

# Banking today: navigating a new reality

Opportunities and challenges for banks in times of higher interest rates, the digital transformation and the transition to a sustainable economy

**DeNederlandscheBank**

EUROSYSTEM

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# Summary

**The Dutch banking sector is financially resilient.** Dutch banks are well capitalised and their profitability has improved in recent years. Interest income has risen, banks have improved their operational efficiency and they have increased their revenues from payment services. The interest margin, the difference between interest income and interest expenditure, continues to form the backbone of the Dutch banking sector's business model.

**The current favourable momentum provides banks an excellent opportunity to give a solid boost to achieving their sustainability and digitalisation ambitions, make their money laundering controls more effective and efficient, clear the backlog of these controls and, where necessary, get their risk management practices in order.** The world in which banking products and services are offered is changing rapidly. The low-for-long interest rate environment has rapidly given way to an environment of higher interest rates and inflation. Due to advancing digitalisation, the way households and businesses wish to conduct their banking business is constantly subject to change, which has also encouraged FinTechs and BigTechs to enter the financial services market. In addition, climate change and the transition to a sustainable economy entail opportunities and risks for the banking sector. Banks can be expected to proactively respond to this changing environment without compromising their solidity and reliability.

## Stickiness of deposits and increasing competition in a changing interest rate environment

**Banks benefit from higher interest rates, but fiercer competition and a deteriorating risk profile may now turn the tailwinds that banks are currently experiencing into headwinds.**

Now that interest rates have risen and interest margins are picking up, Dutch banks are benefiting relatively strongly. While depositors are remaining loyal to their banks for the time being, increased bank profits have been accompanied by widely-felt dissatisfaction in society with the level of interest rates on savings. The desire for better returns on savings may tempt depositors to switch to other banks, either foreign or domestic, that offer higher savings rates or to hold deposits in other forms, such as government bonds or money market funds. Digitalisation facilitates switching by making it easier to compare alternatives and open an account with another bank. Increasing competition may result in lower stickiness of deposits, which may compel banks to raise the interest rates they pay on savings, also depending on their need for liquidity. This also means that banks must build sufficient prudence into their risk management assumptions about competition and depositors' switching behaviour. Banks are also facing challenges in the lending market. While traditional banks remain the dominant lenders in the mortgage and corporate credit markets, new entrants are creating more competition. In addition, tightening monetary policy may cause credit demand to fall. Banks' credit risks may also increase, as the repayment capacity of households and businesses may come under pressure.

## Changing playing field due to increasing digitalisation of society

**Ongoing digitalisation requires banks to continue to respond to changing customer demands, with attention also being paid to managing cyber and outsourcing risks and ensuring that banking services are widely accessible.** Customers expect increasingly fast and more user-friendly service. Banks are therefore continuing to digitalise their services. They are also seeking collaboration with tech companies, such as BigTechs and cloud service providers, to meet customers' (digital) needs and digitalise their business processes. As a result, the banking value chain is changing, which requires banks to adequately manage the ensuing outsourcing risks. De Nederlandsche Bank (DNB) monitors this as a supervisory authority, and we will also have additional authority in this regard when the Digital Operational Resilience Act (DORA) enters into force in 2025. For example, threat-led penetration tests aimed at increasing cyber resilience for large banks will become mandatory, which may also involve third-party IT service providers. Despite the dominance of some tech companies in segments of the payments market and the emergence of a dependency relationship for banks with regard to these activities, the impact on the business model is still modest. This will change if tech operators, and in particular the BigTechs, were to broaden their activities and focus more on the savings and credit markets, thus becoming direct competitors to banks in these markets as well. At the same time, banks are also facing the challenge of continuing to serve the large group of customers who have difficulty with electronic banking and payments. This requires them to strike the right balance between further digitalising their services and ensuring broad accessibility.

**The increasing use of financial customer data brings opportunities, but also requires banks to protect customer privacy and maintain data security.** Financial customer data and the increasingly sophisticated tools to analyse it, provide banks with opportunities to offer more personalised services, increase customer convenience and improve risk assessments. Capitalising on these opportunities requires banks to continue to safeguard the privacy and interests of their customers. In the context of growing cyber risks, they must also ensure that their data management and information security are in order and remain so. In parallel, and due to developments in laws and regulations, such as the open finance framework presented by the European Commission, a customer's *own* bank is no longer the only one that has access to financial customer data. This can benefit consumers and businesses by making it lucrative for them to purchase services from other financial institutions, while this benefit can be a detriment for their own bank, which may find itself exposed to more competition. At the same time, having access to their customers' financial data from *other* financial service providers can also help these banks to offer new products and services and improve their credit risk assessments.

## Opportunities and risks in the transition to a sustainable economy

**The transition to a sustainable economy presents opportunities to offer new banking products, but also requires banks to make important strategic choices about the activities they finance in the future.** The transition to a sustainable economy requires substantial levels of investment from households and businesses. This presents opportunities for banks, such as providing households with the finance they need to make their own homes more sustainable and giving businesses access to credit to invest in energy-saving measures. In order to get these private climate-related investments off the ground, it is up to the government to use its climate policy to create the preconditions for these investments, for instance by appropriately pricing greenhouse gas emissions. Climate change, environmental degradation and the transition to a sustainable economy also expose banks to risks. For instance, increased public attention to the impact banks have on the environment through their lending and new European laws and regulations (which require banks and companies to be transparent about their impact) give rise to reputational and legal risks. It is encouraging that, by signing the climate commitment, the major banks and a number of smaller banks are showing their commitment to contribute to the sustainability transition. At the same time, banks still have steps to take in identifying, measuring and managing climate and environmental risks, and will need to take action to deliver on the climate commitments they have made. This will require substantial and far-reaching decisions, especially with regard to their lending choices. If banks are unable to deliver on the commitments made, they may find themselves facing reputational and legal risks.

## Closing remarks

**Banks' pursuit of profit may conflict with meeting societal expectations regarding interest rates on savings, the accessibility of financial services and their contribution to the sustainability transition.** Healthy banks are able to fulfil their role in the financial system, support the economy and have sufficient buffers to absorb losses. Profits play an important role in this respect, as they offer a first line of defence against negative shocks. Most Dutch banks are commercial enterprises, seeking profits just like other businesses, if only to ensure access to the capital market. Tension may arise between the pursuit of profit and the wish to meet the expectations of society, as illustrated by the recent public dissatisfaction with rising bank profits in relation to the interest rates offered on savings. Moreover, the pursuit of profit may conflict with ensuring broad accessibility of payment services and other forms of financial services. Similarly, private and public interests do not always coincide in the transition to a carbon-neutral economy, for example when banks are expected to play a driving role in this transition. In this context, it is important that banks are always aware of expectations in society and that they continue to make sound and responsible decisions as they chart their course. We will remain in constant dialogue with the sector on these subjects. As part of our supervision we intend to continue to firmly challenge institutions about the strategies they have chosen.

# Introduction

## **Banks play an essential role in society.**

Banks manage the savings of households and businesses, provide access to credit and play a pivotal role in the payment system ([WRR, 2019](#)). They also fulfil the role of gatekeeper, which tasks them with the essential function of preventing and combating money laundering and terrorist financing. A solid and reliable banking sector is a key requirement for the proper functioning of the Dutch economy.

## **The government imposes requirements on banks to safeguard public interests.**

Most banks in the Netherlands are commercial enterprises, which means they seek profits<sup>1</sup>. At the same time, the banking sector is heavily regulated. Banks are subject to regulations requiring them to maintain sufficient capital and liquidity buffers, for instance, and the Dutch deposit guarantee protects private bank deposits up to €100,000. The government uses such measures to safeguard public interests. Banking regulation not only restricts banks, but also offers them advantages – for example by boosting public trust in the banking sector.

## **Tensions may exist between the private interests of banks and the public interest.**

For example, the desire to control costs may be discordant with keeping banking services widely accessible. Another area of tension concerns the need to keep the financial sector clean of money laundering and terrorist financing, the costs associated with these prevention efforts and the disadvantage to bona fide customers when banks decide to restrict financial services to them (derisking)<sup>2</sup>. Again and again, the challenge

is to strike the right balance between allowing scope for private initiative while safeguarding public interests.

**In our supervisory role, we emphasise the resilience of banks' business models.** In itself, ensuring the profitability of an individual bank or the sector is not an objective we aim for as a supervisory authority. However, a healthy and future-proof business model does support the resilience of banks and helps to ensure financial stability. When setting capital requirements, supervisors also consider the business model, giving them a better understanding of a bank's main activities and business units, the environment in which the bank operates and its vulnerabilities.

**In this study, we look at the impact of the changing interest rate environment, the digital transformation and the transition to a sustainable economy on banking business models.** The focus here is on the core activities of banks: attracting deposits, facilitating payments and extending credit. This study builds on previous work published by DNB. For example, DNB ([2021](#)) outlines four different scenarios regarding cooperation between banks and BigTechs.

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<sup>1</sup> The Netherlands also has a number of public banks that carry out specific tasks, such as financing municipalities.

<sup>2</sup> See also DNB ([2022](#)).

# 1 State of the Dutch banking sector

The Dutch banking sector is characterised by a small number of banks with a large market share. Customers are generally satisfied and banks are well capitalised. Profitability has risen sharply over the past year, mainly due to higher interest rates, which has also led to dissatisfaction among depositors.

## 1.1 The Dutch banking sector: concentrated and financially resilient

**The Dutch banking sector is characterised by a small number of institutions with a large market share.** Compared to other European countries, the Netherlands has a relatively highly concentrated banking sector (see Table 1). Four major Dutch banks, ING, Rabobank, ABN AMRO and Volksbank, provide the greatest proportion of services. They have a dominant position in the banking markets for savings, credit and payments. Together, they account for almost 80% of the balance sheet of the sector as a whole. The Netherlands also has a large number of smaller banks, including digital-only

banks and banks that operate in certain niche markets or focus on specific themes such as sustainability. The majority of Dutch people are satisfied with their bank (see also Box 1.1). The share of foreign banks in the Dutch market is limited, even compared to other European countries. Making the desired progress with the European banking union will not only contribute to the resilience of the financial system, but also contributes to the development of a more diverse banking landscape as more foreign parties enter the Dutch market and opportunities arise for Dutch banks to strengthen their position elsewhere.

Table 1 Dutch banking sector concentrated and heavily dependent on interest income (2022)

	Netherlands	Germany	France	Italy	Spain
Concentration (% of assets at 5 largest banks)	83%	35%	82%	63%	70%
Total number of banks	30	1222	88	127	67
Total assets (% of GDP)	295%	223%	398%	166%	309%
Lending (% of balance sheet)	68%	52%	60%	57%	65%
Interest income (% of total income)	68%	65%	45%	51%	71%

Source: DNB, ECB SDW<sup>3</sup>

<sup>3</sup> Unless stated otherwise, this study uses aggregated figures for all banks established in the Netherlands and in EU Member States that have a banking licence. Foreign bank assets on the Dutch market are excluded.



### Box 1.1: Dutch people satisfied with their own bank, but dissatisfied with costs and interest on savings

The majority of Dutch people are satisfied with their bank. A public survey conducted in the spring of 2023 shows that people appreciate the convenience of mobile banking apps (62%). They also value the speed at which their bank executes payments (37%) and enjoy using their smartphones for payment matters (25%).

The customers who are dissatisfied about their bank are mainly dissatisfied with the fees for payment account packages and the interest rates offered on savings. The survey reveals that 9% of Dutch people give their bank a rating lower than 6 (out of 10). Alongside rising payment account fees (64%), they are often dissatisfied because they receive little or no interest on their payment account balance (46%). Bank branch closure (24%), followed by the impossibility of withdrawing or depositing cash at a bank branch (14%) are also reasons for customer dissatisfaction.

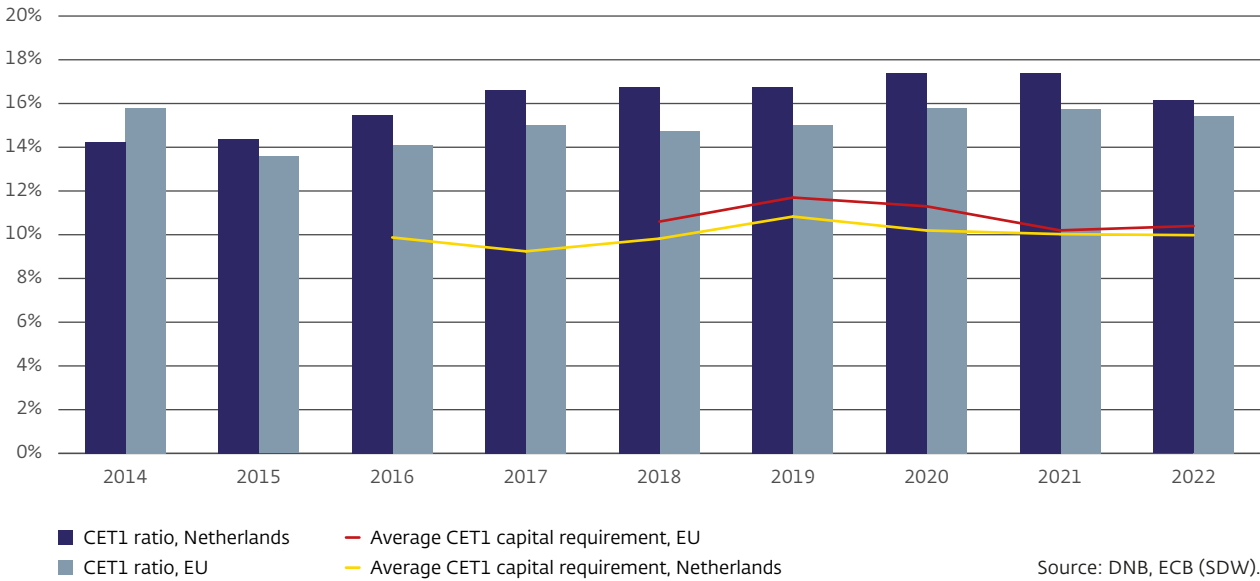
Dissatisfaction with savings rates sometimes prompted consumers to open an account with another bank. Over the past three years, 10% of Dutch consumers opened an account with another bank. Of these, 34% did so to receive more interest on their savings. Other reasons frequently mentioned were the bank's approach to societal themes (16%) and its sustainable and responsible investing policy (15%).

**The size of the Dutch banking sector relative to the economy has decreased significantly since the financial crisis**, from over 500% of GDP in 2008 to around 300% in 2022. This is due in part to the increased size of non-bank financial intermediaries, the reduced activities of Dutch banks abroad and declining mortgage debt as a percentage of GDP (see also [DNB, 2015](#); [DNB, 2022](#)). This trend is also visible elsewhere in Europe.<sup>4</sup> Like German and Spanish banks, Dutch banks are also relatively heavily dependent on interest income. In comparison to other countries, Dutch banks extend relatively large numbers of loans, particularly mortgage loans.

**Dutch banks are well capitalised.** The CET1 capital ratio, which is the ratio of own funds (core capital) to total risk-weighted assets, has steadily increased in recent years, reaching more than 16% in 2022, as shown in Figure 1. Dutch banks' capital position is thus above the minimum requirements, which in the Netherlands are between 11% and 15% for systemically important banks, and just above the average CET1 capital ratio of European banks. Dutch banks are therefore relatively well capitalised. Reforms to the capital framework after the financial crisis contributed significantly to this (see also Box 1.2).

<sup>4</sup> The size of the European banking sector fell from 325% of GDP in 2008 to 250% in 2022.

Figure 1 Dutch banks are well capitalised<sup>5</sup>



### Box 1.2: Implementation of global agreements on strengthening banks' capital positions

After the 2007 financial crisis, global agreements were reached on capital requirements for banks, known as the Basel III accord. In late 2017, the Basel Committee decided on further reforms to banks' capital requirements. For example, standardised approaches for calculating capital requirements have been made more risk sensitive. Basel III also introduces a floor for the capital requirements resulting from banks' internal models. These measures will ensure that banks hold sufficient capital to cover the risks they face.

At the end of June 2023, an agreement was reached in the EU on the implementation of the Basel agreements. The proposals follow the Basel agreements in many respects, but unfortunately do not lead to their full, consistent and timely implementation – something that DNB<sup>6</sup>, but also the European Central Bank (ECB) and the European Banking Authority (EBA), have explicitly called for. One of the biggest deviations is that the capital floor for internal models only becomes applicable to major bank loan portfolios, including some mortgage loans and corporate loans, after a lengthy transition period. As a result, it will take longer before banks are required to maintain higher buffers, which may also have an impact on the profits they can pay out in the coming years.

<sup>5</sup> We used supervisory data from the Single Supervisory Mechanism (SSM) area for the European capital ratios and requirements.

<sup>6</sup> See also DNB (2023).

## 1.2 Profitability of Dutch banks has steadily increased

**The profitability of Dutch banks steadily increased after the financial crisis of 2008, but market capitalisation continues to lag behind own funds.** Dutch banks' return on assets (RoA) rose from less than 0.3% to around 0.5% after the financial crisis (Figure 2a). As banks simultaneously increased their capital buffers, the return on equity (RoE) remained almost stable

over the same period (Figure 2b). Dutch banks outperform other European banks on average on both indicators, which is partly linked to greater cost efficiency. Finally, the market capitalisation of listed banks<sup>7</sup> remains below the book value of their own funds. This suggests that the expected profitability of banks is lower than their shareholders require based on their risk exposure (see also DNB (2021)).

Figure 2a Return on total assets of Dutch banks in European perspective

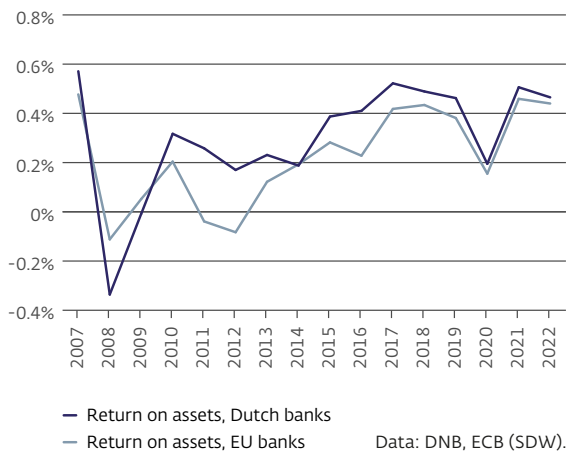
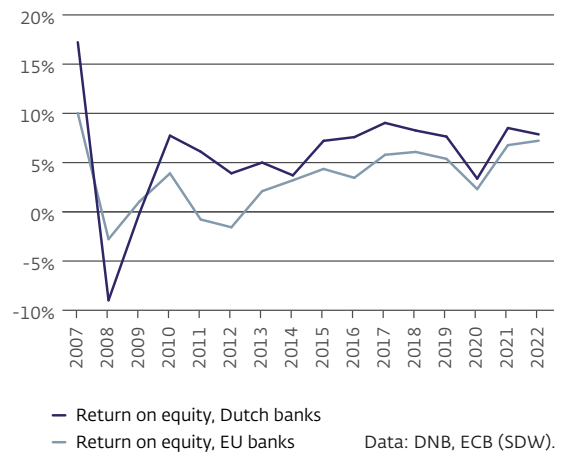


Figure 2b Return on equity of Dutch banks in European perspective



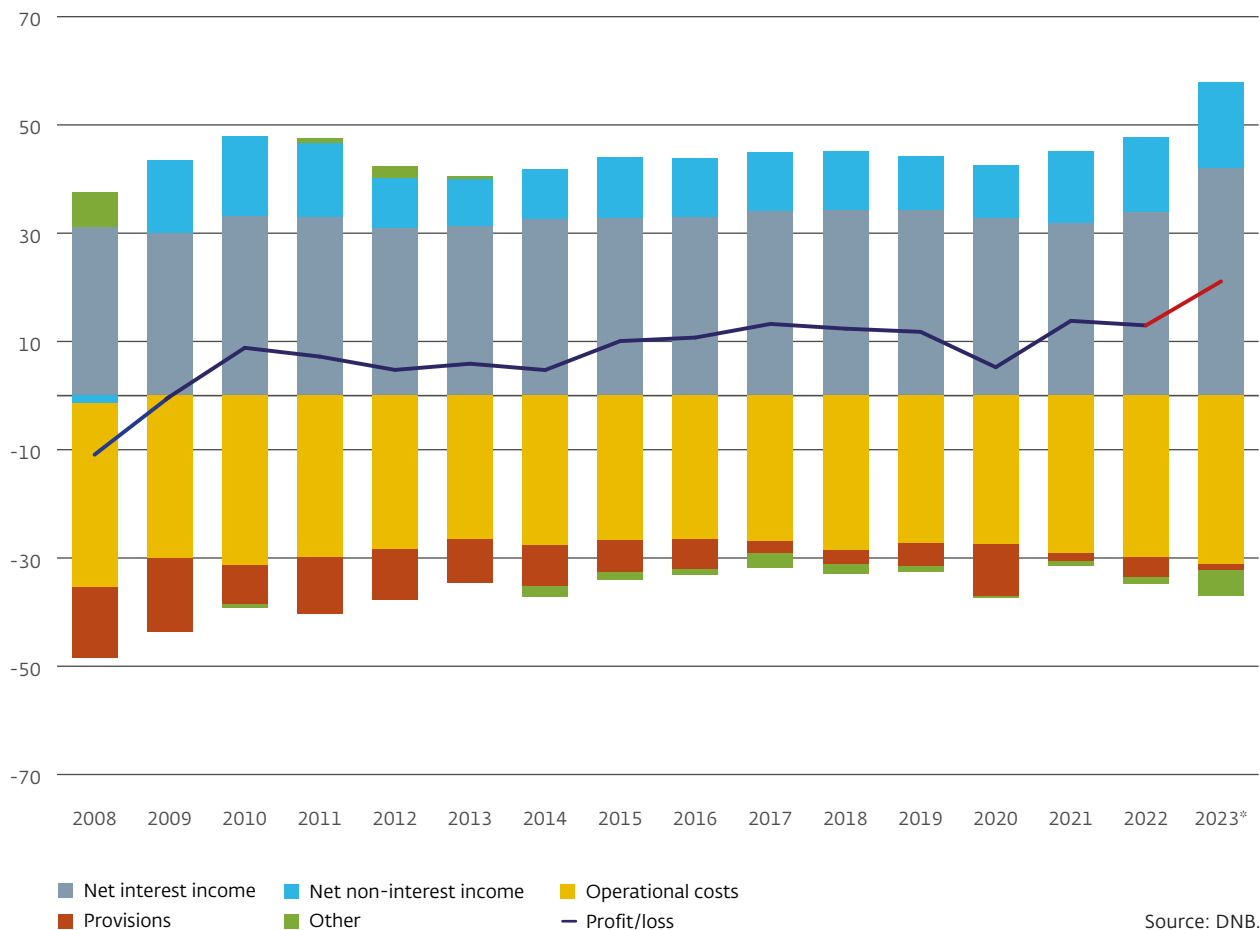
<sup>7</sup> Adyen, which is mainly active in the payment system and has held a banking licence since 2017, is an exception.

**Bank profitability has increased significantly over the past year.** The net result of Dutch banks in 2022 was nearly €13 billion (Figure 3). In the first half of 2023, the net result had already reached €10.5 billion. The net result can be broken down into: (i) *net interest income*, (ii) *net non-interest income*, which includes net fee and commission

income and income from financial assets, (iii) *operating costs* and (iv) *provisions* made by banks for non-performing loans. Against the backdrop of increased bank profitability, the Dutch House of Representatives recently proposed increasing the bank tax. Box 1.3 discusses this in greater detail.

**Figure 3 Profitability of banks highly dependent on net interest income**

Profitability Dutch banks by category, in EUR billion



Source: DNB.

Note: In the figure above, a simple extrapolation of the data for the first half of 2023 was used for profitability in 2023.

### Box 1.3 Raising the bank tax is a political choice; judicious design is essential

Banks operating in the Netherlands pay tax on their borrowed capital: the bank tax. The financial crisis, during which the government lent a helping hand to distressed banks, including through capital injections, triggered the introduction of this tax. The main purpose of the bank tax, as highlighted by the government when it was introduced in 2012, is to price in the implicit government subsidy: the risk that a bank will have to be bailed out by the government to ensure financial stability.<sup>8</sup> In 2021, the Minister of Finance concluded in a comprehensive assessment that the implicit government guarantee for systemically important banks had decreased since the financial crisis, partly due to the policy measures taken at international and European level, although it had not yet ceased to exist ([Government of the Netherlands, 2021](#)).

In the light of banks' increased profits, the House of Representatives recently proposed a structural increase in the tax on Dutch banks by €150 million.<sup>9</sup> It is up to politicians to decide on the desirability of this increase. From a prudential perspective, it is desirable that this increase is designed judiciously such that it does not undermine the resilience of banks. A structural increase in the bank tax that does not take into account the underlying trend in bank profitability may affect banks' future ability to build additional buffers. In addition, the intended purpose of an additional tax on bank profits earned in the Netherlands should be consistent with the design. This link is lacking in the current proposal, since the current bank tax is aimed at addressing the implicit subsidy for the too-big-to-fail risk and depends on the extent to which a bank funds itself with debt.

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<sup>8</sup> Parliamentary Papers of the Dutch House of Representatives, 2011/2012, 33 121, no. 3.

<sup>9</sup> Parliamentary Papers of the Dutch House of Representatives, 2023/2024, 36 418, no. 11.

## Interest income main source of revenue

**Net interest income is the backbone of the Dutch banking business model.** Net interest income is the interest income that banks receive on their assets, such as loans to businesses and households, less the interest expenses that banks pay on their liabilities, including payment and savings accounts and other deposits. Whereas net interest income hovered around €30 billion in recent years, this figure rose to nearly €34 billion in 2022. As such, net interest income accounted for over two-thirds of total operating income in 2022. In the first half of 2023, net interest income already amounted to €21 billion. It is striking that smaller banks in the Netherlands are less dependent on interest income compared to the large banks. Instead, they are more dependent on net fee and commission income.<sup>10</sup>

**The interest margin realised by banks can be conceptually broken down into the margin on deposit funding (funding margin) and the margin on lending (lending margin).**

The interest that banks receive on their assets, such as mortgages and business loans, is generally higher than the interest rates on their liabilities, such as payment and savings account deposits. The interest margin realised by banks as a result can be broken down into a funding and lending margin and the earnings from maturity transformation.<sup>11</sup> The funding margin expresses the funding advantage that banks gain by funding themselves with deposits, and reflects the difference between the interest rate banks pay on their deposit funding and the market rate.<sup>12</sup> The lending margin is the difference between the

interest that banks earn on *newly* issued loans and the market interest rates with a comparable maturity. Finally, a bank generates interest earnings from maturity transformation, as the maturity of a bank's assets tends to be longer than the maturity of its liabilities. If long-term interest rates are higher than short-term interest rates, banks can take advantage of this maturity mismatch between their assets and liabilities. In the case of Dutch banks this is a relatively minor factor, partly because they largely hedge their interest rate risk (DNB, 2022).

**As higher interest rates have been slow to feed through into savings rates for now, banks' funding margin on deposits has increased.**

Banks have passed on the recent rise in market interest rates to a limited extent to interest rates on payment account balances and instant access savings accounts. As a result, banks' funding margin on deposits increased from the end of 2021 (see Figure 4a). It also took some time for banks to pass on negative interest rates (partly) to customers in the period of negative policy rates. Compared to previous periods in which interest rates rose, there is now a faster and more complete pass-through of the higher interest rate to savings rates offered by Dutch banks (DNB, 2023). Elsewhere in the euro area, deposit interest rate increases have also remained limited relative to market interest rates, enabling banks to benefit from higher interest rates (see ECB, 2023). The Ministry of Finance has asked the Authority for Consumers & Markets (ACM) whether there are grounds to investigate the development of savings rates and competition in the Dutch savings market

<sup>10</sup> For large banks, interest income constituted 70% of total income in 2022, while the figure is 45% for small and medium-sized banks.

<sup>11</sup> The concept of funding and lending margins does not include non-interest costs, such as operational costs, expected credit risk costs and capital costs.

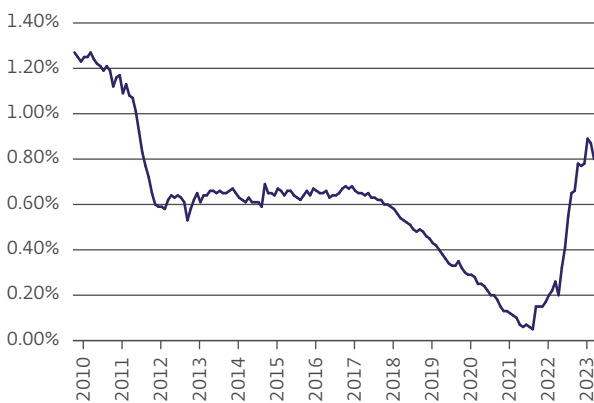
<sup>12</sup> Although balances in payment and savings accounts are (often) freely available to customers, they are a relatively stable source of funding for banks. As a rule, customers generally do not need all their money at the same time. Moreover, customers are unlikely to switch banks, meaning their deposits are relatively stable. This enables banks to lend deposit balances for a relatively long period at higher interest rates. Banks model this effective maturity of deposits based, among other things, on the expected interest rate sensitivity of their customers.

(Government of the Netherlands, 2023). ACM has announced that it sees sufficient grounds to launch a study on the functioning of the Dutch savings market and expects to publish its findings before the summer of 2024 (ACM, 2023).

**Concurrently, banks have managed to maintain their lending margin until recently.**

Lending margins widened after the financial crisis, mainly because banks were able to take advantage of relatively high lending margins on mortgages for a protracted period (Jansen et al., 2013). As discussed in Section 3, these high margins have also encouraged insurers and pension funds to expand their market share in the mortgage loan market. Since 2021, however, the lending margin on newly issued mortgage loans has fallen due to the rapid rise in interest rates (see Figure 4b).

Figure 4a Funding margin on deposits increases due to higher interest rates



Source: ECB SDW, Bloomberg.

Note: The funding margin is calculated here as the difference between the deposit rate paid by banks and the risk-free interest earnings they can obtain from these deposits (using a replicating portfolio of swaps with maturities that are in line with the interest rate sensitivity of the deposits in question as modelled by the banks).

**Non-interest income higher, partly due to greater income from payment services**

**Net fee and commission income has steadily increased in recent years.** Fee and commission income stems from various services, including payment services, retail investment products and investment banking. As banks have increased fees on payment account packages and transactions, the revenue they realise on these services has increased in recent years. In combination with the increase in interest income attributable to payment services and the cost-cutting measures taken by banks, they have seen their profitability from payment services improve in recent years (see Box 1.4). As with other European banks, income from investment banking fell following the 2008 financial crisis mainly because banks scaled back these activities. For Dutch banks, income from trade and other income are relatively minor.

Figure 4b Lending margin on newly issued mortgage loans down again after protracted period



Source: DNB, Bloomberg.

Note: The lending margin is calculated here as the difference between the maturity-weighted mortgage interest rate on new mortgage loans minus the maturity-weighted market interest rate (swap rates for different maturities). Interest rates are a weighted average of mortgage interest rates as reported by banks. This may differ from mortgage providers' current interest rates, partly because the reported mortgage loans may have been extended on the basis of quotes from an earlier period with a different interest rate.

#### **Box 1.4 Profitability of payment services has improved in recent years**

Providing payment services to account holders in the Netherlands is gradually helping to boost the profitability of the Dutch banking sector. This also applies to payment services offered by internationally operating Dutch banks to account holders abroad.

##### **Payment services for Dutch account holders are profitable for the Dutch banking sector**

Payment services provided to account holders in the Netherlands are again profitable for the Dutch banking sector. Unlike in recent years, most major Dutch banks are likely to make a profit on payment services to Dutch account holders this year. This may not hold for some large and medium-sized banks.<sup>13</sup> Research by the Dutch Payments Association (2022) shows that Dutch banks collectively lost €570 million on payment services in the Netherlands in 2021, as costs (€4.2 billion) outweighed revenues (€3.7 billion). Banks made a €802 million loss on the household segment and a €232 million profit on the business segment. The main reasons for the losses in 2021 were low interest income on payment account balances and high costs associated with overhead, risk management and compliance.

To improve the cost coverage ratio of payment services and make them less dependent on macroeconomic developments, major banks have substantially raised fees on payment account packages and transactions in recent years. As a result, the gross revenues of the four major Dutch banks from payment services has increased by around €300 million since 2021. The higher funding margin has also increased the net interest income that banks generate on domestic payment account balances. Estimates indicate that this revenue will be around €1 billion higher in 2023 than in 2021.<sup>14</sup> Moreover, cost-cutting measures, such as the closure of bank branches, the further reduction of paper payment transaction flows, and the elimination of part of the backlog in AML/CFT activities at a number of major banks have also helped to improve the cost coverage ratio of payment services offered to Dutch account holders.

##### **Bank payment function contributes to increased profits of Dutch banks throughout their entire customer portfolio**

Looking at the total customer portfolio of Dutch banks, including their account holders abroad, it appears that the payment function of banks has become more important relative to other banking functions. This applies both to net income from fees and commissions and to net interest income.

Between 2014 and 2022, net income from fees and commissions from the entire range of banking services provided to account holders, including foreign ones, rose by 81%, from €5.7 billion to €10.2

<sup>13</sup> Previous studies show that Dutch banks were able to break even on payment services in the past, see McKinsey & Company (2006).

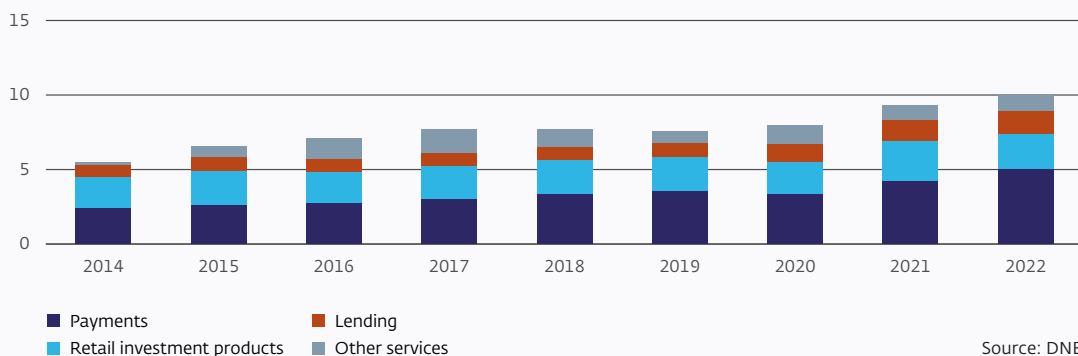
<sup>14</sup> For this estimation, we used the methodology described in the 'Study into the costs and revenues of payment services for financial institutions in 2021' from the Dutch Payments Association (2022) to determine the net interest income from payment services, which has been endorsed by Dutch banks.



billion (see Figure 5). All banking services – payments, retail investment products, credit and other services – contributed to this growth, but the largest contribution comes from payment services, with an increase of €2.6 billion. The share of the bank payment function in net fee and commission income consequently increased to 50%. This is largely due to the emergence of Adyen, a globally operating payment service provider, which has had a banking licence since mid-2017, and which accounts for a large proportion of the additional fee and commission income. A somewhat smaller proportion is due to the fee hikes imposed by major banks and other banks on payment account packages and transactions for both private customers and SMEs.

Figure 5 Importance of bank payment function in net direct fee and commission income doubled between 2014 and 2022

Net income from fees and commissions, in EUR billions



Source: DNB.

Note: The category "other services" includes revenues from investment banking-related activities.

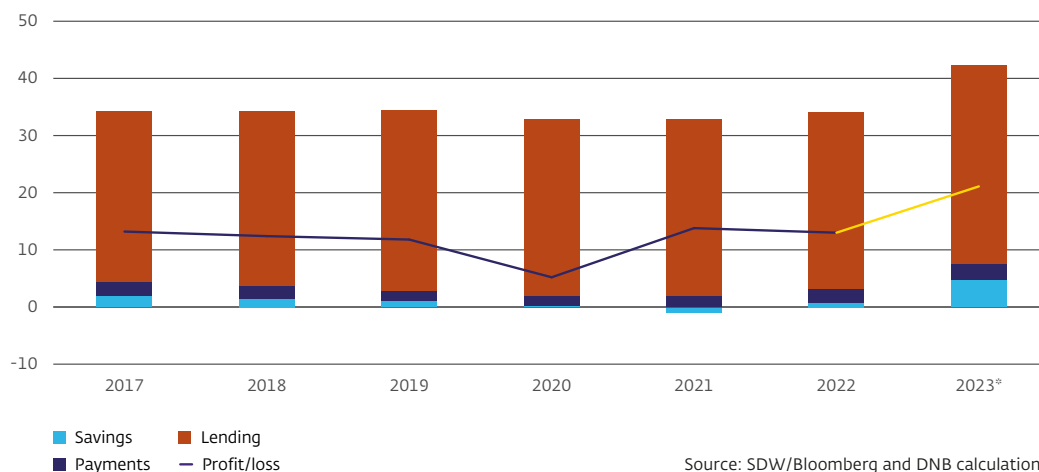
### Banks generate higher net interest income on payment and savings accounts

Although banks derive the lion's share of their net interest income from their loan portfolios, the share they generate from payment and savings accounts has increased in recent years. The combined contribution from payment and savings accounts to net interest income is estimated at over €7 billion for 2023 (see Figure 6). This includes accounts held both by residents of the Netherlands and account holders located abroad. The contribution of payment accounts to total net interest income was limited in 2021, and that of saving was even negative. The reason for these low or even negative contributions was that banks only partly passed on negative interest rates to their customers. Interest rates have recovered in the meantime, and the contribution from savings deposits is particularly notable. The expected increase in the contribution from payment accounts to around €2.9 billion in 2023 is less pronounced and is similar to its 2017 level. This is because, on average, banks lend out payment account balances on a somewhat longer term than savings account balances, making them slightly less sensitive to interest rate

fluctuations. On average, the contribution from payments is higher than from savings because banks pay households and businesses little to no interest on the balances in their payment accounts, unlike the interest they pay on savings accounts, and because banks lend out payment account balances on a somewhat longer term than savings account balances. Both contribute to a higher interest margin on payment accounts. The balances on payment accounts have nevertheless decreased since mid-2022, because account holders have been transferring funds to savings accounts to take advantage of higher interest rates. This dampens the contribution from payment accounts on net interest income and boosts the contribution from savings deposits.

Figure 6 Increase in contribution from payment and savings accounts to net interest income

Net interest income in EUR billions



Note: In the figure above, a simple extrapolation of the data for the first half of 2023 was used for the profitability and net interest income allocated to the three banking functions in 2023. The net interest income allocated to custody (savings and payments) has been estimated by multiplying the balances in payment and savings accounts by the weighted average funding margin. The contribution of lending follows by deducting the contribution from custody from total net interest income. The net interest income from payments are based on the methodology used by the Dutch Payments Association in its report "Study into the costs and revenues from payment services for financial institutions in 2021" (2022), involving multiplying the balances held in payment accounts by an average risk-free market interest rate with a term of 6.2 years. These were obtained by taking a moving average of interest-bearing portfolios, consisting of 39% five-year and 61% seven-year term contracts. The contribution from savings is obtained by subtracting the contribution from payments from the contribution from custody. The methodology used here excludes the funding surcharges that banks must pay for funding in the financial markets.

## Operational costs lower, but AML costs higher

**Dutch banks have been able to significantly improve their cost efficiency.** Banks' operating costs mainly consist of staffing and ICT costs, but also include payments to the deposit guarantee fund and taxes. Dutch banks' cost-to-income ratio, i.e. the ratio of operating costs to revenues, improved from almost 70% before the financial crisis to 55% in 2022. On average, Dutch banks are also more efficient than other European banks, which have a cost ratio of 60%. In addition to the rise in revenues, digitalisation of services and the closure of bank branches, ATMs and cash deposit machines also boosted cost efficiency.

### **Although digitalisation of banking services has boosted cost efficiency, it also raises concerns about the accessibility of banking services.**

The Netherlands is among the frontrunners of countries where banking matters are handled digitally, and Dutch banks are working on their digital transformation (see also Box 1.5). At the

same time, there is a sizeable group of Dutch people who struggle to manage their banking affairs digitally. In 2021, one in six adults was unable to carry out all basic payment services on their own, such as cash withdrawals, payments in brick-and-mortar shops and web shops and using a mobile banking app. Unfortunately, it has become more difficult for this group to seek help from bank employees due to the closure of bank branches and limited possibilities to speak with a bank employee by telephone ([DNB, 2023](#)). Business customers also experience problems ([NFPS, 2022](#)). The National Forum on the Payment System (NFPS)<sup>15</sup> has called on banks to give greater priority to improving the accessibility of payment services. Banks have responded to this call and indicated that digitally challenged customers can continue to use basic non-digital banking services for as long as necessary. They will also give priority to improving the accessibility of payment services ([NVB, 2023](#)).

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<sup>15</sup> The National Forum on the Payment System (NFPS) is a platform of organisations representing providers and users of payment services that work together to ensure a secure, reliable, accessible and efficient payment system for everyone. DNB chairs the Forum and also provides the secretariat.

### Box 1.5: Digital transformation also requires effective management of operational risks

The digital transformation has been a priority for many banks for decades. Customers expect increasingly fast and more user-friendly services. Moreover, innovative technologies and applications are growing and there is greater competition from tech companies responding to changing (digital) customer needs. Especially when it comes to payments, several parties – including Adyen, Revolut, and tech companies including Apple and Google – have been successful in competing with banks (see also [DNB, 2021](#)).

Against this backdrop, most banks have been investing heavily in their digital transformation for some time. Dutch banks mainly focus on the further integration of proven technologies, such as cloud services and application programming interfaces (APIs). Banks have moved their IT systems to the cloud, where they are developing new services together with tech companies. This also creates dependency relationships between banks and tech companies, which can give rise to outsourcing risks. It is essential that banks adequately manage these outsourcing risks. We monitor this as a supervisory authority, and we will also have new powers in this regard when the Digital Operational Resilience Act (DORA) enters into force in 2025. For example, threat led penetration tests aimed at increasing cyber resilience for large banks will be mandatory, involving ICT third-party service providers. DORA also contains an oversight framework under which European supervisors can conduct inspections at critical third-party ICT service providers in collaboration with national supervisors.

Some of the innovations focus on more efficient processes to combat financial crime. The use of machine learning can make transaction monitoring more efficient, thereby reducing the burden on businesses and private customers. Innovative know-your-customer (KYC) processes can make risk assessment of customers faster, cheaper and more accurate based on high-quality data. These data are often requested manually from customers, but upcoming European laws and regulations will make it easier to share financial data (see also Section 3). We support the digital developments that enable institutions to comply more efficiently and effectively with the requirements of the Anti-Money Laundering and Anti-Terrorist Financing Act (*Wet ter voorkoming van witwassen en financiering van terrorisme – Wwft*), provided that the appropriate safeguards are in place, for example to protect customers' privacy (see [DNB, 2022](#)).

The risks associated with the implementation and use of new digital products and services are not always well managed. Challenges lie mainly in data security. For example, technological advancements enable malicious operators to carry out increasingly sophisticated cyberattacks and give them access to new modus operandi. Rising geopolitical tensions are also exacerbating cyberthreats. Moreover, robust data is essential for many applications of digital technologies. For example, artificial intelligence can only be used properly if the underlying data is of high quality and reliable. Supervisory examinations show that banks do not yet have data management and risk reports of sufficient quality in place. It is therefore important that banks continue to invest in a sound and future-proof data management.

**The costs incurred by banks in combating financial crime have increased in recent years, but may fall as backlogs are eliminated.** In recent years, banks have made a sorely needed catch-up to put their customer files into order. As a result, the costs they incur in combating financial crime have increased and were estimated at around €1.7 billion in 2022. This represents more than 5% of their total operating expenses. Banks say around a quarter of these costs are of a temporary nature, related to remediation processes. Several banks have now completed these remediation processes, which has a depressing effect on costs. For other banks, this could happen in the future, once they have also eliminated their backlogs in anti-money laundering verifications. Moreover, a more risk-based approach, combined with the application of new technologies (see also Box 1.5 and DNB (2022)), could take a more efficient and effective approach to combating financial crime in the future. This can also relieve the burden on customers.

### Loan loss provisions fell after COVID-19 crisis, but may rise again

**Central banks' monetary tightening may eventually require banks to raise their provisions.** The provisions that banks make to absorb (expected) credit losses reflect economic developments. Profits fell temporarily during the COVID-19 crisis in 2020, for example, because banks formed substantially higher provisions to absorb potential loan losses (see Figure 3).

The near-full release of these provisions led to a significant improvement in the net profits for 2021. The central banks' monetary tightening may require banks to increase their provisions in the coming years, as was the case in the 1970s and 1980s, when the Netherlands experienced a comparable inflation shock (DNB, 2022). Although banks are now mainly experiencing the positive impact of tightening monetary policy, as it passes through to their interest margins, financial conditions have tightened over the past year partly due to rising interest rates. Moreover, if inflation remains elevated for longer than expected, there is a risk that financial conditions may be tightened even further (DNB, 2023). As a result, banks' credit risks may increase because refinancing risks increase and the repayment capacity of households and businesses may come under pressure.

## 2 Payments and savings

Depositors remain loyal to their banks, but widening interest rate differentials and competition may encourage them to explore alternatives. Digitalisation facilitates this, as savings can be shifted more easily. As a result, the stickiness of deposits may decrease, which – depending on banks’ liquidity needs – may put upward pressure on savings rates.

### 2.1 The Dutch payments and savings market

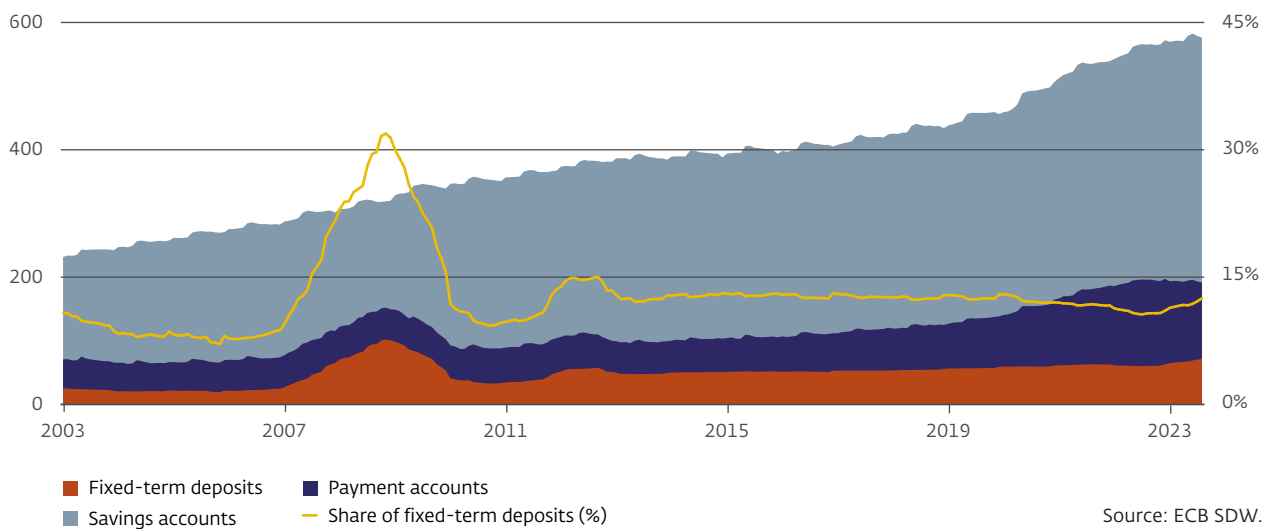
**Dutch consumers mainly hold their payment and savings accounts at one of the major banks.** In the Netherlands, most people (98%) have a payment account with one or more of the four major Dutch banks.<sup>16</sup> This makes payment accounts an important mainstay for Dutch banks. They offer cross-selling opportunities, and many

Dutch people also hold a savings account at the same bank. Between them, the four major banks hold more than 80% of the total volume of household deposits, consisting of payment and savings accounts.

**The volume of deposits of Dutch households has grown substantially in recent years.** In mid-2023, households held almost €580 billion in their

Figure 7 Households are saving steadily

Savings of Dutch households in EUR billion



Note: This concerns the bank deposits that euro area households hold with monetary financial institutions established in the Netherlands. The majority originates in the Netherlands.

<sup>16</sup> Source: Data collected among a representative group of over 23,000 Dutch residents aged 12 years and over by research agency IPSOS, using the consumer panel of research agency GfK as part of the "Point of sale payments in 2022" survey conducted by DNB and the Dutch Payments Association.

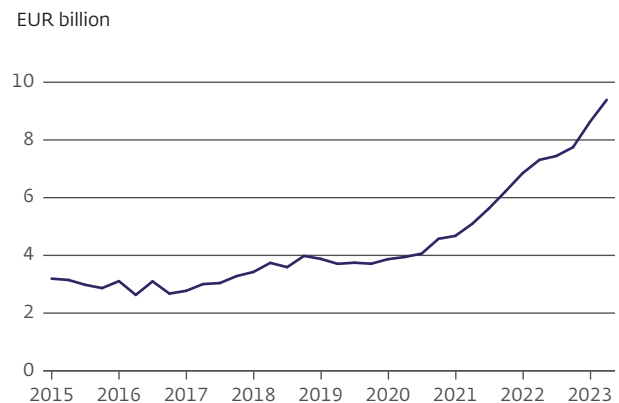
payment and savings accounts.<sup>17</sup> Household savings were particularly high during the COVID-19 crisis (see [DNB, 2023](#)). As a result, the share of household payment and savings deposits in total bank funding increased from 14% in 2008 to 20% in mid-2023. The composition of household deposits has changed over time. Between 2006 and 2008, when interest rates were comparatively high, the share of fixed-term savings deposits was relatively large. A low share of money was held in payment accounts, as no interest is usually paid on them (Figure 7). This changed in the subsequent low interest rate environment. Since 2022, the higher interest rates paid by banks on savings deposits have led to a slight increase in the proportion of savings deposits.

## 2.2 Stickiness of deposits and potential pressure on savings interest rates

**Depositors remain loyal to their bank, despite widening interest rate differentials between banks.** In particular, non-traditional banks, such as digital-only banks, currently offer higher interest rates than the more traditional banks. Although some of these – smaller – banks have seen substantial deposit inflows in recent months, the shift in the savings market as a whole has so far been modest. Dutch households also hold more bank deposits with foreign banks, but this is still limited in terms of the total amount of deposits held by households (see Figure 8).<sup>18</sup> A survey held among Dutch households confirms the perception that Dutch households remain loyal to their bank. In the past three years, a mere 3% of customers have switched to another bank

because of higher interest rates. This percentage is twice as high among young adults (25-34 years). Respondents estimate the average probability that they will transfer their main savings accounts to another bank in the coming year at slightly above 10%.

Figure 8 Dutch households' savings at other euro area banks have increased



Source: ECB SDW.

Note: The figure shows the volume of bank deposits held by Dutch households at non-Dutch banks in the euro area.

**Digitalisation makes it easier for depositors to compare banks and shift savings to other banks.** Digitalisation has made it easier to compare savings interest rates and fees for a payment or savings account at different banks. Moreover, bank accounts can often be opened online, so depositors can then deposit their savings with another bank relatively easily. Several FinTechs also provide options for easily shifting savings to foreign banks, for example because these offer higher savings rates. Combined with the

<sup>17</sup> This amounts to 60% of the Dutch GDP. In addition, businesses held a total of €380 billion in bank deposits by mid-2023. The majority of these, €250 billion, are held in payment accounts, particularly with the major banks. Businesses hold these funds mainly for liquidity management purposes and less for savings.

<sup>18</sup> The most popular countries are our neighbouring countries, such as Germany, Belgium and France. A striking feature is Estonia and Italy's increasing popularity, probably linked to the high savings rates offered by some banks there.

introduction of European banking supervision and the harmonisation of the terms and conditions of national deposit guarantee schemes, this means Dutch banks are now in more direct competition with their European peers. Conversely, this also offers opportunities for Dutch banks to consolidate their position elsewhere in Europe, for example by leveraging their highly digital service provision as a competitive advantage. Nevertheless, differences in the tax treatment of savings deposits, language barriers and lower trust in foreign banks may still keep depositors from switching to a non-Dutch bank.

**Although alternatives to savings deposits are becoming more attractive, Dutch households still make limited use of sovereign bonds and money market funds.** Excluding the wealthiest group of households (10%), Statistics Netherlands data show that Dutch households hold only 10% of their assets in securities, including sovereign bonds and money market funds. At the same time, digitalisation and scale-ups have lowered asset management barriers and costs in recent years, thereby providing wider access to alternatives that outperform bank deposits. Accordingly, in the future new and existing market operators will be able to advise their customers more easily on how best to manage their assets. For example, by linking financial data from different asset sources with the customer's consent (see Section 3). Lastly, tax changes may have an impact on the attractiveness of alternatives, as it is currently less attractive financially to invest in money market funds or similar products for tax reasons in the Netherlands.<sup>19</sup> Experiences gained abroad show that lower costs and wider accessibility of

alternatives to bank deposits can cause changes in customer behaviour. For example, the Belgian government sought to increase competition for deposits by issuing a special low-cost bond to the public, raising €20 billion. In Portugal and Italy, too, governments have issued government bonds directly to households.

**Outside Europe, banks are also facing (indirect) competition from BigTechs.** BigTechs seek to gain a more dominant position in sub-segments outside Europe. In Europe, they are still reluctant to compete with banks in the savings and credit markets, acting primarily as a partner. A case in point is the Apple Savings system launched in the United States in April 2023, which is a partnership between Apple and Goldman Sachs. This savings product offered an interest rate at launch (4.15%) that was significantly higher than that offered by US banks at the time (0.37% on average; [Financial Times, 2023](#)). Although around \$10 billion in deposits were raised in just a few months, there have been signs that the partnership between Apple and Goldman Sachs seems to have cooled recently ([Reuters, 2023](#)). Another example is Chinese yu'e bao, of BigTech Ant, which, in six months, was able to raise \$100 billion by setting up a money market fund, which offered higher interest rates despite having similar liquidity characteristics to a bank deposit. Chinese banks subsequently felt forced to raise their deposit rates ([Chui, 2021](#)). While it is uncertain to what extent BigTechs also have plans to enter the European savings market, the current higher interest rate environment makes such entry more attractive. Not only because the margins on savings deposits have increased, but also because they can use a

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<sup>19</sup> Dutch wealth tax uses a notional return for savings and investments. Since this notional return is based in part on riskier assets, it is less attractive to invest in low-yielding investments such as money market funds. This may change if, in line with the intentions of the current caretaker government, the actual returns will be taxed.



relatively larger portion of deposits collected to provide new loans at higher interest rates than banks that have an existing loans portfolio.

**In terms of the banking business model, reduced stickiness of deposits may put upward pressure on savings rates.** The extent to which banks will be required to raise their savings rates to retain customers hinges on factors such as competition in the savings market – both between Dutch banks and with foreign banks and non-bank alternatives – and on the willingness of customers to switch banks. A further factor is the extent to which banks will need additional

funding, which, given the relatively high household savings over the last years, may be a limiting factor. The potentially higher interest-rate sensitivity of depositors and reduced stickiness of deposits will pose an important challenge for banks in the coming years (see also Box 2.1). It is therefore important that banks regularly review the assumptions made in their risk management policies about competition and depositors' switching behaviour and ensure that these are sufficiently prudent.

### **Box 2.1 Banking turmoil of spring 2023 illustrates the need for adequate risk management and strengthening of regulation**

In the spring of 2023, a number of regional banks in the United States failed, and UBS acquired distressed Credit Suisse. Problems faced by US banks were related to their business model and inadequate risk management. For example, the US bank SVB experienced rapid growth, was highly dependent on unsecured deposits and, in particular, failed to manage interest rate risk adequately. SVB had invested deposits mainly in long-term bonds, on which unrealised losses had accumulated due to the rapid rise in interest rates. In March, SVB and Signature Bank encountered liquidity problems as depositors withdrew large amounts of deposits in a short period of time. The increased digitalisation of the payment system, combined with the role played by social media, led to a much faster cash outflow than in previous cases. In only one day, SVB and Signature Bank saw 25% and 20% of their deposits flow out respectively, 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' time ([Rose, 2023](#)). Credit Suisse had long been affected by various problems concerning integrity, its business model and profitability, causing investors and depositors to move their money.

The March 2023 turmoil has shown that adequate risk management and good governance are very important for banks' resilience, as well as assertive and effective supervision ([BCBS, 2023](#)). It is important for supervisors to be able to detect outliers in business models, to be alert to shortcomings in governance and risk management, and to act and enforce in a timely manner in the event of deficiencies. In addition, the events underline the importance of robust regulation. A wider application of global standards is warranted (see also Box 1.2), as problems for smaller banks can also cause a global chain reaction. Regulations covering interest rate risk will strengthen banks' resilience, and further steps should be taken towards global regulatory harmonisation. It is also important to learn lessons in the area of liquidity risk management. Therefore, the increased speed with which deposits, especially unsecured deposits, can flow out in the current digital age, has prompted a new review of the liquidity requirements that banks have to meet.

## 3 Lending

Lending to households and businesses is an important source of income for banks. But pension funds and insurers have been gaining market share in the mortgage loan market in recent years, while tech operators have also started eyeing the credit market. Likewise, the transition to a climate-neutral economy and ongoing digitalisation bring opportunities and challenges for banks.

### 3.1 Lending to households

#### 3.1.1 The market for lending to households and its significance in terms of profitability

**For banks, the mortgage market remains the most important source of income, although growth in this market has levelled off in recent years.** Dutch banks' gross interest income from loans granted to households amounted to almost €20 billion in 2022. This corresponds to 40% of total gross interest income on loans. The bulk of this interest income (€17.5 billion) is earned on mortgage lending. Of this amount, the four major banks account for 90%. Set against GDP developments, the total value of outstanding mortgage loans in the Netherlands has fallen in recent years, due in part to less favourable tax treatment of mortgage debt (see also Figure 9). For Dutch banks, the consumer credit market is relatively small, with outstanding amounts totalling €27 billion and interest income nearly €1.5 billion.

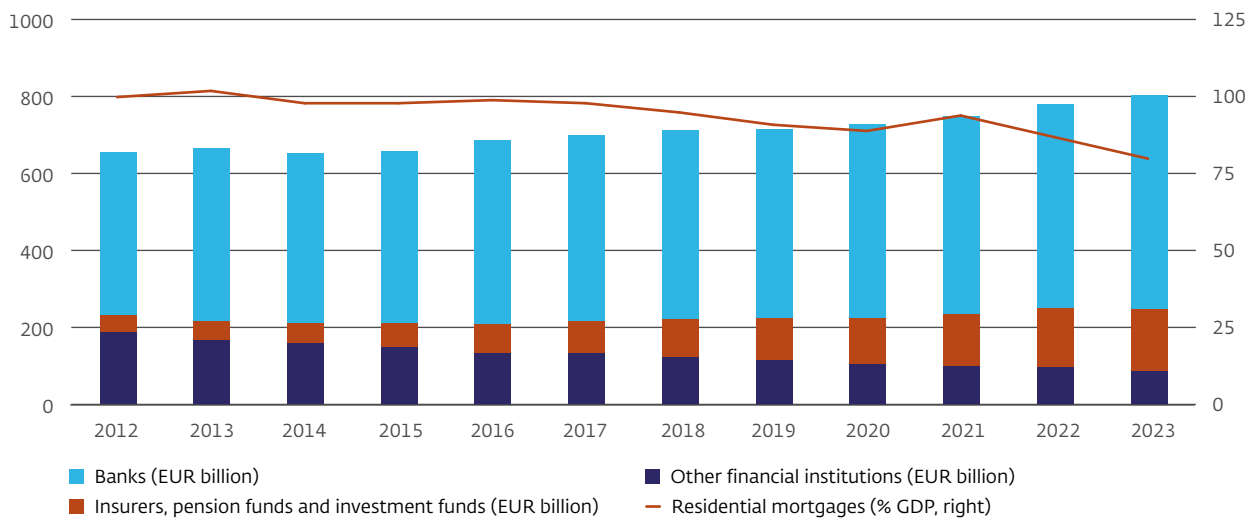
**A relatively high proportion of mortgage loan portfolios consists of interest-only mortgages, which may pose a financial risk for both households and banks.** We have repeatedly called on mortgage lenders to inform customers about the risks of interest-only loans, and to strengthen their risk management ([DNB, 2022](#)). The sector should encourage households to limit the interest-only portion of their mortgage

loans. We also expect lenders to make efforts to obtain more information about their customers' financial situation over the term of their loans. Together with the ECB, we will closely monitor this in the coming years.

#### 3.1.2 Increasing competition from non-bank operators

**In addition to the recent entry of digital-only banks onto the mortgage market, the growing market shares of insurers and pension funds are particularly striking.** The comparatively high returns generated on mortgage loans in recent years, for example compared to sovereign bond yields, have encouraged insurers and pension funds to expand their market shares in the mortgage market (see Figure 9). Shifting consumer preferences to mortgage loans with longer fixed-interest periods during the low interest rate environment has also contributed to this. Insurers and pension funds increased their combined share of the Dutch mortgage market – including through investment funds – from some 12% to 20% between 2016 and 2020, maintaining it in 2023 thus far. For consumers, this has increased the variety of mortgage lenders. Foreign operators have so far been reluctant to enter the Dutch mortgage market, partly due to high loan-to-value ratios (see also [DNB, 2020](#)).

Figure 9 Insurers and pension funds play increasing role in Dutch mortgage market



Source: Statistics Netherlands, DNB.

Note: The figures refer only to loans to Dutch households for house purchases. Other financial institutions consist mostly of finance companies and securitisation vehicles. This category has seen a decline in recent years, partly because banks securitise residential mortgage loans less frequently and due to changed accounting rules, which require banks to leave securitised residential mortgage loans on their own balance sheets more often.

**It is unclear to what extent competition from insurers and pension funds will continue in the years ahead.** Pension funds and insurers have accumulated expertise in investing in and providing mortgage loans in recent years, and they are likely to remain active in this market. At the same time, however, the recent rise in interest rates has prompted a shift in household preferences for loans with shorter fixed-interest periods. This makes mortgage loans less attractive to insurers and pension funds, which prefer loans with relatively long fixed-interest periods, given their own long-term liabilities.

**FinTechs play a small role in the Dutch mortgage market and focus primarily on providing intermediary services.** Mortgage loans are often taken out through intermediaries. Thanks to advancing digitalisation, digital platforms that bring mortgage lenders and borrowers together have gained prominence.<sup>20</sup> Next to increasing platformisation, more and more partnerships between banks and FinTechs in the area of mortgage lending have emerged in recent years. These FinTechs help banks streamline the mortgage lending process and shorten processing times, for example by facilitating the submission of the required

<sup>20</sup> The share of mortgage borrowers engaging an intermediary (self-employed adviser, mortgage desk or comparison website) amounted to 62% in the third quarter of 2022, hovering around 60% since 2010. 30% of all borrowers take out their loans directly from a bank and 5% directly from an insurer (AFM, 2023).

documents. This leaves it to the banks to undertake the capital-intensive activities, bear the credit risks and, therefore, generate the income. As long as the activities of FinTechs focus on intermediation, this mainly creates dependency relationships, but the immediate impact on the banking business model remains limited.

**BigTechs are currently not entering the mortgage market, which is expected to remain unchanged in the years ahead.** Mortgage lending by BigTechs, whether or not undertaken in tandem with banks, has so far not taken hold in other parts of the world either, as far as we can ascertain. The margins that can be earned on mortgages may also be attractive to BigTechs, but mortgages are not an obvious extension of the products they offer to their ecosystems (see also [DNB, 2021](#)). Furthermore, mortgage lending is not very scalable internationally, partly because home loans are governed by national laws and regulations. Accordingly, if BigTechs were to enter the mortgage market, they would likely do so in partnership with banks or non-bank intermediaries.

**This means potential pressure on traditional banks' business models therefore seems to be caused mainly by new mortgage market entrants.** These are, for example, digital-only banks that decide to also offer mortgage loans,

as is now the case in the Netherlands and elsewhere in Europe. Further candidates are operators that expand their offering of buy-now-pay-later services and consumer credit to include mortgage loans, or foreign banks entering the Dutch market. The prominent role played by independent mortgage advisers and increasing platformisation will facilitate the entry of new parties into the Dutch market. While these developments are likely to be gradual, it is important that banks are alert to and anticipate them in their strategies in the coming years. For example, they could raise the bar and continue their digital transformation efforts to become more efficient and responsive to changing customer preferences.

**Developments in the consumer credit market are accelerating, but their impact on banks' business models is modest at present due to the relatively limited market size.** As an alternative to bank consumer credit, various brick-and-mortar and online retailers offer buy-now-pay-later services, typically integrating credit provision into their own services (embedded finance). They often join forces with FinTechs such as Tinka and Afterpay or banks headquartered elsewhere in the EU. The AFM ([2022](#)) reckons around 8% of the purchases are paid through buy-now-pay-later payment services.

## 3.2 Bank lending to non-financial corporations

### 3.2.1 The corporate lending market and its significance in terms of profitability

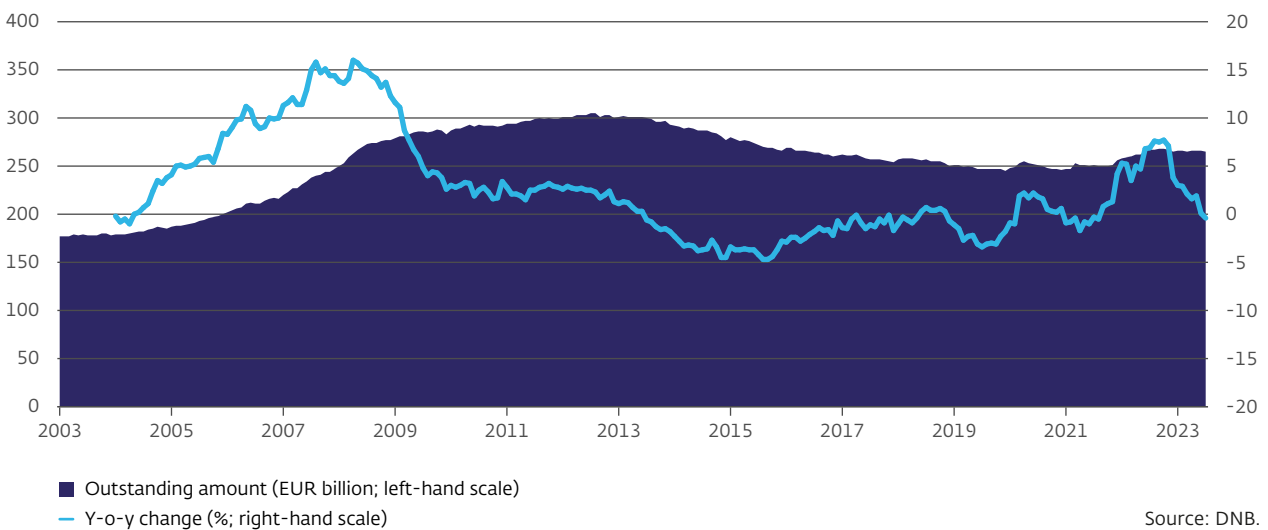
**The modest growth trend in bank lending seen over the past years has fallen off recently.**

The slow pace of growth in bank lending to Dutch businesses seen in the period prior to the COVID-19 pandemic is mainly due to limited demand for corporate loans. For wholesale customers, a shift in bond market financing may also have played a role (DNB, 2020). While demand factors are the most determinative factor in total outstanding bank debt, supply bottlenecks also seem to play a role, in particular for smaller businesses. For example, Dutch SMEs are charged relatively high interest rates compared to their European counterparts, and their loan applications are rejected more often (DNB,

2022). This dynamic is reinforced by the ongoing fragmentation in European capital markets and slow progress in the European Capital Markets Union. Bank lending to the corporate sector has grown slightly since the autumn of 2021 (see Figure 10), mainly driven by lending to Dutch wholesale customers.<sup>21</sup> This trend has fallen off recently however, as rising interest rates and lower economic growth expectations depress credit demand. Demand for loans has also decreased elsewhere in Europe (ECB, 2023).

**Corporate lending is a second important source of income for banks.** Corporate loans represent a quarter of Dutch banks' assets. In 2022, Dutch banks received almost €20 billion in gross interest income from their corporate loan portfolios. Between them, the four major Dutch banks account for nearly 90%. As in the mortgage market, banks managed to increase their lending margins on corporate loans after 2011, but

Figure 10 Bank lending growth to Dutch businesses has flattened out



<sup>21</sup> Lending to SMEs remained broadly flat, according to data on the large banks' lending to SMEs. However, volume decreased in the lowest loan categories, to €250,000, in favour of loans exceeding €1 million (DNB, 2023).

the trend has recently reversed in this market segment, too, as market interest rates have risen faster than rates on new corporate loans.

### 3.2.2 Growing role of non-bank operators in corporate lending market

#### **The role of non-bank operators, including FinTechs, in the corporate credit market has grown, partly because businesses have sought alternatives to bank financing.**

For large businesses, bond issuance has long been an alternative to bank financing. However, Dutch SMEs remain highly dependent on bank lending, although non-bank lending to SMEs is on the rise (see also [SME Finance Foundation, 2023](#)). FinTechs play an important role here, as their activities include bringing together supply and demand as a crowdfunding platform.<sup>22</sup> While crowdfunding has seen strong growth in recent years, it remains a relatively modest source of finance for Dutch SMEs ([Statistics Netherlands, 2023](#)) with a volume of €730 million in 2021. Next to FinTechs acting as a platform, there are FinTechs that provide loans from their own resources ([Berg et al., 2022](#)). They typically use artificial intelligence to assess the creditworthiness of SMEs based on corporate payment data. These operators often advertise themselves with rapid turnaround times for loan applications. The interest rates they charge tend to be higher than those charged by banks, which may reflect both the higher credit risk of the borrowers and their own higher funding costs (see also [AFM, 2021](#)).

**More non-bank operators entering the corporate credit market will make the financing landscape more diverse, but may put pressure on banks' market shares.** For businesses, and SMEs in particular, non-bank operators entering the corporate credit market present a welcome addition to bank financing. At present, the impact on banking business models is still limited, as non-bank financing is comparatively small and non-bank operators mainly focus on comparatively small loans ([SME Finance Foundation, 2023](#)). However, that impact may increase if non-bank operators manage to expand their market shares. A relevant factor in this context are the expanded options which the law provides for sharing financial and payment data subject to customer consent. They imply that a customer's own bank no longer has exclusive access to these data, making it easier for businesses to borrow from other parties (see Box 3.1). Several Dutch large banks have meanwhile launched subsidiaries that focus on the segment currently served by FinTechs, entering into partnerships to tap into a new customer base. For example, banks are now offering banking services through sales platforms such as Bol.com and accounting software vendors. Banks abroad have also entered into partnerships with BigTechs such as Amazon to provide corporate loans to sellers on Amazon's platform.

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<sup>22</sup> In addition to crowdfunding, equipment leasing, factoring and private equity are the main segments for non-bank corporate financing (see [CBS, 2023](#)).

**While increasing partnerships with tech companies offer opportunities, they also create dependencies.**

Closer collaboration with tech firms, lending to households and businesses alike, offers banks opportunities to tap into a new customer base and accelerate operational processes. At the same time, it creates financial, operational and reputational dependencies, for example if banks rely on third-party data when

assessing loan applications, or if part of that assessment is made by other parties. Banks taking such loans on their balance sheets also assume the concomitant risks, such as credit risk.

This is why it is important that banks adequately manage the risks associated with outsourcing to tech operators. As a supervisory authority, we monitor this.

**Box 3.1: Increasing data use requires careful handling**

Regulatory changes have encouraged the exchange of financial data between consumers, businesses and third parties. Under the revised Payment Services Directive (PSD2), the EC's proposed modernisation (PSD3) and the proposed Payment Services Regulation (PSR), banks must share customer data with licensed third parties, subject to explicit customer approval. Work is also under way on a legislative proposal called the Financial Data Access (FIDA) framework for responsible access to data across a wide range of financial services. This would enable open finance, including the exchange of financial information on savings, loans, investments, insurance and pensions. At FIDA's core is the customer's consent to share data with third parties.

These changes have potentially beneficial consequences for both consumers and businesses. It is of the essence that they trust they can safely share their personal data and that third parties use them securely. Our data shows that consumers trust banks more than BigTechs when it comes to the protection and use of their personal data. Privacy remains a point for attention, as third parties' undesirable sharing or unauthorised use of personal data could damage trust.

Data concentration in some major operators must be avoided when broadening access to financial data, as this could disrupt the market mechanism. This is why consideration is being given to proportional data access, which does not necessarily have to be the same for all operators, based on reciprocity, allowing financial institutions access to BigTechs' data. In order to do so, consideration should be given to mutual reciprocity in FIDA. This would mean financial institutions gain access to relevant data from other institutions, including BigTechs, provided customers give their consent to share data with financial institutions.



### 3.3 Integrating sustainability into the banking business model

**The transition to a sustainable economy is a major challenge in which the government, households, businesses and financial institutions each have a role to play.**

The Netherlands faces a major challenge in reducing its reliance on carbon-intensive activities and achieving its climate objectives. In addition, increasing attention is being devoted to reducing the impact which economic activities have on other climate-related and environmental factors, such as that of nitrogen on biodiversity. The transition to a sustainable economy requires substantial investments from households and businesses, which provides opportunities for banks to respond to these financing needs. For example, only half of Dutch homeowners have sufficient savings to make their homes climate-proof, install insulation to achieve energy label B and purchase an electrical heat pump (DNB, 2023). Businesses also need to invest substantial amounts. Globally, the energy transition is expected to require annual investment of 0.4% of GDP (IEA, 2021). It is up to the Dutch government to use climate policies to create the basic conditions for such private investment. This requires a combination of pricing greenhouse gas emissions, regulation, support and coordination by the government, for example in terms of energy supply infrastructure (see also DNB, 2021).

**The transition to a sustainable economy offers opportunities for banks, but it also entails risks.**

These risks may result from physical damage caused by climate change and environmental degradation, for example because domestic real estate exposures are located in parts of the Netherlands that are vulnerable to flooding (see, for example Caloia and Jansen, 2021). Risks also

arise from households and businesses having to adapt to stricter climate and environmental policies, new technologies or changes in market or consumer sentiment. Navigating these risks requires banks to take climate-related and environmental risks into account when formulating and implementing their strategies as well as their governance and management frameworks. The ECB (2020) has also formulated supervisory expectations for the institutions under its direct supervision (significant institutions, SIs). We have also declared that the ECB Guide applies to the less significant institutions (LSIs) under our supervision (DNB 2020).

**Dutch banks have taken initial steps in recent years to integrate climate-related and environmental risks into their operational management, but there is still ample room for improvement.**

Banks are increasingly aware of the risks arising from the transition and their role in this regard. 70% of the major European banks conclude that climate-related and environmental risks have a material impact on their risk profile and business model (ECB, 2022). In their climate action plans, major banks have also identified the (sub)portfolios most sensitive to transition risks and have started integrating climate-related risks into their business processes. Even so, there is still ample room for improvement in terms of identifying, measuring and managing climate-related and environmental risks. While almost all small and medium-sized banks have drawn up action plans, their quality varies (DNB, 2022). In addition, the ECB's thematic review (2022) shows that the majority of the Dutch major banks meet at least the *minimum* supervisory expectations for climate-related and environmental risk management published by the ECB, while they still have substantial steps to take before they *fully* meet the expectations. For example, there is still considerable work to be

done in terms of data collection and processing. Large European banks must meet all expectations gradually over 2023 and 2024 ([ECB, 2022](#)).

**New regulations and public attention to the impact banks have on the environment through their lending to businesses and households also creates reputational and legal risks.**

The damage which economic activities have on the environment is increasingly in the focus of attention, including the role of banks. A case in point is the public debate on nitrogen in the Netherlands and the court proceedings brought against BNP Paribas in early 2023 on financing fossil energy extraction. This societal trend is also reflected in new laws and regulations that expect businesses to be more transparent about the impact their operations have on the environment. For example, the European Corporate Sustainability Reporting Directive (CSRD) will enter into force in 2024, which requires businesses to disclose the impact their activities have on people and the environment. The CSRD will govern listed and other large financial institutions. Negotiations are ongoing at the European level on the Corporate Sustainability Due Diligence Directive (CSDDD), which requires businesses to perform due diligence in proportion to the impact they – and their chain of suppliers – have on people and the environment. If banks become subject to the CSDDD, they will be given a more

direct responsibility for the impact of the activities they finance on people and the environment.

**By signing the climate commitment, Dutch banks are demonstrating their willingness to contribute to the sustainability transition. There are reputational and legal risks, however, if these commitments are not sufficiently fulfilled.**

It is encouraging that the major banks and a number of smaller banks have signed the climate commitment, demonstrating their willingness to contribute to the government's climate objectives. In having done so, banks are taking important steps towards compliance with future European regulations. They will have to take action, however, to deliver on their commitments, which includes making choices about the activities they want to finance and the conditions they impose on their customers. Banks are facing challenges, for example due to the ambitious targets set for the making the Netherlands' housing stock sustainable by 2030 and owing to the slow transition to sustainable alternatives by businesses in carbon-intensive sectors which banks finance (see also [DNB, 2022](#)). However, such challenges should not prevent climate commitments from being made or block anyone from delivering on them. After all, making insufficient progress towards achieving these commitments would also expose banks to reputational and legal risks.

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