share for individual banks increase systemic risks. The larger a bank is in relation to the economy, the greater is the impact of a bank failure or necessary rescue operation. It has also been shown that in countries with a larger banking sector private debts are higher and banks are financed with greater leverage.⁵⁷ Countries with a larger and fast-growing banking sector also have shown to be hit harder by crises in the banking sector, which can lead to, for example, higher public debt levels and more non-performing loans on bank balance sheets.⁵⁸ The failure of a bank with a large market share leads to greater risks to the economy because there is a higher chance that critical functions are jeopardised and the cost the government for a rescue operation is greater. Global and domestic systemically important banks therefore must hold higher capital buffers.

In the case of consolidation in the banking sector a precarious balance between efficiency and cross-border diversification on the one hand and market power and TBTF problems on the other has to be found. Consolidation, a merger or acquisition of a bank can in general lead to higher efficiency and thus lower costs for consumers and businesses and healthy profitability for banks. In addition, cross-border consolidation means that banks are less susceptible to country-specific shocks due to their diversified portfolios. However, consolidation can also be associated with increasing risks as banks become larger and more complex and can lead to more market power. This can result in less competition and diversity in the financial sector and an increase in TBTF problems.⁵⁹

Banks are also influenced by macroeconomic and geopolitical developments and climate and operational risks. Macroeconomic developments, such as higher inflation and interest rates, and geopolitical tensions lead to greater volatility and uncertainty for banks. High inflation and uncertain growth prospects can put increasing pressure on banks' business model. Climate risks are constantly increasing and can pose a threat to the resilience of banks due to increasing physical risks (such as an increased risk of collateral impairment due to flooding) and transition risks (such as stranded assets⁶⁰). Operational and cyber risks are also increasing.⁶¹ This requires a holistic policy, but that is outside the scope of this report.⁶²

Digitalisation can act as a catalyst for the inherent vulnerabilities in banks' business

model. Innovations in payments, such as instant payments⁶³ and online and mobile banking, can result in deposits being transferred faster. Experiences in the United States in the spring of 2023 illustrate the increased speed. In only one day, SVB saw 25% of its deposits flow out, while in the case of US banks that experienced a bank run during the 2008 credit crisis, between 4% and 10% flowed out in two weeks.⁶⁴ In addition, the spread of information (or disinformation) on social

⁶¹ DNB (2022b). Cyber risks also relevant to financial stability.

⁵⁵ DNB (2015) Perspective on the structure of the Dutch banking sector: efficiency and stability through competition and diversity. Amsterdam: De Nederlandsche Bank; and Liikanen, E. (2012) Final report of the high-level expert group on reforming the structure of the EU banking sector. Brussels: European Commission

⁵⁶ Sanders, M. and Zhang, L. (2018). Diversity in the financial sector is of great importance. ESB

⁵⁷ Kakes, J. and R. Nijskens (2018). Size of the banking sector: implications for financial stability

⁵⁸ See footnote 57.

⁵⁹ See footnote 56

⁶⁰ Assets that lose their value in the transition to a sustainable economy, for example due to decreased demand.

⁶² In a European context, see for example the ECB/ESRB Project Team (2023) 'Towards macroprudential frameworks for managing climate risk' for further analyses and policy proposals.

 ⁶³ An instant payment is a transfer in euros in which the amount is available on the recipient's current account within seconds
 ⁶⁴ Rose, J. (2023). Understanding the Speed and Size of Bank Runs in Historical Comparison", Economic Synopses, No. 12, 2023

media can accelerate the outflow of savings. Rumours surrounding the financial position of the UK's Metro bank in 2019, for example, led to an outflow of deposits.⁶⁵ Social media also acted as a catalyst during the recent banking turmoil in the United States.⁶⁶

2.2 Lessons for the framework of potential regulation and supervision

Despite the conclusions of the Basel Committee (before March 2023) that the resilience of the banking sector has increased since the reforms after the financial crisis, discussions continued on the effective operation of the buffer framework.⁶⁷ The

Committee's empirical analyses show that the increase in capital ratios was associated with a reduction in the costs of raising capital and there was no indication of a decline in lending.⁶⁸ The Committee also concludes that the framework has grown more complex. The complexity concerns both requirements for specific risks and the different associated definitions of capital.⁶⁹ At the same time, after the coronavirus pandemic many reports and investigations pointed to the importance of sufficient available or releasable capital buffers, so that banks would not procyclically restrict lending in response to a shock.⁷⁰ There has long been discussion on whether, buffers are in practice sufficiently useful as an 'airbag', which means absorbing shocks without falling below the minimum requirements and triggering a bank failure.⁷¹ In the EU, there are also striking differences in the level of systemic buffers for the largest banks, with excessively low buffers in some other member states being a particular cause for concern.⁷²

With regard to the turmoil in March 2023, the Basel Committee concludes that the problems amongst American banks and Credit Suisse had to do with the business model, deficient risk management and a lack of assertive and effective supervision.⁷³ The first and most important source of financial and operational resilience lies in the banks' risk management practices and governance arrangements. The events in March revealed a number of deficiencies in these banks. For example, there were fundamental deficiencies in the management of traditional bank risks (such as interest rate and liquidity risk) and an excessive focus on growth. There were also deficiencies in supervision. The Federal Reserve also concludes in its report on the failure of SVB that when supervisors became aware of vulnerabilities, they took insufficient steps to ensure that SVB solved these problems with sufficient speed.⁷⁴ This underlines the importance of adequate risk management and good governance for banks' resilience, together with assertive and effective supervision.⁷⁵

The Federal Reserve emphasises the importance of adequate capital levels. The direct cause of SVB's failure was a bank run, but the underlying concern also related to the bank's

 ⁶⁵ Katwala (2019), The Metro Bank hoax shows the immense power of fake news on WhatsApp, Wired, 14 May 2019
 ⁶⁶ Cookson, J.A., Fox, C., Gil-Bazo, J., Imbet, J.F. and Schiller C. (2023), Social Media as a Bank Run Catalyst. Université Paris-Dauphine Research Paper No. 4422754

⁶⁷ Basel Committee on Banking Supervision (2022), Evaluation of the impact and efficacy of the Basel III reforms.

 ⁶⁸ It should be noted here that this framework was introduced during a period of accommodative monetary policy.
 ⁶⁹ With regard to complexity and specific risks, see Section 10 of Basel Committee on Banking Supervision (2022), Evaluation of the impact and efficacy of the Basel III reforms. With regard to complexity in the capital framework, see for example Rogers (2022) and the discussion on AT1 capital later in this section.

⁷⁰ See inter alia Basel Committee on Banking Supervision (2023a), ECB (2022) and ESRB (2022).

 ⁷¹ Hernández de Cos (2023). Back to the (macroprudential) future: Reflections and questions on macroprudential policy.
 ⁷² At the end of 2020, the EBA (2020), amongst others, concluded that there was unjustified heterogeneity in the setting of buffers for domestic systemically important banks. The EBA sees this as cause for concern from the perspective of financial stability. Particularly excessively low calibration, due to systemic risks and possible negative cross-border contagion effects.

⁷³ Basel Committee on Banking Supervision (2023b), Report on the 2023 banking turmoil.

⁷⁴ Federal Reserve (2023). Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank

⁷⁵ DNB (2023f), Banken in beweging: Kansen en uitdagingen in tijden van hogere rente, digitalisering en verduurzaming.

solvency.⁷⁶ In addition, if there are unrealised losses or if asset valuations are inadequate, capital ratios are not a proper reflection of a bank's solvency position.⁷⁷

The events in March 2023 again illustrate how vulnerable banks are to liquidity risks. In March 2023 it became clear that the speed with which deposits (in particular uncovered ones) can flow out has increased in the current digital era, partly due to social media. This has prompted the supervisors and other authorities to examine the liquidity requirements that banks must fulfil.⁷⁸

Some the capital instruments that qualify as 'additional capital' (additional Tier 1 capital, AT1⁷⁹) proved to be less transparent and clear than expected. The events at Credit Suisse showed that investors and markets had not fully internalised the various triggers that can lead to a loss of participation in AT1 instruments. That is possibly because AT1 instruments are complex and also because of major differences in the working between different AT1 instruments.⁸⁰ The question is whether AT1 capital may thus contribute to turmoil in markets and uncertainty amongst investors. A reassessment of the complexity, transparency and regulatory qualifications of AT1 instruments may be required. Even before March 2023, there were concerns about the role and complexity of the AT1 framework, making AT1 instruments less useful as actual capital.⁸¹

Box 3. Trade-off between increased regulation and complexity

After the 2008 financial crisis, regulation was necessarily widened to address the risks, but as a result it also became increasingly complex. This complexity is partly because European regulation is a result of negotiations between all Member States. Political trade-offs and national interests result in exceptions and Member State options.

Complex rules may be necessary to address risks as effectively as possible, but they also have disadvantages. Complexity hinders market discipline, creates a regulatory burden for banks and incentivises increased scale, potentially increasing risks in the sector. The complexity is also a burden for supervisory authorities, since it makes the application and enforcement of regulations more complex. It also increases the risk of regulatory arbitrage.⁸²

In 2021 Danish and Norwegian supervisory authorities also warned that the European framework for bank regulation had become too extensive and complex.

They argued that supervisory authorities were now also unable to "see the wood for the trees" and were not able to supervise its implementation effectively.⁸³ The Basel Committee also recognises the increased complexity within the framework.⁸⁴ The Basel framework now consists of almost 1,900 pages. EU regulations, together with the technical

⁷⁶ See footnote 74.

⁷⁷ See footnote 73
⁷⁸ See footnote 66

⁷⁹ AT1 instruments absorb losses if the capital of the issuing financial institution falls below a level set by the supervisory authority. It is seen as a hybrid instrument because in the first instance it has the characteristics of a debt instrument, but it can be converted into equity. AT1 instruments are often designed as contingent convertibles (cocos), and in the Netherlands they are sometimes called buffer bonds.

⁸⁰ See also Basel Committee on Banking Supervision (2023b), Report on the 2023 banking turmoil.

⁸¹ See for example ESRB (2021b) and ECB (2022).

⁸² See for example Haldane, A. G. and Madouros, V. (2012). The Dog and the Frisbee.

⁸³ Noonan, L. (2021). Europe's over-complex bank rules increase risk, watchdogs warn. Financial Times. With regard to the risks of complexity of the system, see also Herring, R. J. (2018), The Evolving Complexity of Capital Regulation. Journal of Financial Services Research

⁸⁴ Basel Committee on Banking Supervision (2022). Evaluation of the impact and efficacy of the Basel III reforms.

standards, are a multiple of that. Banks have to bear a considerable regulatory burden. This gives rise to high compliance costs⁸⁵ and has a negative effect on the supply of financial services and costs for customers, while part of the services shift to less regulated non-bank players.⁸⁶

There is also debate about complexity and proportionality with regard to the resolution mechanism.⁸⁷ The demands placed on banks to be resolvable lead to costs. For small and medium-sized banks with a resolution strategy, these costs can be relatively high, because larger banks often have benefits of scale. The resolution mechanism thus potentially erects barriers (to entry) for smaller banks and may therefore lead to less diversity in the sector. This in turn contributes to less competition and incentivises increased scale, which may exacerbate the TBTF problem. The discussion on proportionality has been going on for some time, but it becomes more pertinent as the debate increases concerning a broadening of the scope of resolution and consequently making more banks eligible for resolution.⁸⁸

In addition, the regulatory burden increases due to increasing non-prudential legislation that pursues other important objectives, but also gives rise to extra **costs.** An example of this is the anti-money laundering legislation and compliance with international sanctions. Compliance with this legislation also entails costs, such as hiring specialist personnel and implementing new technologies.

2.3 Lessons for the resolution framework and the protection of deposits.

The Financial Stability Board (FSB) stated that resolution of Credit Suisse would have been feasible, contrary to the decision taken by the Swiss supervisory authority.⁸⁹ The FSB concludes that resolution would have been a sound and feasible alternative to the acquisition of Credit Suisse. According to the FSB the resolution plan was largely in place, there was sufficient loss absorption capacity and the Swiss authorities were sufficiently able to eliminate operational and legal obstacles in collaboration with international supervisory authorities before Credit Suisse failed. According to the FSB, the bail-in tool was applicable and this would have led to a solvent bank. According to the FSB, the fact that resolution was ultimately not pursued was a choice by the Swiss authorities.

These opposing conclusions may point to different interests, with the national authorities perhaps being more risk averse. The FSB has an interest in consistent regulation at system level. Any deviation from these rules undermines the system and sends a signal that governments will nevertheless step in. The Swiss government and supervisory authorities are those who literally pay the bill for a failing bank, and they may be more inclined to opt for the

⁸⁵ See for example Herring, R. J. (2018), The Evolving Complexity of Capital Regulation. Journal of Financial Services Research. This article contains an anecdotal comment that a number of years ago Citigroup employed more personnel in compliance, namely 25,000, than the entire workforce of Lehman Brothers before the bank collapsed.

⁸⁶ Trapanase, M. (2022), Regulatory Complexity, Uncertainty, and Systemic Risk. Occasional Papers (Questioni di economia e finanza) No. 698.

⁸⁷ Restoy, F. (2019). Proportionality in financial regulation: where do we go from here?

⁸⁸ See footnote 93.

⁸⁹ FSB (2023a). 2023 Bank Failures, Preliminary lessons learnt for resolution.

certainty of government intervention as opposed to a scenario of resolution with an uncertain outcome. Political preferences for specific solutions can also play a role.

Although that the FSB concludes that resolution remains a strong instrument even after the turmoil in the banking sector, the organisation sees a number of potential improvements. A bail-in of foreign investors would give rise to legal problems. For example, during the Credit Suisse case it became clear that American securities law applied to American investors, and that these rules would still have to be met in the event of a bail-in. The US market watchdog, the Securities and Exchange Commission, described complying with American rules in the event of a bail-in as "difficult".⁹⁰ Hence there would be uncertainty with regard to the effectiveness of the bail-in of Credit Suisse. Other European banks also issued MREL instruments under non-EU law. According to the FSB, the authorities should have given greater priority to the testing and simulation of the operational process of resolution, including communication and coordination.

Liquidity in resolution also remains an important point of concern. This subject has been on the agenda for some time and is a known deficiency of the resolution framework in the EU, as well as in many other jurisdictions. A bank has a high demand for liquidity after resolution. In the European context, the SRF provides for the possibility of (liquidity) support. The size of the SRF, around €75 billion at the beginning of 2024, appears insufficient, however, to meet demand for liquidity in the event of the resolution of large banks, particularly if problems occur simultaneously at a number of banks, which is a real risk in the case of an impending financial crisis. For example, the use of liquidity support from governments after the 2008 financial crisis in the EU peaked at around €1,300 billion.⁹¹ Central banks or governments therefore appear to have a role in stabilising the liquidity situation. This is also what happened in practice in the US and Switzerland in March 2023. The FSB also concludes that there is a need for an effective public backstop for liquidity in resolution. This backstop function for banks on the part of government would show more clearly that a bank was sufficiently solvent. In a European context, this underlines the importance of completing the banking union.

Another lesson that the FSB draws is that the failure of banks that were not previously seen as systemically important may nevertheless jeopardise financial stability. For

example, the banks that collapsed in the United States were relatively small by American standards. Nevertheless, the problems in these banks also led to contagion to other banks and the wider system. Since the collapse of these banks was not expected to jeopardise critical functions or financial stability, these banks usually had not planned for resolution. That meant they did not have to make any plans to be resolvable and also only needed to have limited loss absorption capacity (for a bail-in).⁹² Since it is now clear that the collapse of these banks may have major consequences, this may also have implications for the resolution mechanism. It is logical to examine whether the scope of resolution should be widened, so more banks would be required to prepare for winding up through resolution and would have to meet the associated requirements. Widening of the scope of resolution in the EU has also been the subject of a long-running debate.⁹³

⁹⁰ Page 18 of FSB (2023a). 2023 Bank Failures, Preliminary lessons learnt for resolution.

 ⁹¹ Amamou R., Baumann, A., Chalamandaris, D., Parisi, L and Torstensson P. (2020). Liquidity in resolution: estimating possible liquidity gaps for specific banks in resolution and in a systemic crisis. ECB Occasional Paper Series no. 250.
 ⁹² This is aside from the fact that these banks in the United States specifically had to meet less stringent supervisory

²⁶ This is aside from the fact that these banks in the United States specifically had to meet less stringent supervisory requirements.

⁹³ This debate was unconnected with the turmoil in the banking sector at the beginning of 2023, but resulted particularly from problems that some Member States have experienced with winding up small and medium-sized banks in the European crisis framework. In this framework, these banks would not be readily resolvable because the bankruptcy regime is inadequate, but the banks may also not fulfil the requirements set for winding up through resolution. At the beginning of 2023 the European Commission (2023b) issued a proposal to this effect for a revision the European crisis framework for banks (CMDI). The negotiations on this proposal are still ongoing.

An observation in relation to the actions of the authorities in the United States is that deposits that are not guaranteed by the DGS may ultimately be protected. This appears to result from both a desire (political and otherwise) to protect deposits more broadly in order to limit risks to households or businesses and hence control the possible negative effects on financial stability and the real economy. A flight of deposits may persist even if a bank is taken into resolution or has received liquidity support. This risk applies particularly to banks with many uncovered deposits, as was the case of SVB, and may even endanger a bank after the resolution process has been completed. The explicit protection of uncovered deposits, however, is at odds with the principles behind resolution, since it promotes moral hazard. Moreover, no money is set aside for the protection of these deposits in the deposit guarantee fund (DGF).

Box 4. Dutch experiences with the resolution of banks

Various banks have collapsed in the Netherlands in recent decades. For example, ABN AMRO (as the Dutch part of the Fortis group), SNS Reaal, Icesave (as a branch of a failing Icelandic bank) and DSB bank got into difficulty in the wake of the 2008 financial crisis. This was before the establishment of the resolution mechanism, so there were few harmonised and standardised procedures for bank resolution. In order to protect financial stability and maintain critical functions of ABN AMRO and SNS Reaal, the Dutch government felt compelled to nationalise parts of these banks. DSB bank and Icesave went into insolvency, so the Dutch DGS ensured that all depositors got up to €100,000 of their savings back.

More recently, Amsterdam Trade Bank (ATB), a small Dutch bank, was declared bankrupt. This was as a result of the sanctions against Russia that affected ATB because it was a subsidiary of a Russian bank. The sanctions imposed on Russia had seriously disrupted ATB's business operations. The DGS was also activated in the case of ATB and payments were made whereby all depositors were fully compensated up to €100,000.

Experiences of winding up through bankruptcy and the operation of the DGS have generally been positive in the Netherlands. In cases where the DGS was activated, it succeeded in making a rapid payout. The recovery rate of assets of failed banks in the Netherlands is also high. That, combined with the fact that the DGS is at the front of the queue for repayments to creditors from the assets means that the Dutch DGS has practically made no losses on the recent payouts. Other creditors, such as depositors with uncovered deposits, in many cases also got their money back in the bankruptcies of DSB bank and ATB.

There is still no Dutch bank that has been wound up through resolution. In the rest of the eurozone too, only a few banks have been wound up through resolution. The most recent examples are the resolution of the Croat and Slovenian subsidiaries of Austria's Sberbank Europe. These banks also failed as a result of the sanctions against Russia.

Unlike the FSB, there are also experts who have more fundamental doubts about the effectiveness of the resolution mechanism. The academics Admati, Hellwig and Portes, for example, argue that the reforms after the 2008 financial crisis, including the introduction of the

resolution mechanism, did not solve the TBTF problem.⁹⁴ According to these experts, the problems in the resolution of cross-border systemically important banks are impossible to resolve. They believe, for example, that it is impossible to maintain cross-border critical functions. Also, it requires too much capacity on the part of the authorities and there are no proper agreements in place on liquidity in resolution and no clear backstop on the part of the government. The conclusion of these academics is therefore that cross-border TBTF banks should not actually exist. Others indicate that public financial support will still be required in the case of a bail-in of one or more systemically important banks.⁹⁵

According to these academics, the focus should be on preventing these TBTF banks

failing. Particularly by imposing much higher capital requirements and allowing supervisory authorities to intervene much earlier when something goes wrong, it would be possible to ensure that a bank would likely not enter a FOLTF situation. Furthermore, for countries with relatively large financial sector – such as Switzerland – it is essential to make TBTF problems manageable if the conclusion is that the resolution mechanism is not operating well in practice, even if it requires far-reaching interventions.⁹⁶ These countries would have to take measures to make banks smaller and less risky, because for them the risks for the financial position of the government would be much greater.

2.4 Conclusions and focal areas for the resilience of banks

In the field of regulation, supervision and resolution in the banking sector, a lot has changed since the 2008 financial crisis, making the sector more resilient. Since then major steps have been taken at international and European level to strengthen the resilience of individual banks in the financial system as a whole. European banks have also come through the financial turmoil of 2023 in good shape. Despite these steps, however, risks remain and experience shows that regulation is never complete. At the same time, the share of NBFI in the financial sector has grown, and there is a risk of vulnerabilities shifting.

The above analysis reveals four focal areas relating to the resilience of banks:

- 1. Inherent vulnerabilities in the banking system are pertinent despite additional regulations since 2008. These vulnerabilities are inherent in the banks' business model, the use of leverage and the key role of trust in the financial system.
- 2. Digitalisation can act as a catalyst for these vulnerabilities. Depositors can withdraw their funds from banks faster than ever. Rapid provision of information (or disinformation) on social media can also play a major role. This can cause liquidity risks amongst banks to increase faster.
- **3.** *Too-big-to-fail* **problems and risk of contagion are not a thing of the past and may be a reason for governments to intervene.** Given the crucial role of banks and their interconnectedness in the economy and financial system, governments may have an interest in enabling banks to survive, particularly if they are large or systemically important. The additional government guarantees in the United States and Switzerland in response to failing banks damages the feasibility and credibility of the resolution framework for systemically important banks and the possibility to declare non-systemically important banks insolvent. This may prompt banks to engage in moral hazard behaviour.
- 4. Regulatory complexity has increased sharply and in some cases may impede supervision and market discipline. While the stability of the system has increased due to

⁹⁴ Admati, A., Hellwig, M. and Portes, R. (2023). Credit Suisse: Too big to manage, too big to resolve, or simply too big? VoxEU column Financial Regulation and Banking.

⁹⁵ Avgouleas, E. and C. Goodhart (2015), Critical Reflections on Bank Bail-ins, Journal of Financial Regulation 1, 3–29.

⁹⁶ Brunetti, A. (2023). Big banks must become globally resolvable or significantly smaller, VoxEU column Financial Regulation and Banking.

the reforms since the global crisis in 2008, so has the complexity of the regulation. This leads to both a regulatory burden and opportunities to assess and control risks and exercise market discipline. Regulatory complexity can also incentivise increased scale and differences in application (and hence arbitrage) within the EU.

These focal areas are a reason for exploring policy options to strengthen the resilience

of banks. In an international context – for example in the Basel Committee and the FSB – research is being done specifically into the further tightening of laws and regulations for banks and the strengthening of supervision. This may lead to policy recommendations. This report is intended to provide added value for an exploration of policy options from the Dutch perspective of action in the EU. It is important to keep in mind that uniform and consistent rules are important in order to achieve a common banking market in Europe and to prevent an uneven playing field between Dutch and foreign banks.

An important point in this regard is that it is impossible and undesirable to eliminate risks entirely in the banking sector. Operating a business in general and banking activities in particular entail risks. This is also inherent in the banks' function and business model, which includes liquidity and maturity transformation. This offers major benefits for individuals and businesses, enabling them to borrow, save, make payments and control their risk. Additional regulations that completely eliminate risk would have consequences for the business model of banks and economic growth. Risks could nevertheless be distributed differently, for example between the government and private operators, to prevent profits accruing to private operators while the government and the public bear the risk. This precarious balance in banks between risk reduction and fulfilling economic functions should therefore always be considered in policy discussions.

3. Policy options & directions

This chapter introduces policy options Section 3.1 covers the compilation of the list of policy options and the description of the effects. Section 3.2 describes the policy directions, in which various policy options are clustered. The clustering consists of a base direction (3.2.1), measures contributing to the shock resistance of banks (3.2.2), measures that improve the recovery and resolution of banks (3.2.3) and measures addressing market structure of the banking sector (3.2.4). The full list of analysed policy options can be found in Annex 1. The information sheets in Annex 2 contain the details of the individual policy options.

3.1 Selection and description of policy options

The policy options explored in this report originate in part from the national and international debate on the strengthening of the resilience of the banking sector. Some of the policy options build on existing regulations. Others involve more fundamental changes to the current framework or structure of the financial system. It can also be seen in the information sheets in annex 2 that not all policy options make net contributions to the resilience of the banking sector. Policy options that are expected to be able to make an effective net contribution to addressing the focal areas arising from the analysis in this report, and where the general picture is not predominantly negative or risky, are included in one of the policy directions (see also Section 3.2).

The policy options are detailed in information sheets that indicate the expected effects of the policy options on various aspects. These aspects are: financial stability, the real economy, competitiveness and earning capability of banks, public costs and risks and feasibility. Table 2 states precisely what is meant by these terms. In addition to the stated effects, connections between policy measures and other (possibly existing) policies or policy options in other sheets are also described.

ASPECT	CONTENT
Financial stability	The impact on the stability of the individual banks and the financial system as a whole, specifically with regard to solvency and liquidity of banks, trust in banks and interconnectedness within the financial system.
Economy	The impact on the relevant economic functions of banks, specifically the ability of individuals and businesses to save, make payments, borrow and spread risks. In addition, the impact on structural economic growth, particularly through the channel of lending and capital allocation costs.
Competitiveness and earning capacity	The impact on the efficiency, competitiveness and earning capacity of banks.
Public costs and risks	The impact on public risks and costs.
Feasibility	The extent to which it is assessed that the policy option can be implemented in the short or longer term in the national, European and international framework for banking regulation, market order and state aid. In addition, the practical implementation of the policy option.

Table 2. Aspects covered in the analysis of policy options

This report provides no conclusive opinion on the desirability of policy options. The decision as to whether a policy option is desirable is ultimately a matter of careful political assessment. Many measures involve a trade-off: the expected effect on financial stability may be positive, for example, whereas the expected effect on the economy is negative. The next section (3.2) does nevertheless give insight into the policy options intended to address the focal areas in the analysis by clustering these in policy directions.

An important aspect of the policy measures discussed in the sheets is the Dutch

perspective for action. Regulatory standards for the financial sector, and the banking sector specifically, are generally agreed at an international level (at least in outline).⁹⁷ These international standards are then implemented in laws and regulations at European level, which are then partly transposed in Dutch laws and regulations. Deviations from these laws and regulations at national level are often impossible or only possible to a limited extent. Rules in the EU and the Netherlands therefore follow largely from the relevant international agreements. In the case of many policy measures, it is therefore neither possible nor desirable to implement them independently. In such cases, the Dutch perspective for action is that a forthcoming cabinet may commit to placing a certain policy option on the international and European decision-making agenda and seek support for it.

Even if a policy option in itself is deemed desirable and falls within national competence, this does not mean that its introduction at national level would be necessarily desirable. First of all, national measures may disrupt the level playing field between banks in different countries. This can cause competitive advantages or disadvantages for certain banks. This runs counter to the European idea of the internal market and banking union. It may also impede economic efficiency by hindering the optimum allocation of capital and liquidity. Furthermore, policy options are often effective if they are introduced at international or European level to prevent leakage effects. Table 3 shows which policy options fall within national competences.

SHEET	POLICY OPTION
15.	Prohibiting issuance of MREL to non-EU investors
17.	Doubling of the target size of the national deposit guarantee fund
20.	Making bank taxation progressive
21.	Increasing the percentage of the thin cap rule for banks
22.	Establishing a public deposit bank
25.	Making competition in the banking sector a secondary mandate of DNB
28.	Separating utility and risk activities of banks

Table 3. Policy options falling within national competences

3.2 Policy directions

In the light of the focal areas and investigated policy options, this report charts four **policy directions.** Policy directions comprise a set of coherent policy options. They aim to provide guidance for the reader in understanding the coherence of policy options. However, the measures

⁹⁷ In the case of banks, the Basel Committee and the Financial Stability Board (FSB) to a large extent play a leading role in this regard.

do not only have combined effects; each measure may also contribute individually to the objective of the policy direction.

First a base direction is presented. This base direction contains measures that address the identified vulnerabilities and build to a large extent on the existing Dutch policy position, but that clearly go a step further relative to the status quo. The base direction is a set of measures that can be viewed as a additional to the existing situation and the Dutch input in various areas.

In addition, three policy directions are presented that may supplement this base direction. The policy options in the additional policy directions contribute in a coherent and consistent way to a common objective that is in line with the focal areas in the analysis in this report. These concern the following policy directions:

- Policy direction 1: Better buffers
- Policy direction 2: Strengthening of recovery and resolution
- Policy direction 3: Focus on market structure

Not all explored policy options are part of one of the policy directions. Policy options have been included in the policy directions if they address one or more focal areas in the analysis in Chapter 2 and are in line with the narrative and objective of the policy direction. In addition, the overall picture in of the policy option in the information sheet should not be predominantly negative or risky. That does not mean the policy options that have been included score positively for all assessment criteria. Policy options have advantages and disadvantages and there may be a trade-off between various aspects.

Some of the policy options have multiple variants. Variant a is the analysed main variant, while variant b is often a less far-reaching version of it. If a b variant is mentioned, this is also described in the relevant information sheet.

3.2.1 Base direction

The base direction is a set of measures that are largely in line with the current Dutch policy position, but that would clearly mean taking a further step if they were

introduced. Compared to the status quo, these measures would result in a strengthening of the resilience of banks. These options build on the current framework and problems that are currently being discussed at international and European level, including in response to the financial turmoil in March 2023. Implementing these measures may not be a straightforward matter, however, for example due to a lack of political support in the EU. The base direction will therefore require political effort to create support at European level.

SHEET	POLICY OPTION
1.	Tightening liquidity requirements (LCR)
2b.	Variant b: Tightening requirements for high-quality liquid assets (HQLA)
4b.	Variant b: Faithfully implementing of Basel standards
5a.	Variant a: Introducing capital requirements for high concentrations of government
	bonds
7b.	Variant b: Tightening requirements for AT1 capital
7b. 8b.	Variant b: Tightening requirements for AT1 capital Variant b: Increasing macroprudential buffers
7b. 8b. 9b.	Variant b: Tightening requirements for AT1 capitalVariant b: Increasing macroprudential buffersVariant b: Harmonising buffers for systemically important banks
7b. 8b. 9b. 15.	Variant b: Tightening requirements for AT1 capitalVariant b: Increasing macroprudential buffersVariant b: Harmonising buffers for systemically important banksProhibiting issuance of MREL to non-EU investors

Table 4. Policy options in the base direction

16.	Public guarantees for liquidity in resolution
19b.	Variant b: Introducing a European deposit guarantee scheme (EDIS)
24.	Further developing the capital markets union (CMU)

The base direction contains policy options that further limit the inherent vulnerabilities of the bank business model. The measures in the base direction contribute to a framework that takes account of the dynamics around trust and liquidity. The tightening of liquidity requirements makes banks more resilient to liquidity outflows in times of financial turbulence or volatile market developments. As also stated in the analysis, liquidity risks for banks have become more relevant due to the increased digitalisation.

A number of measures in the base direction contribute to strengthening the shock resistance of banks and a level playing field between countries. This strengthens the resilience of the European and also the global banking sector. First, this requires the implementation of Basel standards without permanent exceptions. In the EU, Member States have recently agreed new temporary exceptions in the European implementation of the Basel standards. To maintain the level playing field in the banking sector, it is important that these temporary exceptions do not become permanent. If the exceptions do not become permanent, the capital of European banks will increase somewhat. This will reduce the vulnerability of individual banks and the financial system as a whole. Second, harmonisation of macroprudential buffers may negate differences in the shock resistance of systemically important banks in the EU. In the base direction, this is achieved through further harmonisation of criteria for the identification of systematically important banks (O-SIIs) and the setting of buffers for these banks, including the introduction of higher leverage ratio buffer for these banks. So as to increase the shock absorption capacity and reduce procyclical effects of shocks on the economy, the base direction proposes that each EU Member State applies a positive-cycle neutral countercyclical buffer (CCyB) of at least 1% in a neutral risk environment. This will counter fragmentation within the EU and reduce the risk of Member States adopting excessively low buffers.

Reform of regulation concerning AT1 capital may reduce the complexity and strengthen the incentives. A clear and less complex design of AT1 capital will make it easier to understand thus help supervisory authorities and market participants in the exercise of supervision and market discipline. Better use can thus be made of AT1 capital before a bank fails. At the same time, banks may lose capital-raising flexibility and their financing costs may rise.

Contagion risk in the EU is addressed in the base direction by completing the banking union and capital markets union. First of all, the introduction of capital requirements for high concentrations of government bonds on bank balance sheets reduces the interconnectedness between banks and governments (including their own government). It also means that banks with large volumes of government bonds have to hold more capital and thus increases the shock resistance of these banks. This does nevertheless reduce the attractiveness of government bonds, which may weigh on the relative price and increase the costs of countries' sovereign debt. Second, steps can be taken towards a European deposit guarantee scheme (EDIS) to reduce the dependence between banks and governments. In the adjusted EDIS variant, national deposit guarantee funds jointly support each other if they become depleted as a result of a payout. This contributes to confidence amongst savers (and limits the possibility of bank runs), the reduction of dependences between national banks and governments and the reduction of fragmentation in the European savings market. The Dutch DGS would nevertheless be exposed to some extent to risks in other EU countries. Finally, the completion of capital markets union would increase the shock absorption capacity and diversity of the financial sector. This would reduce the dependence on banks and increase the range of financing options for the real economy.

A joint guarantee by the euro area countries may eliminate doubts as to whether there is sufficient liquidity for banks after resolution. This would therefore further strengthen resolution as a means of winding up a bank, reducing the risk of the government having to intervene to protect critical functions and financial stability. This would nevertheless explicitly highlight the public guarantees for the banking sector and would involve risk-sharing between Member States. The prohibition of the issuance of MREL to non-European investors if it is not possible to establish with sufficient certainty that MREL can be written off in resolution also helps to strengthen resolution as a means of winding up a bank. It means there is greater certainty on the ability to apply private loss-sharing (bail-in) in resolution. Critical functions of banks in resolution are thus better protected and the risk of sector funds (DGF and SRF) or even the government having to contribute is reduced. On the other hand this measure limits the diversification of risks; in the current situation in a bail-in part of the loss is 'exported' to non-EU countries. This limits the damage the European economy due to the impact of these losses. This effect is partly lost if MREL is issued particularly to EU investors. In addition, the prohibition of MREL issuance to non-EU investors reduces the size of the market for MREL issuance and may thus result in higher costs for banks.

Although the base direction includes measures that can be seen as follow-up steps in the development of current framework, introducing these measures at European level is no straightforward matter. Except for the prohibition of MREL issuance to non-EU investors, all measures can only be introduced at the European level. These measures have largely been on the agenda for some time, but it has not so far proved possible to reach agreement on them.

3.2.2 Policy direction 1: Better buffers

The 'better buffers' policy direction contains policy options that go further in addressing the inherent vulnerabilities and systemic importance of banks by strengthening the buffers that banks hold and limiting risks on bank balance sheets. This policy direction addresses the inherent vulnerabilities of banks (focal area 1), which are partly strengthened by digitalisation (focal area 2) as well as the remaining TBTF risks (focal area 3). This increases the protection of banks and the functions that they perform. Some measures also reduce the complexity and fragmentation of regulation, which in some cases make market discipline and supervision more difficult and create an incentive for increased scale (focal area 4).

SHEET	POLICY OPTION
2a.	Variant a: Tightening requirements for high-quality liquid assets (HQLA)
3b.	Variant b: Increasing the minimum leverage ratio
4a.	Variant a: Faithfully implementing Basel standards
7a.	Variant a: Abolishing AT1 capital
8a.	Variant a: Increasing macroprudential buffers
9a.	Variant a: Harmonising buffers for systemically important banks

Table 5. Policy options in policy direction 1: better buffers

The policy measures are adjustments to the prudential supervision framework that **mostly lead to better and higher buffers.** They are first and foremost measures that improve the capital and liquidity requirements in terms of design, quality and quantity. Preventing the risk of unrealised losses when liquidating assets through adjustments in requirements for the valuation of assets at market value⁹⁸ and improving the solvency of banks through various minimum capital

⁹⁸ In Europe, the requirements with regard to the valuation of assets at market or book value are not the same as in the United States, so in 2023 European banks were less exposed to unrealised losses than American banks such as SVB.

requirements contributes to the reduction of inherent vulnerabilities. Such minimum requirements are the requirements that a bank must comply with at all times. The presence of sufficient additional capital builds confidence and potential to absorb losses, thereby reducing the risk of bank failure and possible government intervention. Full implementation of the Basel standards may also have the effect of raising capital requirements due to the abolition of specific exceptions, such as the European reduction in risk weights for SME loans. A higher leverage ratio may also contribute to simplification by reducing the dependence on internal models that may underestimate long-term risks or uncertainties.⁹⁹ The abolition of various capital instruments, including AT1 capital, with sometimes opaque design and suboptimal incentives, may both reduce regulatory burdens and promote risk control, thereby strengthening supervision and market discipline.¹⁰⁰ This leads to a simplification of the capital framework.

In addition to an improvement in minimum requirements, this policy direction also includes a reform of macroprudential buffers. This could increase the resilience and capacity of the banking sector to absorb shocks, thanks to the flexibility of capital buffers. In contrast to minimum requirements, it is possible to draw on macro buffers temporarily and some macro buffers can be released after a shock.¹⁰¹ The positive effects of being able to use macro buffers are strengthened by these policy options, which raise the available buffers. Macroprudential policy also takes account of TBTF risks. After all, systemically important banks must hold more capital. Harmonisation of the macroprudential framework in the EU may ensure greater shock resistance in the European banking sector and a more level playing field between Member States. It also contributes to a decrease in fragmentation of regulation in the EU.

There is neither theoretical nor empirical certainty about the effect of higher capital requirements and buffers on economic dynamics – but it is clear that they promote financial stability and banks' current capital ratios are at the lower end of the optimal **spectrum.** By holding more capital, banks can better absorb financial shocks and stabilise the economy. This promotes financial stability and thus reduces the risk of public costs. However, no clear answer can be given about the cost of higher buffers. According to the theoretical Modigliani-Miller effect, holding more equity should not lead to additional costs in a perfectly functioning market.¹⁰² The market is not perfect, however, partly due to differences in the tax treatment of equity and debt and implicit guarantees for TBTF banks. There are studies showing that costs for banks in practice may therefore increase when they hold more capital.¹⁰³ For example, an increase in capital ratios of 1 percentage point could lead to a change in average financing costs for banks of between -0.05 and +0.15 percentage points.¹⁰⁴ Even if an increase in capital requirements leads to higher financing costs, this is not necessarily associated with higher costs for lending and a negative effect on the economy. Well-capitalised banks may be better able to maintain lending in an economic downturn. A recent overview study by the Basel Committee points to optimal weighted capital ratios between 10% and 25%, a higher optimum than the Basel Committee had estimated prior to the Basel III reforms.¹⁰⁵ Current weighted capital ratios are at the lower end of this spectrum. Other studies show that optimal minimum capital ratios are substantially higher

⁹⁹ This strengthens the effect of the Basel 3.5 implementation limiting the use of internal models. In this policy direction, internal models are not completely abolished, and they may be relevant where there are significant differences in risks compared to the standard approach.

¹⁰⁰ Coco is an abbreviation of contingent convertible: a loan to a bank that can be converted into shares in that bank, if the bank gets into difficulty.

¹⁰¹ The microprudential framework has procyclical elements and is intended to address standalone risks for individual banks. On the other hand, macroprudential policy is intended to counter procyclicality. It also looks at the entire system and the interactions within it, countercyclically, looking ahead and taking TBTF risks into account.

interactions within it, countercyclically, looking ahead and taking TBTF risks into account. ¹⁰² Modigliani, F. and M.H. Miller (1958) The cost of capital, corporation finance and the theory of investment. The American Economic Review, 48(3), 261-297.

¹⁰³ See special feature IV in ECB (2011), Kashyap, A.K., Stein, J.C. and Hanson, S. (2010)

¹⁰⁴ Basel Committee on Banking Supervision (2019), The costs and benefits of bank capital – a review of the literature, Working Paper 37.

¹⁰⁵ See footnote 104.

than is currently usual amongst banks, which would imply that there is scope for higher capital levels as provided for in this policy option.¹⁰⁶

Complementary regulation for NBFIs is a precondition for the intended effect of higher prudential minimum requirements and buffers on financial stability to prevent waterbed

effects. An increase in capital requirements can lead to shift in financial intermediation from banks to NBFIs, such as pension funds, insurers and investment and/or hedge funds.¹⁰⁷ Although this is to some extent a desirable development, because NBFIs, for example, usually make less use of leverage and are therefore less likely to cause systemic risks, this may mean that risky activities are shifted to NBFIs. Due to the limited availability of data on NBFIs compared to banks, there is less ability to monitor specific risks in NBFIs. The effectiveness of higher capital requirements therefore requires complementary policies for NBFIs, such as the further development of capital markets union and adequate regulation of risks for NBFIs, as mentioned in the base direction.

The measures under this policy direction promote the shock resistance of banks and limit the risks. As a result, risks at banks will materialise less quickly and financial setbacks will also be less likely to lead to a bank failure. This means there is less need for large-scale adjustments to the framework for resolution in addition to the base direction.

Measures in this policy direction require international or European engagement, because they cannot be implemented at national level. European implementation contributes to maintaining a level playing field and limits risks at European level. This also limits Dutch banks' exposure to risks in other Member States. This requires patience and direction in the Dutch efforts, in the knowledge that there will be resistance and sometimes dilution will occur. Supporters will need to be found with a similar vision of the future of regulation and supervision of the financial sector.

3.2.3 Policy direction 2: Strengthening of recovery and resolution

Policy direction 2 is aimed at improving the potential for recovery or an orderly resolution of the bank, in accordance with the principles of the resolution framework. The measures are intended to prevent the negative consequences of bank failure (focal area 3). The policy direction contains measures that strengthen and clarify private loss sharing (bail-in), prohibit banks in difficulty from distributing capital and strengthen the firepower of the bank-funded DGS

SHEET	POLICY OPTION
10.	Possibility of system-wide restrictions of dividend payments and share buybacks
13.	Introducing a MREL floor
14.	Subordination requirement for the entire MREL buffer
19a.	Variant a: Introducing a European Deposit Guarantee Scheme (EDIS)

Table 6. Policy options in policy direction 2: strengthening of recovery and resolution

The introduction of binding, system-wide options to impose restrictions on dividend payments and share buybacks gives supervisory authorities the opportunity to ensure that banks do not distribute capital in crisis situations. This can contribute to strengthening the capital position of institutions in times of (impending) economic crisis, so that losses can be

¹⁰⁶ See for example: Miles, D., Yang, J. and Marcheggiano, G. (2013) and Barth, J. R., & Miller, S. M. (2018).

¹⁰⁷ Kramer, B., Hendriks, B., Katz, M. and Soederhuizen, B. (2022) Heeft de contracyclische kapitaalbuffer een effect op de kredietverlening?

better absorbed. When individual banks take steps to strengthen their capital position, for example by no longer paying dividends or raising new capital, this is sometimes interpreted by investors as a possible sign that the bank is in trouble. Banks are therefore reluctant to take these types of measures on an individual basis. System-wide restrictions can help to counter these stigma effects and collective action problems. System-wide restrictions do nevertheless create more uncertainty for investors, which may increase banks' financing costs. They may also negatively affect access to capital markets for the banks concerned compared to foreign banks and other financial institutions on which such restrictions cannot be imposed. Finally, a system-wide measure does not distinguish between strong and weak banks, which may affect competitiveness and the level playing field.

The two measures addressing MREL strengthen loss absorption buffers to which a bail-in can be applied in resolution. This provides greater certainty about the ability to apply private loss sharing (bail-in) in resolution. These measures therefore increase the chance that critical functions can be protected in resolution and reduce the risk of sector funds (DGF and SRF) or even the government having to contribute. In addition, a strengthening of the loss absorption buffers can contribute to greater market discipline by clarifying which creditors must bear a loss in the event of a bank failure. Strengthening the loss absorption buffers is not free of charge, however. The instruments that qualify for MREL are more expensive for banks to finance than many other forms of financing, such as deposits. The issuance of certain MREL instruments requires access to specific capital markets, which is more limited for medium-sized and smaller banks than for large banks. As a result, the issuance of specific MREL instruments may be more expensive or unfeasible for these banks. This may actually reduce the diversity and competition in the banking landscape.

The establishment of an EDIS will provide more firepower for the DGS by merging the national DGSs of EU Member States. In addition to the base variant, this policy direction opts for an EDIS in which national deposit guarantee funds are merged into an EDIS and with a certain degree of risk-sharing is achieved between national banking sectors. This means that banks are somewhat exposed to risks in other banks in the eurozone. This further reduces the dependence between governments and their national banking sectors. On the other hand, risk-sharing can reinforce moral hazard behaviour amongst Member States by limiting the incentive to solve problems nationally.

The feasibility of the measures included in policy direction 2 appears limited in the short term. All measures require agreement at European level. There appears to be little support in the EU for a strengthening of MREL. A fully-fledged EDIS similarly does not seem feasible in the short term. There is resistance to it in various Member States. The risk-sharing between Member States (or their banking sectors) is particularly sensitive. Many Member States have also attached conditions to the introduction of an EDIS. For example, in the past the Netherlands made the introduction of a risk weighting for government bonds on bank balance sheets (RTSE) a condition for the introduction of an EDIS.

The introduction of these measures therefore requires patience. To this end, the Netherlands should make a consistent and long-term commitment to putting measures on the agenda in an international and European context and to seeking supporters with a similar vision of the future of regulation and supervision of the financial sector.

3.2.4 Policy direction 3: Focus on market structure

Policy direction 3 contains measures aimed at stimulating competition and diversity in the financial sector. The aim of these measures is to reduce the remaining TBTF problems and the risk of contagion (focal area 3). In addition to measures that reduce risks by increasing banks' buffers (policy direction 1) or measures that better guarantee the resolution of systemically important banks (policy direction 2), dependence on banks can also be addressed by facilitating competition and diversity in the financial sector, both within and outside the banking sector. This

will not necessarily make existing banks more resilient, but it will help to protect the functions that the banking sector fulfils. The measures under this policy direction are shown in the table below. This is supplementary to the base direction. Some measures in policy direction 1 can also provide support, as explained below.

SHEET	POLICY OPTION
23.	Central bank digital currency as means of saving
24.	Making competition in the banking sector a secondary mandate of DNB
25.	Assessing stability and resolution risks in consolidation

Table 7. Policy options in policy direction 3: focus on market structure

TBTF issues and the risk of contagion can be tackled by focusing on more competition and diversity in the banking sector. The policy options in this policy direction include steps to facilitate competition and diversity in the European banking sector, by focusing on a public alternative for bank functions, or by paying greater attention to competition.

Increasing competition and diversity can promote economic growth and resilience, if properly framed. Section 1.3 referred to a lack of diversity in the business models of Dutch banks. Competition between banks and with NBFIs can contribute to better dynamics in the financial markets, namely through innovation and the market exit of less well-functioning institutions. This can promote the resilience and future-proofing of the financial system, and contribute to economic growth. More diversity in financial services can make the sector as a whole less sensitive to shocks.¹⁰⁸ This also broadens the range of financing options available to businesses.¹⁰⁹ A prerequisite for this deeper market is that competition takes place in a way that does not reduce profits in an unsustainable way or transfers risks to the government or other banks, for example through the DGS. It is also between banks and NBFIs. To this end, it is crucial to mitigate financial stability risks at NBFIs and to examine other areas in which there may be an uneven playing field.

First and foremost, further development of capital markets union is important for policy focused on market structure. A healthy and well-regulated European capital markets union will ensure diversity in the supply of finance and greater opportunities for banks to diversify their services. This is part of the base direction and the measures in this policy direction are very much complementary.

Furthermore, a secondary competition mandate for DNB can indirectly contribute to the promotion of competition. Because of this DNB will have to perform its duties with a view to healthy competition in the sector, and will have to take competition into account in the design of policy, insofar as this contributes to or is not at the expense of the primary objectives. The role and powers of ACM will remain unchanged. The secondary mandate for DNB can help to embed competition and diversity more firmly in future policy considerations, within the main objective of the financial stability of supervised institutions and of the system as a whole, and within the possibilities that DNB has in international bodies and supervision. Partly based on this secondary mandate, the UK's Prudential Regulation Authority (PRA) has set up a strong but simpler prudential regime for smaller banks.¹¹⁰ At the same time, the scope for DNB to operate

¹⁰⁸ Sanders, M. and Zhang, L. (2018) Diversiteit in de financiële sector is van groot belang. ESB.

¹⁰⁹ This will be examined in more detail in the Interdepartmental Policy Study (IBO) on business finance. This IBO is expected to appear in mid-2024.

¹¹⁰ See inter alia Bank of England (undated) and Bank of England (2022).

independently is limited. After all, it is part of the SSM, where the ECB has the leading role, and in the EU international standards are implemented by the legislator. Moreover, a secondary mandate may also lead to greater complexity in policy and supervision choices. It would then be necessary to prevent this having a negative prudential impact and leading to ambiguities in relation to the powers of the existing national and European competition authorities.¹¹¹

There are measures that can address risks of systemic importance and promote a more level playing field between larger and smaller banks. In a healthy European market, growth through consolidation is not good or bad by definition: it can reduce dependence on local economies while also increasing systemic risks. In certain cases, cross-border acquisitions can increase the stability of the European banking sector by contributing to bank profitability and diversification. By giving supervisory authorities the opportunity to explicitly take into account the consequences for the financial stability and resolvability of a bank in the assessment of a request for a declaration of no objection, an unwanted increase in systemic risks can be limited.

Moreover, public alternatives are conceivable to stimulate competition with banks. The policy option of enabling individuals to make payments and save through an account at the central bank offers a public alternative to services at commercial banks. This may reduce society's dependence on the critical functions of banks. In addition, it would encourage commercial banks to adjust their revenue models and be prepared for the risk of a deposit outflow. This option – which, partly due to the introduction of the possibility of saving, differs significantly from current policy proposals for the digital euro – can therefore act as a disciplinary mechanism for commercial banks. It could encourage them to operate more competitively and innovatively to retain customers, by offering new services linked to the digital wallet as an intermediary. The impact on financial stability is potentially large, however. By introducing the option to save at the central bank, the safety of deposits as a stable and cheap form of financing for commercial banks will decrease. This could impair the profitability and resilience of banks. In times of stress, a public alternative to savings and payments could also increase instability in the banking sector. When introducing a savings option by means of central bank digital currency, careful consideration will have to be given to possible security mechanisms.

International and European commitment will also be required for some of the measures in this policy direction. Only the introduction of a secondary competition mandate for DNB can be introduced nationally. Nevertheless, the EU frameworks for this measure are also relevant and a broader European perspective must also be taken into account.

Finally, simplifying regulations may promote a level playing field and limit implementation costs and thus contribute to a competitive and diverse sector. This simplification of regulation involves elements from the prudential framework, as already discussed in the 'better buffers' policy direction. Abolition of AT1 capital would simplify the capital framework, partly benefiting the competitive position of small and medium-sized banks. Harmonising and strengthening macroprudential buffers for systemically important banks in the EU (sheet 6) and the macroprudential framework in a broad sense reduces fragmentation in the European market. In addition, consideration could be given to asking the Basel Committee, the European Commission and the EBA to analyse where simplification is possible without any easing of requirements. For example, following the British example described above. A European analysis could involve CRR and CRD and the technical standards based on them, including the scope for further limiting national options and discretions, and the interaction between prudential requirements in the CRR and CRD on the one hand and MREL requirements on the other. This

¹¹¹ Ferran, E. (2023). International Competitiveness and Financial Regulators' Mandates: Coming Around Again in the UK, Journal of Financial Regulation, Volume 9, Issue 1.

would be with a view to reducing fragmentation in the internal market and easing the regulatory burden.

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