Towards recovery

2020 Annual Report

DeNederlandscheBank

EUROSYSTEEM

De Nederlandsche Bank N.V. 2020 Annual Report

Towards recovery

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Note
The original Annual Report, including the financial statements, was prepared in Dutch. In the event of discrepancies between the Dutch version and this English translation, the Dutch version prevails.

Gross domestic product (GDP), used to express quantities in some tables and charts, is GDP at market price unless stated otherwise.

Legend
0 (0.0) = the figure is less than half of the rounding used or nil
blank = a figure cannot logically occur or the data are not reported (to DNB)
- = data unavailable.

Rounding
Figures may not add up due to automatic rounding per series. As figures are rounded for each table, the individual tables do not always fully reconcile.

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Rarely has the world changed so drastically in such a short span of time as it did in 2020. The impact has not only affected our daily lives, but also the economy. At year-end 2019, the Dutch economy was forecast to grow by 1.4%. Now, more than a year later, we have experienced a contraction of 3.8%, and we are taking stock of the economic damage wrought by the COVID-19 pandemic. Firm interventions by the Dutch and other European governments and the European Central Bank (ECB) have kept more severe damage at bay. More than anything, our healthcare professionals have put tremendous effort into limiting the consequences of the pandemic for public health. Thanks to the availability of multiple vaccines, we can now look forward to the restoration of public life and the recovery of the economy. At the same time, however, we must acknowledge a high degree of uncertainty. The current crisis again demonstrates just how difficult it is to reliably predict economic developments, and reminds us that we can only manipulate the economy to a certain extent. We must not lose sight of this as we continue to pursue sound policies.

No contradiction between public health and the economy

While the second wave of the pandemic is crashing over us, calmer waters are visible on the horizon. Nevertheless, we face significant economic uncertainty in the short term. The duration of this uncertainty is directly linked to how quickly we are able to gain the upper hand over the virus. The current economic crisis is a direct result of the pandemic. If the restrictions and other measures had not been put in place, the pandemic would likely have been more deadly and the economic damage more severe. This is why we can only really look forward to a sustainable economic recovery once the virus is under control. The better we adhere to the measures designed to curb the spread of the virus, the more frequently we get tested and the faster we vaccinate the population, the quicker we will be able to start largely resuming our normal lives. The robust economic recovery in the third quarter of 2020 - the relatively quiet period between the first and second waves of the pandemic - shows that once we gain control of the virus, economic recovery can quickly follow.

Lessons learned from the previous crisis have made us more resilient

The pandemic is far from over. Nevertheless, there are lessons to be learned from what we have so far experienced. We also see that governments and central banks have learned lessons from previous crises.

First of all, the current crisis has once again confirmed the benefits of cross-border cooperation, an absolute necessity for combating this pandemic. The virus does not respect borders, after all, and it was able to spread so rapidly in part due to globalisation. The best way to fight it is by cooperating across borders. For example, the development, production and distribution of vaccines benefits from international cooperation, despite the complexity and time-consuming nature of these activities. Solidarity is also key; we will all reap the benefits once less developed countries are supplied with vaccines, after all. Here in the Netherlands, we received assistance from Germany, which selflessly provided critically needed ICU space during periods of peak demand. Even in crises like these we must resist the urge to close borders, both mentally and physically. Maintaining openness will not only help us to beat this pandemic, but will also promote economic recovery. Countries with small, open economies such as the Netherlands are particularly reliant on solidarity with Europe to help them withstand global risks and protectionist tendencies. Maintaining European unity is however not a given. Fortunately, Europe's policy response to the current economic crisis has been significantly quicker and more effective than during the major financial crisis of more than a decade ago. The European recovery fund is a promising start. Now it is a matter of getting down to business and keeping up the momentum. The eleventh-hour post-Brexit agreement between the EU and the UK is certainly a positive note in this context.

Being thoroughly prepared for crises also means acknowledging that we cannot quantify every risk in excruciating detail, which is why healthy buffers are vital – and this is a second essential lessen to be learned from the current crisis. Buffers are a crucial factor in fiscal policy, for instance: low public debt provides scope for increasing expenditure during recessions. Public debt in the Netherlands is expected to rise slightly above the 60% ceiling prescribed by the Maastricht Treaty, thus remaining well within manageable limits. If public finances in the Netherlands had not been so healthy prior to the outbreak of the pandemic, then the support packages, which have proved to be of immense value to individuals, companies and the economy as a whole, would not have been as substantial. Buffers are also essential for banks: substantial capital buffers allow them to temporarily loosen the reins in times of crisis, as they did in the early phase of the pandemic. Capital buffers that were built up in recent years made these measures possible. Maintaining sufficient buffers is a valuable lesson learned from the financial crisis of 2008-2009. Indeed, the pension sector plodded along for years without sufficient buffers, resulting in allocation issues and consequent tensions between generations, thus intensifying the need for a comprehensive review of the pension system. In the healthcare sector, too, the crisis has revealed that inadequate buffers can be disadvantageous when emergencies arise, especially if the capacity for rapid upscaling is also limited. In addition to ensuring healthy buffers, it is important to have the courage to actually deploy them when necessary. As long as the recovery is fragile, patience must be exercised in reversing emergency measures. Still, there is no taboo on giving due consideration to a gradual exit strategy and the restoration of buffer levels in a timely manner.

A third lesson is that a crisis like this calls for a broad application of economic policy instruments. The options for using monetary policy to stimulate the economy are limited in a situation in which economic activity is subject to severe restrictions. Governments can apply more robust and focused interventions, as was the case in most countries through large-scale emergency support packages. Central banks have a key but primarily supporting role to play by maintaining favourable financing conditions to facilitate lending. The ECB did so by purchasing securities on a large scale and by providing banks with long-term financing on favourable terms. Supervisory authorities also contributed, both by allowing banks to address their buffers, and by urging them to restrict dividend payouts, thus making more capital available to maintain lending levels. Chapter 1 of this Annual Report takes a closer look at the impact of the COVID-19 pandemic on the economy and also examines the policy response. The policy mix in the euro area is currently by and large satisfactory, which has kept the economic crisis from becoming as severe as it could otherwise have been. This is a positive development all things considered, and needs to be continued. It is essential to embed the steps that have been taken to improve the alignment between monetary and fiscal policy in European economic policy.

While the pandemic was accompanied by financial turbulence worldwide in the initial weeks of the outbreak, it did not spread to the real economy, partly due to the intervention of central banks and regulators. Lending also remained stable. What is more, anyone who would have fallen into a deep slumber in early 2020 and awakened now to today's share prices would never suspect that the world has in fact been plunged into a deep recession. The MSCI World Index showed share price gains of 14% at year end. Notwithstanding this impressive performance, the crisis has also brought certain vulnerabilities in the financial system to light. This includes the destabilising effect that non-bank financial institutions such as money market funds can have by retreating en masse from their role as market engines in times of financial stress. These vulnerabilities are now being addressed by various institutions, including the Financial Stability Board (FSB). It is crucial to ensure in the coming period that the problems in the real economy do not devolve into a full-blown financial crisis. Additionally, the dependence on bank lending in the euro area poses a risk, making it desirable to spread sources of finance to enhance the resilience of the economy and the financial system as a whole. The completion of the European banking union and vigorous progress towards establishing the capital markets union are essential in this regard. More specifically for the Netherlands, a credit register would offer opportunities for improving lending facilities, especially for SMEs. Other countries in the euro area already make use of such a register. Central registration of corporate loans makes it easier for lenders to obtain reliable information about the creditworthiness of companies, and it makes the credit market more accessible to new providers.

Finally, the COVID-19 crisis has also revealed a particular vulnerability in the Dutch labour market. The rise in unemployment has thus far remained relatively limited thanks to extensive support measures. However, job losses during the pandemic have primarily been among workers on temporary contracts and other temporary and standby staff. This group is less likely to benefit from social safety nets than other groups of workers. The same goes for self-employed persons, although the government rapidly introduced temporary support measures to help them. In the near future, the Netherlands will have to give serious thought to the structure and nature of the labour market, and that is the fourth lesson to be learned from this crisis. The choice for the type of employment relationship should be consistent with the nature of the work and the preferences both of those performing the work and those contracting for it. In the current landscape, the choice of employment relationship is clouded by differences in taxation and social protection.

Self-employed persons, for instance, pay far less in taxes than people on regular employment contracts. That works out well for them when the economy is booming, but it also means that they have no entitlements to social benefits should the economy take a turn for the worse. This makes it all the more vital that the next government expediently implements proposals, such as those of the Commission on the Regulation of Work, into policy.

Challenges on the road to recovery

With the prospect of a medical solution to the pandemic on the horizon, now is the time to use the lessons learned from the past as we examine ways to overcome the challenges that still lie ahead. We were facing many of these challenges prior to the COVID-19 crisis, but the pandemic has made them more urgent than before.

We have no way of knowing what the world will look like once the pandemic is behind us. Based on experiences of past pandemics and other extreme events, we know that people wish to resume their normal lives as quickly as possible. Central banks, however, cannot afford to rest on their laurels. Inflation in the euro area in the year under review was 0.3% (and 1.1% in the Netherlands), which is considerably lower than the ECB's inflation aim (i.e. inflation lower than, but close to 2% in the medium term). Globally, inflation has been low for some time, due in part to an ageing population, globalisation, the flexibilisation of the labour market and the digitisation of the economy. Inflation that is too low poses a risk to the smooth functioning of the economy, as it makes relative price adjustments and debt reduction more complicated. While the COVID-19 pandemic has put both upward and downward pressure on prices, current expectations are that there will be no price increases in the short term. Wage growth, one of the key drivers of inflation, will likely remain tempered in the coming period as unemployment rises. The fact that monetary policy is unable to fully control inflation was already acknowledged at the time of Jelle Zijlstra's moderate monetarism. Fiscal policy and the wage determination process are also important factors in price trends. These factors may currently be playing a bigger role than ever, now that the economy is subject to so many pandemic-related restrictions. The pace at which the economy and inflation recover will also depend on the further course of the pandemic, on fiscal policy and on wage developments, meaning central banks will have to demonstrate flexibility and patience.

The limits of monetary policy, the interaction between monetary policy and fiscal policy, and the relationship between monetary policy and longer-term challenges such as climate change are also pertinent topics in the context of the ECB's strategy review, which will also rely on input from external experts and representatives of civil society organisations. Here in the Netherlands, we organised an online meeting last November to listen to the general public's expectations regarding monetary policy. The ECB intends to complete its strategic review of monetary policy in the course of 2021.

8 A return to the world before the COVID-19 crisis is certainly not desirable in terms of CO_2 and other greenhouse gas emissions. As a result of the pandemic, global CO_2 emissions dropped by 6-7% in 2020, despite a sharp rise in the second half of the year in line with the economic recovery. CO_2 emissions will have to drop at a similar rate over the next decade if we are to limit the global temperature rise to 1.5 degrees Celsius, which is the most ambitious target in the 2015 Paris Climate Agreement. Last year's drop only occurred because of a major contraction in the world economy, which drives home the fact that we simply cannot return to our old ways. The greening of the economy is a prerequisite for limiting the disastrous consequences of climate change for our well-being and prosperity. This is unquestionably the single biggest challenge we will face in the years ahead. The recovery phase that will follow the current crisis is a unique opportunity to accelerate the transition to a climate-neutral economy. This can be done firstly (and preferably at the global level, but in any case in Europe) by refining the system of carbon pricing, by focusing public investment on greening the economy and by introducing tax incentives to encourage private investment in projects and instruments that promote sustainability. Financial institutions can play an important role in boosting sustainability, and they will have to continue to focus attention on the financial risks associated with climate change. These risks will continue to form a key theme in our supervisory activities.

Moreover, the Netherlands as a whole will have to put forth additional effort in the area of sustainability. Despite the very best intentions, the Netherlands will not be winning any medals soon in the European sustainability race. CO_2 emissions will have to drop by 2.7 percentage points annually if we are to achieve climate neutrality by 2050, a target recently set by the European Council. Current and proposed policies will only result in an annual drop of 2.3 percentage points, according to the 2020 Policy Document on Climate change. Climate policy in its current form is thus not up to the task. Moreover, the Netherlands is facing even more challenges when it comes to making the economy more sustainable, Nitrogen pollution will have to be reduced if biodiversity is to be maintained. Nitrogen pricing could offer a solution here, too, with revenues used to provide support to affected sectors as they make the necessary transition.

Sustainable recovery also means that action will have to be taken to address the huge mountain of debt that has resulted from the COVID-19 crisis. The burden of debt has increased sharply both for governments and companies.

Worldwide, public debt has risen on average from 89% to 105% of gross domestic product (GDP); companies are at 107% of GDP compared to 92% of GDP prior to the crisis, with significant differences between countries. We must not forget that debt sustainability was already a concern prior to the current crisis, and the pandemic is still far from over. Moreover, the interconnectedness between banks, companies and governments has increased, partly due to the guarantee schemes that were launched to cushion the effects of the crisis, thus adding an additional layer of complexity to the debt problem. The second biggest post-crisis concern (after tackling climate change) is the two-pronged challenge of addressing interconnectedness, which has only increased, and reducing debt levels. The IMF and the World Bank will play an essential coordinating role in dealing with these issues worldwide, as the debt sustainability analyses they conduct partly determine the need for debt restructuring and the extent of that restructuring in affected countries. Debt reduction also extends to central banks: the ECB now has close to a third of total European public debt on its balance sheet, and has also become a major financier of banks. This calls for timely consideration of a gradual exit strategy. The Maastricht Treaty explicitly prohibits the ECB from writing off public debt on its balance sheet, after all. Stepping away from the accommodative monetary policy will be challenging, not only because of the sharp rise in public and private debt, but also due to banks' increasing reliance on the ECB for financing. At the same time, there are no indications that inflation will rapidly rise, meaning a sudden dismantling of the unconventional measures is unlikely.

In order to ensure that the Dutch government continues to be able to absorb shocks in the future, the public debt ratio should serve as an anchor for fiscal policy. This does not mean that we should aim for a precise debt level; as mentioned, the economy is too uncertain and monetary policy is ill-suited for keeping it on track. It is more important to ensure that debt levels stop rising once the post-crisis economic recovery is under way. This means that it would be undesirable to systematically increase public expenditure, as emphasised by the Fiscal Space Working Group. At the same time, we must also take a critical look at the European rules, the core of which, i.e. the 3% budget deficit limit and the 60% public debt limit, is enshrined in the Maastricht Treaty, and is unlikely to be amended. It would be desirable, however, if the emphasis at European level would also shift from budget deficit to public debt. This would take greater account of the specific situation in each country, and would give public finances greater leeway to respond to the economic cycle. Public debt is moreover objectively quantifiable, in contrast to the so-called structural budget deficit, which is often used at present. It is also essential to provide better protections for public investments with a view to the intended greening of the economy and productivity growth. The latter, in turn, will contribute to a higher structural growth rate and a sustained reduction in debt ratios as a percentage of GDP.

Financial institutions must also continue to build up substantial buffers. The temporary easing of the supervisory framework, as decided by supervisors in the first weeks of the crisis, enabled banks to continue lending, but this strategy must not be allowed to result in the permanent erosion of buffers. It will therefore be necessary to return to the pre-crisis framework in due course (though it should be noted that certain components of this framework were still incomplete in the early stages of the pandemic), especially because sustained low interest rates pose a challenge to all financial institutions, including insurers and pension funds. This calls for maintaining an adequate level of resilience (also see Chapter 2 of this Annual Report). In the recovery phase moreover, we must be prepared for escalating loan losses due to business failures. This will be an inevitable development, especially when support packages are phased out after the pandemic has subsided. Banks must make every effort to identify non-performing loans in good time and respond appropriately. In this regard, it would be prudent to develop a secondary market for these "bad" loans, and, in extreme cases, national or European "bad banks" could be part of the solution. Such a system would have to depend on private creditors, and not the public sector, absorbing any of the losses incurred by these bad banks.

To increase the resilience of the Dutch economy, it is also important to further reduce overall mortgage debt during the recovery period and to institute fundamental reforms in the housing market. The COVID-19 crisis has had hardly any impact on house prices partly due to persistently sluggish new home construction. We may indeed muse that 'two wrongs make a right', but this does not alter the stubborn structural imbalances such as the high debt level and a small and expensive private rental segment. These factors make it more difficult for first-time buyers to get a foot in the door, and they make the Dutch economy and housing market more sensitive to mutually reinforcing fluctuations. It is up to the government to counter these imbalances by tackling the housing shortage and by no longer favouring buyers over renters. This means taxing owner-occupied domiciles at the same rate as any other kind of asset, for instance by gradually transferring home ownership to the box 3 income tax schedule. These proceeds can then be returned to citizens in the form of lower income tax rates, for example.

Progress was made in the year under review in another area, supplementary pensions, which have posed certain problems for the Dutch economy. This is a positive development. The new pension system is unquestionably more future-proof thanks to the abandonment of the average contribution, which distorted the labour market, and the elimination of the friction between nominal security and indexation aspirations, all while maintaining the principles of risk sharing and a collective investment policy. As workers no longer build up pension capital to secure a guaranteed entitlement but rather to accrue financial assets, it will moreover become far more apparent that future pension benefits are uncertain and dependent on investment yields and life expectancy. It is essential that the agreements made by the social partners and government in June 2020 are implemented diligently and decisively, so that the new pension system can be in place by 2026 at the latest. The switch-over to the new system will unavoidably involve a degree of redistribution between generations. This is neither a new nor unique phenomenon in supplementary, collective pensions. This redistribution must of course be transparent, carefully considered and comprehensible for members, who must also be duly informed.

Developments in digitisation have accelerated during the COVID-19 crisis, and this is good news. Digitisation leads to new economic potential and dynamism, and can give a boost to productivity growth down the road. We also find that economies that are more digitally advanced (such as the Dutch economy) have tended to suffer less of an impact from the COVID-19 crisis, partly because their infrastructure is better attuned to the demands of remote working, learning and consuming. The challenge is to ensure that digitisation promotes well-being and prosperity, and that all groups in society maintain access to vital financial services. This is a concern when it comes to access to payment systems, for instance. The use of cash has been declining sharply, partly as a result of the pandemic. This is why we, together with the ECB, are looking into possibilities for introducing a digital central bank currency, the digital euro (also see Chapter 3 of this Annual Report). The digital euro could help ensure that everyone retains access to currency issued by a central bank even if the use of cash declines further. Cash will remain indispensable for the foreseeable future, however, if only because not everyone is comfortable with electronic payments. It is therefore important that banks adhere to the agreements made in the context of the National Forum on the Payment System (NFPS) with regard to maintaining the current number of ATMs for the time being, and that retailers continue to accept cash payments.

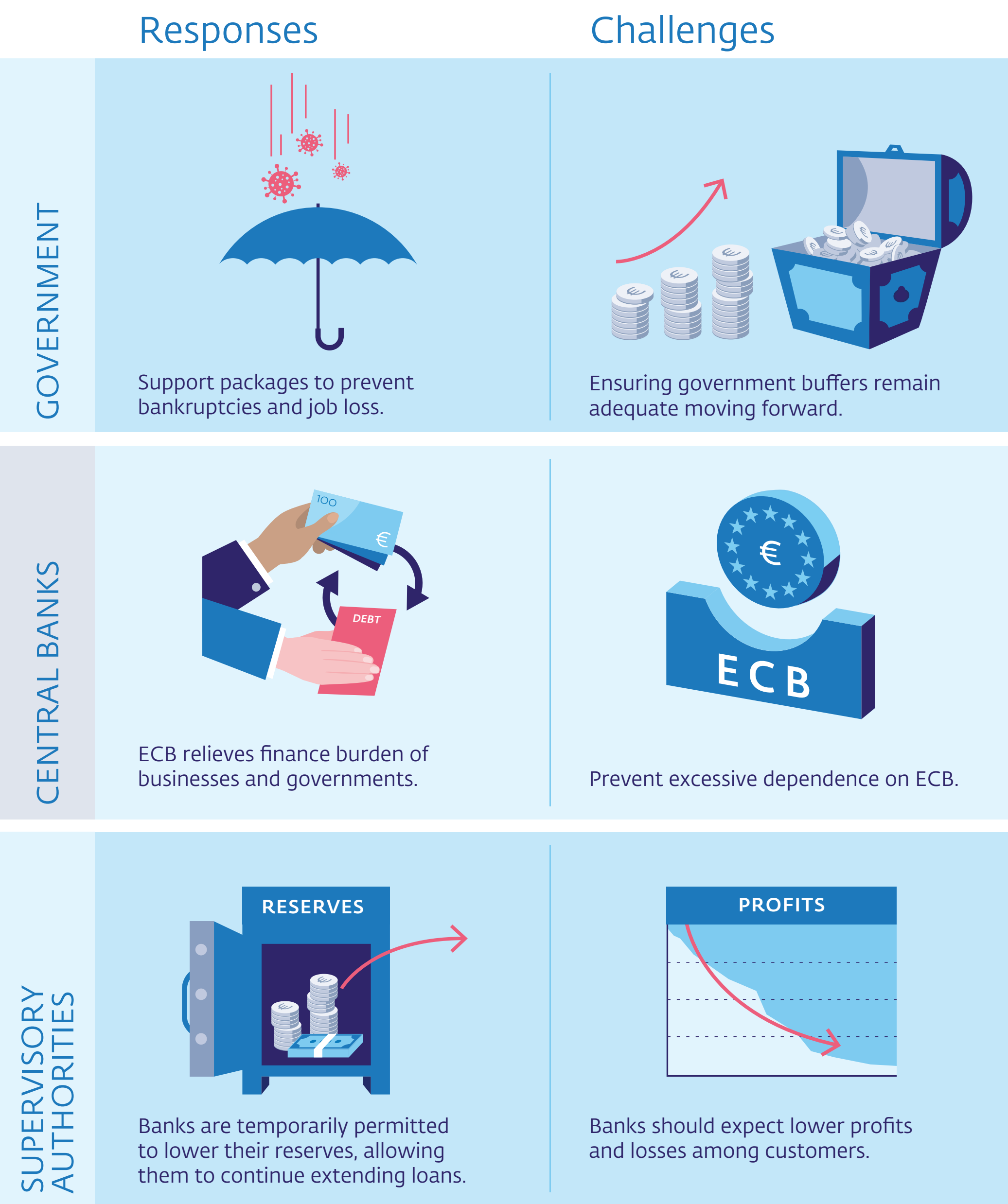
We are also engaged in automating our own supervisory activities, in line with ongoing digitisation activities in the financial sector, meaning we are now able to supervise institutions more efficiently and effectively. At the same time, however, a digital economy also faces risks such as greater vulnerability to cyberattacks. The likelihood of a cyberattack grows as economies become more digital, as does the potential impact of such an attack. It is therefore crucial to invest in the rapid detection and mitigation of cyber risks. We have been warned often enough about the risk of pandemics, and despite the SARS and MERS outbreaks, we recently found ourselves insufficiently prepared. It behoves us to prevent history from repeating itself when it comes to cyber risks. The risks are real, and they will materialise sooner or later.

Final remarks

There has rarely, and perhaps never, been a year in the history of the Netherlands and DNB when the economic tide turned so quickly. The Dutch economy scored a nine out of ten at the start of 2020, but the year ended with a COVID-19-induced contraction of historical proportions and, even more importantly, tremendous human and social suffering. We must nevertheless conclude that the Dutch economy was in a healthy state when thrust into this crisis, and that it has shown remarkable resilience. Scientists, doctors and other healthcare professionals, also along with financial and economic policymakers, have combined efforts to prevent greater damage and suffering and to create the prospect of recovery. Despite continuing uncertainty, it is already looking as though 2021 will end on a significantly more positive note than 2020.

1 The impact of the coronavirus crisis and the way forward

Policy response and challenges



The outbreak of COVID-19 in the Netherlands and the measures taken to curb the spread of the virus have had an unprecedented impact on the Dutch society. Many have experienced the consequences of the virus first-hand, or they have seen how it has affected the lives of others. On the one hand, there are the individual consequences of getting infected, but the pandemic also has far-reaching societal effects: loneliness is on the rise, learning outcomes in education are suffering and non-COVID healthcare treatments are being delayed. The virus has also led to significant economic contraction. Together, national governments and central banks have implemented a large set of measures, which has mitigated the economic consequences and the impact on the financial sector. The further roll-out of a number of vaccines offers the prospect of a gradual easing of contact restriction measures and economic recovery. At the same time, the time ahead will be characterised by a high level of uncertainty – both in terms of public health and with regard to the economy.

Effective policy response mitigates consequences of historic contraction

In 2020, the Dutch economy contracted by 3.8%, comparable to the effects of the 2009 financial crisis. Still, the impact of the pandemic in the Netherlands has been less severe than in many other countries, with the euro area as a whole contracting by 6.8% in 2020. The relatively small contraction in the Netherlands was partly due to the nature of the contact restriction measures taken by the Dutch government during the first wave of infections, which were not as stringent a the measures taken in some other countries. In addition, the most strongly affected sectors – in particular the tourism industry – make up a comparatively small part of the Dutch economy. The fact that, thanks to the relatively high degree of digitisation, a large share of the Dutch population were already used to teleworking and online shopping prior to the pandemic was a contributing factor as well.

Moreover, the large-scale support measures taken by the government helped reduce economic damage and preserve jobs. The NOW scheme, for example, which provides wage cost subsidies for employers, at one point supported more than 2.6 million employees. Approximately 374,000 self-employed workers also made use of emergency support. All in all, this meant that the first support package reached some 3 million workers. In addition to these support measures, tax deferrals and loan guarantees helped prevent liquidity problems among businesses. In total, the Dutch government's expenditure in 2020 and 2021 is estimated at EUR 61 billion so far on support measures. It should be noted here that government spending would also have increased without the support packages, for example as a result of higher spending on unemployment benefits. In conjunction with national policy action, measures were also taken at European level. These included Next Generation EU, a joint recovery fund aimed at boosting structural reform and facilitating a greener and more digital economy.

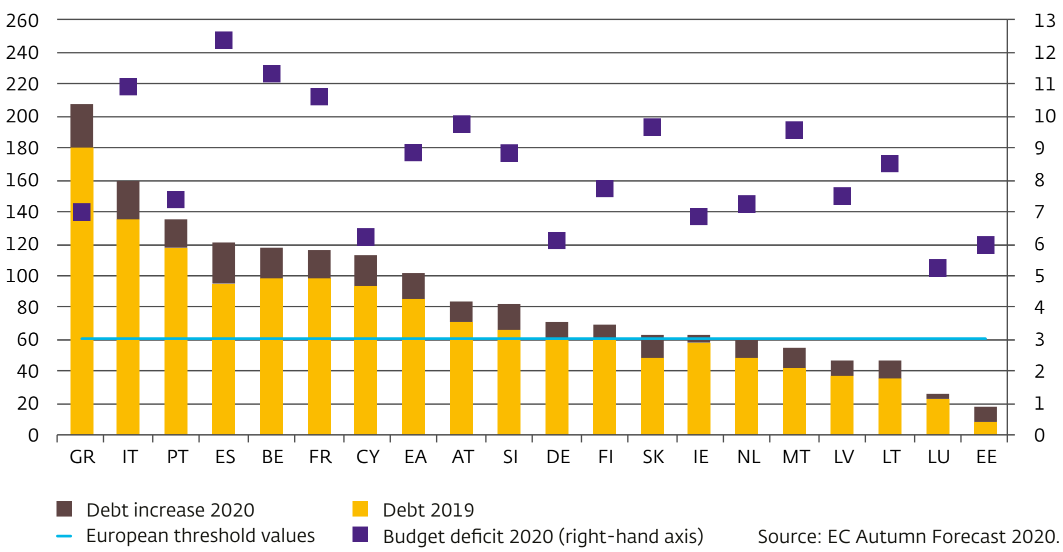
The impact of the crisis is not evenly distributed

In the labour market, the first blows dealt by the coronavirus crisis were mostly absorbed by young people and workers on flexible contracts. By the end of 2020, the total number of flex workers had been reduced by approximately 180,000 compared to the end of 2019. And despite a steady growth in the number of self-employed workers, many in this group applied for income support. By and large, people on permanent contracts have so far been able to hold on to their jobs, which means that many of them have not yet directly experienced the financial consequences of the crisis.
As a result of the contact restriction measures and mounting uncertainty, banks reported a total household savings increase of EUR 42 billion in 2020 – a record yearly rise. Flex workers and self-employed workers are particularly affected by job and income insecurity, and also their access to social safety nets is more limited. The uneven distribution of the impact of the crisis can not only be seen in the labour market, but also in education, as there are indications that the adverse effects of school closures are felt more strongly by children from disadvantaged socio-economic backgrounds.

Strong increase in public debt

Partly as a result of the support packages, the Netherlands' public debt increased sharply, from 49% of GDP in 2019 to just above the European norm of 60% in 2021, according to DNB's December projections. Lower tax revenues and higher spending on unemployment benefits will also add to the mounting debt level. Thanks to the substantial buffers built up during times of economic prosperity, there is now scope to finance the support packages and to limit the damage to the economy.

Figure 1 Substantial differences in public debt and deficit among euro area countries



Source: EC Autumn Forecast 2020.

Other European countries had a less advantageous starting position (see Figure 1), causing the average national debt in the euro area to exceed 100% of GDP. In addition, the bank loan guarantees issued by several countries in response to the crisis are creating new fiscal risks and increasing interdependence between banks, governments and the private sector.

Monetary policy also helps support the economy

In tandem with budgetary policy, monetary policy has proven important in mitigating the effects of the crisis. The ECB has supported financial markets and facilitated more favourable financing conditions throughout the euro area, amongst others via the introduction of the Pandemic Emergency Purchase Programme (PEPP). A combination of short- and long-term financing operations for banks (TLTROs) also helped sustain lending to the real economy. At the same time, the negative deposit facility rate no longer applies to part of the reserves banks hold with central banks, reducing the impact of negative interest rates on banks' profitability.

Through various policy instruments such as the TLTROs and the PEPP, as well as the relaxation of collateral requirements for banks, the ECB injected liquidity into the system, which eased the pressure on money markets. Unsecured money markets briefly dried up at the start of the pandemic, partly due to the retreat of money market funds and surging interest rates. These money market funds were confronted by large-scale withdrawals, as investors hoarded cash as a precaution in the face of deteriorating economic conditions.

Banking system remains stable

Together with the ECB, DNB also took a number of supervisory measures, including a temporary reduction in the buffer requirements for banks (overview). This ensured that banks had more capital available to maintain lending levels. In addition, the planned introduction of stricter capital demands was postponed, while banks followed the ECB's advice to not pay dividends in 2020, and to exercise extreme restraint in paying dividends in 2021. This ensures that banks have greater reserves to extend new loans or absorb losses on existing loans.

The position of the Dutch banking system has so far proven stable, despite the repayment holidays banks have granted to some of their customers. The volume of loans that customers are unable to repay has not increased to an alarming extent and lending levels have remained steady. DNB stress tests show that the capital ratios of Dutch banks will remain well above the minimum requirements, even in the event of a very severe scenario in which the economy does not recover in 2021 and the government does not phase out contact reduction measures before 2022. While the impact on banks would be significant if such a situation were to materialise – leading to an increasing number of bankruptcies and persistently low confidence in the period ahead – lending would not be affected.

The stable position of the banking system is the combined result of the support measures and its strong starting position, which can be credited to the mandatory strengthening of capital buffers in the years prior to the pandemic. At the same time, the measures that have been taken obscure our view on credit risks. Even in the event of a relatively positive economic scenario, some customers will default on their payment obligations as soon as the government starts phasing out its support measures.

The European banking sector as a whole also appears to be resilient enough to withstand the pandemic. The ECB vulnerability analysis of July 2020, for example, revealed that while banks' capital ratios would decrease in the event of a severe recession, they would not fall below the minimum requirements. Should an even more severe economic scenario materialise, a number of banks would have to supplement their capital reserves, but the total capital shortfall would remain limited.

Falling interest rates and share prices caused the average funding ratio of pension funds to drop significantly at the beginning of the pandemic, but it has since recovered to a large extent. Insurers – especially life insurers – are also feeling the effects of the low interest rates caused by the coronavirus crisis. Given their special role in the crisis, DNB has given health insurers leeway to support healthcare providers, which, incidentally, has not yet been necessary. To date, the impact on the financial position of these insurers has remained fairly limited. The same is true for non-life insurers: the disappointing performance of travel, event and absenteeism insurance policies was offset by a drop in the number of claims from motor and fire insurance policyholders.

Challenges for post-pandemic recovery

It is desirable to use buffers in times of economic adversity to mitigate the consequences of the downturn. At the same time, the pandemic will produce financial vulnerabilities that can frustrate recovery. In the third quarter of 2020, the Dutch economy proved that it was resilient enough to quickly bounce back from a heavy blow. However, sustainable recovery after the crisis is not a given and will require effective policy.

Phasing out support measures and building up public sector buffers

Government support has helped limit economic damage and reduce risks to the financial sector, but there are also drawbacks. For instance, prolonged support can sustain companies that are no longer viable in the long term, which can hamper structural economic adjustment. At the same time, such adjustments are less likely to be made in times of crisis. Someone who loses their job will have a harder time finding new employment during a downturn than they would during an upswing. Moreover, the various support packages put extra pressure on government budgets. The further roll-out of the vaccines brings the prospect of economic recovery closer, which would offer scope to phase out the support measures. However, as long as the pandemic continues, government support will remain necessary to help households and businesses navigate these difficult times.

Directly after the pandemic, economic recovery should also take precedence over reducing the public deficit. This means that the government should draw up a budget that contributes to stabilising the economy by avoiding austerity measures and tax increases. Once economic recovery has solidified, there can be an assessment of how best to ensure sufficient buffers in the longer term. Structural spending increases would not be prudent at this time, given the uncertain economic situation and rising public debt. The budgetary policy should, however, give ample space and priority to spending that increases the sustainable growth potential, such as investments which facilitate the energy transition and help limit climate change. This kind of government policy can contribute to green economic recovery, which has become even more urgent in light of the recently raised European climate targets.

Countries with relatively high public debt levels would do well to work towards reducing their debt-to-GDP ratios in the coming years. In doing so, it is important to focus on reform that fosters economic recovery, rather than austerity measures that – initially – put pressure on growth. Higher economic growth increases tax revenues, making public debts easier to bear. Many European countries have untapped potential to increase productivity and harness their competitive power. The Netherlands also faces challenges, for example with regard to its labour and housing markets, as indicated in the introduction to this Annual Report. For a robust recovery of the European economy, the new European recovery fund has an important role to play next to national policies.

Impact of coronavirus crisis on businesses remains uncertain

Many businesses have been hard hit by the crisis. The support packages have provided some relief, but business owners in the hardest-hit sectors in particular have been forced to significantly deplete their reserves. Even after the pandemic, they will struggle with financial problems, which could have an influence on economic recovery. This would be the case, for instance, if businesses with large debts prove to be more reluctant to invest or find it harder to raise capital. Moreover, businesses with small buffers will be more vulnerable to new setbacks during the recovery phase. There was no immediate cause for concern about the financial situation of the Dutch business sector as a whole prior to the pandemic. While Dutch businesses did have higher debts compared to the euro area average in 2019, this image was distorted by the relatively strong presence of multinationals in the Netherlands. A study by CPB Netherlands Bureau for Economic Policy Analysis concluded that, in terms of profitability and solvency, both small and medium-sized businesses and large corporations were in relatively good shape until recently. Viewed from an international perspective, the Dutch business sector has relatively high savings.

It remains to be seen what consequences the pandemic will have for the business sector. At national level, there was a limited increase in the overall debt of Dutch businesses across the first three quarters of 2020. The number of bankruptcies in 2020 reached the lowest level since 2000. For many business owners in hard-hit sectors, however, the outlook has worsened.

This is indicated by banks' increased provision levels and means that, going forward, a higher number of bankruptcies is to be expected. Where necessary, businesses will have to rebuild their financial buffers after the pandemic. This process would be expedited by a growing economy, a fact that once more highlights the necessity for the government to avoid austerity measures and tax increases. It would also be prudent to reduce tax incentives for businesses to take on debt. This would make it more appealing for businesses to finance themselves with equity, increasing their resilience.

Risks to the banking sector remain high

It remains of the utmost importance to prevent the crisis in the real economy from spreading to the financial sector. To do so, the banks – and DNB in its role as a supervisory authority – must pay extra attention to credit risks. Although there are no major payment problems for the moment, the risk of such problems occurring is growing. The longer the crisis lasts, the greater this risk will be once the government starts phasing out its support measures. Banks will have to make a timely assessment of the effect of the pandemic on the financial situation of their customers and take action where necessary, for instance on restructuring or write-downs. This requires that banks have sufficient operational capacity, as well as an effective approach to bankruptcies. The provisions which banks must make will limit their profitability and require further cost reductions, which will catalyse the digitisation of the services provided by banks. Moreover, the search for profitability could lead to consolidation in the banking sector, a development which would be especially relevant in other European countries.

As supervisory authorities, DNB and the ECB must continuously and carefully weigh the effects of prudential measures in order to extend or revoke these in time. On the one hand, if the measures are revoked prematurely, economic recovery could suffer. On the other hand, it is important that the system not 'get used to' the current – less far-reaching – measures. To prevent this from happening, capital and buffer requirements should be normalised in a timely but gradual manner, in order for banks to be able to absorb new shocks in the future. As the measures are lifted, it is important to pay attention to the coherence of policy action taken by supervisors, governments and central banks.

In addition to phasing out the crisis measures, the last components of the post-financial crisis Basel 3.5 package have yet to be implemented. These measures will limit the differences between banks, for instance with regard to the risk weights they assign in assessing loan applications. While the implementation of these measures has been postponed by a year, this cannot be put off indefinitely, as they are needed to strengthen banks' buffers in the long term.

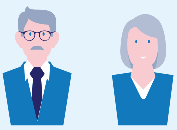
Challenges ahead for monetary policy

At the start of the pandemic, monetary and financial conditions in the euro area were already accommodative due to the inflation outlook, which had been lower than desired for some time. As mentioned above, monetary policy contributes to mitigating the economic impact of the coronavirus crisis by ensuring that the financial climate for businesses and governments remains favourable. However, the actions which are necessary to foster such a climate also have their drawbacks. Due to the purchase programmes, for instance, the exposures on the balance sheets of the ECB and DNB have increased. See also the financial accountability overview in Chapter 4 of this Annual Report. Once the pandemic begins to abate, monetary policy will have to normalise again. Particular attention should be paid to the interaction between monetary and budgetary policy during this process.

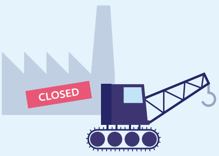
The vulnerabilities created by the pandemic raise additional questions for monetary policy. Businesses and governments with growing indebtedness will be more vulnerable to increasing interest rates, and there is also a risk of banks becoming overly dependent on cheap funding from central banks due to the continued availability of these resources. Because the ECB relies on the banking sector to successfully implement its monetary policy, these developments could hinder the withdrawal of these accommodative monetary measures. The ECB is currently evaluating the future-proofness of its monetary strategy. In doing so, it will also take into account these new challenges, which have become more evident as a result of the COVID-19 crisis. For DNB, it is important that this evaluation results in a renewed monetary strategy which is robust enough to withstand the uncertainty that lies ahead, with due consideration of potential side-effects.

2 Getting used to low interest rates

Causes of low interest rates



The Netherlands' ageing population is saving more money than it is spending.

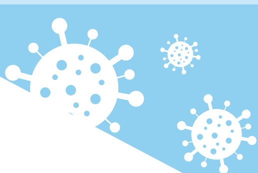


There is less heavy industry, which means fewer investments.

There are fewer major innovations, causing growth to slow down.

...while inflation is falling.

The ECB is keeping interest rates low to encourage spending.



Due to the pandemic, people are even more inclined to save their money.

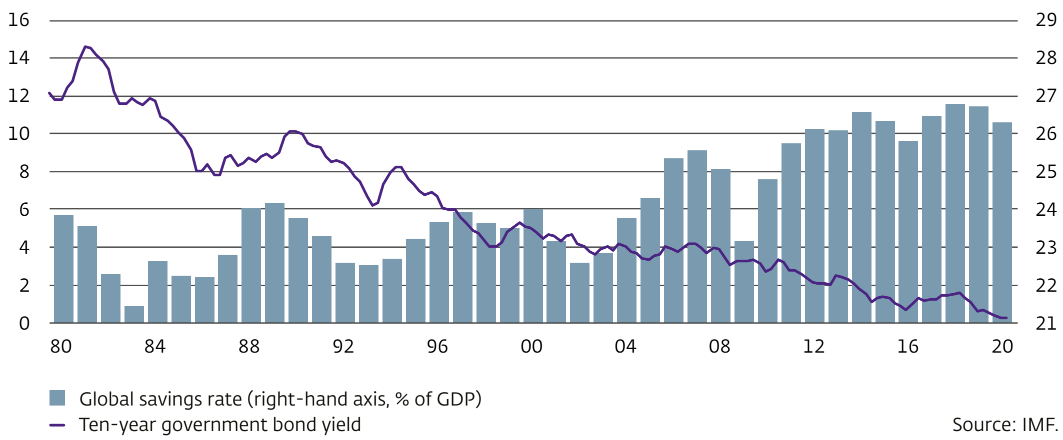
Globally, interest rates have been low for some time now due to a number of long-term trends, which have been reinforced by the coronavirus crisis. For banks, long-term low interest rates put net interest income under pressure, as these are only passed on to deposit rates to a limited extent. Pension funds and insurers are also being affected by the increased costs of building up fully funded pensions and life insurance policies. It is important that financial institutions and society continue to adapt to the low interest rate environment.

Low interest rates due to long-term trends reinforced by the coronavirus crisis

One of the main reasons for the fall in interest rates is the decline in inflation which started in the 1980s. The declining inflation levels are linked, among other things, to the globalisation and digitisation of economies, as a result of which production costs have been reduced. In addition, interest rates have been low due to the decelerated growth of the world economy since the 2008-2009 financial crisis, which caused companies around the world to become more cautious about investing. The increased importance of the services sector also plays a role here. This sector is, on average, less capital-intensive than industry and consequently requires less substantial investments. As a result of lower investment growth, demand for financing has fallen, which has also contributed to lower interest rates. The growing need to save worldwide has contributed to low interest rates as well (see Figure 1). One of the explanations for this is the ageing global population: as people get older, the need for financial security after retirement grows. An ageing population also

Figure 1 Global savings rate increases, market interest rate continues to decline

Quarterly figures



Source: IMF.

Note: The interest rate is the unweighted average ten-year government bond yield of the G7 countries. The savings rate expresses public and private savings as a percentage of the gross domestic product (GDP).

tends to take fewer financial risks. As a result, the increased need for savings has been accompanied by higher demand for safe assets, such as government bonds.

The above-mentioned long-term trends, which have structurally depressed interest rates, have been reinforced by the coronavirus crisis. The lower demand for consumer goods and services, for example, has a downward effect on inflation. Due to increased economic uncertainty, people are also putting more money aside than before, and they have been more or less forced to reduce their consumption as a result of the containment measures, leading to increased savings. In 2020, Dutch households poured almost EUR 42 billion into their bank accounts. Companies have also invested less due to the pandemic, which has had a negative effect on their demand for credit. These long-term trends in savings behaviour and investments are expected to keep the equilibrium interest rate – the rate at which there is a balance between capital supply and demand – low for the foreseeable future. This is a situation that Japan, for instance, has been dealing with for a very long time.

Governments, on the other hand, have borrowed more money on the capital market to finance their support measures. As a result, the public savings rate has fallen and government debt has increased in many countries. The steep increase in the issuance of government bonds has increased the supply of relatively safe assets, which had become more and more scarce in recent years. The increased supply of government bonds has an upward effect on interest rates. The ECB has taken several measures to prevent rising financing costs for households, businesses and governments during the current crisis (see also Chapter 1). Among other things, the ECB is buying government bonds to counter disruptions in the financial markets, such as the drying up of liquidity and high risk premiums. In addition, long-term refinancing operations are in place to support lending by providing interest rate advantages to banks that maintain their lending to businesses. These measures help increase the impact of monetary policy on the economy.

The persistently low interest rates also have an impact on monetary policy. If the key policy rate is at the lower limit, there is little room to provide incentives by lowering interest rates, as would normally be the case. That is why the financial conditions have also been extended to include other instruments, such as purchasing programmes, indicating that the deployment and effectiveness of monetary instruments depends on the conditions in financial markets, and on the economic conditions. The ECB will use this insight in the evaluation of its own monetary strategy, which is currently taking place. In this evaluation, the ECB will also address any unintended side effects of long-term accommodative monetary policy on financial markets and institutions.

Impact on financial stability

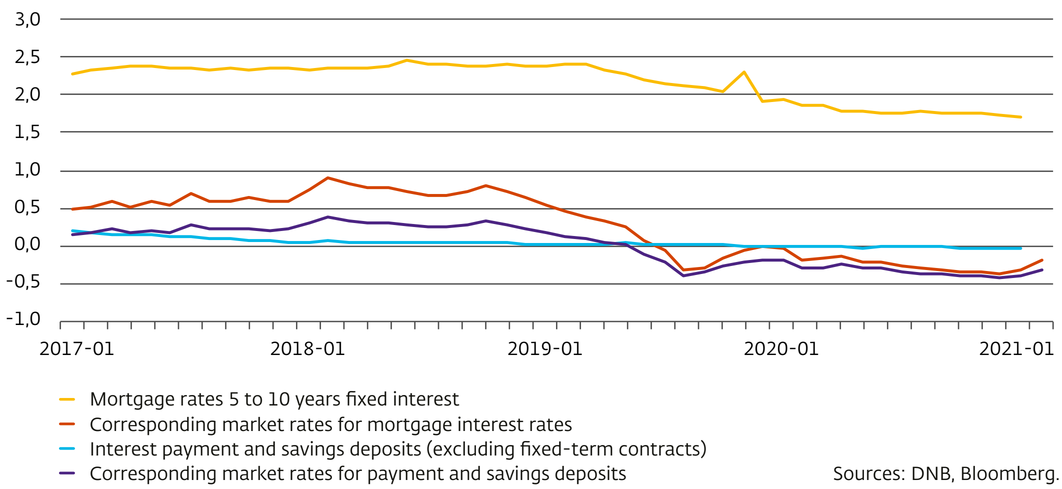
Favourable financing conditions are important in the short and medium term to promote economic recovery. Financing costs have been reduced, partly due to far-reaching interventions by central banks and governments. This has three beneficial effects: it contributes to reducing the negative effects of the coronavirus crisis, it boosts inflation and facilitates economic recovery.

Risks to financial instability will grow the longer interest rates remain low and the current accommodative monetary policy continues. For example, low interest rates and an accommodative monetary policy can lead to a search for yield among investors. After a substantial correction in the spring of 2020, the financial markets were quick to recover. Since then, stock market losses have mostly – or even completely – been recouped, with new records being set on the US exchanges. The market for debt issuance has also flourished. The recovery in financial markets, accompanied by high valuations and low risk premiums, is driven by monetary and fiscal stimulus and the prospect of economic recovery. The roll-out of various vaccines has improved the economic outlook, even as this outlook remains uncertain. In the longer term, however, further debt build-up may lead to borrowers defaulting on their loans. In recent years, low interest rates have provided incentives for debt financing and debts were hardly reduced in good economic times Persistently high levels of debt pose risks in the longer term. Finally, the low interest rates, combined with the COVID-19 support measures, could help weak companies that do not have a future-proof business model to survive longer. This hampers the necessary adjustments to the economic structure and can thus damage the economy's growth potential.

Low interest rates have negative effect on banks' interest income

For banks, long-term low interest rates put pressure on net interest income. This is mainly due to the limited transfer of low interest rates into deposit interest rates. While many market rates have fallen below 0%, banks have not lowered their interest rates below 0% on a large portion of payment and savings deposits (see Figure 2). At the same time, interest rates on loans are changing along with market interest rates, partly due to competition in the mortgage market.

Figure 2 Mortgage interest rate changes along with market rates, but the interest rates on deposits remain mostly unaffected



Sources: DNB, Bloomberg.

24 As existing interest contracts expire, the net interest margin (NIM) decreases. If long-term interest rates fall harder than short-term interest rates, there will also be a drop in the interest income that banks receive because loans have a longer maturity than deposits. However, the interest income earned by Dutch banks in this way was already small, partly because banks hedge against interest rate risk. After a number of years in which the NIM of the major Dutch banks was relatively stable, it decreased by more than 0.1 percentage point to 1.4% in 2020. If the interest rates of banks and market rates remain at the levels of summer 2020, the major banks' NIM will continue to fall in the coming years. In Japan, where interest rates have been low for decades, the NIM has already fallen by 60 basis points over the last fifteen years.

Compensating for lower interest income poses a significant challenge to banks. Dutch banks are highly dependent on interest income. In recent years, other revenues have not increased, or have only increased to a minor extent. However, the banks have managed to increase cost efficiency. This is partly because Dutch banks are ahead of the curve in Europe in terms of the digitisation of services. Employee cutbacks and a reduction in the number of bank branches made possible by digitisation have resulted in cost savings. With additional cost savings, for instance enabled by a further digitisation of services, banks can offset part of the fall in interest income. Still, it is vital that banking services remain accessible to citizens who are unable to keep up with the current pace of digitisation. The possibilities to maintain interest income through balance sheet growth are limited, as domestic private debt is already high and institutional investors are expanding their market share. Abroad, lack of scale and the absence of activities in attractive niches is an obstacle to expansion for most Dutch banks. In addition, strong growth in payment and savings deposits makes it difficult for banks to offset the downward pressure on interest income by replacing deposit financing with other types of financing.

Low interest rates can particularly exert downward pressure on banks' credit provisioning in the short term, as companies and households are better able to meet their obligations when interest rates are low. However, this offers little compensation, because provisioning levels were already low, partly due to the fall in interest rates. Moreover, provisioning levels will be higher in the coming years as a result of the coronavirus crisis. The ECB's exclusion of negative interest rates on some of the reserves held by banks with the Eurosystem and the encouragement of bank lending with targeted long-term refinancing operations only compensates for some of the pressure on interest income. In addition, the ECB's purchasing and lending programmes have increased the banking sector's reserves with the central bank. This excess liquidity is in itself detrimental to the interest margin, as banks receive negative interest on additional reserves. There will be some relief for banks, however, when the accumulation phase of the Deposit Guarantee Fund and the Resolution Fund expires in 2024.

As interest rates remain low for a longer period of time, banks will charge negative interest rates to more customers. The number of payment and savings accounts with negative interest rates has grown in recent times. However, this has so far affected only a limited number of customers, as most banks are not yet charging negative interest rates on balances below EUR 250,000. While negative interest rates are an inconvenience for people with savings, it seems likely that banks will charge negative interest rates to more customers if market interest rates remain low. After all, there is only a limited number of possibilities to offset lower interest income in other ways.

Long-term low interest rates make it more difficult for banks to meet their return on equity (ROE) targets. In Japan, bank ROEs have already declined sharply in recent years due to the fall in interest income. The ROEs achieved by Dutch banks before the coronavirus crisis were relatively high compared to the European average. At the same time, these returns were, on average, below the target values set by investors and banks themselves. At lower risk-free interest rates, it would make sense for investors to relax their ROE targets for bank shares. So far, however, we have not seen any indications of this.

If banks' profitability remains low in the long term, this might have negative effects on their resilience, and on the effectiveness of monetary policy. If low profitability becomes structural, unexpected losses will sooner come at the expense of banks' own funds, and it will take longer to supplement capital buffers by retaining profits. A long-term low or negative interest rate also puts pressure on the banks' options to lower their lending rates in response to the accommodative monetary policy.

Low interest rates raise pension costs

Low interest rates make it expensive to build up a fully funded pension. This is because low interest rates will lead to a lower expected return on investments. For example, a large proportion of the bonds which are currently being issued have a negative yield. Stock returns may also be lower during times of low or negative interest rates. The fall in interest rates in recent years has contributed to an increase in the value of shares and bonds. However, the positive effect this has on investment returns will stop if interest rates do not fall further in the future. In light of the higher costs of fully funded pensions, it is even more important that pension funds thoroughly inform their members about their expected pensions and the level of uncertainty involved in calculating these estimates. The pension system reforms are not a solution for the higher costs of pensions due to low interest rates. Especially in the new system, pension results will mainly depend on contributions and returns.

Regardless, the pension reforms will make the system more robust and future-proof. Pension funds will now align their investment policies with the risk attitudes of different generations, for instance. As a result, the risks that people of various ages are exposed to are better suited to the risks they are willing and able to take. Besides, interest rate risk of the young will no longer inadvertently affect older generations,. Moreover, by no longer awarding pension rights, there is no need for pension funds to use the actuarial interest rate for the valuation of pension entitlements. This eliminates an important source of tension between generations. The uniform system will also be abolished. This system resulted in all members of a pension fund, despite having different investment horizons, building up the same pension rights per euro invested. The abolishment of the uniform system removes an important source of difficult-to-explain redistribution between younger and older generations while making the system more compatible with the modern labour market.

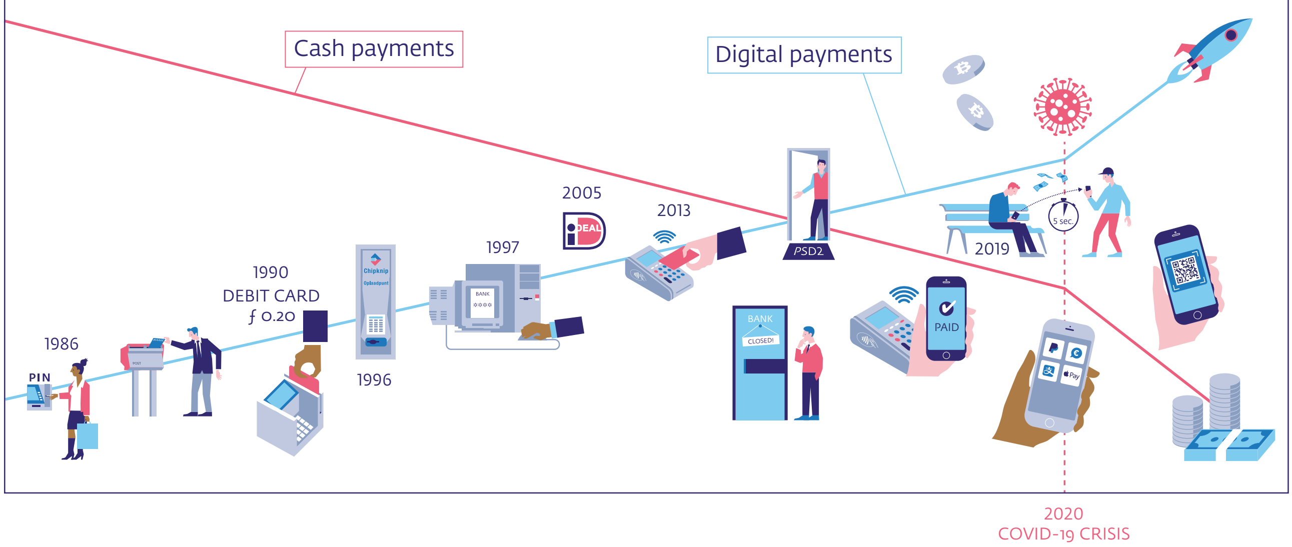
Low interest rates make products with guarantees expensive, affecting insurers' profitability

The earning capacity and traditional business models of life insurers and other insurers with long-term commitments are also under severe pressure due to the low-interest rate environment and declining premium income. Low interest rates make life insurance policies and long-term non-life insurance policies, such as incapacity insurance, less attractive. This is because low interest rates drive up the costs of products with guarantees. As a result, there has been a drop in the production of life insurance policies in the Netherlands. In response, insurers have reduced costs and rationalised their products. There has also been consolidation. Additional measures, such as more cost savings, product innovations and premium increases, can help further relieve pressure on the earning model, but they cannot remove it entirely. This means that the sector is expected to continue its gradual contraction.

In the long run, there is a risk that life insurers will not be able to deliver on past return guarantees. The effects of long-term low interest rates are still not fully reflected in the statutory solvency ratios for insurers. This is because insurers value long-term liabilities on the basis of interest rates which are higher than the current market rates. If interest rates remain low, maintaining insurers' statutory solvency ratios will therefore depend on the yields they obtain on mortgages, shares and corporate bonds, and on the dividend policy they pursue. For more risky investments, which can produce higher yields, insurers will have to retain higher buffers than for less risky investments, such as government bonds. If the solvency ratio deteriorates and insurers are unable to raise external capital, they should reduce the risk profile of their investments. This would then limit their potential returns, making it more difficult to deliver on the return guarantees issued. To avoid such a vicious cycle, it is therefore important that insurers take sufficient account in their buffer policies of the consequences of long-term low interest rates, and of their own earning capacity.

3 Payment systems in a time of continuing digitisation

Digital payments are increasingly popular



Market innovations and the COVID-19 crisis have increased the adoption of digital payments significantly. This process raises additional points for attention for keeping the payment system safe, accessible and efficient in the future. As a central bank, we are in the midst of this digitisation ourselves and are investigating the added value that a digital euro might represent in the European context.

The digitisation of the payment system has been ongoing for years. The COVID-19 crisis has accelerated this digitisation, strongly influencing the payment system in the Netherlands. Dutch people are increasingly making purchases – and paying for them – online. Cash is used less frequently in shops, and electronic payments are mostly made using a contactless method (see Figure 1). This trend was given an additional impulse at the start of the COVID-19 crisis, when it was incorrectly believed by many that payment using coins and banknotes might lead to infection. This was one of the factors discouraging customers from paying cash. Research has shown that Dutch people expect to be paying electronically more often than before even after the crisis, and that electronic payments are the new standard.

We have the statutory task of promoting the smooth operation of payment systems. These new developments can certainly make a positive contribution to this, assuming that they will make the payment system safer, better and/or more efficient. At the same time, we aim to facilitate the use of cash, especially for people who are having trouble keeping up with increasing digitisation and other payment innovations. Moreover, cash is an important alternative to electronic payments at points of sale, in case digital systems are not available or faulty. Increasing digitisation increases the potential impact of cyberattacks. That is why enhancing the resilience of the payment system will remain an important point of focus in the coming years.

Figure 1 Share of cash and card payments at points of sale

Share in % of total number of transactions – the figure for 2020 is an estimate

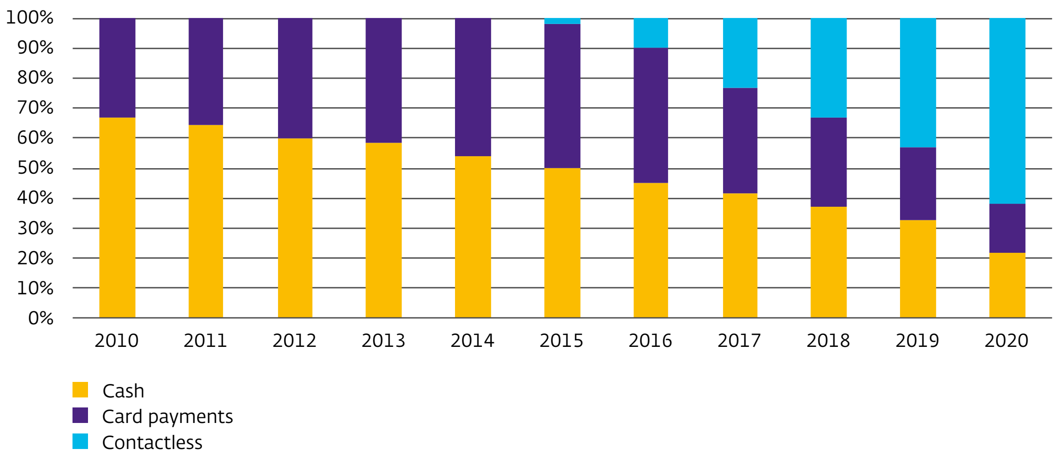
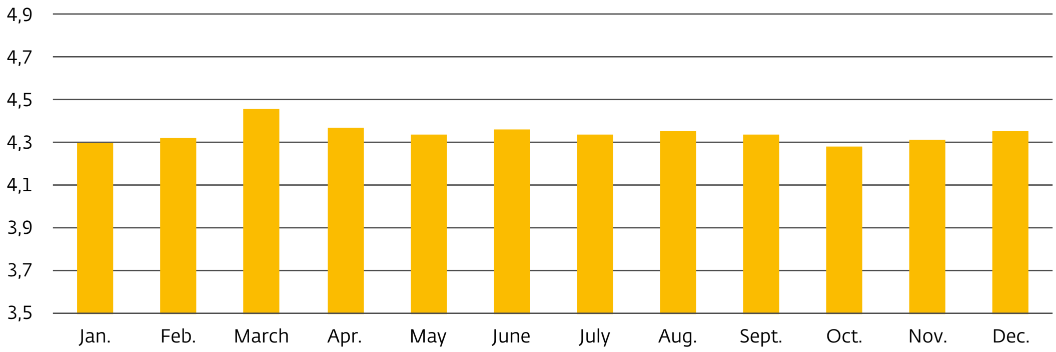


Figure 2 Confidence in the payment system remained high in 2020



Source: DNB/Dutch Payments Association.

Note: Confidence was rated on a scale from 1 (very low confidence) to 5 (very high confidence).

Despite the COVID-19 crisis, confidence in the payment system remains high in the Netherlands. In March 2020, at the time of the first lockdown, that confidence even seems to have increased (see Figure 2). This may be because of the measures that Dutch banks took to simplify contactless payments. It is our job to sustain that confidence in the context of all these developments. We do so in collaboration with all stakeholders, united in the National Forum on the Payment System (NFPS).

The digital euro offers opportunities

The digitisation of the payment system is part of a more general societal trend, which also affects central banks. For example, the European Central Bank (ECB) and the central banks of those countries where the euro is used as a means of payment – which together form the Eurosystem – are investigating the possibilities offered by a digital alternative to cash, the digital euro. As yet it is unclear what form the digital euro will take for consumers and companies. During the exploratory phase, which started at the end of 2020, all Eurosystem central banks have been exploring design ideas, conducting various technical experiments and engaging with stakeholders and partners. By means of public consultation, together with the ECB, we have taken stock of the opinions of the public and those with business interests. Around mid-2021, the Eurosystem will decide whether to continue the exploration into the requirements and design of a digital euro.

In the past, we have communicated our positive stance towards the digital euro. We consider it important that the public retains access to currency issued by a central bank. At present, euro banknotes are the only form of central bank money that the public have access to, but in an increasingly digital world those are becoming less useful. A digital euro would combine the efficiency of a digital payment instrument with the safety of central bank money. Moreover, a digital euro may prevent us from becoming overly dependent on digital currency issued and managed outside the euro area, such as stablecoins. Such a scenario might after all adversely affect financial stability and monetary policy.

For the time being, cash will remain a necessity and the digital euro will be a welcome, contemporary addition. The digital euro will not replace the current payment system and the parties active in it, such as banks and payment service providers. The various payment systems – payment cards, non-cash, cash and the digital euro – complement one another and can function well side by side. Together, they ensure the continuity and accessibility of the Dutch payment system.

Infrastructural developments

Cryptos are another example of the digitisation of the payment system. A famous example would be the bitcoin, although this has yet to realise its potential as a means of payment, among other things, because it does not have all the characteristics of a means of payment. The fact that the bitcoin's value fluctuates very strongly was one reason for the development of stablecoins. These are virtual currencies that aim for a specific value and are linked to, for example, the value of the euro. They are intended to facilitate faster and cheaper international payments. One example of a stablecoin is Diem, formerly known as Libra.

To supervisory authorities and central banks, stablecoins present a dilemma: in theory, they could facilitate an effective and efficient payments system, but they could also inversely impact monetary policy, financial stability and the safety of payments. It is important that legislation and directives recognise developments like these, in order to safeguard the level playing field between market participants. At the same time, the rise of cryptos and stablecoins has a stimulating effect. In response to private initiatives in the field of international payments, central banks are now engaging worldwide with the challenge of making their own payment systems – including cross-border ones – faster. This is in line with the market's high expectations in this regard. Research into a digital euro and, elsewhere, other forms of digital central bank currency is a good example of this. In addition, a special G20 working group, in collaboration with other global authorities, has drawn up an extensive action plan for making the international payment system, faster, more transparent and more efficient. This can be done, for example, by interlinking national payments systems more effectively and increasing the standardisation of international transfers of funds.

Another important development is the European Payments Initiative (EPI), which was set up at the request of the European Commission, the Eurosystem and other parties. Within this initiative, a number of large European banks are developing a payment solution that allows consumers to pay in shops and transfer money to each other online everywhere in Europe. This initiative was set up to reduce dependence on big non-European players, such as VISA and MasterCard, and to create a European means of payment for online purchases, including cross-border ones. EPI aims to use the European instant payments infrastructure that is already in use.

The Netherlands is already seeing a great deal of use of instant payments, which enable the secure transfer of funds within five seconds at any time of the day, including weekends, for example by means of a mobile banking app. The instant payments infrastructure is increasingly being implemented in all of Europe, facilitating the introduction of new European payment services.

The European Commission (EC) discusses this ongoing digitisation of the payment system and the new opportunities this offers in its recently published Retail Payments Strategy for the EU. In this strategy, the EC describes its desire for an increasingly integrated and safe European payments market for the public and businesses. An increasing number of parties seem interested in offering payment products. Major interests are at stake. After all, payment data offer a wealth of information for institutions that possess the technology to monetise them. Our research has shown, however, that one year after the introduction of PSD2 – a new European payment services directive – only a quarter of Dutch people were prepared to share payment data and did so primarily with their own banks. It is rare for citizens to give other companies permission to view payment data. The reason for this is the privacy-sensitive nature of these data, which is something that market parties will have to take into account.

Reservations about digitisation

The digitisation of the payment system, which is part of a broader societal digitisation trend, will continue over the coming years and lead to new initiatives. This may benefit citizens and companies, and as such it is a good thing. We therefore welcome digitisation of aspects of the payment system. However, we have certain reservations with respect to these developments.

Firstly, not everyone is equally adept at handling digitisation, which adversely affects the inclusiveness of the payments system. Consumers may for various reasons not be able to pay digitally, or not want to do so. Certain people have difficulties using electronic means of payments, yet they should still be able to participate in society. These people, for whom cash is an alternative, must retain easy access to the payment system. In addition, cash helps people to budget. Cash payments limit total payments, as people experience more 'pain' when paying cash than when using a non-cash means of payment. Also, they cannot spend more cash than they are carrying, which helps them not to exceed their budget and to avoid incurring debt. Privacy is another reason why consumers are not always prepared to pay digitally. However, the anonymous nature of cash increases the risk of money laundering. That is why we hold the financial sector to its gatekeeper role.

We consider it important that cash remains available and generally accepted. Cash is invaluable to many members of society, both as a means of payment and for saving purposes. People especially tend to save in times of uncertainty, steadily increasing the number of banknotes in circulation. Having cash on hand enables people to pay for groceries even in the event of a POS terminal failure. This, however, requires sufficient numbers of ATMs and cash deposit points. These should be both available and safe to use, which is not always the case, due to explosive attacks and the closure of bank branches. Because of this, banks are taking additional measures in close consultation with the police to minimise the chance of explosive attacks, and hence inconvenience to citizens and shop owners. Security is fundamental to sustaining confidence in the payment system. As cash is being used less frequently, yet at the same time must remain easily accessible and generally accepted, we have commissioned an independent agency to provide advice during the first half of 2021 regarding the cash-payment infrastructure for the medium term. Their research considers the entire chain for banknotes and coins as well as means to keep cash usable at acceptable costs.

Our second reservation with regard to the ongoing digitisation is that this increasingly exposes the payment system to operational risks. Failure of part of the digital payments chain impacts the economy directly. Such risks also include cyberthreats. A targeted attack that results in large-scale disruption of the payment system could lead to enormous societal disruptions. There are good reasons why we and other institutions warn of such a risk increasingly frequently. It is therefore important that there are sufficient alternatives to digital payments to resort to in emergencies. At present, cash performs this back-up function in the event of failures, but as its use decreases, this function is impaired.

Therefore, the ongoing digitisation of the payment system must be accompanied by an increase in cyber resilience. We contribute to this by means of the TIBER testing programme, for example. Within TIBER-NL, some thirty financial institution are subjected to hacking tests, during which so-called 'ethical hackers' break into their computer systems in order to reveal vulnerabilities. At the same time, attempts are made to test companies whose services these financial institutions use, such as suppliers, as these too can be a financial institution's vulnerability. Within this programme we collaborate with other European central banks to improve cyber resilience in this manner. Recently, the Netherlands Authority for Financial Markets (AFM) joined the programme as well.

Whatever means of payment people opt for in the future, we will remain closely involved in the relevant developments, putting the interests of society first. Our aim in this is to keep the entire payment system as safe, reliable, accessible and efficient in the future as it is now.

4 Accountability

This chapter focuses on our main results in 2020. We begin by discussing the most important results and challenges in the context of our core tasks. We then explain the six strategic ambitions that we intend to achieve through our DNB2025 strategy. This is followed by a brief description of developments in our operational management. The chapter concludes with our financial overview and an overview of costs.

2020 in brief

The COVID-19 crisis had a significant impact on DNB in 2020. The outbreak of the pandemic put pressure on financial stability briefly in the spring. The reforms instituted in recent years following the credit crisis enabled the financial system to absorb the shock readily without suffering any negative and self-reinforcing systemic consequences. Moreover, there were no major disruptions in the payment systems.

The nature and scope of the economic shock necessitated far-reaching measures, however. At the national level, the Dutch government introduced various support measures. We at DNB temporarily lowered the buffer requirements for banks. At the European level, the European Central Bank (ECB) and the European Commission took key steps to restore and maintain calm on the financial markets. Nevertheless, the economic contraction of 3.8% is extraordinarily severe.

We also faced major operational challenges. The urgent nature of the coronavirus crisis compelled us to realign our priorities. Moreover, most of our employees had to work remotely for months on end. We had to postpone some activities, although we resumed them later in the year with due observance of all coronavirus-related measures and restrictions.

It is of great significance that the financial sector continued to operate smoothly. Our mission is to ensure financial stability and sustainable prosperity. The societal impact and coherence of our activities are expressed in our value creation model (see Figure 1). The greatest challenge we are facing is to prevent the economic crisis from spiralling into an all-out financial crisis. We have weighed the measures taken against medium-term risks. In this context, we emphasise in Chapter 1 the mounting levels of public and private debt, the resilience of banks and other factors. In Chapter 2 we discuss the consequences of persistently low interest rates, which is clearly of a structural nature. Chapter 3 focuses on the dilemmas inherent to the digitisation of payment systems, which has accelerated because of the pandemic, and the risks involved. It is furthermore essential, now more than ever, to continue to emphasise integrity in the financial system. Finally, the urgency of economic constraints and threats, such as the effects of climate change, is only increasing. Structural reforms must therefore be incorporated in post-crisis recovery.

Figure 1 Value creation at DNB

Input

Budget
- Actual figure: EUR 454.4 million (budget: EUR 500.6 million)

Employees
- Average number of FTEs: 1,882.4
- Focus on diversity, inclusiveness and permanent employability
- 35.8 % of managers are female (40.5% of total workforce)

Knowledge development
- actual training costs: EUR 3.9 million (budget: 6.4 million)
- Digital competence development

Consultation and cooperation
- National
- European
- Global

Office accommodation

Digital infrastructure

Core tasks and organisation

Statutory tasks (Section 4.1)
On the basis of Articles 3 and 4 of the Banking Act:
- Price stability and balanced economic developments in Europe
- Resilient financial system
- Sound and ethical financial institutions
- Resolution of financial institutions
- Secure, reliable and efficient payment systems
- Clear and reliable data

Strategic ambitions DNB2025 (Section 4.2)
- CSR
- Balanced conditions
- Confidence
- Digital
- Employees
- Cost-conscious

Operational management (Section 4.3)
- Operational Risk Management
- Compliance and integrity
- Stakeholder management
- Working environment
- Chain management
- Environmental protection and carbon footprint

Governance

Results

1. Contributed to ECB monetary decision-making
- Weighed up the need for, and effectiveness of, monetary measures to mitigate impact of coronavirus crisis on the financial sector against risks of imbalances if financial conditions are accommodative for a protracted period
- Contributed to monetary strategy review and organised a listening session

2. Took measures at national and international level to prevent economic crisis from turning into a financial crisis
- Banks' buffer requirements temporarily lowered to sustain lending
- Conducted pandemic stress test to maintain a good view of banks' resilience
- Called on banks and insurers to exercise restraint in paying out dividends

3. Took measures to ensure that financial institutions are able to withstand the impact of the coronavirus crisis, with due regard for longer-term solidity
- Introduced targeted regulatory relief for banks and developed evaluation framework for reversing the measures in a diligent and timely manner
- Reviewed our supervision methodology
- Adopted new resolution strategy and worked on solid preparations for possible resolution using resolution plans and instruments
- On-site analyses relaunched following earlier postponement or cancellation

4. Worked to promote confidence in the financial sector
- Conducted 33 thematic integrity examinations, and intervened where necessary
- Studied sources of confidence in the financial sector
- All employees took the civil service oath
- Received 670 internal requests for advice on integrity regulations, 82 incident reports and 16 complaints

5. Contributed to public discourse on structural economic reforms through substantive analysis
- Contributed to the practical implementation of the Pension Agreement
- Called for reforms in the labour and housing markets
- Urged for reduction of economic divergence between euro area countries

6. Promoted continuity and accessibility of payment systems
- Ensured agreement on cash availability
- Studied promotion of central bank digital currency in the euro system

7. Stressed importance of sustainability and fostering sustainable recovery
- Contributed to sustainability statistics
- Integrated climate-related risks into supervision and studied biodiversity risks
- Called for a sustainable economic recovery from the coronavirus crisis
- Mapped transition risks in own balance sheet
- Developed CSR policy for own-account investments

Contribution to society

We seek to safeguard financial stability and thus contribute to sustainable prosperity

Real economy
- Euro area inflation lags 0.3% below the ECB's target (NL inflation: 1.1%)
- Strong 3.8% economic contraction in 2020
- Good progress on implementing new pension system
- Bottlenecks in housing and labour markets persist
- Little progress on European banking union and capital markets union

Financial sector
- Financial system has coped well with the impact of the coronavirus crisis
- Dutch banks' capital position is robust (CET1 ratio: from 17.0% at end-2019 to 17.8% at end-2020)
- Insurers and pension funds remain under pressure mainly due to low interest rates (average SII ratio of life insurers at 191%; policy funding ratio of Dutch pension funds at 95.0%)

Confidence
- Financial sector's interpretation of gate-keeper role in terms of integrity still requires heightened attention
- Confidence in financial institutions has held up well (70% have confidence in their own bank or insurer; 50% have confidence in their pension fund). Confidence in DNB is high (79% are very or highly confident)

Cash and payment systems
- No disruptions in payment systems
- Availability of cash is under pressure (share of cash payments has fallen to 20%)

Sustainability
- Financial institutions are more aware of climate-related risks
- Current climate plans fail to achieve carbon reduction targets in the Netherlands.
- Own-account investments: ESG integration: 77%, norm-based screening: 98%, exclusions: 100%, turnover-weighted carbon emissions: 202 tCO_2e/turnover, green bonds: EUR 279 million

4.1 Core tasks: results and challenges in 2020

4.1.1 Price stability and balanced macroeconomic development

Inflation in the euro area in the year under review lagged behind the ECB's target for inflation of below, but close to 2% in the medium term. The outlook for inflation was adjusted downwards in 2020. It was pegged at 0.3% for the euro area as a whole at year-end. Nevertheless, we are not facing a situation of inflation-induced economic damage or any real risk of deflation. Inflation trends and prospects in the Netherlands were similar to the wider euro area, with an inflation rate of 1.1% at year-end. Inflation here was somewhat higher than the euro area average due to temporary drag in some other euro area countries as a result of VAT rate cut, among other factors. In addition, negotiated wages rose slightly more in the Netherlands.

The ECB took measures to limit the harmful effects of the coronavirus crisis on the financial markets, banks and the economy. The outbreak of the pandemic initially led to financial turbulence and a temporary tightening of financial and monetary conditions in the euro area, which briefly hampered the transmission of monetary policy. The ECB's intervention restored calm, and its policy also contributes to favourable financing conditions, enabling financial institutions to do their part in combating the crisis. Monetary policy in 2021 will be aimed at economic recovery and nudging inflation toward the medium-term target. The long-term impact of the coronavirus crisis on inflation is as yet unclear.

Our input in the monetary decision-making process focused on various factors, including the balance between the measures' necessity, effectiveness and potential side-effects. The ECB's measures were necessitated by the drag on inflation and growth precipitated by the pandemic, and they have proven their worth in supporting the functioning of the financial markets and the transmission of monetary policy. These factors were weighed against potential, unintended side-effects such as the risk of imbalances that may arise when monetary and financial conditions remain accommodative for extended periods. We exert influence on monetary policy through deliberations in the ECB Governing Council, where the President of DNB participates in monetary policy decision-making together with the governors of the other euro area central banks and the ECB Executive Board. In addition, we communicate our positions through the media.

The ECB embarked on a review of its monetary strategy in January 2020. The review has been delayed somewhat due to the coronavirus crisis. It focuses on various factors, including the effect of structural trends on inflation and the integration of specific themes such as climate change and financial stability in monetary policy. The review will also look in detail at the approach to promoting price stability, measurements of inflation and the inflation outlook. Finally, the review will examine the effectiveness of monetary instruments in recent years. Our objective is that the review will produce a monetary strategy that is robust in the face of uncertainty and, above all, appropriate in the context of low inflation. Communication with a broad range of stakeholders and the general public is a key component in the review process (see Box 1).

Box 1 Listening session on monetary policy

All of the NCBs in the Eurosystem and the ECB organised listening sessions on the economy and monetary policy.

Our online listening session, 'Talk to us', took place on 26 November 2020. Registration was open to the general public, and the session was publicised on social media channels and elsewhere. Around 30 representatives of civil society organisations and a number of private individuals shared their ideas with members of the DNB Governing Board and the ECB Governing Council on a range of different themes. The public 'Talk to us' session was streamed live.

Participants expressed particular concern about house prices and the impact of low interest rates on pensions. Another topic of discussion was long-term debt sustainability should interest rates rise. Additionally, growing inequality and climate issues were identified as topics that the ECB should consider.

4.1.2 Resilient financial system

We use macroprudential policy to bolster the resilience of the financial system. We are just one of the actors in the financial sector and we have limited influence on developments that affect the system. We identify risks to financial stability in our biannual Financial Stability Report (FSR), and we make recommendations to mitigate their impact. We conducted two pandemic stress tests in the year under review to analyse the effects of the coronavirus crisis on the financial sector. The tests revealed that a lengthy and deep pandemic-induced recession could have a major impact on banks' financial position. Still, they would remain in a good position to extend credit, thereby giving a boost to the economy. The FSR also devoted attention to non-COVID-related risks, such as cyber risks and Brexit.

Our focus during the crisis has been on striking a balance between maintaining a healthy financial sector and preserving lending levels. We temporarily lowered the buffer requirements for banks. These measures freed up more than EUR 8 billion in capital to compensate losses and maintain lending. While the total impact on lending cannot be estimated with any degree of certainty in advance, it could well amount to up to EUR 200 billion. Banks will have to replenish their buffers after the crisis has abated, and it is partly for this reason that they are not inclined to avail themselves of the scope provided in the buffer requirements, we have found. We are in contact with the banks to provide clarity on the timeline for phasing out the current measures. We also supported the ECB's recommendation to banks to temporarily refrain from dividend pay-outs and share repurchases, and the subsequent recommendation to exercise restraint. This also helps boost resilience. We issued a similar recommendation to insurers.

Vulnerabilities in non-bank financial sector were also revealed in the year under review. The Financial Stability Board (FSB) has identified key lessons learned and potential reforms.

4.1.3 Sound and ethical financial institutions

The coronavirus crisis has had a major impact on our supervisory activities. In our separate independent public body (ZBO) report, we take a closer look at our main supervisory activities during the year under review.

Consultations at both the European and global level during the year under review resulted in decisions to relax certain aspects of supervisory regulations temporarily in order to limit the economic shock of the crisis. In the longer term, however, these measures may lead to increased financial risks, which is why we have stressed to our international partners that a permanent relaxation of regulations must be avoided. To this end, we have developed an evaluation framework for reversing the measures in a diligent and timely manner. We have shared the evaluation framework with the ECB. It will also provide guidance for our engagement in future discussions regarding international regulatory standards.

We are closely monitoring potential credit risks at banks in order to signal problems in good time. We requested supplementary reports on temporary deferments of payment by companies and households (moratoria) and on the status of non-performing loans. In addition, we calculated on a quarterly basis what the prudential situation of the banks would have been without the relief measures in order to keep a close eye on their underlying performance.

The coronavirus crisis also affected our on-site inspections. We postponed or cancelled roughly half of our planned inspections, which could potentially go at the expense of risk identification in the long run. In the second half of the year we rescheduled a number of on-site inspections as off-site inspections. We used our surplus capacity for other supervisory activities and to provide specialist banking expertise to respond to a greater need.

Banks generally continue to enjoy a robust financial position despite the adverse economic circumstances. Their capital position has even improved somewhat. Pension funds and life insurers continue to face difficulties, which is primarily due to long-term low interest rates that are attributable to more than just the coronavirus crisis.

Box 2 Bankruptcy of Conservatrix

On 8 December 2020, the Amsterdam District Court ordered the bankruptcy of life insurer Conservatrix. Bankruptcy was ultimately unavoidable because Conservatrix was failing or likely to fail, and no alternative measures could be expected within a foreseeable timeframe that could prevent failure.

The bankruptcy is an unsatisfactory outcome for all stakeholders and for the policy holders in particular. We wrote a letter to the Ministry of Finance detailing the developments and elucidating that this was a unique case with its own specific circumstances, wholly unrelated to the coronavirus crisis.

Our updated supervisory methodology enables us to respond to challenges more effectively. It has intensified our risk-based approach and provided greater uniformity in the supervision of various types of institutions. It also dovetails better with the ECB's supervisory approach, and it enables us to make better use of data-driven supervision. In addition, we published a new Supervisory Strategy, including our supervisory priorities for the coming years.

Integrity

Some financial institutions are still not giving sufficient expression to their gatekeeper role. Our integrity supervision focuses on preventing financial institutions from becoming involved in financial and economic crime. We conducted 33 institution-specific and thematic examinations into the management of cash-related integrity risks by banks, the way in which trust offices and banks deal with fiscal integrity risks and the involvement of Dutch banks in the FinCEN files (see Box 3). The examinations revealed that institutions are taking steps in the right direction, but that they could take their role and responsibility more seriously. We intervened at a number of institutions, including imposing fines and penalties. Furthermore, we completed preparations for conducting integrity supervision of crypto service providers starting in 2021. By year-end 2020, we had registered 15 crypto service providers.

Box 3 FinCEN files

Starting on 20 September 2020, cooperating media from various countries published confidential transaction information as reported by US banks to the Financial Crimes Enforcement Network (FinCEN). The leaked information was related to notifications of suspicious transactions between 2000 and 2017. The files indicate involvement of at least 11 banks that are subject to Anti-Money Laundering and Anti-Terrorist Financing Act (Wwft) supervision by DNB, including Dutch banks and branch offices of foreign banks.

We asked the banks involved to investigate the published data, which are partly unverified and outdated. The banks reported their findings to us, and we took follow-up action where necessary, monitoring compliance with relevant measures. We also exchanged information with other supervisory authorities as a result of the publications. We wrote an explanatory letter about the FinCEN files together with the Dutch Authority for the Financial Markets (AFM).

4.1.4 Resolution of financial institutions

We made considerable progress in our resolution planning. We adopted updated versions of resolution plans for insurers as well as the last remaining resolution plans for banks, and we updated and expanded existing plans. Finally, we began work on the resolution framework for investment firms.

We continued to develop the resolution tools available for banks and insurers. These efforts will expand opportunities to recapitalise a failing institution. We also worked on developing additional policy to increase the loss-absorbing capital of banks falling under our responsibility. This new policy will be ready for implementation in 2021, and will form the basis for requirements for banks in this area. It should be noted that there is scope for further strengthening international resolution standards and the European resolution framework. With regard to banks, we will continue to promote sufficiently stringent requirements for loss-absorbing capital and a level playing field in Europe, thus reducing the risk of having to address public coffers. Last year, partly due to our efforts at the European level, it was determined that at least 8% of banks' loss-absorbing capital must be subordinated.

We took additional preparatory measures in response to the pandemic. A bridge bank is being rapidly established as a resolution tool for banks. A bridge bank is an institution that can be used to operate a failed bank if a quick sale is not possible or undesirable. We also conducted a number of crisis drills to test the resolution framework and improve it where possible. A number of crisis drills were cancelled in 2020 due to the exceptional circumstances, but we intend to continue conducting them. The review of priorities resulted in some delays in other areas, such as in resolution planning for central counterparties and the establishment of a resolution framework for investment firms.

We took key steps last year to enable us to effect pay-outs under the Dutch Deposit Guarantee within seven business days. We published a Single Customer View assessment framework to ensure the quality of the deposit data that banks must submit. We will be launching a major public awareness campaign in 2021.

4.1.5 Secure, reliable and efficient payment systems

The cash infrastructure in the Netherlands is under pressure. This has been exacerbated by the coronavirus crisis. Cash payments declined to 15% of point-of-sale transactions at one point in the year under review due to the false perception that cash is an unsafe option during the pandemic. This proportion later recovered to 20%, remaining lower than the 30% share prior to the crisis.

One of our priorities is to ensure sufficient availability of cash. Cash fulfils a range of social functions. It is the only form of public central bank money, and a crucial fall-back option should electronic POS systems fail. Furthermore, many people rely on cash for dealing with their personal finances. The use of cash is steadily declining. Banks are reducing the number of ATMs and closing branches. The trend is accelerating due to temporary closures of ATMs as a result of explosive attacks. The banks are working with us and with the responsible ministries on improved security measures. Based on a report, the National Forum on the Payment System (NFPS), which we chair, has reached new agreements on the availability and acceptance of cash. We have commissioned an external study into maintaining an efficient and robust cash infrastructure even while the use of cash remains structurally low. Decisions will be made in 2021 based on the results of this study.

We are exploring options for a digital euro within the Eurosystem, issued by the central bank. Against the background of the further digitisation of the payment system, we expressed a positive opinion on digital central bank currency last year. It is conceivable that a digital euro could replace cash in the long term. However, further digitalisation must be accompanied by enhanced cyber resilience, which is why we are emphasising cyber risks through the TIBER testing programme and through other means.

We are monitoring the risks associated with global stablecoins. The FSB published a report with ten recommendations that we are taking as the basis for these monitoring activities. Furthermore, we are working with the FSB and the Committee on Payments and Market Infrastructures (CPMI) to improve cross-border payments. In this capacity we are emphasising the importance of the Legal Entity Identifier (LEI) in financial reporting and in payment and securities systems.

No major disruptions occurred in payment systems in the year under review despite the coronavirus crisis. We are committed to ensuring efficient collateral management as part of our supervision of payment institutions. We simplified the process for submitting credit claims as collateral and we prepared an infrastructure for the potential use of additional credit claims. The operational crisis management team for the Dutch financial sector met several times to ensure preparedness for potential disruptions. We are working at the European level to improve the European Securities and Markets Authority's (ESMA) supervision of central counterparties.

4.1.6 Clear and reliable data

Last year we initiated new datasets in the area of securities and other financial institutions. We also led the way in improving statistics in the area of sustainability, partly as a member of the European System of Central Banks (ESCB). Priority must be given to developing and refining indicators for exposures to climate-related risks, carbon footprints and green financial instruments, as datasets in these areas are still in their infancy.

The multi-year modernisation of our IT systems for statistics will enable us to continue our work in a future-proof manner. The work sharing arrangements with Statistics Netherlands (CBS) were completed last year based on agreements on closer collaboration. Finally, we were involved in reducing the reporting burden for pension funds by integrating European and national reports.

4.2 Progress on DNB2025 ambitions

DNB2025, our agenda for change, contains a vision and strategy for the medium term with six strategic ambitions to help us achieve our mission of ensuring financial stability and sustainable prosperity. This section discusses the core results we achieved in the year under review and the steps we intend to take in 2021 as we progress toward achieving our objectives.

4.2.1 CSR

We are fully integrating corporate social responsibility (CSR) in all elements of our work. We updated our CSR strategy. Our progress on our priorities in the area of climate-related financial risks is discussed in our climate-related financial report (see Annex 1). This is the first report that we have prepared in accordance with the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD). The financial overview provides an overview of our sustainable reserve management. Section 4.3 discusses sustainability in our operational management.

DNB2025 strategic ambition for CSR

Vision (ambition)	Progress in 2020	Priorities in 2021
■ We strive for sustainable economic growth that has no harmful effects on the environment ■ We strive for an inclusive financial and economic system	■ Awareness of climate risks raised through our supervision of financial institutions ■ Energy transition indicator developed ■ Greater emphasis on socially responsible investment by integrating our SRI Charter into our own policies, among other measures ■ Promoted 'green recovery' and inclusion through studies, speeches and communication ■ Circularity and sustainability integrated into our own operational management and buildings ■ Accessibility of payment systems maintained	■ Publish study into 'applying sustainability risks in the financial sector' ■ Advise on post-crisis recovery and simultaneous boost to climate ambitions ■ Develop national and international sustainability statistics ■ Elaborate responsible investment in more detail ■ Identify carbon footprint of own reserves and study physical risks ■ Devote attention to social and environmental impact of our operational management and payment chain, payment systems and financial education

We use our CSR policy to boost economic inclusion of vulnerable groups. We focus on specific objectives to improve accessibility to the labour market and the housing market. Table 1 shows our progress in these areas, and Section 4.2.2. discusses the structural reforms we advocate. Inclusion will feature more prominently in our presentations of the economic outlook in 2021.

Table 1 Indicators for an inclusive financial and economic system

	Objective	Progress in 2020
Accessible labour market	■ Annual increase in net labour participation throughout the population: smaller discrepancies between sub-groups (age, gender, background) ■ Less distinction between flexible and permanent employment: reduction of tax relief for self-employed persons; increased accessibility to social security schemes (% of self-employed people with occupational disability insurance) and fewer differences between permanent and flexible employment in protection against dismissal	■ Participation dropped across the board. Differences between sub-groups remained stable. ■ Accelerated phase-out of tax relief for self-employed persons starting in 2021. No change in access to social security schemes. No noteworthy change to protection against dismissal.
Accessible housing market	■ Balanced tax treatment for rental and owner-occupied dwellings ■ Appeal of renting versus buying: levelling the costs of renting and buying ■ Greater supply in mid-range rental segment ■ Balanced tax treatment for rental and owner-occupied dwellings	■ No noteworthy structural reforms to the housing market ■ Difference in tax treatment for rental and owner-occupied dwellings reduced as a result of previously initiated policy on phasing out mortgage interest tax relief. In contrast, the gap was widened due to the elimination of the transfer tax for home buyers up to the age of 35

We promote the accessibility and availability of payment systems. We reached agreements in the National Forum on the Payment System (NFPS) to address certain constraints, with a specific focus on people who are unable to keep up with the increasing digitisation of banking services. Partly at our insistence, the NFPS intends to look into options for establishing independent service points where customers can ask questions about payment services. We also made new agreements on the accessibility of ATMs and cash deposit facilities and the acceptance of cash by retailers (also see Section 4.1.5). We postponed publication of the three-yearly Accessibility Monitor until 2021 due to the pandemic.

The NFPS is devoting additional attention to the uptick in WhatsApp fraud and spoofing. Representatives from the business community and consumer protection organisations have agreed to provide information to the public about these forms of fraud. In addition, banks have pledged to adjust and harmonise their leniency policies.

We were involved in various educational initiatives to boost financial knowledge and inclusion. We participate in various events, including Wiser in money matters (Wijzer in Geldzaken), Money Week (Week van het Geld) and Pensioen3daagse, an event focusing on pensions. We also provide informational materials to school pupils and economics teachers. The Visitor Centre was closed for a great deal of 2020 due to the pandemic, meaning there were fewer tours and teacher's days. The building was sold at the end of the year. Our educational programme in 2021 will continue primarily online. The Visitor Centre will be operational again once the renovations of our headquarters are complete in 2023.

4.2.2 Balanced conditions

We strive for more balanced economic conditions through structural solutions to long-term issues. Reforms are needed to address imbalances in the financial sector and the structure of the economy. However, direct responsibility for policy on various issues lies largely outside our immediate sphere of influence. We therefore exert influence by conducting in-depth analyses and by actively participating in policy debates and public discourse.

DNB2025: strategic ambition: Balanced Conditions

Vision (ambition)	Progress in 2020	Priorities in 2021
■ At the national level, we are striving for a stable pension system, a balanced labour market and moderate development of mortgage debt to reduce cyclical ups and downs. ■ At the European level, we are committed to the normalisation of monetary policy, completion of the banking union and strengthening of the capital markets union.	■ Pension system reform has progressed thanks to the legislative proposal and additional agreements ■ Structural reforms in the labour and housing markets will be more likely at a later stage ■ The coronavirus crisis necessitated an expansion of unconventional monetary policy ■ Agreements on a European recovery fund gave a boost to efforts to combat the crisis ■ Little progress on banking union and capital markets union	■ Have impact on new coalition agreement, with emphasis on structural labour and housing market reforms ■ Contribute to a robust ECB monetary strategy based on the review ■ Promote balanced crisis management to prevent the economic crisis from becoming a financial crisis

The Netherlands

Progress was made in 2020 particularly with regard to pension reform. We were involved in the development of the pension accord. We encapsulated our standpoint in a position paper and communicated it publicly. Important points that we emphasised, including the transition to a system of personal pension assets with risk-sharing, the elimination of the uniform contribution rate system, and a tailored investment policy, were incorporated in the outline memorandum and in the legislative proposal that was published for consultation in December 2020. Agreements were also reached on the transition to the new system. This reform will help ensure a more future-proof pension system. In 2021 we will continue to monitor developments to ensure that the agreements are carefully and appropriately reflected in legislation.

At present, access to the housing market is still is still subject to numerous bottlenecks. The government made insufficient progress toward reforming the housing market in the year under review. We pointed out existing constraints, but our input is currently not being reflected adequately in the public debate. Political support for reforms has also eroded due to the current, deep recession and because elections were approaching. Nevertheless, it remains of great importance to work towards a more accessible housing market with a better balance between buying and renting. Additionally, a balanced housing market will benefit from lower mortgage debts. It is to be hoped that the necessary reforms will be included in the new coalition agreement.

A divide is opening on the labour market because flexibilisation has gone too far. Last year, we advocated for a social safety net that is also accessible to flex workers and self-employed persons. We continue to emphasise the importance of reducing taxation differences between contractual employees and self-employed people, and between employees on permanent and flexible contracts. This will promote mobility from flexible to permanent employment and vice versa. It is to be hoped that these recommendations will be incorporated into policy in the forthcoming term of government based partly on the recommendations put forward by the Commission on the Regulation of Work (Borstlap Commission) in its report. We advised the commission on the contents of the report, and we support the commission's recommendations.

Europe

European policy was dominated by the fight against the coronavirus crisis. The monetary policy response is discussed in Chapter 1 and Section 4.1.1. European leaders also made agreements on a European recovery fund. The fund is now providing some financing for national support measures through grants and long-term loans. These agreements also mean that monetary policy is not solely responsible for combating the effects of the pandemic, thus helping to ensure a more balanced policy mix. DNB president Klaas Knot stressed in the HJ Schoo lecture that it is in the genuine self-interest of all euro area countries to limit economic divergence to the greatest extent possible.

Little progress was made in the year under review towards completing the European banking union. The coronavirus crisis has resulted in greater interconnectedness between governments and banks. This is reinforced by the fact that countries have issued guarantees on loans made by banks. Due to these new risks, there is currently inadequate political support among Member States for further progress on the banking union, where risk sharing must go hand in hand with agreement on risk weighting of public debt. This topic needs to be re-emphasised in 2021, also in the context of reducing public debt after the crisis has abated. This will also require a review of the fiscal agreements in the European Union.

We support the European Commission's proposal to reinforce the capital markets union. The further integration of financial markets in Europe will boost financial stability. The Financial Stability Committee (FSC) emphasised the importance of making progress on the capital markets union in its meeting of November 2020.

4.2.3 Digital

Our digital ambition as expressed in DNB2025 focuses on incorporating data-driven working methods in all our core tasks based on digital technologies. We need to have the right mix of digital competencies in-house to enable us to work with institutions appropriately.

DNB2025 strategic ambition: Digital

Vision (ambition)	Progress in 2020	Priorities in 2021
■ We use data, technology and digital processes to carry out our work with maximum efficiency and effectiveness ■ We are also a respected peer in the sector in terms of digital know-how	■ Review of our supervisory methodology and digitalisation of supervisory processes to boost our digital and data-driven supervision ■ New portals completed ■ Data Science Platform operationalised ■ We are promoting and supporting data initiatives in all domains ■ Data strategy and central data management developed ■ Reduced reporting burden for the sector partly thanks to improved accessibility of datasets ■ Cloud strategy formulated ■ Digital Strategy Programme governance adjusted	■ Ramp up data-driven working methods in all core processes ■ Operationalise data strategy ■ Completion of new, more stable digital working environment and improvements to the data centre ■ Use cloud-based apps or SAAS ■ Exchange experiences with data analysis with the financial sector (iForum) ■ Provide guidance to European initiatives in the areas of data, digitalisation, innovation and the cloud

The review of our supervisory methodology will boost the integration of digital innovations in our working methods. We worked hard in 2020 to prepare for the digitalisation of a major portion of our core processes in 2021. We are also working on three new user portals for supervisors (Mijn Toezicht), for supervised institutions (Mijn DNB) and the integration of new technological developments in our activities (Mijn Wereld). In addition to the technological developments, we are committed to taking our employees' digital skills to the next level.

A new data science platform was launched in 2020. The platform enables us to make cost-conscious use of data-intensive research and analyses in all fields. We worked in 2020 to ensure platform data accessibility and to adjust vital processes. The goal is to detect developments and risks at financial institutions in a timely manner and to use data with due care in our activities.

We promote digital developments and reduce the reporting burden by cooperating with a range of partners. We maintain contact with other central banks, the ECB and the BIS Innovation Hub. We also work with universities, expert organisations and technology companies. Naturally, we also maintain close contact with financial institutions. Among other activities in 2020, we worked with partners in the iForum and iPanel to inventory the impact of technology on the sector. Based on the results of these explorations, various pilots were launched to promote digitalisation, thus reducing the reporting burden and consequently the indirect cost of supervision for institutions.

We relocated our data centre in 2020 and we outsourced workstation automation. This proved to be a major undertaking, partly due to the simultaneous temporary relocation of our offices. Our network infrastructure proved to be inadequate for remote working at such a large scale. Video calls were particularly problematic. An additional problem was that cooperation with our outsourcing partner did not go as smoothly as planned. We assembled a crisis team to address the most pressing issues and to make major changes to workstation automation in 2021. We will also introduce systematic improvements in the data centre and create a new cloud-based work environment. We apply the lessons learned in the next stage of the outsourcing agreement. We also took additional measures to safeguard digital security and we formulated a cloud strategy.

We adjusted our governance of digitalisation at the end of the year under review. The aim is to create a more DNB-wide management structure, which will enable a more integrated approach to the digital agenda.

4.2.4 Confidence

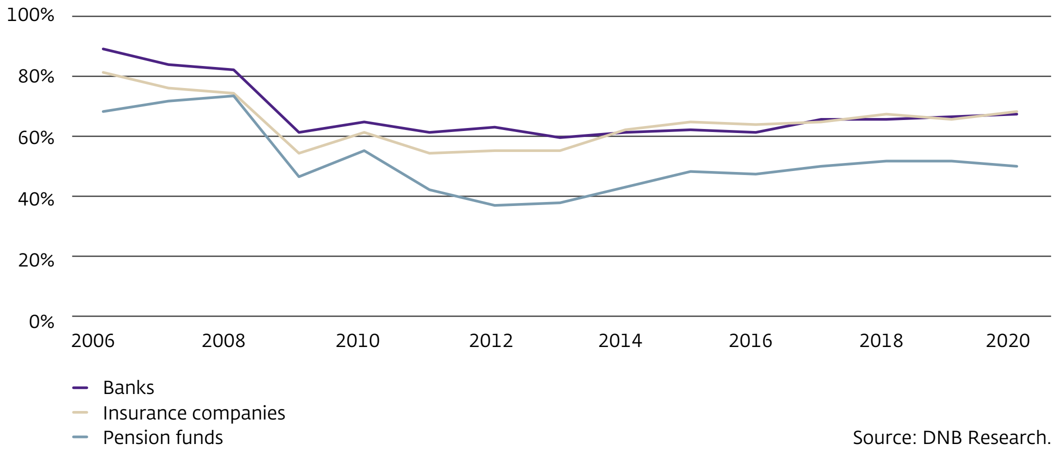
One of our ambitions is to make a recognised contribution to public confidence in financial institutions in the Netherlands. Public confidence in financial institutions is an essential condition for the functioning of the financial system, and thus for the development of the real economy.

DNB2025 strategic ambition: Confidence

Vision (ambition)	Progress in 2020	Priorities in 2021
■ We aim to ensure public confidence in financial institutions as a condition for the functioning of the financial system	■ We researched underlying sources of confidence and embedded findings in our updated supervisory methodology ■ We took a hard stance against financial crime and we emphasised the importance of anti-money laundering supervision at the European level. ■ We contributed to building public confidence through financial education and communication ■ We collaborated with stakeholders ■ We completed the DNB Confidence Monitor	■ Gain greater insight into our contribution to confidence in financial institutions ■ Complete development of confidence indicators ■ Establishment of European anti-money laundering supervision ■ Establish DNB-wide approach to confidence ■ Follow-up research into aspects of confidence

We exert influence on public confidence in various ways. First of all, we ensure that institutions are financially sound and that they comply with legislation and regulations on sound and ethical operational management. Second, we are committed to combating financial crime in the financial sector. We developed both of these points further in the year under review and incorporated them in our supervisory methodology. Third, financial education contributes to justifiable public confidence in financial institutions. Fourth, we collaborate with external partners on issues of societal relevance such as reliability and accessibility of payment systems.

Figure 2 Share of respondents with strong or full confidence



Source: DNB Research.

We studied the underlying sources of confidence and the influence we can exert to build confidence. We conducted the annual Confidence Monitor in April 2020. The results reveal that public confidence in financial institutions had remained stable, despite the outbreak of the pandemic shortly before. Three quarters of respondents indicated having strong or full confidence in their own bank. This means that confidence levels remained stable. Confidence in insurers and pension funds also remained at the level seen in 2019. Confidence in financial institutions remained lower than prior to the financial crisis of 2008/2009.

Confidence in DNB remained relatively high. We also regularly measure stakeholder confidence in DNB. Last year's survey revealed that 79% of respondents were very confident or highly confident in us. This level of confidence is comparable to the pre-crisis level of 2008.

We continue to study various aspects of confidence. We remain committed to the provision of information and dialogue with the public, and we are developing concrete indicators for confidence.

4.2.5 Committed and versatile employees

Our HR policy focuses on greater diversity, open dialogue and enhanced digital skills. It is our ambition that our employees come from diverse backgrounds. Moreover, we wish to engage our stakeholders in effective dialogue to produce results, and develop digital skills in all positions. In addition, and transcending everything, the coronavirus crisis and remote working had a major impact, which is why we put great emphasis in the year under review on social cohesion, workload and the work-life balance.

DNB2025 strategic ambition: Employees

Vision (ambition)	Progress in 2020	Priorities in 2021
■ We are committed to greater diversity, open dialogue and enhancing the digital skills of our employees.	■ Various initiatives to make better use of diversity, including inventorying gender and cultural diversity ■ HR policy and processes brought into alignment with DNB2025 ■ Collaboration with stakeholders enhanced through dialogue ■ Various initiatives to promote our employees' substantive commitment ■ Digital skills inventoried and various pilots run	■ More solid embedding of diversity and inclusion throughout the organisation and additional study into cultural diversity ■ New leadership vision ■ Update performance management system implement it throughout the organisation ■ New job classification system and rotation policy in place ■ 80% of employees take Wijzer in Data ('data savvy') course ■ Promote social cohesion, taking remote and hybrid working into account

We launched various initiatives to boost diversity and inclusivity. The target of 35% women in management positions has been raised to 37% for 2021. At the end 2020, 35.8% of DNB managers were women. We participated in Statistics Netherlands' Cultural Diversity Barometer Netherlands to gain insight into our employees' cultural backgrounds. In order to curb unconscious bias, we participated in a pilot of the Ministry of Social Affairs and Employment (SZW) to create equal opportunities in recruitment and selection by using an objective selection method. The results of this pilot will be published in 2021. We also have a policy in place to hire employees with an occupational disability. We are on track to meet our ambition of filling 45 FTEs by hiring employees covered by the Occupational Disability (Employment Targets and Quotas) Act by 2025, and an additional 18 FTEs by hiring employees not necessarily covered by this legislation. All divisions set annual goals to boost diversity and inclusivity. They report on their progress to the Governing Board.

The coronavirus crisis has given a boost to our employees' digital skills. The experiences gained with remote working during the pandemic will be beneficial as we transition to hybrid working going forward. The DNB Academy developed a curriculum for data & technology courses to train employees how to handle data securely and effectively in their work. The Data & Technology traineeship for tech talents, introduced in 2019, is still a success, with new trainees starting in 2020.

We continued our sustainable employability programme ('Blue Zone') in 2020. We support our employees by accentuating the importance of motivation, vitality and development. This was particularly relevant in the year under review due to the lockdowns and remote working. We also continue to offer broad opportunities for personal and professional development. The newly implemented performance management system focuses squarely on development and ongoing dialogue. Actual training costs were substantially lower last year because various external courses were cancelled and specific costs (such as hotel expenses) related to internal meetings and training sessions did not materialise.

We launched a DNB-wide corporate culture change programme last year. The programme focuses on the three themes that our people feel are most important: safety and openness, collaboration and appreciation, and orientation on results. An employee survey revealed that our people are concerned about issues such as the impact of working from home, attention to diversity and inclusivity, and safety. The Governing Board engaged employees in dialogue about appropriate cultural changes. Additionally, various initiatives were developed, such as a digital working method, to promote the envisaged cultural change in teams.

Key HR figures

The average number of FTEs at DNB was 1882.4 in the year under review (see Table 2). The increase compared to last year is partly due to intensified integrity supervision, the implementation of the PSD2 payment services directive and Brexit. Additional staff were also hired for security, communications and ICT. 958 insourced staff are associated with DNB, primarily in ICT support. A total of 372 vacancies were filled in 2020. External candidates filled 291 (78%) of these positions. This includes 14 trainees and 4 managers. The other 82 vacancies, including 10 management positions, were filled through internal transfers.

Table 2 Key HR figures

	2020	2019
Workforce (regular employees and Governing Board)*	2088	1957
Average number of FTEs	1,882.4	1,813.0
Total % women	40.5%	40.4%
Workforce % women	40.5%	40.9%
Governing Board % women**	40.0%	40.0%
Division directors % women	35.3%	23.5%
Heads of department % women	31.9%	31.8%
Heads of section % women	52.4%	43.8%
Actual training costs (EUR)	3,891,609	5,874,360
Budgeted training costs (EUR)	6,410,229	6,517,022

* Does not include trainees, insourced staff or Supervisory Board members.

** A sixth Governing Board member was appointed on 1 February 2020 due to Job Swank's long-term absence. The percentage of women on the Governing Board is calculated based on 2 women and 3 men.

Employees on permanent or temporary contracts, by gender	Women	Men	Total
Permanent	704	1,076	1,780
Temporary	142	166	308
Total	846	1,242	2,088

Employees in full-time or part-time employment, by gender	Women	Men	Total
Full-time (36 hours p/w or more)	638	1,165	1,803
Part-time (less than 36 hours p/w)	208	77	285
Total	846	1,242	2,088

Employees on contract and insourced	
On contract	2,088
Insourced	958
Total	3,046

Inflow and outflow by gender	Women	Men	Total
Inflow	128	163	291
	44.0%	56.0%	
Outflow	72	87	159
	45.3%	54.7%	

Reason for outflow	2020	2019
Own request	87	97
Termination of contract	13	16
End of temporary employment contract	22	13
Retirement and early retirement	28	33
Restructuring	1	56
Occupational disability	5	9
Death	3	4
Total	159	228

52 **The illness absence rate rose due to an increase in long-term absence due to illness.** Short-term absence decreased during the COVID-19 crisis. The average employee was ill once in 2020. This represents a 50% drop in the notification frequency compared to the previous year. A possible explanation is that employees are less likely to call in sick when experiencing mild symptoms during the coronavirus crisis, because they are already at home or have greater leeway to set their own hours. In addition, reduced physical contact may have helped limit the spread of common seasonal viruses. Generally speaking, our employees have displayed remarkable resilience during the coronavirus crisis, although they feel they are under increased pressure. Their resilience was put to the test recently once again during the second period of lockdown. HR is continuously monitoring developments and supporting sustainable employability through various initiatives. Our internal occupational health and safety service, working together with the HR advisors, provided a great deal of advice and also mental coaching on how to maintain good health and a pleasant work-life balance. Management has been paying more attention than usual to the physical and mental wellbeing and resilience of our employees, including through special online meetings and more online, individual contact.

Absence due to illness	2020	2019
Total illness absence rate	3.52%	3.48%
Short-term absence	0.35%	0.68%
Medium term absence	0.45%	0.43%
Long-term absence	1.77%	1.74%
One to two years	0.94%	0.62%
Notification frequency	0.55	0.92

4.2.6 Cost conscious

Our ambition is to perform our tasks cost-consciously. It should be plain to our stakeholders, both internal and external, that we work efficiently, enabling us to achieve better results.

DNB2025 strategic ambition: Cost-conscious

Vision (ambition)	Progress in 2020	Priorities in 2021
■ Greater cost consciousness and emphasis on internal operations boosts effectiveness and improves insights into the results achieved	■ Resource allocation based on strategic agenda ■ New cost structure established in consultation with stakeholders, partly on basis of supervisory methodology ■ Programme and portfolio management established ■ Greater strategic focus on 2021 priorities ■ Study into challenge role of Finance launched ■ New performance management system ■ New SLA with Centric ■ Reduced costs due to hybrid and remote working	■ Launch Vision on Work (conceived in 2020) ■ Active cost steering and reductions based on lessons learned from coronavirus crisis ■ Process architecture set-up and link to Digital ambition ■ Efficiency analyses to boost focus on results ■ Improved management information thanks to new cost structure, short-cycle management and other factors

We made agreements with the Ministry of Finance on a new cost structure for the independent public body (ZBO) tasks in 2021-2024. The cost structure is partly based on an efficiency analysis conducted by an external party into our costs for supervision and our strategic ambitions. In the coming years we will need to invest in meeting our digital ambitions in particular, enabling us to achieve efficiency gains down the road while also continuing to improve the quality of our supervision. Some of these investments will be offset by realigning priorities in our supervisory arm. This will increase the challenge of identifying risks in the financial sector effectively. When making this decision, preference was given to focusing on the structural improvement and efficiency of supervision through further digitalisation.

Crypto service providers faced relatively high supervision fees in 2020. Our supervision fees subsequently came under fire. The relatively high fees for this group were rooted in the registration process, which was more intensive than expected. Moreover, we do not allocate our resources based on the costs of supervision in relation to an institution’s income, but on the effort required to ensure appropriate supervision. The sectors themselves are responsible for financing the costs of supervision in accordance with statute. Together with the sector and the responsible ministries, we constantly look for ways to improve the financing of supervision costs.

We are making more extensive use of programme management for topics spanning multiple divisions or tasks. This enables us to manage processes more effectively. For example, we centralised the coordination of the strategic sustainability programme and the digital agenda. We also use short-cycle management methodology to achieve targeted and effective results.

The coronavirus crisis compelled us to postpone, adapt or delay certain activities. DNB staff went on fewer domestic and international journeys in the year under review. The prevailing circumstance also compelled us to make conscious choices and scrutinise our expenditures. We intend to look into whether the experiences of the past year will provide novel insights for structural cost reduction. In the meantime, the travel budget has been permanently cut by 25%.

We combine enhanced cost-consciousness with greater external transparency. We regularly consult with external stakeholders about trends in our costs, and we discuss the results of these discussions in the annual consultation with the Ministry of Finance, while also including them in the development of our cost structure. We maintain awareness about the direct and indirect financial consequences of our activities for the institutions we supervise. We transparently weigh these consequences against the underlying strategic choices and the benefits for the soundness and integrity of the financial sector.

4.3 Ethical and sustainable operational management

Ethical and sustainable operational management is the basis for the efficient and effective performance of our work and contributes to ensuring business continuity.

Operational risk management

Various risks have the potential to impede the performance of our tasks or to undermine integrity. Identifying risks in time allows us to implement appropriate controls. We make a distinction between strategic, financial and operational risks. Detecting strategic risks is integrated into the performance of our core tasks. Section 4.4 discusses financial risks. We explain our operational risk management below.

The Governing Board announced the ambition in 2019 to have a sustainable operational risk control structure in place by the end of 2021. We started preparing for the implementation of a governance, risk and control (GRC) tool to provide comprehensive insight into risks, controls and incidents. We will use this tool organisation-wide over the course of 2021. The Governing Board also adopted a risk appetite statement, which indicates the extent of risk we find acceptable in the various risk categories. This will enable us to better control risks and quantify the need for additional measures. We will elaborate our risk appetite statement further in 2021 and implement it in the divisions.

The coronavirus crisis brought a number of operational risks into sharper focus. We devoted considerable attention to business continuity risks to ensure that critical business processes continue without fail. We took measures to ensure social distancing in our buildings and we started using rotating teams to prevent absences. Network and other ICT-related issues caused some disruptions when our entire workforce starting working remotely due to the lockdown (also see Section 4.2.3). The move to our temporary office building also involved certain risks. HR-related risks were given heightened attention last year due to the coronavirus crisis. Furthermore, when outsourcing, we have noticed that the number of potential offers from the market is decreasing, particularly when it comes to long-term contracts. In this context, we received some media attention last year due to our relationship with Centric, which was plagued by turbulence in management. The Minister of Finance answered parliamentary questions on this topic on 22 January.

We periodically test our information security on the basis of the Cobit framework. Information security risks increased due to our temporary relocation and remote working. We took technical measures to control these risks and we emphasised the importance of risk awareness among our staff through the '#zeker' campaign.

Compliance & Integrity

The Compliance & Integrity (C&I) department occupies an autonomous position at DNB and mainly fulfils an advisory and monitoring role to ensure integrity throughout the organisation. C&I policy is aimed at ensuring that our employees know what is expected of them. Employees may approach C&I if they require assistance or find themselves confronted with a dilemma. C&I explicitly promotes appropriate conduct through workshops, dilemma training sessions and instructional videos. It also advises our various organisational units on desirable risk controls or dilemmas with respect to privacy, compliance and integrity. C&I is also responsible for screening employees, including upon commencement of employment. 2020 was also marked by the fact that DNB employees became civil servants. As part of the oath-taking ceremonies, we paid special attention to the integrity aspects associated with the status of civil servant.

C&I received 413 notifications in 2020 and 670 requests for advice relating to DNB's integrity regulations (see Table 3).

Table 3 Reports and requests for advice relating to integrity regulations

	2020	2019
Notifications of gifts and invitations, ancillary activities, conflicts of interest and transfers	413	448
Requests for advice	670	626

There was an increase in incident reports in 2020 relating to the handling of information (see Table 4). Incidents included emails being sent to unintended recipients. The reporting increase can be ascribed to greater awareness of the danger of data leaks, which we emphasised throughout the year. We also boosted our risk management. There was also an increase in the number of administrative violations of the Regulation on private investment transactions, primarily because considerably more employees started investing in 2020. Other incidents involved inappropriate use of the DNB brand and the loss or theft of DNB property. Finally, three extraordinary integrity investigations were launched in 2020 into potential breaches of integrity. The DNB Complaints Committee received two internal and fourteen external complaints in the year under review. The increase compared to 2019 can be ascribed to the fact that we now also register notifications that do not formally qualify as complaints under the Complaints procedure.

Table 4 Integrity incidents, investigations and complaints

	2020	2019
Integrity incidents (total)	**82**	**29**
improper use of information	62	23
Regulation on private investment transactions	11	3
other	9	3
Complaints	**16**	**8**
internal	2	3
external	14	5

Interaction with our stakeholders

We undertake various initiatives to engage our stakeholders in dialogue. These include financial institutions, sector associations, universities and research institutes, students, NGOs and the general public. The listening session on the ECB's monetary strategy is an example of this engagement (see Section 4.1.1). The goal of these encounters is to obtain input from society on the work we do. We are also maintaining close contact with stakeholders during the renovations of our headquarters building. For example, we invited local residents to an information evening and dialogue sessions, and we developed an app to keep interested parties up to date on the progress of the renovation work.

We conducted a stakeholder survey for the second time in 2020. All divisions, units and departments provided a list of our most important national and international contacts. A research agency then contacted these stakeholders with a survey about their experiences with DNB. Approximately 400 stakeholders completed the survey, which revealed that they feel our communications have improved and that we have become more proactive in our supervisory activities. Respondents were less enthusiastic about our progress in the areas of tailored supervision and administrative sensitivity. The only area where respondents gave us a slightly worse score was for the unity and consistency of our external communications. All in all, our stakeholders gave us a reputation score of 66, which is two points higher than in the previous survey. A score of 60 or more indicates a 'very good' reputation, according to the research agency's system.

We are open and honest about the past. This is why the Governing Board decided in 2020 to launch an investigation into potential DNB involvement in slavery.

Finally, we demonstrate our societal engagement by providing financial contributions and making donations. The financial support is aimed at activities and organisations that are related to our core tasks. We also donate to charitable organisations that are active in the areas of health, society and culture. Our financial support and donations totalled EUR 526,000 in the year under review.

Working environment

The health and wellbeing of our employees is an essential element of everything we do. We were able to ensure that all employees could continue working safely, effectively and healthily during the coronavirus crisis, both remotely and at our offices. We also safeguarded operational continuity for on-site activities in the financial core infrastructure. Our ICT infrastructure was strained at certain points throughout the year due to the demands placed on it by remote working.

The relocations posed no significant problems. All employees relocated to our temporary facilities in Amsterdam in the first half of 2020. The gold and banknotes were moved to Haarlem during the first weekend in October, and are now safely stored in the former Joh. Enschedé banknote printing works, which has been modernised to meet the most stringent security requirements. Construction of the new Cash Centre in Zeist is progressing on schedule, and renovation work has commenced on our headquarters building. Our data centre was also relocated to a modern and energy-efficient facility in 2020, and became fully operational in October. Work on our headquarters building should be complete by 2023, meaning we will be able to depart from our temporary facilities and return to our home base. The gold vaults and banknote activities will be permanently relocated to Zeist in 2023.

Chain management

We incorporate sustainability in our own operational management. The expertise and professional development of our people are key ingredients that serve as a basis for formulating policy and advice. We also insource. Our main categories of suppliers and markets in 2020 were: ICT services, software and hardware; banknotes and coins; external hiring and consultancy; facilities management and maintenance. We work with suppliers in the following categories: printing, outsourcing and consultancy firms, resellers, and management and maintenance companies.

Guidelines for sustainable business practices are incorporated in our procurement policy. We carried out 37 European and multiple private tenders in the year under review. Our goal is to apply RVO (Netherlands Enterprise Agency) criteria to every single tender, if available. RVO criteria were available for four tenders in 2020, and we applied them in those procurement procedures. We expect our suppliers and our staff to act with integrity and comply with the rules. Suppliers who fail to do so are excluded from the purchasing procedure based on the exclusion grounds laid down in the tender. We also decided in 2020 that we will only add electric cars to our lease fleet. We respect the principles of the circular economy when purchasing office supplies, and we met our goal of including these principles in two tenders per year. We also actively engage suppliers that are committed to pursuing a policy of social return.

We have been using 100% sustainable cotton in our banknote production since 2019. The supplier must hold specific certificates. We purchase together with nine other countries on behalf of the Eurosystem. The ECB's requirements for sustainable cotton are currently somewhat less strict than our own. The ECB will require 50% sustainable cotton in 2021, rising to 100% in 2023. We apply a protective coating to 5, 10 and 20 euro banknotes during the production process to extend their useful lives. We have reached agreements with the Royal Dutch Mint on responsibly sourced raw materials for striking coins.

We pursue a socially responsible investment policy for our own investment portfolios. This policy is described in detail in our Responsible Investment Charter and in Section 4.4.

Environmental protection and carbon footprint

We meet all requirements of the ISO 14001:2015 environmental management system and we apply this system to our Facility Management, Cash Operations and Security departments, thus embedding environmental protection in our operational management.

We reduced our CO_2-emissions to 3,555 tonnes in 2020. This reduction can primarily be ascribed to the sharp drop-off in business travel and commuting as a result of the coronavirus crisis (see Table 5). Remote working also caused a reduction in energy consumption at our facilities and an increase in IT network traffic. We ventilated our buildings only with outside air in 2020 to safeguard hygiene. For the first time in a long time, this year we are once again using 'grey' electricity, because not all energy consumed in our temporary facilities is renewable, and because the data centre uses renewable energy sourced from abroad.

Table 5 Environmental data, CO_2 emissions (in tonne)[1,4]

	2020[2]	2019[3]
Energy	**1770**	**1,604**
Electricity	166	0
Natural gas for heating	1,556	1,583
District heating and cooling	33	0
Diesel for energy supply	15	21
Commuting	**980**	**1,556**
Public transport	301	552
Passenger vehicles	679	1,004
Business travel	**792**	**1,684**
Passenger vehicles	269	311
Air travel	504	1,344
International rail travel	19	30
Goods and passenger transport	**13**	**23**
Total CO_2	**3,555**	**4,866**
Offset through purchase of carbon credits[5]	4,000	4,866
Total CO_2 emissions	**0**	**0**

1 We use the emission conversion factors published online at www.co2emissiefactoren.nl (in Dutch) and the Milieubarometer calculation method to determine our material CO_2 emissions.
2 The 2020 reporting period runs from 01 October 2019 to 30 September 2020.
3 The 2019 reporting period runs from 01 October 2018 to 30 September 2019.
4 Total subject to minor rounding differences.
5 The number of carbon credits purchased was determined based on actual CO_2 emissions during the reporting period. Ample credits were purchased to compensate for uncertainties and actual consumption that cannot be determined during construction of the off-site data centre.

We buy carbon credits to compensate for our CO_2 emissions, resulting in net carbon neutrality. We expect our energy consumption to decline further this year as a result of our relocation to our temporary facilities, the new off-site data centre and the sale of the property on Sarphatistraat, all of which will be reflected in the statistics.

4.4 Financial overview

Our exposures and risks stem from the Eurosystem's joint monetary policy and from other activities, including our own-account investments. The ECB took a wide range of monetary policy measures in the year under review to mitigation the harmful effects of the coronavirus crisis on the financial markets, banks and the economy. See Section 4.1.1 and Chapter 1 for a discussion of the measures, which caused a significant increase in our exposures and risks. The measures also had a negative impact on our profitability. This section covers the development of our exposures, risks, buffers and profits.[1] It also discusses our socially responsible investment policy.

Total exposures, risks and buffers

Total exposures at risk in 2020 increased to EUR 301.4 billion due to the measures taken in response to the pandemic (see Table 6). The EUR 111.7 billion increase in our exposures compared to 2019 is almost entirely due to purchases under the pandemic emergency purchase programme (PEPP) and increased lending to banks through open market operations (OMOs). Our monetary exposures will increase further in 2021, because the ECB's purchases will continue until March 2022 at least. By contrast, in view of the prevailing negative interest rates, we reduced our own euro portfolio further in 2020.

Total calculated risk increased to EUR 15.9 billion in 2020. The level of financial risks is highly dependent on the prevailing monetary policy measures and market conditions. Interest rate risk and credit risk arising from monetary operations rose by EUR 11.8 billion to EUR 14.9 billion in the year under review, primarily driven by increased interest rate risk as a result of purchases made or planned under the PEPP. The risk to our own investment portfolio doubled roughly to EUR 1.0 billion, despite its downscaling. This increased risk is a result of greater volatility in the financial markets and an expansion of our equity portfolio. We use risk models to calculate our risks. In line with our guidelines on the governance of these risk models, they were validated in 2020 by experts from our supervisory divisions who were not involved in their development.

We will use nearly all of our 2020 profit to bolster our buffers. Our buffers are in place to absorb potential losses. Our capital policy distinguishes between buffers to cover temporary risks (the provision for financial risks - VFR) and buffers to cover structural risks and latent uncertainties (our capital). Total calculated risks at year-end 2020 were higher that our total buffers because of the sharp rise in temporary risks associated with the unconventional monetary policy. This resulted in a buffer shortfall. In accordance with our capital policy, EUR 868 million was added to the VFR.

1 The rubrics 'total exposures, risks and buffers', 'monetary operations' and 'own-account investments' are part of the risk paragraph in the financial overviews and are therefore included in the scope of the independent auditor's report, see page 178.

Gold occupies a special position in our risk framework. Our gold reserves (EUR 30.4 billion) are intended to cover ultimate systemic risks that can materialise in extreme scenarios beyond the limits of the risk calculations. We manage the gold stocks passively.

Table 6 DNB exposures, risks and buffers

EUR billion. Exposures involving risks for DNB, excluding gold and excluding intra-system exposures.

	31/12/2020	31/12/2019	Difference
Total exposures	**301.4**	**189.7**	**111.7**
Monetary exposures	290.7	175.6	115.1
Own-account investments and other portfolios	10.7	14.1	-3.4
Total risk*	**15.9**	**3.6**	**12.3**
Risk under provision for financial risks (VFR)	13.0	1.8	11.2
Other risks	2.9	1.8	1.1
Risk buffer**	**11.2**	**9.8**	**1.4**
Provision for financial risks	2.7	1.8	0.9
Capital and reserves	8.5	7.9	0.5

* The risk under the VFR consists of the interest rate risk and the credit risk on purchases in the active asset purchase programmes APP and PEPP, excluding exposures to the Dutch government. All other risks, including the risks from other purchase programmes, own-account investments and liquidity transfer to banks (OMOs), are covered by capital and reserves.

** Capital and reserves does not include profit for the financial year. The EUR 0.5 billion increase reported represents the profit appropriation from the 2019 financial year.

Monetary operations

We conduct monetary operations jointly with the other central banks in the Eurosystem. These monetary operations consist of purchase programmes and open market operations (OMOs), and are discussed in Box 4. Table 7 shows our share of the Eurosystem's total exposure for each bond purchase programme.

Box 4 ECB monetary operations

The Asset Purchase Programme (APP) has been the active purchase programme since 2014. Under the APP, the Eurosystem purchases public-sector securities (PSPP), covered bonds (CBPP3), investment grade corporate bonds (CSPP) and asset-backed securities (ABSPP). The Pandemic Emergency Purchase Programme (PEPP) was launched in March 2020. Under the PEPP, the Eurosystem purchases similar instruments, but it is more flexible than the APP. The inactive programmes SMP and CBPP1 & 2 are gradually expiring. See page 136 in this Annual Report for more detailed information.

Most purchases under the APP and PEPP relate to securities issued by the public sector, for which risk is generally not shared within the Eurosystem. As under the Securities Markets Programme (SMP), the purchase of corporate bonds and covered bonds are primarily for shared account and risk. Eurosystem capital key shares are the basis for the distribution of profits and losses between the Eurosystem central banks. The ABSPP is on the ECB's balance sheet and is primarily at the ECB's risk. Any losses in the ABSPP are ultimately reflected in a lower dividend pay-out from the ECB to the national central banks.

In addition to the purchase programmes that are part of the unconventional monetary policy, the ECB also conducts open market operations (OMOs), which consist of regular liquidity provisions to banks, among other activities. They also include the targeted long-term refinancing operations aimed at credit growth (TLTROs) and the pandemic emergency long-term refinancing operations (PELTROs), which are part of the unconventional policy. These liquidity provisions are for the shared account and risk of Eurosystem central banks.

The expansion of the purchase programmes significantly increases our interest rate risk in particular. Interest rate risk arises because we purchase long-term assets, thereby locking in long-term, low-interest income. The additional liquidity that becomes available as a result of these purchases is held by banks in bank deposits on which we pay a variable interest rate. This maturity mismatch between our assets and liabilities creates the interest rate risk. We determine the extent of interest rate risk by projecting a scenario with rising key policy rates. As the key policy rate rises, the impact on the interest income from the purchases is limited, but it does result in higher interest charges on the deposits. In addition to interest rate risk, the additional purchases also give rise to credit risk. The modelled interest rate risk rose by EUR 10.5 billion in 2020, and the credit risk by EUR 1.2 billion.

The additional lending to banks through OMOs contributes to our total risks only to a limited extent. Lending increased as a result of the favourable interest rates of the targeted longer-term refinancing operations (TLTRO-III). The credit risk is limited because the loans are covered by collateral. Combined with the relaxation of the collateral framework, the increased lending generates a EUR 0.1 billion increase in credit risks on open market operations. The impact on interest rate risk is negligible because the interest rates on the loans will become variable following the expiration of the temporary, pandemic-related measures.

The risks from the unconventional monetary policy will likely remain on our balance sheet for several years. This is due to various factors, including the long maturities of the bonds purchased under the purchase programmes.

Table 7 DNB's monetary exposures by purchase programme and country

EUR billion. The exposures where DNB incurs a risk are reported. The total may differ from the sum of the exposures for each country and each programme due to rounding differences.

	OMO	SMP	CBPP 1-3	PSPP	CSPP	PEPP	Total
Netherlands	8.3	0.0	1.1	98.8	4.4	35.0	147.6
France	23.3	0.0	4.3	0.0	4.6	1.2	33.4
Italy	22.0	1.0	1.6	0.0	1.2	0.1	25.9
Germany	20.0	0.0	3.4	0.0	1.7	0.3	25.5
Spain	15.4	0.4	3.1	0.0	1.0	0.3	20.2
Other	16.3	0.2	2.0	14.7	1.8	3.1	38.1
Total	**105.3**	**1.6**	**15.6**	**113.5**	**14.8**	**40.0**	**290.7**
Difference relative to December 2019	68.8	-1.1	1.2	2.2	3.9	40.0	115.1

Own-account investments

We virtually phased out the euro portfolio in 2020 to limit negative yields on our bond portfolios. The negative yields are the result of persistently low interest rates. There were no significant changes to our US dollar portfolio. We hold US dollars to meet any need for foreign exchange on the part of the ECB. We deliberately keep the risk profile of our US dollar portfolio low. The euro portfolio primarily comprises high-grade government bonds and semi-government bonds with short-term maturities. Forward exchange contracts are used to hedge the currency risk in the dollar portfolio. The currency risk on the IMF receivables, which are expressed in a basket of international currencies (special drawing rights – SDRs), is also hedged. In addition to internally managed bond portfolios, we also hold units in externally managed funds with equities and corporate bonds.

Table 8 Composition of own-account investments and IMF receivables

EUR billion

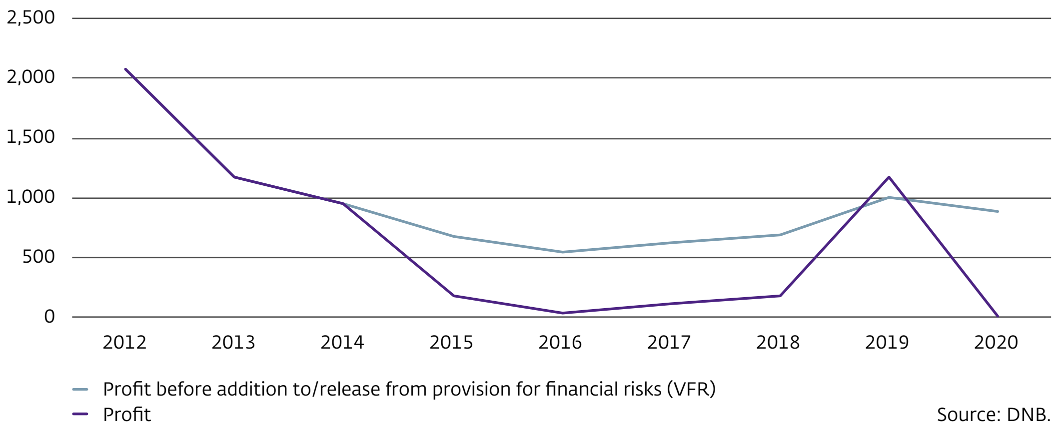
	31/12/2020	31/12/2019	Difference
Euro-denominated fixed-income securities	0.0	5.0	-5.0
Foreign currency denominated fixed-income securities	4.3	4.1	0.3
Equity funds	1.9	1.5	0.4
High-yield bond funds	0.6	0.7	-0.1
Investment-grade bond funds	0.6	0.5	0.0
IMF receivables	3.2	2.3	0.9
Total	**10.7**	**14.1**	**-3.4**

Profit

The wide range of monetary policy measures decided by the ECB in 2020 has had a negative impact on our profitability. Our 2020 profit prior to addition to the provision for financial risk (VFR) decreased to EUR 883 million (compared to EUR 999 million in 2019). We added EUR 868 million to the VFR in 2020 to bolster our buffers. The remaining profit of EUR 15 million stems from interest earnings on European Stability Mechanism (ESM) funds that we hold. As of this financial year, we have expanded our capital policy to include the agreement to distribute this interest income to the shareholder through dividend payments. The shareholder can then compensate the ESM for the negative interest rate on a budget-neutral basis to maintain ESM capital.

Figure 3 Profit development

EUR million



Source: DNB.

Based on current insights, our result for 2021 and the coming years will be lower than in recent years, and loss years cannot be excluded. Our future result is highly sensitive to interest rate developments and the Eurosystem's monetary policy measures. Due to the purchase programmes, our monetary exposures will remain considerable for the foreseeable future and profit will remain highly sensitive to interest rates. As a result, it is uncertain whether we will be able to further strengthen our buffers in 2021 or whether they will be reduced.

Our profit on monetary operations was lower in the year under review than in 2019 as a result of the ECB's pandemic-related measures. Monetary operations contributed EUR 391 million to our profit in 2020, compared to EUR 831 million a year earlier. The interest rate on the three-year refinancing operations (TLTRO-III) for banks was reduced in 2020, and may dip to 0.5% below the deposit facility rate by June 2022. The sharp increase in the use of these loans by banks leads to higher negative interest earnings at the expense of profit. The new purchases under PEPP also had a negative effect on our profit, as the interest rate is below zero on average. On the other hand, the increase in lending to banks and the purchases under PEPP have resulted in higher monetary deposits, which are subject to negative interest rates. Despite these monetary deposits being partially exempt from negative deposit rates as of 30 October 2019, the higher volume generated more interest income compared to a year earlier.

Our own investment portfolio was initially hit hard after the outbreak of the coronavirus crisis, but these losses were more than compensated for by year-end thanks to the recovery of the financial markets. These gains were added to the revaluation reserves, however, and are therefore not directly reflected in our profit. The reported result of EUR 368 million in 2020 is mainly due to the realisation of part of the revaluation reserves. Corporate bond investment fund holdings were also sold, which was necessitated by price gains in 2020 that drove the volume of our high-yield corporate bond portfolio to its strategic upper limit. Among our equity investment funds, a switchover to a new fund also resulted in a realisation of the revaluation reserves.

The non-monetary deposits contributed EUR 254 million to the 2020 profit. These are deposits we hold for other central banks and official agencies at a rate of interest of just below the deposit facility rate. The total volume of non-monetary deposits rose in the year under review, which is why these interest earnings increased by EUR 104 million compared to 2019.

Table 9 Breakdown of DNB profit

EUR million

	31/12/2020	31/12/2019	Difference
OMO	(602)	(153)	-449
CBPP1 & 2	2	5	-3
CBPP3	79	81	-2
SMP	109	177	-68
CSPP	120	93	27
PSPP	252	207	45
PEPP	(66)	n/a	-66
Money market liabilities for monetary deposits	496	417	79
Release from/(addition to) provision for monetary policy operations	1	4	-3
Total monetary operations	**391**	**831**	**-440**
Euro portfolio fixed-income securities	8	(18)	26
Foreign reserve portfolio fixed-income securities	(30)	(5)	-25
Equity funds	397	183	214
High-yield bond funds	12	1	11
Investment grade bond funds	1	6	-5
IMF receivables	(20)	(18)	-2
Total own-account investments and IMF receivables	**368**	**149**	**219**
Money market liabilities for non-monetary deposits	254	150	104
Total sundry (including expenses)*	(130)	(131)	1
Total release from/(addition to) provision for financial risks (VFR)	(868)	177	-1,045
Profit	**15**	**1,176**	**-1,161**

* Sundry consists of operating expenses and revenues from participating interests

Socially Responsible Investment (SRI)

Our policy on socially responsible investment is detailed in our Responsible Investment Charter. The policy applies to all of own-account investments. The monetary portfolios, which form the bulk of our balance sheet at EUR 290,7 billion, are outside the scope of the SRI Charter. The monetary exposures on our balance sheet stem from the implementation of monetary policy in the Eurosystem in accordance with the ECB's mandate and principles. It should be noted that the impact of climate change on monetary policy is included in the ECB's broader monetary strategy review, in which we are actively involved. This is discussed in greater detail in our climate-related financial report (Annex 1 to this report).

We took additional steps in 2020 to implement our SRI policy in our own-account investments. For instance, we appointed a new external fund manager for a portion of our equity portfolio that meets the requirements of our SRI policy. We also established an SRI monitoring and reporting framework for our own-account investments. Moreover, we quantified the carbon footprint of our own-account investments and we conducted a climate stress test to better identify climate risks (see Annex 1). Table 10 presents a detailed overview of all steps we took in the year under review with regard to the five strategic pillars in our SRI Charter. We incorporate these aspects in our investment portfolio processes.

We will continue to work on implementing the SRI Charter in 2021, extending the time frame for full implementation by one year to March 2022. One step will be expanding our portfolio of green bonds to the planned minimum size of EUR 400 million. The activities in the 'Filter' and 'Integrate' pillars will also receive emphasis, as they are not yet incorporated in our externally managed investments. We will take concrete steps in 2021 towards further implementation in our investment processes. In 2020, for example, we decided to change the operational structure of part of our externally managed investments by transitioning from investment funds to mandates. This new operational structure offers greater scope for tailor-made solutions and flexibility for the further implementation of the SRI Charter and the medium-term ambition to bring part of our own-account investments in line with the Paris climate agreement.

The climate-related financial report in Annex 1 provides greater details about how we approach climate risks and opportunities in all of our core tasks, including in our own-account investments, monetary portfolios and supervisory activities.

Table 10 Overview of implementation of SRI Charter

Pilar	What did we do in 2020?
Filter	■ We established a framework to monitor the implementation of the exclusion and screening policies by our external asset managers on a quarterly basis ■ We screened our internally managed asset portfolios and our counterparties based on the UN Global Compact Principles. ■ This means that the exclusions policy was applied to 100% of our investments, and the norm-based screening policy to 98% of our investments.
Integrate	■ One of our external asset managers who had not yet fully integrated environmental, social and governance (ESG) criteria into the investment process took verifiable steps to improve. ■ We appointed a new equities manager for part of our equity portfolio. This manager incorporates ESG criteria in her investment decisions in accordance with our policy. ■ Financially material ESG criteria were included in the assessment of the most important parties in our internally managed investments. ■ ESG criteria now apply to 77% of our own-account investments.
Promote	■ Under the auspices of the NGFS, we coordinated a report on the progress central banks worldwide are making in integrating SRI into their investment portfolios. Further information on our work in the NGFS is included in Annex 1.
Report	■ We developed a reporting standard for quarterly reports to our Investment Advisory Committee and our Risk Management Committee on the SRI profile of our investments. ■ Initial trial report on the Principles for Responsible Investment (PRI) over 2019. ■ Participated as a central bank in the PRI reporting & assessment review group. ■ This annual report contains our first-ever report on the carbon footprint of our own-account investments. This report forms an integrated part of Annex 1.
Develop	■ We subjected our balance sheet to a climate stress test as part of our climate strategy. A summary of the results is provided in Annex 1. ■ We expanded our investments in green bonds, also in keeping with our climate strategy. Annex 1 contains more information on this topic.

4.5 Notes on costs

Total costs of the performance of our core tasks in 2020 amounted to EUR 454.4 million[2].
This represents a budget underrun of EUR 46.2 million, which is primarily a result of the lower costs for banknotes and the impact of the coronavirus crisis (lower costs for training programmes, travel and other factors). The costs for our facilities were also lower in the year under review due to the better-than-expected proceeds from the sale of our property on Sarphatistraat and due to (temporary) lower expenses in the accommodation programme. The relocation of the gold and banknotes took place later than was anticipated in the budget, meaning the associated costs were reallocated.

2 The total costs for core tasks deviate from total DNB costs (EUR 511.9 million) in the 2020 financial statements (page 118) because (i) the cost allocation to tasks includes the proceeds from the sale of the property on Sarphatistraat (EUR 46 million) (accounted for in other income in the financial statements), and because (ii) a one-off charge against an old provision for health insurance contributions for pensioners and former employees (due to a reinterpretation of the underlying agreement: EUR 11.5 million) is not allocated to core tasks.

The year under review formed a transition phase to expanded digitalisation in 2021-2025. We largely completed all upscaling planned for 2020, although there were some delays in certain areas, partly precipitated by the coronavirus crisis. We expect no significant setbacks going forward. In drawing up the budget, the financial impact of the digital strategy on the various core tasks was initially based on the preliminary programme structure. The structure was refined in the course of 2020, and the finalised budget was allocated to the various projects. This means that certain costs had to be shifted in relation to the budget.

The costs for each core task are set out in Table 11.

Table 11 Overview of costs in 2020

EUR million

	Actual 2020	Budget 2020	Difference	Actual 2019	Actual 2018
Core task					
Financial stability	12.7	14.8	-2.1	12.7	11.4
Monetary tasks	64.3	68.5	-4.2	63.6	62.8
Cash and payment systems	128.5	155.9	-27.4	116.5	109.8
Supervision	176.4	188.4	-12.1	164.8	157.1
FEC	3.3	3.2	0.0	2.9	2.7
Statistics	47.7	46.8	0.9	51.5	48.4
Resolution	10.7	12.1	-1.4	9.2	7.3
DGS	10.8	10.9	0.0	9.1	10.3
Total	**454.4**	**500.6**	**-46.2**	**430.3**	**409.6**

The EUR 2.1 million cost underrun for the Financial stability core task can mainly be ascribed to the impact of the coronavirus crisis on the activities, e.g. less international travel and lower costs for technical cooperation. In addition, costs were lower organisation-wide in the accommodation programme, and the implementation of the digital strategy had less of an impact on this core task than budgeted.

The Monetary tasks also had a budget underrun (EUR 4.2 million) as a result of the coronavirus crisis and lower costs in the accommodation programme. The implementation of the digital strategy also had less of an impact on this task than budgeted.

The Payment Systems core task had a cost underrun of EUR 27.4 million. Half of this was caused lower production costs for banknotes due to the postponement of a large order. This underrun can also be ascribed to lower costs in the accommodation programme, which is a relatively major expense for this task.

Actual costs for the Supervision task were EUR 12.1 million less than agreed with the Ministry of Finance in the cost structure and less than budgeted. This can be ascribed to organisation-wide underruns in the accommodation programme. In addition, direct costs for supervision were lower than budgeted, partly due to lower average salary costs and lower costs for on-site inspections, travel and other factors as a result of the coronavirus crisis. See the independent public body (ZBO) report 2020 for a full explanation of the costs for our supervisory task.

Spending on the Statistics core task was EUR 0.9 million over budget. This was mainly due to the fact that more resources were allocated to the digital strategy for this task than budgeted.

The underspend on the Resolution core task was EUR 1.4 million. This can be ascribed to lower travel expenses due to the pandemic, lower ICT costs and other factors. The independent public body (ZBO) report 2020 provides details of the costs for our Resolution and DGS tasks.

Annex 1 Climate-related Financial Disclosure

Introduction

Integrating the risks and opportunities associated with climate change into our work stems from our mission to promote sustainable prosperity. Climate change and the energy transition are key challenges for the economy and the financial sector, representing a source of risk to financial stability. This report discusses the steps we are taking to identify and mitigate climate risks, specifically in our supervision of the financial sector, our economic advice, statistics and balance sheet management. For the first time, we are reporting in accordance with the framework of the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board (FSB). We will refine this report annually as we continue to integrate climate risks and opportunities into the performance of our duties.

Solid evidence indicates that economic activity drives global warming. There is however uncertainty as to how climate change will develop, as well as governments' policy responses to it and its potential financial and economic impact. We therefore distinguish two types of climate-related financial risks: physical risks and transition risks (see Box 1). We have made good progress in recent years in identifying these risks. For example, we have researched physical risks in the financial sector, and we have subjected the financial sector and our own balance sheet to climate stress tests to detect transition risks. This is particularly challenging, because climate change as we are experiencing it today is unprecedented, meaning historical data is of little practical help. Moreover, measurement methods and statistics are still being developed worldwide.

Box 1 Financial risks from climate change and the energy transition

Climate change results in two types of financial risks. Physical risks for the financial sector arise as a result of greater damage and losses from natural phenomena including high temperatures, storms, precipitation, drought and flooding. If these losses and damage are covered by insurance, this has direct consequences on insurers' business models and risk management. If they are uninsured – and therefore borne by households, businesses or public authorities – this affects financial institutions' exposure to these parties. The second type of risk, transition risk, is the result of the transition to a carbon-neutral economy. Climate policy, technological developments and changing consumer preferences may cause loans to sectors and companies that emit high levels of CO_2 or other greenhouse gases (and investments in them) to lose value much faster than expected.

1 Governance

DNB's Governing Board is responsible for achieving our vision for corporate social responsibility (CSR), and is accountable to the Supervisory Board for progress in this area. The first four priorities in our CSR strategy describe our approach to the risks and opportunities presented by climate change. Each year, the Governing Board assigns weight to specific aspects of these priorities that are then reflected in the various divisions' plans and included in updates to our CSR strategy. Additionally, the Governing Board makes use of a CSR decision rule: the deliberation process for every decision includes the positive or negative impact on our CSR priorities. The Prudential Supervision Council and the Resolution Council also make use of this decision rule. Moreover, internal bodies that are responsible for shaping policy such as the Risk Management Committee include climate risks in the performance of their duties. The Strategic Sustainability Programme will be launched in 2021, an organisation-wide effort designed to help us achieve our CRS goals more decisively through centralised management.

In the national context, we are working with various parties in the financial sector and other stakeholders to improve the identification and management of climate risks. In 2016, for example, we initiated the Platform for Sustainable Finance to encourage the exchange of knowledge on sustainability-related themes such as climate risks, carbon accounting and carbon pricing. Representatives from the financial sector, supervisors and government ministries participate in this consultative body. The platform published a report in 2020 in which financial institutions shared their experiences in managing climate risks. We also organise an annual knowledge-sharing session with NGOs, and we use the insights derived in our economic advisory role in the public debate on climate policy.

We also work in an international context on identifying and managing climate risks. As an example, we are a co-founder of the TCFD, and we are involved in climate-related policy-making as a member and vice-chair of the FSB. We are also active in international bodies such as the Basel Committee on Banking Supervision (BCBS), the International Association of Insurance Supervisors (IAIS), the Bank for International Settlements (BIS), the IMF and the OECD. We are also a co-founder and active member of the Network for Greening the Financial System (NGFS), which we chaired until the end of 2020. The NGFS is an international network for central banks and supervisory authorities that is proactively committed to enhancing the sustainability of the financial system. In 2020, the NGFS published several recommendations on how central banks and supervisors of financial institutions can go about integrating the management of climate risks in the performance of their duties, including a Guide for Supervisors, the preparation of which was coordinated by DNB, and an Overview of Environmental Risk Analysis by Financial Institutions. The NGFS also submits recommendations to policy-makers, for example on developing better datasets and methods for measuring and managing sustainability risks. Reliable data that can be compared is vital for making reasonable estimates of climate risks, which is why we are involved in various international work streams to develop statistics on sustainability.

We are actively involved in the preparations for the ECB's monetary strategy review in the area of climate change. As part of this review, the ECB will be looking into ways to integrate climate risks into monetary policy, and it will explore what it can do to encourage the transition to a climate-neutral economy. The preparations for the strategic review are divided among a number of work streams. We are 'co-lead' of the work stream that is looking into how monetary policy instruments can be deployed to promote the transition to a green economy. In an international context, we also share insights on greening non-monetary portfolios. We do so, for example, as the chair of an NGFS sub-group on sustainable portfolio management. We are also involved in an ECB high-level task force, which is developing investment principles for the sustainable investment of central banks' non-monetary reserves.

2 Strategy

Our goal is to fully embed CSR in our core tasks by 2025. The potential impact of our activities is significant in the area of climate change through our supervision of the financial sector, the economic advice we issue and our management of monetary portfolios (monetary exposure: EUR 290.7 billion). The final result, however, will also depend on the efforts of other stakeholders (financial institutions, government, the ECB). Moreover, we use our investments (EUR 7.5 billion, excluding IMF receivables) to exert influence. These financial and material aspects of our strategy are discussed below. Additionally, we are actively working to reduce the carbon footprint of our own operational management, including through compensation measures.

We use our supervisory activities to influence the way Dutch financial institutions manage the climate risks they face. Since 2016, we have been identifying the scope of climate risks affecting the Dutch financial sector. As part of these activities, we have conducted a climate stress test on the impact of the energy transition on the financial sector and we have examined exposure to climate risks. The results of these efforts indicate that climate change and the energy transition have the potential to lead to major losses. Our Supervisory Strategy and our annual Supervision Outlook describe how we use our supervisory activities to encourage financial institutions to manage climate risks and other material sustainability risks.

We include environmental, social and governance (ESG) issues in processes for our own-account investments in accordance with our policy on responsible investment, as laid down in the Responsible Investment Charter (see Section 4.4). This includes identifying the climate risks and opportunities on our own balance sheet, along with the carbon footprint of our own-account investments.

We have set priorities for the short term (2021) and targets for the medium term (2025) for the financial sector, the economy and our own balance sheet. Table 1 shows the priorities for 2021 (see Section 4. 'Indicators and targets' for progress on priorities for 2020). The annual priorities will help us to achieve the following targets by 2025 (see CSR strategy): identifying and managing financial climate risks by the financial sector, in the economy and on our own balance sheet, along with the inclusion of relevant sustainability indicators in ECB and IMF statistics. The new Strategic Sustainability Programme will guide our organisation-wide climate strategy in the years ahead.

Table 1 DNB priorities in the area of sustainability for 2021

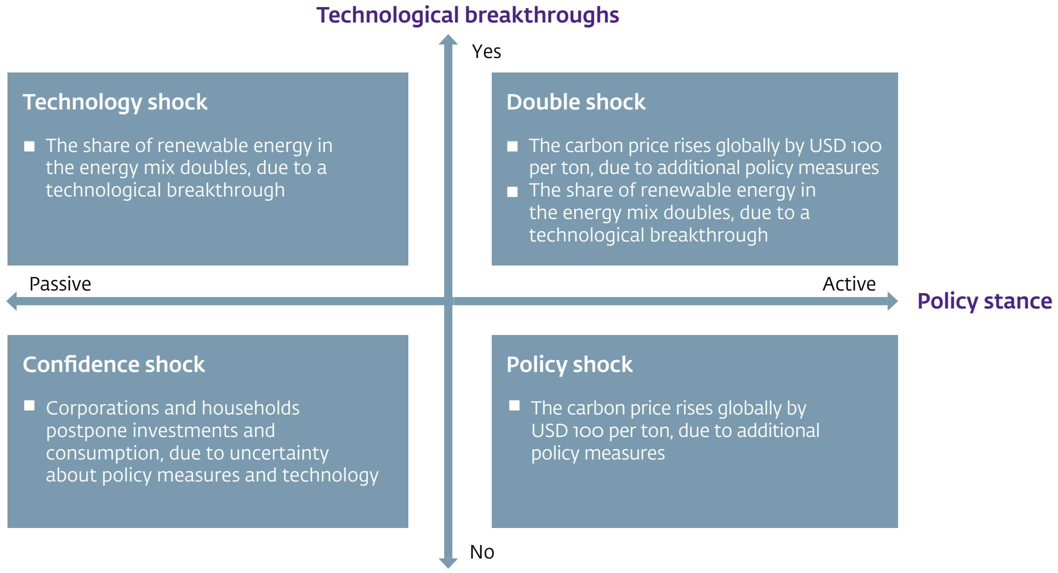
Our duties	Priorities for 2021
Supervision of the financial sector	We will publish a study in 2021 on financial institutions' progress on embedding material sustainability risks in their internal risk measurement and assessment. The report will provide insight into the degree to which banks, insurance companies and pension funds have taken material sustainability risks into consideration.
Statistics	We will develop a method for measuring carbon footprints (including their breakdown) at the sector and institutional level, and we will publish initial carbon indicators for the most pertinent Dutch financial sectors.
Economic advice	We will issue advice on how policy measures for economic recovery following the COVID-19 crisis can simultaneously give a boost to achieving climate goals.
Balance sheet management	In the various consultative structures with the ECB, we will advocate for the application of the precautionary principle in integrating climate risks into the risk management frameworks for the corporate sector purchase programme (CSPP) and collateral framework. We intend to invest a minimum of EUR 400 million in green bonds for our own-account investments. Moreover, we will look into how we can bring our equity portfolio into alignment with the Paris Climate Agreement, and we will initiate a study into physical climate risks.

3 Risk management

Balance sheet management

We continually monitor the carbon footprint of our own-account investments and we have conducted a climate stress test to identify exposure to transition risks. We report on the carbon footprint of our own-account investments to our internal stakeholders on a quarterly basis. In addition, we have used a climate stress test with four scenarios to identify the transition risks of our monetary portfolios and our own-account investments (see Figure 1). The method behind the stress test is based on the framework developed by the Financial Stability Division for supervised institutions, which we have adjusted for use on the balance sheet of a central bank. The results of the stress test do not constitute a prediction, but a sensitivity analysis for various scenarios. We subjected our monetary portfolios and our own-account investments to the stress test in March 2020, based on data available as of the end of November 2019.

Figure 1 Stress test scenarios



The stress test covers energy transition risks and includes four extreme yet plausible scenarios. We designed the scenarios based on two key factors in a disruptive energy transition: public policy and technological developments.

- Technology shock: a technological breakthrough doubles the proportion of renewable energy in the energy mix.
- Double shock: there is a simultaneous combination of a policy shock and a technology shock.
- Policy shock: governments pursue an active policy of reducing CO_2 emissions, triggering an abrupt rise in carbon prices.
- Confidence shock: a lack of policy and technological breakthroughs results in diminished confidence among consumers, producers and investors.

Results of the stress test for our monetary portfolios

The climate stress test revealed that our balance sheet is sensitive to transition risks, which is largely caused by the energy transition's impact on market interest rates in the various scenarios. The double-shock scenario has the most profound negative impact on our profits, and poses the greatest risk to our balance sheet (see Figure 2). The stress test also revealed that a relatively small portion of the total portfolio is responsible for the shift in risks, primarily due to exposures in the CSPP to energy companies.

Figure 2 Stress test scenario impact on profit and total risks for DNB

Scenario	Profit for DNB	Total risks for DNB
Policy shock	medium	medium
Technology shock	low	low
Double shock	high	high
Confidence shock	low	low

Stress test results for own-account investments

The double shock scenario also has a major impact on the corporate bond and equities portfolios in our own-account investments. Figure 3 shows the impact of the climate stress test on the corporate bond and equities portfolios in our own-account investments. Three sectors are affected relatively severely: i) industry, ii) production and distribution of energy, natural gas, electricity and refrigerated air, and iii) mining and quarrying. The policy shock scenario has a relatively severe impact on our corporate bond portfolio, stemming from sectors i) and ii) above, but also due to an assumed abrupt rise in interest rates. The confidence shock scenario presumes a stock market crash, with a resulting severe hit to our equities portfolio.

Figure 3 Impact of the stress test scenarios on the market value of corporate bonds and equities in DNB portfolios

Scenario	Corporate bonds	Equities
Policy shock	high	medium
Technology shock	low	low
Double shock	high	high
Confidence shock	low	high

Developments in balance sheet management

In the coming period we will explore options for expanding the stress test to include physical climate risks so that we can identify such risks to our own-account investments. These activities will help us to gain a complete perspective on climate risks and enable us to take mitigation measures where necessary.

4 Indicators and targets

We have made progress on the climate-related CSR priorities for 2020 in our various core tasks. Supervisory authorities, economic advisers, monetary policy-makers and reserve managers all have frameworks and instruments available to them to assess climate risks and to mitigate them where possible. Below we discuss the progress we have made.

Supervision of the financial sector

In 2019/2020 we communicated our expectations of financial institutions regarding the management of climate risks. We then assessed in 2020 whether banks and insurers had included climate risks in their risk assessments. We are developing an assessment framework for supervisors that they can use to determine whether the financial institutions' risk assessments are in line with the expectations we publish. Additionally in 2020, we conducted interviews with institutions based on our policy statements and their own risk assessments as part of our regular supervisory activities and thematic examinations. In the years ahead, we will be making our expectations regarding climate risks more substantive, while also expanding them to include additional sustainability risks. This is because other societal and environmental challenges, such as declining biodiversity, also pose increased risks for financial institutions. We published a study on this topic in 2020 together with the Netherlands Environmental Assessment Agency: Indebted to nature – Exploring biodiversity risks for the Dutch financial sector? The study reveals that Dutch financial institutions run physical, transitional and reputational risks due to the loss of biodiversity.

We published a Q&A and a good practices document for banks in 2020, offering suggestions for integrating climate risks in governance, risk management and reporting. As in 2019, we asked medium-sized banks in 2020 to indicate their response to climate risks in their risk assessments. A comparison of the assessments submitted reveals that these banks (Less Significant Institutions, LSIs) placed more emphasis on climate risks in 2020 than they did in 2019. We shared our 2020 findings with the banks. The ECB also used our findings as a basis for the Guide on climate-related and environmental risks. The guide is directly applicable to large banks (significant institutions (SIs), and we will incorporate it in our supervision of all banks starting in 202. We also contributed to a report on institutions' climate-related and environmental risk disclosures.

We published a Q&A and a good practices document for insurers in 2019, indicating how they should deal with climate risks in their risk assessments. An analyses of the insurers' risk assessments in 2020 reveals that roughly half of insurers included climate risks as an influence factor in their risk profiles. Large insurers tend to view climate risks as material risks. This indicates that insurers are taking steps in the right direction. We do expect, however, that the sector will rapidly expand efforts to incorporate climate risks in their risk assessments (see Table 2).

We published a fact sheet for the pension sector in 2019, providing an overview of all relevant sustainability legislation. The introduction of the IORP II Directive means that managing ESG risks has become anchored in regulatory and legislative requirements for pension funds, which are now legally required to prepare risk assessments that take these risks into account, and to submit their risk assessments to us by the end of 2021. To ensure awareness of these requirements among pension funds, we emphasised the importance of managing climate risks in speeches, workshops and through other channels in 2020. Examinations of funds and discussions with administrators reveal clear frontrunners (mostly larger funds), followers and laggards. Those in the vanguard have launched initiatives to collect relevant and reliable information on sustainability issues and to integrate this information in their investment policy and risk management. Funds in this group are also more likely to have defined CO_2 reduction targets. We are committed to encouraging pension funds to continue integrating sustainability risks in their risk management practices. We recognise the added value of sharing experiences and learning from one another and of collaboration within the sector.

Table 2 Observations on the financial sectors with regard to climate risks

Financial sector	Observations in 2020
Banks	Greater emphasis on climate risks among LSIs
Insurers	Half of insurers include the impact of climate risk on their risk profile.
Pension funds	Pension funds acknowledge climate risks, although to varying extents.

In August 2020, we were involved in the organisation of an international conference for financial market infrastructures (FMIs) on climate risks. The conference was led by the Bank for International Settlements and was aimed at raising awareness on this topic. We feel that climate risks can be integrated further in the medium term in the supervision of compliance with laws and regulations among FMIs.

We point out climate risks during exploratory discussions with licence applicants seeking market access. Our supervisory dialogue with the sector is ongoing, and we are defining our exceptions regarding climate risks and other sustainability risks in greater detail. Starting in 2021, we will emphasise climate-related and environmental risks during fit-and-proper assessments of board members and other officers.

We contributed to international policy development regarding supervision of the financial sector. We responded to the request for consultation on the European Commission's Renewed Sustainable Finance Strategy. Additionally, in 2020 we co-chaired and participated in the high-level Task Force on Climate-related Financial Risks (TFCR) of the BCBS. The TFCR is currently engaged primarily in exploratory activities, which are not expected to result in changes to the Basel standards in the short term. We are working with the International Association of Insurance Supervisors (IAIS) on a paper on integrating climate risks in the supervision of the insurance sector. We worked with the European Banking Authority (EBA) on exploratory studies into the integration of sustainability risks in banks' own risk assessments and in minimum capital requirements. In our view, the study on integrating sustainability risks in minimum capital requirements and the subsequent European decision-making process should be brought forward. We also worked with the EBA on the inclusion of sustainability risks in the 2019 publication, Guidelines on loan origination and monitoring. In accordance with these guidelines, institutions must weigh sustainability risks in their lending decisions. Institutions that specifically develop sustainable credit facilities and instruments must have appropriate policies and supporting processes in place. We contributed to several publications by the European Insurance and Occupational Pensions Authority (EIOPA), including one on the relationship between the prudent person rule for pension funds and sustainability, and one on climate scenarios that insurers can use when conducting their own risk assessment. We believe it is important that climate risks become incorporated in international supervision standards and in European legislation and regulations. Progress has certainly been made in this regard, but we feel the process could be accelerated.

Economic advice

We critically monitored the agreements made as part of the Dutch Climate Agreement, and we advised the government. This is particularly the case for economic measures, such as the desirability of the introduction of a carbon tax. In publications, speeches and interviews, we made frequent and specific proposals for improved emissions pricing at the EU level as part of a green recovery from the COVID-19 crisis, and in this context we put forward a number of proposals for intensifying climate-related investments. In addition, we emphasised the need for an ambitious EU Green Deal in speeches and during meetings. CO_2 emissions fell significantly in 2020, even further than the agreed targets (see Table 3). However, this reduction is primarily a result of the restrictions on travel and the economic crisis resulting from the COVID-19 pandemic rather than a consequence of more stringent climate policy. As the economy once again gains traction, emissions will also rise sharply. The Netherlands Environmental Assessment Agency has calculated that emission reductions will fall short of the 2030 target by half under current policy in the Netherlands. This increases the risk of an abrupt transition, resulting in damage to the economy and the financial sector. However, a carbon tax for industry was introduced in the Netherlands in 2020, which led to a light increase in the effective carbon price for the sector. Our advice on this topic was referenced on numerous occasions during the policy deliberations on the introduction of the carbon tax.

Table 3 Overview of climate targets for the Netherlands and 2020 status

Indicator	Objective	2020 status
CO_2 emissions in the Netherlands	Drop in CO_2 emissions in the Netherlands in accordance with nationally agreed climate targets (50-55% reduction by 2030 and climate neutral by 2050)	Achieved
CO_2 emissions in the Europe	Drop in CO_2 emissions in Europe in accordance with agreements in the EU Green Deal (annual)	Achieved
Climate plans	Netherlands Environmental Assessment Agency calculates that the climate plans effectively meet the reduction targets	Not achieved
European effective CO_2 price	The European effective CO_2 price is in accordance with the price required to meet the targets of the Paris Climate Agreement (annual, set by the World Bank)	Measurable progress (see plans for the EU Green Deal, not yet finalised)

Statistics

We are working with the ECB and IMF on the development of internationally comparable official statistics on sustainability in the financial sector. We chair the Statistics Committee's Expert Group on Climate Change and Statistics. In late 2020, the group completed a report with recommendations for follow-up studies on carbon footprint indicators, physical risk indicators and the identification of green/non-green instruments. These follow-up studies will be initiated in 2021, and we will make additional capacity available to ensure that they are conducted expediently. We are the coordinator of the Sustainable Finance Statistics theme in the IMF's Balance of Payments Committee, and in this role we have presented our plans for a report due to be published in 2021 containing guidelines for the inclusion of sustainable finance in regular balance-of-payments statistics.

Balance sheet management

We have identified the carbon footprint of our own-account investments. To this end, we conducted an analysis of all investment categories in our portfolio (see Table 4). The indicators have been aggregated at the level of three investment categories: government bonds and semi-public bonds, corporate bonds (High Yield and Investment Grade bonds) and equities. We report on multiple climate indicators, as they each provide different insights and information (see Box 2). The data covers emissions as reported by companies themselves and estimates provided by the data supplier (see Annex 2, About this report). Our calculations currently only involved scope 1 and scope 2 emissions. We plan to add scope 3 emissions in a few years, however, once companies' data availability has improved (see Box 2). We have currently not set carbon footprint reduction targets. In the course of the year we will explore whether we can align our equities portfolios with the goals set out in the Paris Climate Agreement, enabling us to define emission reduction targets.

Table 4 Climate indicators for our own-account investments

	Total	Government bonds and semi-public bonds	Corporate bonds	Equities
Portfolio size (EUR billion)*	**7.2**	4.0	1.2	1.9
Data availability**	**80%**	72%	79%	99%
Total CO_2 emissions (tCO_2e)***	**1,179,337**	903,893	171,843	103,601
Carbon footprint (tCO_2e/enterprise value)	**169**	257	154	45
Weighted Average Carbon Intensity (tCO_2e/turnover)	**202**	223	280	115

* Portfolio size has been calculated based on the market value at 31 December 2020, excluding positions in cash and derivatives, and can vary widely from year to year.
** Data availability indicates the percentage of the portfolio for which data on CO_2 emissions is available. This percentage is higher for the turnover of weighted CO_2 emissions indicator: 95% for government bonds and semi-public bonds, 87% for corporate bonds and 99% for equities.
*** Total CO_2 emissions from government bonds and semi-public bonds are based solely on emissions from government bonds in the portfolio. Necessary data such as enterprise value is lacking for semi-public bonds due to the complex organisational structure.

The market value of our investments in green bonds amounted to EUR 279 million at 31 December 2020. This represents an increase of approximately EUR 232 million compared to year-end 2019. Our goal is to invest at least EUR 400 million in green bonds by year-end 2021. We make our selection of green bonds based on either the Green Bond Principles or the Climate Bond Standard and Certification Scheme.

Box 2 Notes on CO_2 emissions and climate indicators

All greenhouse gas (GHG) emissions are measured and expressed as tonnes of CO_2. Scope 1 includes direct emissions (e.g. from heating systems, vehicles or generators). Scope 2 includes indirect emissions caused by purchases of products for further use and production (e.g. electricity generated elsewhere). Scope 3 includes all other indirect emissions produced as a result of activities that take place after the production phase (e.g. during the consumption phase or waste processing phase), over which companies have little direct influence. The European Commission recommends that enterprises report scope 3 emissions in the Guidelines for non-financial reporting: supplement on reporting climate-related information.

The total CO_2 emissions indicator is the sum of all scope 1 and 2 GHG emissions of enterprises in the portfolio, weighted by the proportion of the investment in each enterprise. This indicator is the most literal descriptor for how polluting a portfolio is. However, the indicator is not adjusted for the total size of a portfolio, which makes it unsuitable for comparing different portfolios. Carbon footprint corrects for portfolio size, making it easier to compare the emissions of different portfolios. Weighted Average Carbon Intensity indicates the exposure of a portfolio to enterprises with relatively high emissions. For government bonds, CO_2 emissions are weighted by total public debt (rather than by enterprise value) or GDP (rather than by turnover).

Annex 2 About this report

The introduction by the President and the three thematic chapters of this Annual Report describe the main developments and outlook relating to our core tasks. Chapter 4 looks back on the year under review. In that chapter, we provide accountability to our stakeholders about the results of our activities and our strategic progress. We continuously endeavour to improve our transparency. The dialogue with our stakeholders (see Section 4.3 Interaction with our stakeholders) helps us to do our work as effectively as possible and enables us to increase our societal impact. If you would like to respond to this Annual Report or if you have other comments, please email us at info@dnb.nl.

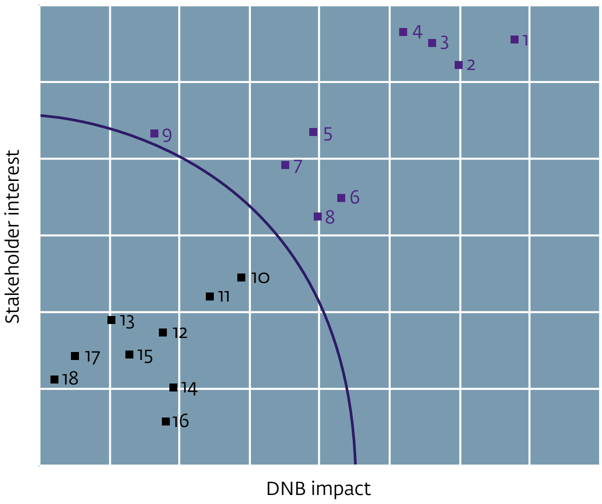
Reporting guidelines

This report has been prepared in accordance with the reporting guidelines of the Global Reporting Initiative (GRI) standards – Option Core. We apply GRI reporting principles and we use GRI- and DNB-specific indicators (see the website for the GRI content index). The report on material, financial and economic climate risks and opportunities (see Annex 1) was prepared using the reporting framework of the Task Force on Climate-related Financial Disclosures and PCAF measurement methodology. The report has been prepared in accordance with the EU Non-Financial Reporting Directive (2014/95/EU).

Materiality analysis

In our accountability report we focus on themes that are important to our stakeholders and to us. Senior management used the results of stakeholder surveys and engagement sessions, internal documentation and media, peer and trend analyses to compile a list of 18 themes where we have societal impact. More than 200 stakeholders (mainly financial institutions and other relevant parties) responded via our intranet, our website and sectoral newsletters to indicate which of these themes they considered to be the most important for our societal impact. 40% of respondents also suggested additional themes. Additionally, 40 internal stakeholders (department heads, divisional directors and Governing Board members) offered their input on the themes where we have the most societal impact. Figure 1 shows the results of these analyses. The Governing Board used this materiality analysis to make a final selection of nine material themes. This analysis was also used in selecting the themes for the chapters in this Annual Report. The themes are in line with our activities and our medium-term strategy, DNB2025. See Figure 2 for an overview of the places in this Annual Report where our role in these themes is discussed. See the value creation model (Section 4.1) for an overview of our results.

Figure 1 Materiality analysis 2020



1 Stability and future-proofness of Dutch financial institutions
2 Public confidence in the Dutch financial sector
3 Operation of payment systems
4 Integrity of the Dutch financial sector
5 Balanced economic conditions in the euro area
6 Economic and financial sustainability issues and risks
7 Price stability in the euro area
8 Recovery of the Dutch economy from the COVID-19 crisis
9 Compliance and integrity (DNB)

10 Transition to the new pension system
11 Innovation in payment systems
12 Socially responsible investment (DNB)
13 Cost awareness (DNB)
14 Digitalisation (DNB)
15 Stability and accessibility of the housing market
16 Diversity and talent development of employees (DNB)
17 Lending to businesses
18 Stability and accessibility of the labour market

Sustainable Development Goals

Both themes contribute to the achievement of the UN's Sustainable Development Goals (SDGs). Through these 17 global goals, organisations, businesses and governments commit to substantially improve the state of our world by 2030. In consultation with stakeholders, we have decided to commit ourselves to the following goals: 8. Decent work and economic growth, 12. Responsible consumption and production, 13. Action on climate change and 17. Partnerships to achieve the goals. Figure 2 shows how our efforts on material themes contribute to the (sub)goals (definitions according to Statistics Netherlands).

Organisational structure

DNB is a public limited company whose sole shareholder is the State of the Netherlands. The Governing Board is responsible for its management. Alongside an Internal Audit Department and an Executive Secretariat, there are 17 divisions and 5 departments that report directly to a board member (see the organisation chart). The Supervisory Board supervises the general course of business at DNB and the Governing Board's policy regarding the implementation of DNB's national tasks (see the Report of the Supervisory Board). Our temporary head office is located at Spaklerweg 4 in Amsterdam.

Table 1 Materiality themes, progress and contribution to SDGs

Materiality theme	Definition	Progress	SDG
Stability and future resilience of Dutch financial institutions	The solidity and liquidity of Dutch banks, insurers, pension funds and other financial institutions and the extent to which their business models are future-proof	See Section 4.1.3, Chapter 1 and the independent public body (ZBO) report ■ Dutch banks have weathered the coronavirus crisis well so far: the average capital ratio of Dutch banks (CET1 ratio) increased from 17.0% at year-end 2019 to 17.8% (Q4 2020). ■ Insurers and pension funds continue to face pressure, mainly due to low interest rates. The Solvency II ratios of Dutch life insurers rose slightly from PM% at year-end 2019 to PM% (Q3 2020). ■ The average policy funding ratio of Dutch pension funds is 95% Most funds are above the 90% threshold for curtailing benefits.	
Public confidence in the Dutch financial sector	Dutch society's confidence in financial institutions	See Section 4.2. ■ Confidence in financial institutions stable despite coronavirus crisis: 70% of people have strong or full confidence in their own bank or insurance company; only 50% of people have this level of confidence in pension funds. ■ Confidence in DNB is at roughly the same level as prior to the credit crisis: 79% of people are very confident or highly confident.	
Operation of payment systems	Payments systems that are efficient, secure, reliable and accessible to all	See Sections 4.1.5, 4.2.6 and Chapter 3 ■ There were no major disruptions in payment systems. ■ The use of cash is declining due to reduced availability of ATMs. The proportion of cash payments declined to 20%.	 (08:10: Access to financial services)
Integrity of the Dutch financial sector	Compliance with laws, regulations and corporate governance codes by financial institutions, including prevention of involvement in financial crime	See Section 4.2.3 and independent public body (ZBO) report ■ We conducted 33 thematic examinations in the year under review and we intervened where necessary. ■ It is necessary to continue to emphasise integrity and to encourage financial institutions take their gatekeeper role more seriously.	

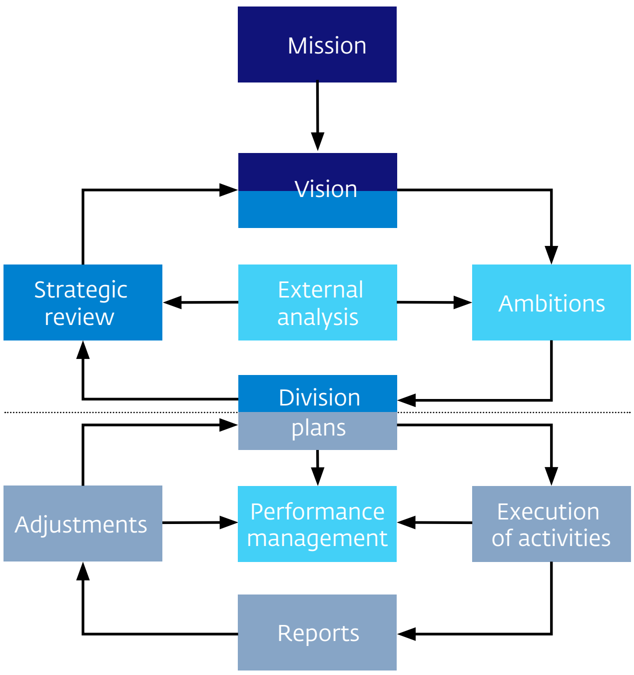
Materiality theme	Definition	Progress	SDG
Balanced economic conditions (in the euro area)	Balanced economic developments in euro area countries, including the future resilience of the European currency union	See Section 4.3.3: ■ Good progress on implementing new pension system. ■ Persistent constraints on labour and housing markets. ■ Limited progress on completing banking union and bolstering capital markets union.	(incl. 8.1 Sustainable economic growth, 8.5 Income and employment, 17.13 Enhance global macroeconomic stability)
Economic and financial sustainability issues and risks	The economic and financial consequences of societal challenges such as climate change and the energy transition	See Section 4.3.1 and Annex 1 ■ Financial institutions are more aware of climate risks ■ Current climate plans fail to achieve CO_2 reduction targets in the Netherlands. ■ We have addressed CSR in all our core tasks and international cooperation, including the identification of transition risks for our own balance sheet and the development of an SRI policy for our own-account investments.	(incl. 12.6 Encourage Corporate Social Responsibility, 13.2 Climate policy and reduction of greenhouse gas emissions, 17.16 Enhance global partnership for sustainable development)
Price stability in the euro area	Prices that do not rise or fall too quickly, i.e. the objective of annual inflation of below but close to 2% over the medium term in the euro area	See Section 4.2.1 and Chapter 2: ■ Euro area inflation of 0.3% fell short of the ECB's 2% target, but there are no major risks of adverse effects from deflation. Inflation in the Netherlands was 1.1%. ■ Accommodative monetary conditions contribute to lending and economic recovery and to the convergence of inflation towards the medium-term target.	(incl. 17.13 Enhance global macroeconomic stability)
Recovery of the Dutch economy from the COVID-19 crisis	Economic resilience of households, businesses, financial institutions and the government during the COVID-19 crisis	See Section 4.1 and Chapter 1. ■ Substantial economic contraction of 3.8% as a result of the coronavirus crisis, but less severe than initially feared, partly due to extensive support measures. ■ Sustainable recovery will only get underway once the virus is under control	(incl. SDG 8.1 Sustainable economic growth)
Compliance and integrity (DNB)	Compliance with laws and regulations; DNB's sound and ethical conduct	See Section 4.3: ■ All employees took the civil service oath. ■ 413 internal notifications and 670 internal requests for advice on integrity regulations were received and processed. ■ 82 integrity incidents and 16 complaints were filed and processed.	

Method of management and evaluation

The Governing Board is responsible for managing and evaluating our work and strategy. Implementation is safeguarded in an integrated planning and control (P&C) cycle, in which we translate the long-term aspirations into annual priorities. We lay down the objectives in each policy area in division-specific plans and performance targets for employees. We monitor progress using the planning and control tool, based on data provided by the departments responsible for the objectives. The business controllers from the Finance & Consulting department and the Risk Management & Strategy (RMS) department assess the reported progress. Based on this input, the Governing Board receives quarterly reports.

Additionally, our RMS department is responsible for assuring quality in the entire organisation's overall performance of its duties, both in regard to content and process. RMS supports quality assurance of first-line activities through lessons learned sessions and advice on effective working methods, among other means. Our Internal Audit department (IAD) has an independent position in the organisation and conducts audits into the effectiveness of the overall risk framework and the consistent application of policies and processes. The IAD submits periodic reports on its findings to the Governing and Supervisory Boards.

Figure 2 Method of management and evaluation



The Annual Report was produced under the direction of an editorial committee and a central team from the Economic Policy & Research division, the Financial Stability division and the Finance & Consulting and Communications departments, with input provided by divisional directors and other relevant staff. The texts in the Annual Report were discussed and approved by the Governing Board.

Scope and aspect boundaries of the report

The information in this chapter relates to the 2020 calendar year, with the exception of the environmental data, for which the reporting period is the fourth quarter of 2019 to the third quarter of 2020. No changes have been made to definitions or methods of measurement. All data are based on calculations (not estimates), unless stated otherwise. See below for additional notes on the calculation of the carbon footprint of our own-account investments.

Notes on carbon footprint of own-account investments

The calculations were performed based on data supplied by MSCI ESG Research. The indicators depend on the reliability of emissions reports submitted by the enterprises. Where data was lacking, MSCI provided an estimate (approximately 25% of the data is estimated for equities and corporate bonds; approximately 75% of the data is estimated for semi-government bodies, supranational institutions and agencies). MSCI ESG Research collected data on government bonds based on the Emissions Database for Global Atmospheric Research.

The coverage ratio of reported and estimated data for the total CO_2 emissions and enterprise size weighted CO_2 emissions indicator is as follows: semi-government bonds (72%), corporate bonds (79%) and equities (99%). The coverage ratio of reported and estimated data for the turnover weighted CO_2 emissions indicator is as follows: government bonds (100%), semi-government bodies, supranational institutions and agencies (84%), corporate bonds (87%) and equities (99%).

The data in Figure 7 in Annex 1 is presented in aggregated form. The total portfolio as of year-end 2020 was composed as follows: Government bonds (40%), semi-government bodies, supranational institutions and agencies (16%), investment-grade corporate bonds (8%), high-yield corporate bonds (9%) and equities (27%).

External assurance

Our external auditor reviewed the non-financial information in Chapter 4 of this Annual Report. The assurance report is included in Annex 3.

Benchmarks

Our reporting on corporate social responsibility is assessed every two years in the Transparency Benchmark of the Ministry of Economic Affairs and Climate Policy. This benchmark was not conducted in 2020 (on the 2019 reporting year).

We were the first central bank in the world to sign the UN's Principles for Responsible Investment (PRI) in 2019. We prepared a transparency report (as a pilot) in 2020. The assessment of this report provides insight into our strengths and areas for improvement in the context of responsible investment. In the years ahead, we will continue to assess our PRI compliance and make improvements where possible.

Definitions

Terms	Definitions
Asset purchase programme	ECB programme for purchasing assets, including public-sector securities (PSPP), covered bonds (CBPP3), investment grade corporate bonds (CSPP) and asset-backed securities (ABSPP).
Bank for International Settlements (BIS)	An international organisation pursuing international monetary and financial cooperation and acting as a bank for the national central banks.
Banking union	Collaborative agreements in the EU aimed at resolving the interconnectedness between governments and banks. There are three pillars to the banking union: common European supervision by the ECB, a common European resolution regime and a European deposit guarantee scheme.
Basel Committee on Banking Supervision (BCBS)	The Basel Committee on Banking Supervision is a global partnership that sets standards for prudential supervision and promotes international cooperation among banking supervisors.
Borstlap Commission (Commission on the Regulation of Work)	Commission convened by the government to advise on the functioning of the labour market.
Brexit	The departure of the United Kingdom from the European Union.
Capital Markets Union	EU aim to improve the functioning of cross-border capital markets in the euro area.
Capital policy	The capital policy sets out the rules for the buffers DNB holds, how large they must be and how they are to be used.
Cash and payment systems	DNB actively promotes accessible, secure and reliable cash and payment systems. As a member of the Eurosystem we issue banknotes and are responsible for the circulation of coins and banknotes in the Netherlands. We also manage payment systems and we are responsible for oversight of institutions and systems that process payment transactions.

Terms	**Definitions**
CO_2-neutrality	Full offset of CO_2 emissions by investing in a reduction elsewhere.
Committee on Payments and Market Infrastructures (CPMI)	Basel Committee on Payments and Market Infrastructures that promotes the security and efficiency of payments, clearing and settlement.
Crypto	A digital asset managed by cryptographic algorithms, usually using blockchain technology. A crypto does not have a physical manifestation like a euro coin. Rather, it is an encrypted code, like a password, that can be transferred and stored electronically.
DNB Academy	Provider and coordinator of training courses (both internal and external) for DNB employees.
Dutch Deposit Guarantee	Statutory protection of savings in a Dutch bank account of up to EUR 100,000 per person per bank.
ESG issues	Environmental, social and governance issues.
European Banking Authority (EBA)	European supervisory authority for the banking sector.
European Insurance and Occupational Pensions Authority (EIOPA)	European supervisory authority for the insurance and pensions sector.
European Securities and Markets Authority (ESMA)	European supervisory authority for the financial markets.
European Stability Mechanism (ESM)	Permanent European fund that can lend to countries in the euro area that are facing financial difficulties, subject to certain conditions.
Financial stability	DNB is committed to a stable financial system that ensures an efficient allocation of resources and that is capable of absorbing shocks so that they do not have a disruptive effect on the real economy.

Terms	Definitions
Financial Stability Board (FSB)	The Financial Stability Board is a global network that promotes international financial stability by coordinating and monitoring the work of supervisory authorities and international regulators in the area of financial supervision and regulation.
Financial Stability Committee (FSC)	The FSC is the macroprudential authority in the Netherlands. Its task is to identify risks to financial stability and to make recommendations in this regard. The FSC is comprised of representatives of DNB, the Dutch Authority for the Financial Markets (AFM) and the Netherlands Ministry of Finance. The Netherlands Bureau for Economic Policy Analysis (CPB) is also involved, providing external expertise.
Governing Council	Governing Council of the European Central Bank.
iForum	DNB works with the sector in the iForum to create more opportunities for technological innovation in the financial system.
International Association of Insurance Supervisors (IAIS)	A worldwide network of insurance supervisors that sets standards for the insurance sector and promotes international cooperation.
iPanel	The iPanel provides strategic advice to the iForum. It is made up of representatives from DNB, the AFM, the Ministry of Finance and various branches within the financial sector.
ISO 14001:2015	An international standard that specifies requirements for an environmental management system that an organisation can use to gain insight into its environmental impact.
Legal Entity Identifier	Registration code for Dutch enterprises.
Monetary tasks	As a member of the Eurosystem, we contribute to decision-making on monetary policy and its implementation. Monetary policy is aimed at price stability, which is defined as an inflation rate of under but close to 2% over the medium term.

Terms	Definitions
National Forum on the Payment System (NFPS)	A group of 15 civil society organisations, chaired by DNB, which focuses on improving the efficiency of the retail payment system.
Network of Central Banks and Supervisors for Greening the Financial System (NGFS)	Network of central banks, supervisory authorities and international organisations that aims to green the financial system and strengthen the efforts being put forth by the financial sector to achieve the Paris climate agreement goals.
Open Market Operations (OMOs)	These are transactions through which the ECB provides financing to banks in order to satisfy their liquidity needs or to absorb excess liquidity from the system. Lending to banks is collateralised.
Pandemic Emergency Purchase Programme (PEPP)	The ECB's emergency purchase programme was launched in March 2020 with the aim of mitigating the impact of the COVID-19 pandemic by promoting the transmission of monetary policy and by making financing conditions more accommodative. Both public and private debt certificates are purchased under the programme.
Provision for financial risks (VFR)	Buffer on DNB's balance sheet to cover temporary risks.
Prudential measures	Prudential measures are aimed at ensuring the soundness of financial undertakings and contributing to the stability of the financial sector.
Resolution	As the Dutch resolution authority, we seek to ensure that the critical functions of banks are safeguarded to the greatest extent possible, while non-viable institutions or parts of institutions are wound up in an orderly manner.
RVO criteria	Criteria established by the Netherlands Enterprise Agency (RVO) and the Dutch public authorities for sustainable procurement.

Terms	**Definitions**
Socially responsible investment	The policy through which DNB considers environmental, social and governance (ESG) aspects, in addition to financial and economic aspects, when making investment decisions.
Stablecoin	A crypto whose value is kept as stable as possible in relation to fiat currencies such as the euro and dollar thanks to specific mechanisms. Examples of stablecoins are Tether and Diem (previously Libra), the stablecoin that Facebook has launched. Some stablecoins are backed by gold or another commodity rather than by fiat money. The aim of stablecoins is to make cryptos suitable as a day-to-day means of payment.
Statistics	DNB collects statistical information and compiles statistics in close cooperation with partners such as Statistics Netherlands (CBS), the European System of Central Banks (ESCB) and the International Monetary Fund (IMF).
Statistics Netherlands (CBS)	National institute engaged in collecting data and compiling statistics on Dutch society. Statistics Netherlands produces statistical information on a wide range of social and economic themes.
Supervision	DNB exercises prudential supervision of banks, pension funds, insurers and other financial institutions by checking whether they are financially sound and are able to meet their obligations and by conducting fit and proper assessments of board members, issuing licenses and combating financial and economic crime.
Sustainable Finance Platform	A group consisting of supervisory authorities, sector associations, ministries and the Sustainable Finance Lab that seeks to promote and increase awareness of sustainable finance in the financial sector by coming together to consider ways to avoid or overcome obstacles to sustainable finance.
Sustainable investment	The policy through which DNB considers social and economic aspects, in addition to financial and economic aspects, when making and implementing decisions.

Terms	Definitions
Targeted Longer-Term Refinancing Operations (TLTRO)	Refinancing operations offered by the Eurosystem aimed at stimulating lending to enterprises and consumers in the euro area.
Task Force on Climate-related Financial Disclosures (TCFD)	The FSB established the TCFD to develop effective publications on climate-related risks.
Technical cooperation	DNB's programme for cooperation with and assistance to constituency countries that are jointly represented in the IMF and World Bank and to other affiliated countries.
TIBER	TIBER is short for threat intelligence-based ethical red teaming, which is a framework and programme for cybersecurity tests. TIBER involves carrying out controlled attacks on participating institutions, including DNB itself, based on current threat data. The aim is to jointly learn from the results of the cybersecurity tests in order to boost resilience to advanced cyberattacks.
UN Global Compact	The United Nations Global Compact encourages enterprises all over the world to implement sustainable and socially responsible policies. It encapsulates principles in the areas of human rights, labour, the environment and the fight against corruption.
Unsecured money markets	Banks and enterprises borrow and lend (<12 months) on these markets without collateral.
Wiser in money matters	Initiative of the Ministry of Finance. Partners from the financial sector, academia, government, education and consumer organisations join forces in this platform to promote financial soundness in the Netherlands.
Wwft	Anti-Money Laundering and Anti-Terrorist Financing Act (*Wet ter voorkoming van witwassen en financiering van terrorisme*).

Appendix 3 Assurance report of the independent auditor

To: the Shareholder and the Supervisory Board of DNB

Our conclusion

We have reviewed the non-financial information as specified in the 'External assurance' paragraph in the Accountability chapter of the Annual Report 2020 of De Nederlandsche Bank N.V. (hereafter: DNB) at Amsterdam for the year ended 31 December 2020 (hereafter: nonfinancial information). A review is aimed at obtaining a limited level of assurance.

Based on the procedures performed nothing has come to our attention that causes us to believe that the non-financial information has not been prepared, in all material respects, in accordance with the standards as disclosed in the 'Reporting guidelines' paragraph in the Accountability chapter of this Annual Report.

Basis for our conclusion

We performed our review of the non-financial information in accordance with Dutch law, including Dutch Standard 3000A –'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie' (attest-opdrachten) (assurance engagements other than audits or reviews of historical financial information (attestation engagements)). This engagement is aimed to obtain limited assurance. Our responsibilities in this regard are further described in the 'Our responsibilities for the review of the non-financial information' section of our report.

We are independent of DNB in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Reporting criteria

The non-financial information should be read and understood in conjunction with the reporting criteria. DNB is responsible for selecting and applying these reporting criteria, keeping in mind the relevant laws and regulations with respect to reporting.

The applied reporting criteria for the preparation of the non-financial information are the Sustainability Reporting Standards of the Global Reporting initiative (GRI) in combination with DNB's own reporting criteria. The reporting criteria are further detailed in the 'Reporting guidelines' paragraph in the Accountability chapter.

Limitations to the scope of our review

References to external sources or websites in the non-financial information are not part of the non-financial information itself as reviewed by us. Therefore, we do not provide assurance on this information.

The non-financial information includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherently, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the nonfinancial information.

Responsibilities of the Governing Board for the non-financial Information

The Governing Board of DNB is responsible for the preparation of the non-financial information in accordance with the applicable reporting criteria, including the identification of stakeholders and the definition of material matters. The choices made by the Governing Board regarding the scope of the non-financial information and the reporting policy are summarized in Annex 2 'About this report' in the Accountability chapter of the Annual Report.

Furthermore, the Governing Board is responsible for such internal control as it determines is necessary to enable the preparation of the non-financial information that is free from material misstatement, whether due to fraud or error.

Our responsibilities for the review of the non-financial information

Our responsibility is to plan and perform our review in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

Procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing, and are less in extent, compared to a reasonable assurance engagement. The level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the information in the non-financial information. The materiality affects the nature, timing and extent of our review procedures and the evaluation of the effect of identified misstatements on our conclusion.

We apply the 'Nadere Voorschriften Kwaliteitssystemen' (NVKS, Regulations for Quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have exercised professional judgement and have maintained professional skepticism throughout the review, in accordance with the Dutch Standard 3000A, ethical requirements and independence requirements.

Our review included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant societal themes and issues, and the characteristics of the company;
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the non-financial information. This includes the evaluation of the results of stakeholder dialogue and the reasonableness of estimates made by the Governing Board;
  Obtaining an understanding of the reporting processes for the non-financial information, including obtaining a general understanding of internal control relevant to our review;
- Identifying areas of the non-financial information where a material misstatement, whether due to fraud or error, is most likely to occur, designing and performing assurance procedures responsive to these areas, and obtaining assurance information that is sufficient and appropriate to provide a basis for our conclusion. These procedures included, amongst others:
  - Interviewing management and relevant staff at corporate level;
  - Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures over, and consolidating the data in the non-financial information;
  - Obtaining assurance information that the non-financial information reconciles with underlying records of the company;
  - Reviewing, on a limited test basis, relevant internal and external documentation.
- Evaluating the presentation, structure and content of the non-financial information;
- Considering whether the non-financial information as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

We have communicated with the Governing Board regarding, among other matters, the planned scope and timing of the review and significant findings that we identify during our review.

Amstelveen, 18 March 2021

KPMG Accountants N.V.
M.A. Huiskers RA

2020 in brief

January

Start of staff relocation in Amsterdam, from Frederiksplein to the Toorop building, our temporary office accommodation.

Most ATMs sealed off at night due to explosive attacks. Banks install new security systems throughout 2020.

DNB research reveals that 1 in 7 Dutch residents is unable to raise € 2,000 in case of a financial emergency.

February

Olaf Sleijpen appointed to DNB Governing Board in charge of Monetary Affairs.

March

PM Mark Rutte announces that the Dutch economy is on lockdown and advises everyone to work from home. DNB staff start working remotely.

DNB temporarily lowers the buffer requirements for banks to stimulate lending and mitigate the effects of the coronavirus crisis on the economy.

DNB calls on banks to refrain from dividend payments and share buybacks for the time being.

ECB announces a range of monetary measures to alleviate the damaging effects of the coronavirus crisis on the financial sector and the economy.

Government announces substantial support packages for companies to save jobs.

April

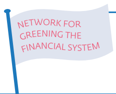
DNB expresses positive opinion about the digital euro. Central bank digital currency can safeguard public interests in the monetary system.

Health insurers offer financial support to hospitals and other healthcare providers.

May

DNB calls for green recovery from the coronavirus crisis and leveraging of opportunities to reduce CO_2 emissions.

The European Systemic Risk Board recommends restricting dividend payments and share buybacks by financial institutions.

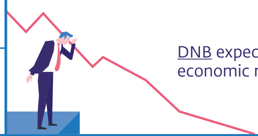


66 central banks and supervisors, and 12 NGFS observers publish guidance on how to better to manage climate-related and environmental risks.

June

Klaas Knot updates the Dutch House of Representatives on macro-economic risks to financial stability.

The ECB expands and extends its purchase programme to buttress the economy further to support businesses and households as long as the pandemic continues.



DNB expects Dutch economy to face deep economic recession due to pandemic.

July/August

Contactless payments gain further ground during the coronavirus crisis.

DNB to investigate historical links with slavery.

Government and social partners present pension accord for a more future-proof pension system.

Collaboration between financial institutions is key for combating cybercrime.

Dutch households remain confident in the financial sector despite concerns about the coronavirus crisis.

September

Klaas Knot delivers H.J. Schoo lecture: Emerging from the crisis stronger together – how we can make Europe more resilient, prosperous and sustainable.

European Commission presents proposals to bolster capital market union further, increasing financing opportunities for companies and investment options for investors.

October

DNB relocates banknote operations and more than 200 tonnes of gold to Haarlem.

First crypto service provider registration now that they are subject to DNB integrity supervision.

Despite the support measures, the coronavirus crisis results in an unprecedented drop in employment.

DNB Sarphatistraat office building sold.

November

DNB's Paul Hilbers appointed new Executive Director at IMF.

DNB holds listening sessions where Dutch citizens and civil society organisations share their ideas and opinions about economic hurdles.

DNB publishes its Supervisory Strategy.

December

EIOPA publishes recommendation for amendment to Solvency II legislation for insurers.

Frank Elderson joins the ECB's Governing Council.

The EU and the UK sign an eleventh-hour Brexit deal, averting a no-deal scenario.

5 Governing Board, Supervisory Board, Bank Council, Employees Council and governance

Klaas Knot

Else Bos

Olaf Sleijpen

Nicole Stolk

As of the date of adoption of the 2020 financial statements, the Governing Board, Supervisory Board, Bank Council and Employees Council were composed as follows:

Governing Board

President:
Klaas Knot (1967, Dutch, economics, end of second term: 2025)

Executive Director and Chair for Prudential Supervision:
Else Bos (1959, Dutch, econometrics, end of first term: 2025)

Executive Director of Banking Supervision:
Vacancy. Frank Elderson (1970, Dutch, Dutch law) held this position until 15 December 2020.

Executive Director of Monetary Affairs:
Olaf Sleijpen (1970, Dutch, economics, end of first term: 2027)

Executive Director for Resolution and Internal Operations:
Nicole Stolk (1969, Dutch, history and Dutch law, end of first term: 2025)

Executive Director of Monetary Affairs:
Job Swank (1955, Dutch, economics, end of second term: 2025)

Company Secretary:
Cees Ullersma (1969, Dutch, economics)

The allocation of responsibilities among the members of the Governing Board is represented in the organisation chart on our website.

Due to long-term illness, Job Swank is currently unable to fulfil his duties as an executive director. Olaf Sleijpen has been appointed by Royal Decree as an Executive Director as of 1 February 2020.

Frank Elderson (1970, Dutch, Dutch law), joined the European Central Bank (ECB) as a member of the Executive Board effective 15 December 2020. He resigned from his position as DNB's Executive Director of Banking Supervision on the same date. The position is currently vacant.

Supervisory Board

Chair:
Wim Kuijken (1952, Dutch, economics, end of first term: 2023)
Member of the Remuneration and Appointments Committee

Vice-Chair:
Margot Scheltema (1954, Dutch, international law, end of second term: 2023)
Chair of the Supervision Committee
Member of the Audit Committee

Other members:
Feike Sijbesma (1959, Dutch, medical biology and business administration, end of third term: 2024)
Chair of the Remuneration and Appointments Committee

Mirjam van Praag (1967, Dutch, econometrics, end of first term: 2024)
Member of the Supervision Committee
Member of the Bank Council on behalf of the Supervisory Board since 2020

Marry de Gaay Fortman (1965, Dutch, Dutch law, end of first term: 2024)
Member of the Remuneration and Appointments Committee
Member of the Supervision Committee

Roger Dassen (1965, Dutch, business economics and accountancy, end of first term: 2022)
Chair of the Audit Committee.

Government-appointed member:
Annemieke Nijhof (1966, Dutch, chemical technology, end of second term: 2023)
Member of the Audit Committee
Member of the Bank Council since 2015

Remuneration and Appointments Committee
Feike Sijbesma, Chair
Wim Kuijken
Marry de Gaay Fortman

Audit Committee
Roger Dassen, Chair
Annemieke Nijhof
Margot Scheltema

Supervision Committee
Margot Scheltema, Chair
Marry de Gaay Fortman
Mirjam van Praag

The other positions held by the Governing Board and Supervisory Board members are posted on our website.

Mirjam van Praag was appointed as a Supervisory Board member and a member of the Bank Council as of 1 October 2020. She succeeded Kees Goudswaard in both capacities.

Bank Council

Chair:
Barbara Baarsma
Chair of Rabobank Amsterdam and Professor of Corporate Finance and Financial Markets at the University of Amsterdam

Other members:
Mirjam van Praag
Member on behalf of the Supervisory Board

Ingrid Thijssen
Chair of VNO-NCW.

Annemieke Nijhof
Member on behalf of the Supervisory Board as a government-appointed member

Sjaak van der Tak
Chair of LTO Nederland

Chris Buijink
Chair of the Dutch Banking Association

Han Busker
Chair of FNV

Harry Garretsen
Professor of Economics at the University of Groningen

Nic van Holstein
Chair of the Trade union federation for Professionals

Willem van Duin
Chair of the Dutch Association of Insurers

Piet Fortuin
Chair of CNV

José Meijer
Acting chair of the Federation of the Dutch Pension Funds

Jacco Vonhof
Chair of Royal Association MKB-Nederland

Representative of the Ministry of Finance:
Christiaan Rebergen, Treasurer-General.

Employees Council

Jos Westerweele (Chair)
Sandra Koentjes (Professional Secretary)
Carel van den Berg
Jacqueline van Breugel
Annemarie van Dijk
Bernard de Groes
Saideh Hashemi
Robin Hoogesteger
Elina Kogan
Marjon Linger-Reingoud
Anja Peerenboom
Mikey Staats
Paul Suilen
Aaldert van Verseveld
Ingrid Voorn

Governance

De Nederlandsche Bank (DNB) is a public limited company incorporated under Dutch law. In its capacity as the central bank of the Netherlands, DNB forms part of the European System of Central Banks (ESCB), the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM). As the financial sector supervisor and national resolution authority, DNB is an independent public body.

DNB is led by a Governing Board consisting of a President and at least three and at most five Executive Directors.

The President of DNB is also a member of the Governing Council and the General Council of the European Central Bank (ECB).

The Executive Director of Monetary Affairs is responsible for financial stability, financial markets, economic policy and research, and payment systems. The Executive Director of Monetary Affairs is also responsible for DNB's statistics function and he is a Crown-appointed member of the Social and Economic Council of the Netherlands (SER).

The Executive Director and Chair for Prudential Supervision is responsible for supervision policy and supervision of insurers and pension funds. She represents DNB on the Board of Supervisors of EIOPA, the European Insurance and Occupational Pensions Authority. DNB has a Prudential Supervision Council for Financial Institutions, chaired by the Chair for Prudential Supervision, to support the internal deliberations and decision-making by the Executive Directors of Supervision concerning supervisory matters.

The Executive Director of Banking Supervision is responsible for supervision of banks, horizontal functions and integrity supervision, and legal affairs. He also represents DNB on the ECB's Supervisory Board, which is responsible for decision-making on the supervision of significant banks in the euro area within the framework of the SSM.

The Executive Director for Resolution and Internal Operations is responsible for resolution tasks concerning Dutch banks, investment firms and insurers. She also represents DNB on the Single Resolution Board (SRB). DNB has a Resolution Council, chaired by the Executive Director for Resolution and Internal Operations, to support the Governing Board's internal deliberations and decision-making concerning resolution matters. The Executive Director for Resolution and Internal Operations is also responsible for managing DNB's internal operations. These include the HR, ICT, Security & Transport, Communications, Finance & Consulting and Strategy departments.

The Supervisory Board supervises the general course of business at DNB and the Governing Board's policy regarding the implementation of Section 4 of the Bank Act 1998. It is also responsible for adopting the financial statements. The Supervisory Board has several other significant powers, including approval of the budget and of certain Governing Board decisions. It consists of at least seven and at most ten members, one of whom is appointed by the Minister of Finance.

DNB has one single shareholder: the Dutch State, which is represented by the Minister of Finance, also in the General Meeting. The Governing Board renders account to the General Meeting by presenting its annual report and financial statements over the past financial year. The General Meeting has significant powers, including approving the annual financial statements, discharging Governing Board and Supervisory Board members, appointing Supervisory Board members and appointing the external auditor.

The Bank Council functions as a sounding board for the Governing Board. It consists of at least eleven and at most thirteen members. Two members of the Supervisory Board, including the government-appointed member, sit on the Bank Council. With regard to the other members, DNB aims to ensure that the various sectors of society are represented.

Our website provides more information on the governance structure, as also laid down in the Bank Act 1998 and in DNB's Articles of Association and Rules of Procedure. Although the Dutch Corporate Governance Code only applies to listed companies, we strive to implement the principles and best practices from the code as much as possible. We explain our implementation of the code in more detail on our website.

6 Report of the Supervisory Board

Introduction

Due to the COVID-19 pandemic, 2020 was also an unusual year for the Supervisory Board and its supervision of DNB's governance. In 2020 the Supervisory Board focused on how DNB's policies were put into practice as regards its core tasks and internal operations, with a particular emphasis on the impact of the coronavirus pandemic, both on the performance of its core tasks and the internal organisation, and on several specific areas: integrity supervision, DNB's accommodation programme, digitalisation of processes and procedures, cybersecurity, the new cost structure for DNB's operations as an independent public body (zelfstandig bestuuursorgaan – ZBO), sustainability and a green economic recovery from the pandemic. These and other subjects kept the Supervisory Board closely involved with DNB throughout 2020.

Composition and appointments

The Governing and Supervisory Board compositions changed in 2020. As of 1 February 2020, Olaf Sleijpen was appointed as Executive Director responsible for monetary affairs. Meanwhile, Job Swank is still at home, recovering from a serious illness. The Supervisory Board wishes him a good recovery. Frank Elderson was appointed as member of the Executive Board of the European Central Bank (ECB) as of 15 December 2020 and as of the same date was discharged from his position as member of DNB's Governing Board. The Supervisory Board is delighted that Frank Elderson was appointed to this prominent position at the ECB and is grateful to him for his commitment to the tasks and responsibilities of DNB and his enormous efforts on behalf of our mission, organisation and employees. The position of Executive Director of Banking Supervision is currently vacant.

Pursuant to Section 13(1) of the Bank Act 1998, the Supervisory Board consists of at least seven and at most ten members. As of the date of adoption of the 2020 financial statements, the Supervisory Board consisted of seven members: Wim Kuijken (Chair), Margot Scheltema (Vice-Chair), Annemieke Nijhof (government-appointed member), Feike Sijbesma, Marry de Gaay Fortman, Roger Dassen and Mirjam van Praag.

Two members were reappointed by the shareholder for a new term: Marry de Gaay Fortman (as of 1 July) and Feike Sijbesma (as of 1 September). After two terms as a member with an academic profile, Kees Goudswaard stepped down as of 1 October. The Supervisory Board owes him a great debt of gratitude for his sustained commitment to DNB over the years, including as Chair of the Audit Committee and the Supervision Committee. He was succeeded by Mirjam van Praag, who was appointed as a Supervisory Board member as of 1 October for an initial term of four years. The Board is very pleased with Van Praag's appointment, and looks forward to working with her.

Changes to the composition of the Governing Board resulted in a new diversity balance. The gender balance on the Governing Board is now 40% women and 60% men. Changes to the composition of the Supervisory Board also resulted in a new diversity balance. The gender balance on the Supervisory Board is now 57% women and 43% men. DNB thus meets statutory targets for gender balance on both boards. In the event of appointment or reappointment, the Board will focus on the adopted profiles, which include the aim of diversity. It should be noted that the aim of diversity extends beyond gender balance and also takes account of expertise, background and competencies. For further details, see the expertise matrix and gender diversity matrix below.

Area of expertise	Kuijken	Scheltema	Nijhof	De Gaay Fortman	Van Praag	Sijbesma	Dassen
Management							
Management and organisation	■	■	■	■	■	■	■
Accounting and internal control structure		■					■
Stakeholder management	■	■	■	■	■	■	■
Risk management		■		■	■	■	■
Outsourcing	■	■		■		■	■
Legal affairs and corporate governance		■		■			■
Core tasks							
Macro-economic issues	■				■	■	■
Financial stability and institutions		■		■	■		
Cash and payment systems							
Statistics					■		
Strategic issues							
Sustainability		■	■			■	■
Digital IT	■					■	■
Public interest	■	■	■	■	■		

The participation of Supervisory Board members on the Bank Council changed in 2020. Annemieke Nijhof continued her membership as a government-appointed Supervisory Board member throughout 2020. Kees Goudswaard was a member appointed by the Supervisory Board from 1 January until 30 September, after which Mirjam van Praag succeeded him in this capacity.

The composition of the Supervisory Board, its committees and the Governing Board is provided from page 100 of this Annual Report. The profiles of the Governing and Supervisory Board members and the other positions they hold can be found on our website.

Duties

The average attendance rate at Supervisory Board meetings was 98%. None of the members was regularly absent. A part of each of these meetings was held with the Governing Board being present. The table below specifies the attendance rates of each of the members in the plenary Supervisory Board (SB), Remuneration and Appointments Committee (RAC), Audit Committee (AC), and the Supervision Committee (SC) meetings.

Member	SB	RAC	AC	SC
Wim Kuijken	8/8	9/9		
Margot Scheltema	8/8		8/8	5/5
Feike Sijbesma	7/8	9/9		
Kees Goudswaard	6/6			3/3
Marry de Gaay Fortman	8/8	9/9		5/5
Annemieke Nijhof	8/8		8/8	5/5
Roger Dassen	8/8		8/8	
Mirjam van Praag	2/2			2/2

The Chair of the Supervisory Board and the President of DNB were in frequent contact about issues concerning the Supervisory Board's work and developments concerning DNB. As part of its supervision of the general course of business at DNB, the Supervisory Board discussed the DNB-wide financial results and accountability for 2020 in the Audit Committee. The Supervisory Board discussed the results and accountability for 2020 with regard to independent public body (ZBO) activities in the Audit Committee, Supervision Committee and in plenary meetings. These discussions were based on quarterly financial reports, the management letter and audit report from the external auditor and the internal audit department's (IAD) quarterly reports.

In 2020, the size of the balance sheet items arising from monetary operations and the associated risks were also a key focus for the Board. The risks to DNB's balance sheet arising from the Eurosystem's monetary policy led the Governing Board, with the support of the Supervisory Board, to add EUR 868 million to the provision for financial risks. The result for 2020 thus amounts to EUR 15 million (2019: EUR 1,176 million). There was no addition to the general reserve in accordance with DNB's capital policy. The distribution to the Dutch State thus amounted to EUR 15 million. No gold sales took place in 2020. The Supervisory Board discusses the Governing Board's considerations concerning the gold stock when there is reason to do so.

The Supervisory Board discussed the 2020 financial statements with the Governing Board at length, in the presence of the external auditor. Pursuant to Section 13(6) of the Bank Act 1998, the Supervisory Board subsequently adopted DNB's financial statements and presented them for approval to the general meeting. The Supervisory Board discussed the budget for 2021, including the independent public body (ZBO) budget, and approved it on 13 November 2020. The Supervisory Board established that the internal operational and control instruments, such as the planning and control cycle and the risk management and control system, operated effectively.

Following deliberation by the Supervisory Board, the Governing Board and several members of the Supervisory Board reviewed the independent public body budget in the annual budget meeting with the Ministry of Finance. The Supervisory Board is pleased to see that the Governing Board practises transparency in the budgeting process and engages in dialogue about it with its main stakeholders. It believes DNB exercises its supervision decisively and intrusively, formulating unambiguous priorities. Based on available resources, the Governing Board and Supervisory Board jointly look for effective and efficient solutions to execute DNB's core tasks and to further strengthen its internal operations.

The Supervisory Board continued to devote particular attention to DNB's internal organisation in 2020. On various occasions, for instance, the Supervisory Board discussed the progress made in the outsourcing of ICT services and DNB's accommodation programme in considerable depth. The focus in the accommodation programme in 2020 was on the further development of the design of DNB's head office building at Frederiksplein, the sale of the office building at Sarphatistraat 1, and the relocation of the DNB Cash Centre and the gold stock to the temporary DNB Cash Centre in Haarlem. The Supervisory Board also discussed internal operational management, stressing the importance of a balanced weighing of cost efficiency, sustainability, security and transparency. The Board also engaged all division directors in dialogue to enhance the interaction between the Board and the broader organisation. Finally, the Supervisory Board and Governing Board also discussed progress on the DNB2025 strategy, with a focus on digitalisation and other priorities. By regularly engaging the Governing Board in dialogue on themes such as diversity and inclusiveness, process & programme management and DNB's risk management, the Supervisory Board seeks to contribute to the strengthening of DNB's corporate culture.

At each of its meetings, the Supervisory Board addressed the most important trends in DNB's areas of responsibility, derived from the periodic update on current affairs, with the Governing Board members, who informed the Supervisory Board about the international forum meetings they attended.

During a retreat with the Governing Board, the Supervisory Board discussed DNB's strategic challenges, zooming in on the opportunities and dilemmas inherent to a green recovery after the coronavirus crisis and the role DNB can play in promoting such a green recovery.

Pursuant to Section 24 of the Works Councils Act (Wet op de ondernemingsraden), members of the Supervisory Board attended consultation meetings between the Executive and the Employees Council. The Chair of the Supervisory Board and the Chair of the Audit Committee met periodically with the head of the Compliance & Integrity department, and the Chair of the Audit Committee regularly met with the Head of the IAD and the external auditor. The Supervisory Board assessed its own performance in 2020 and discussed the results at a plenary meeting without the Governing Board being present. The Board enlisted the assistance of an external expert to help with this assessment. At this meeting, the Supervisory Board also discussed its cooperation with the Governing Board and the latter's performance.

Audit Committee

In the year under review, the Audit Committee consisted of Margot Scheltema, Roger Dassen and Annemieke Nijhof. Margot Scheltema was the chair from 1 January to 30 September, followed by Roger Dassen as of 1 October. Meetings were held in the presence of the Executive Director for Resolution and Internal Operations, the external auditor, the heads of the IAD and Finance & Advice departments, several officers from the relevant areas and in some cases the Chair for Prudential Supervision and the Executive Director of Monetary Affairs. The Audit Committee approved the appointment of a new head of IAD in the year under review.

The Audit Committee extensively discussed the financial statements, the control plan and the external auditor's findings, and advised the Supervisory Board to adopt the 2020 financial statements and to approve the independent public body report for 2020. The Audit Committee and the Supervision Committee discussed the new cost structure for the independent public body tasks at length and expressed support for the needed investments in digitalisation at DNB. The Audit Committee also worked with the Governing Board to identify opportunities to further enhance the organisation's effectiveness. Furthermore, the Audit Committee discussed the 2021 budget and the 2021 independent public body budget at length with the Governing Board. The Audit Committee advised the Supervisory Board to approve both budgets. In 2020, as in previous years, the Audit Committee examined the external auditor's report and management letter, establishing that the Governing Board acted adequately on the findings and recommendations set out in the management letter.

The Audit Committee discusses current affairs relating to DNB's internal operations with the Executive Director for Resolution and Internal Operations at each meeting, with the themes of accommodation, information security, risk management and the outsourcing of ICT services being key priorities for the Audit Committee. It also discusses recent developments in payment systems and statistics, the quarterly reports issued by the Compliance & Integrity Department, and the quarterly financial reports. Throughout 2020 the Audit Committee regularly discussed the progress made on DNB's accommodation programme, specifically emphasising the business case update.
In separate thematic sessions, the Audit Committee focused on ICT services and cyber risks, among other things. In joint meetings with the Supervision Committee, the Audit Committee discussed the new cost structure for 2021-2024 for the independent public body activities. The Audit Committee regularly meets with relevant lines of defence within DNB and with the external auditor without the Governing Board being present.

Remuneration and Appointments Committee

Throughout the year under review, the Remuneration and Appointments Committee consisted of Feike Sijbesma (Chair), Wim Kuijken and Marry de Gaay Fortman. The Remuneration and Appointments Committee devoted attention to the composition of the Governing Board due to Frank Elderson's departure as of 15 December 2020, and began preparing for the nomination of a new Executive Director of Banking Supervision. The Remuneration and Appointments Committee sought someone with an academic profile to join the Supervisory Board, which resulted in the appointment of Mirjam van Praag as of 1 October 2020. In addition, the Remuneration and Appointments Committee continued its preparations for the nomination of an eighth Supervisory Board member, with financial sector expertise. The Committee also considered payment systems expertise in formulating its nomination. The Remuneration and Appointments Committee spoke with the President of DNB about his performance and that of the other Governing Board members, following the Supervisory Board's annual evaluation. A periodic meeting between the Chair of the Supervisory Board and the shareholder is part of the Supervisory Board's role in compliance matters, for instance when assessing the compatibility of secondary positions.

Supervision Committee

The Supervision Committee consisted of Kees Goudswaard (Chair), Margot Scheltema and Marry de Gaay Fortman from 1 January until 30 September. Kees Goudswaard stepped down from the committee as of 1 October, when Margot Scheltema became the chair and Mirjam van Praag joined as a committee member. Annemieke Nijhof also participated in the meetings, which were held in the presence of DNB's two Executive Directors of Supervision and several officers from the relevant areas. The Supervision Committee's agenda is based in part on an annual agenda and in part on current events. The meetings focused on a number of practical cases, current policy issues and gaining a deeper understanding of various supervisory topics. Among other things, the Supervision Committee looked in more detail at integrity supervision, the situation in the life insurance sector, the pilot project for the use of external experts in fit and proper assessments, AFM and DNB enforcement policy, the impact of the pension agreement, communication about supervision and the digitalisation of supervision. As part of the Supervisory Board's monitoring of DNB's policy in respect of its prudential supervision, the Supervision Committee exchanged views with the Governing Board in all meetings about institution-specific supervision cases to which the latter devoted particular attention in that period, to the extent relevant to safeguarding the quality and effectiveness of DNB's supervision policy. The Supervision Committee, like the Audit Committee, advised the Supervisory Board to approve the independent public body report for 2020 and the independent public body budget for 2021. The Supervision Committee discussed the evaluation of specific supervision cases with the Executive Directors of Supervision.

Declaration of Independence

The Regulation on Incompatible Offices and the Regulation on Conflicts of Interest apply to Supervisory Board members without restriction. Supervisory Board members are not employed by DNB and were not a DNB employee at any time in the five years preceding their appointment, nor do they have any relationship with DNB from which they could obtain personal gain. Supervisory Board members receive a fixed annual fee that is not related to DNB's results in any given year. All Supervisory Board members are independent within the meaning of the Dutch Corporate Governance Code. Any potential secondary position is assessed on the basis of the Regulation on Incompatible Offices and submitted to the Compliance & Integrity Department for advice. This procedure was also followed in 2020, for both Supervisory Board members and Governing Board members.

Concluding words

The Supervisory Board reflects on an eventful year in which the coronavirus pandemic took a heavy toll on Dutch society and the economy. The Board notes that over the past year, despite the exceptional circumstances that forced much of the organisation to work from home, DNB maintained its commitment to the performance of its core functions and internal operational management. The Supervisory Board would like to thank DNB's staff and its Governing Board for their contribution to sustainable prosperity in the Netherlands and looks forward to its continued cooperation with the Governing Board in 2021.

Amsterdam, 18 March 2021

The Supervisory Board of
De Nederlandsche Bank N.V.

Wim Kuijken, Chair
Margot Scheltema, Vice-Chair
Annemieke Nijhof, government-appointed member
Feike Sijbesma
Marry de Gaay Fortman
Roger Dassen
Mirjam van Praag

Financial statements

Balance sheet as at 31 December 2020
(before appropriation of profit)

Millions

		31 December 2020	31 December 2019*
	Assets	EUR	EUR
1	Gold and gold receivables	30,401	26,664
2	Claims on non-euro area residents denominated in foreign currency	13,550	13,506
2.1	Receivables from the International Monetary Fund (IMF)	8,852	8,256
2.2	Balances held with banks and investments in securities, external loans and other external assets	4,698	5,250
3	Claims on euro area residents denominated in foreign currency	583	731
4	Claims on non-euro area residents denominated in euro	27	970
5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	141,538	26,791
5.1	Main refinancing operations	0	0
5.2	Longer-term refinancing operations	141,538	26,651
5.3	Fine-tuning reverse operations	0	0
5.4	Structural reverse operations	0	0
5.5	Marginal lending facility	0	140
5.6	Credits related to margin calls	0	0
6	Other claims on euro area credit institutions denominated in euro	0	2
7	Securities of euro area residents denominated in euro	156,272	121,414
7.1	Securities held for monetary policy purposes	154,109	116,125
7.2	Other securities	2,163	5,289
8	Intra-Eurosystem claims	107,495	109,038
8.1	Participating interest in the ECB	551	540
8.2	Claims equivalent to the transfer of foreign reserves to the ECB	2,364	2,357
8.3	Claims related to the issuance of ECB debt certificates	0	0
8.4	Net claims related to the allocation of euro banknotes within the Eurosystem	66,097	59,872
8.5	Other intra-Eurosystem claims (net)	38,483	46,269
9	Other assets	2,189	1,971
9.1	Euro area coins	0	0
9.2	Tangible and intangible fixed assets	152	151
9.3	Other financial assets	181	196
9.4	Off-balance sheet instruments revaluation differences	195	0
9.5	Accruals and prepaid expenses	1,630	1,614
9.6	Other investments	31	10
	Total assets	**452,055**	**301,087**

* The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for further details.

Amsterdam, 18 March 2021
Governing Board of De Nederlandsche Bank N.V.

Klaas Knot, President
Else Bos
Job Swank[1]
Nicole Stolk
Olaf Sleijpen

1 Executive Director Job Swank did not sign the financial statements due to long-term illness.

	Liabilities	31 December 2020 EUR	31 December 2019 EUR
1	Banknotes in circulation	77,342	69,491
2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	258,291	139,756
2.1	Current accounts (covering the minimum reserve system)	252,691	131,213
2.2	Deposit facility	5,600	8,543
2.3	Fixed-term deposits	0	0
2.4	Fine-tuning reverse operations	0	0
2.5	Deposits related to margin calls	0	0
3	Other liabilities to euro area credit institutions denominated in euro	245	0
4	Liabilities to other euro area residents denominated in euro	16,981	5,317
4.1	General government	14,232	3,290
4.2	Other liabilities	2,749	2,027
5	Liabilities to non-euro area residents denominated in euro	51,154	41,922
6	Liabilities to euro area residents denominated in foreign currency	0	0
7	Liabilities to non-euro area residents denominated in foreign currency	0	161
8	Counterpart of special drawing rights allocated by the IMF	5,700	5,968
9	Intra-Eurosystem liabilities	0	0
9.1	Liabilities related to the issuance of ECB debt certificates	0	0
9.2	Other intra-Eurosystem liabilities (net)	0	0
10	Other liabilities	964	882
10.1	Off-balance sheet instruments revaluation differences	0	304
10.2	Accruals and deferred income	770	363
10.3	Sundry	194	215
11	Provisions	2,707	1,834
12	Revaluation accounts	30,173	26,636
13	Capital and reserves	8,483	7,944
13.1	Issued capital	500	500
13.2	General reserve	7,971	7,430
13.3	Statutory reserve	12	14
14	Profit for the year	15	1,176
	Total liabilities	**452,055**	**301,087**

Amsterdam, 18 March 2021
Adopted by the Supervisory Board of De Nederlandsche Bank N.V.

Wim Kuijken, *Chair*
Margot Scheltema, *Vice-Chair*
Feike Sijbesma
Annemieke Nijhof
Marry de Gaay Fortman
Roger Dassen
Mirjam van Praag

Profit and loss account for the year ended 31 December 2020

Millions

		2020	2019
		EUR	EUR
1	Interest income	1,494	1,493
2	Interest expenses	(921)	(331)
	Net interest income	**573**	**1,162**
3	Realised gains/(losses) from financial operations	422	211
4	Write-downs on financial assets and positions	(2)	(3)
5	Transfer to/(from) provision for financial risks	(868)	177
	Net result from financial operations and write-downs	**(448)**	**385**
6	Fees and commissions income	16	13
7	Fees and commissions expense	(11)	(9)
	Net fees and commissions income/(expense)	**5**	**4**
8	Income from equity shares and participating interests	132	112
9	Net result of monetary income pooling	17	(241)
10	Other income	248	187
	Total net income	**527**	**1,609**
11	Staff costs	(246)	(227)
12	Other administrative costs	(174)	(134)
13	Depreciation and amortisation of tangible and intangible fixed assets	(70)	(60)
14	Banknote production costs	(23)	(11)
15	Other costs	0	(1)
16	Capitalised software costs	1	0
17	Corporate income tax	0	0
	Profit for the year	**15**	**1,176**

Amsterdam, 18 March 2021
Governing Board of De Nederlandsche Bank N.V.

Klaas Knot, *President*
Else Bos
Job Swank[2]
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Olaf Sleijpen

Amsterdam, 18 March 2021
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Mirjam van Praag

2 Executive Director Job Swank did not sign the financial statements due to long-term illness.

Notes to the balance sheet as at 31 December 2020 and the profit and loss account for the year 2020

1. Accounting policies

The financial statements are drawn up in accordance with the models and accounting policies applying to the European Central Bank (ECB) and the European System of Central Banks (ESCB) (hereafter: ESCB accounting policies[3]) and the harmonised disclosures to the balance sheet and the profit and loss account. This is possible under the exemption provisions of Section 17 of the Bank Act 1998. Where Section 17 does not provide any exemption or where the ESCB accounting policies or harmonised disclosures do not cover the subject, the financial statements are compiled in accordance with the provisions of Part 9 of Book 2 of the Dutch Civil Code, which have been elaborated in the Dutch Accounting Standards (Richtlijnen voor de Jaarverslaggeving – RJ). In addition, remuneration is disclosed in accordance with the provisions of the Public and Semi-public Sector Executives Remuneration (Standards) Act (Wet bezoldiging topfunctionarissen publieke en semipublieke sector – WNT).

The ESCB accounting policies are broadly in line with the Dutch Generally Accepted Accounting Principles (GAAP). In deviation from Part 9 of Book 2 of the Dutch Civil Code:

a. unrealised gains from assets and liabilities measured at revalued amounts are recognised as set out under 'Revaluation' below;
b. the balance sheet format differs from that set out in the Financial Statements Formats Decree;
c. no cash flow statement is included;
d. a provision for financial risks may be established; and
e. tangible and intangible fixed assets are depreciated and amortised, respectively, over their standard estimated useful lives.

With the exception of accelerated depreciation of tangible fixed assets[4] and the provision for employee benefits[5] all individual items in the balance sheet and the profit and loss account are recognised in accordance with the ESCB accounting policies. The provisions of Part 9 of Book 2 of the Dutch Civil Code are reflected mainly in the general accounting policies and the disclosures relating to the following balance sheet and profit and loss account items:

a. capital and reserves
b. participating interests
c. events after the balance sheet date
d. off-balance sheet rights and liabilities
e. revaluation accounts
f. realised gains/(losses) from financial operations
g. number of employees
h. fees paid to the external auditor
i. remuneration (also in accordance with the WNT)

3 ECB/2016/34 as amended by ECB/2019/34.
4 See pages 122 and 147 for further details of the accelerated depreciation.
5 See pages 124 and 155 for further details of DNB's provision for employee benefits.

Restatement of comparative figures

The presentation of figures on the assets side of the balance sheet has changed. From the 2020 financial year onwards, depending on their currency and country of issue, positions in equity and bond funds are recognised under asset items 2.2 'Balances held with banks and investments in securities, external loans and other external assets', 3 'Claims on euro area residents in foreign currency', 4 'Claims on non-euro area residents in euro' or 7.2 'Other securities'. As at 31 December 2019 they were recognised under 9.3 'Other financial assets'. The change in presentation does not affect DNB's net profit or financial position.

Comparative figures have been restated as follows to facilitate comparison:

Millions

	Amounts presented in 2019	Adjustment owing to reclassification	Adjusted amounts for 2019
	EUR	EUR	EUR
Asset item 2.2 Balances held with banks and investments in securities, external loans and other external assets			
Equities and equity funds	-	1,477	1,477
Asset item 7.2 Other securities			
High-yield bond funds	-	703	703
Investment-grade bond funds	-	546	546
Asset item 9.3 Other financial assets			
Equities and equity funds	1,480	(1,477)	3
High-yield bond funds	703	(703)	-
Investment-grade bond funds	546	(546)	-

Securities held for monetary policy purposes

Securities held for monetary policy purposes are valued at amortised cost, subject to impairment. See the breakdown in the note to asset item 7.1 'Securities held for monetary policy purposes' on page 136 for further details.

Securities not held for monetary policy purposes and investment funds

Marketable securities held for other than monetary policy purposes are valued at the mid-market prices[6] prevailing on the next-to-last trading day of the year. Options embedded in securities are not separated for valuation purposes.

Marketable investment funds and portfolios that are externally managed and strictly replicate the performance of an index-linked fund are valued at market prices (net asset value). Valuation is on a net – fund – basis and not on the basis of the underlying assets, provided that the investments meet certain predetermined criteria, broadly speaking in relation to the level of influence of DNB on the day-to-day operations of the fund, the legal status of the fund and the way the investment is evaluated. There is no netting between the revaluation results of different marketable investment funds.

Revaluation

Revaluation differences arising from price differences in respect of securities not held for monetary policy purposes are determined on a code-by-code[7] basis. Revaluation arising from exchange rate differences is determined on a currency portfolio basis and subsequently on a currency basis. Unrealised revaluation gains are added to the item 'Revaluation accounts'. Unrealised revaluation losses are charged to the 'Revaluation accounts' item to the extent that the balance of the relevant revaluation account is positive. Any shortfall is taken to the profit and loss account at year-end. Price revaluation losses on a security are not netted against price revaluation gains on another security or exchange rate revaluation gains. Exchange rate revaluation losses on any one currency are not netted against exchange rate revaluation gains on any other currency or against price revaluation gains. For gold and gold receivables, no distinction is made between price revaluation and exchange rate revaluation.

Gold and gold receivables

Gold and gold receivables are valued at the year-end ECB market price and revalued as set out under 'Revaluation'.

Conversion of foreign currencies

The financial statements are presented in euro (EUR), which is DNB's functional and presentation currency. On- and off-balance sheet rights and liabilities denominated in foreign currency are converted into euro at the year-end ECB market exchange rate and revalued as set out under 'Revaluation'. Income and expense denominated in foreign currency are converted at the ECB market exchange rates prevailing at the transaction dates.

6 The ESCB accounting policies define the mid-market price as the mid-point between the bid price and the offer price for a security.
7 The ESCB accounting policies define code as International Securities Identification Number/type.

Repurchase and reverse repurchase transactions

A repurchase transaction (repo) is a spot sale of securities hedged by a forward purchase of the same securities. The receipts from the spot sale are presented in the balance sheet as a deposit. In the light of the forward purchase, the securities continue to be recognised as assets. Hence, the amount involved in the forward purchase is disclosed in the balance sheet under liabilities. A reverse repurchase transaction (reverse repo) is regarded as lending. The securities received as collateral are not recognised in the balance sheet and do not, therefore, affect the balance sheet position of the portfolios concerned.

Other financial instruments

Other financial instruments include foreign exchange forwards and foreign exchange swaps, as well as interest rate swaps and futures. On initial recognition, foreign exchange forwards and foreign exchange swaps are valued at their spot rates. Subsequent differences between spot and forward rates are amortised and taken to the profit and loss account. This allows their value to evolve towards the forward rate over time. Interest rate swaps are valued at market rates. Futures are settled on a day-to-day basis. Currency positions are included in the revaluation accounts and revalued as set out under 'Revaluation'.

Intra-ESCB and intra-Eurosystem claims and liabilities

Intra-ESCB balances are the result of cross-border payments within the European Union (EU) settled in euro by the central banks. Such transactions are for the most part initiated by private institutions. Most are settled within TARGET2[8] and give rise to bilateral balances in the TARGET2 accounts held by the EU central banks. On a daily basis, such bilateral balances are netted and assigned to the ECB, leaving every national central bank (NCB) with a single net bilateral balance vis-à-vis the ECB. DNB's position vis-à-vis the ECB arising from TARGET2 transactions is presented, together with other euro-denominated positions within the ESCB (such as interim income distributions to the NCBs and monetary income results), as a net asset or liability item under 'Other intra-Eurosystem claims/liabilities (net)' on the NCB's balance sheet. Positions held within the ESCB vis-à-vis NCBs outside the euro area arising from TARGET2 transactions are reported in 'Claims on/liabilities to non-euro area residents denominated in euro'.

8 TARGET2 stands for Trans-European Automated Real-Time Gross Settlement Express Transfer system 2.

Intra-Eurosystem positions arising from DNB's participating interest in the ECB are reported under 'Participating interest in the ECB'. This item comprises (i) DNB's paid-up share in the ECB's subscribed capital and (ii) net amounts paid due to increases in DNB's share in the ECB's accumulated equity value[9] resulting from previous capital key adjustments.

Intra-Eurosystem positions arising from the transfer of foreign reserve assets to the ECB by NCBs at the time of joining the Eurosystem are reported in 'Claims equivalent to the transfer of foreign reserves to the ECB'.

Intra-ESCB balances arising from the allocation of euro banknotes within the Eurosystem are included as a single net asset or liability item under 'Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem'. See below under 'Banknotes in circulation' for further details.

Participating interests

Participating interests are valued at cost, subject to impairment. Income from participating interests is included in the profit and loss account under 'Income from equity shares and participating interests'.

The participating interest in the ECB is accounted for in accordance with the principles set out under 'Intra-ESCB and intra-Eurosystem claims and liabilities'.

Tangible and intangible fixed assets

Tangible and intangible fixed assets are valued at cost less depreciation or amortisation, subject to impairment. For intangible assets, in addition to the primary acquisition cost and the costs of external advisers relating to these assets, the in-house hours spent on these assets are also capitalised. For software developed in-house under 'Intangible fixed assets', a statutory reserve has been formed. Depreciation and amortisation are calculated on a straight-line basis from the moment the asset is put into use. The standard useful life of buildings and renovations is 25 years, that of equipment, plant and furniture 10 years and that of computer hardware, software, motor vehicles and intangible assets 4 years. Accelerated depreciation or amortisation is applied if a shorter useful life is likely. Land is not depreciated. Retired tangible fixed assets are valued at the lower of book value and expected realisable value.

9 Equity value means the total of the ECB's reserves, revaluation accounts and provisions equivalent to reserves, minus any loss carried forward from previous periods. In the event of capital key adjustments taking place during the financial year, the equity value also includes the ECB's accumulated net profit or net loss until the date of the adjustment.

Other assets (excluding tangible and intangible fixed assets) and accruals and income collected in advance

'Other assets' (excluding tangible and intangible fixed assets) and 'Accruals and income collected in advance' are valued at cost or nominal value, subject to impairment. Transactions in 'Other assets' and 'Accruals and income collected in advance' are recognised in the financial statements as at the settlement date, with the exception of foreign exchange transactions and related accruals, which are reported as at the trade date, in accordance with the economic approach.

Banknotes in circulation

The ECB and the euro area NCBs, which together comprise the Eurosystem, issue euro banknotes[10]. The shares in the total value of the euro banknote circulation is allocated to the Eurosystem central banks on the last working day of each month, in accordance with the banknote allocation key[11].

The ECB has been allocated a share of 8% of the total value of euro banknotes in circulation, whereas the remaining 92% has been allocated to NCBs in proportion to their weightings in the Eurosystem capital key. The value of the share of banknotes in circulation allocated to each NCB is accounted for on the liabilities side of the balance sheet under 'Banknotes in circulation'. The difference between the value of the euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of the euro banknotes actually circulated by the relevant NCB gives rise to intra-Eurosystem positions. These claims or liabilities are presented under 'Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem'.

From the cash changeover year[12] until five years following the cash changeover year the intra-Eurosystem balances arising from the allocation of euro banknotes are adjusted in order to avoid significant changes in NCBs' relative income positions as compared to previous years. The adjustments are effected by taking into account the differences between the average value of banknotes put into circulation by each NCB in the reference period[13] and the average value of banknotes that would have been allocated to them during that period under the Eurosystem capital allocation key. The adjustments will be reduced in annual stages until the first day of the sixth year after the cash changeover year, when income on banknotes will be allocated fully in proportion to the NCBs' paid-up shares in the ECB's capital. In the year under review, an adjustment resulted from the accession of Lietuvos bankas in 2015, which terminated on 31 December 2020.

The interest income and expense on these balances is disclosed in the profit and loss account[14].

10 Decision of the ECB of 13 December 2010 on the issue of euro banknotes (recast) (ECB/2010/29), OJ L 35 of 9.2.2011, p. 26.
11 Banknote allocation key means the percentages that result from taking into account the ECB's share in the total euro banknote issue and applying the subscribed capital key to the NCBs' share in such total.
12 Cash changeover year refers to the year in which the euro banknotes are introduced as legal tender in the respective Member State.
13 The reference period refers to the 24 months which start 30 months before the day on which euro banknotes become legal tender in the respective Member State.
14 ECB Decision of 3 November 2016 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (recast) (ECB/2016/36, OJ L 347 of 20 December 2015, pp. 26-36.

Provision for financial risks
A provision for financial risks may be established pursuant to Article 8 of the accounting policies that apply to the ECB and the ESCB. DNB has established a provision for financial risks to cover its exposure to transitory and volatile risks whose magnitude it has established on the basis of a reasoned estimate[15]. It has formed the current provision for financial risks with an eye to risks pertaining to the asset purchase programme (APP[16]) and the pandemic emergency purchase programme (PEPP[17]). It is comprised of credit risk on the monetary asset purchases under the programmes (excluding exposures to the Dutch government) and interest rate risk.

Pension and other retirement schemes
The pension entitlements of staff as well as of others having comparable entitlements have been transferred to Stichting Pensioenfonds van De Nederlandsche Bank N.V. (Pensioenfonds DNB). Through an agreement, DNB has undertaken to pay to the DNB Pension Fund, subject to conditions agreed for the purpose, such amounts as to ensure the pensions under the Pension Fund's pension schemes. In the agreement, the financial methodology is set out in a premium, supplement and risk policy ladder; in the target assets, allowance is made for the indexation ambition. The level of the amounts payable by DNB and the liabilities reported in the financial statements in respect of other retirement schemes are calculated on an actuarial basis.

Other balance sheet items
Other balance sheet items are valued at nominal value, subject to impairment.

ECB profit distribution
After adoption by the ECB's Governing Council, the ECB's profit is distributed to the NCBs of the Eurosystem in proportion to their weightings in the Eurosystem capital key. The amount distributed to DNB is disclosed in the profit and loss account under 'Income from equity shares and participating interests'.

An amount equal to the ECB's income arising from the 8% share of euro banknotes in circulation allocated to the ECB, as well as the income arising from securities purchased through a) the securities markets programme (SMP), b) the third covered bond purchase programme (CBPP3), c) the asset-backed securities purchase programme (ABSPP), d) the public sector purchase programme (PSPP) and e) the pandemic emergency purchase programme (PEPP), is distributed in January of the following year by means of an interim profit distribution, unless otherwise decided by the Governing Council.[18] It is distributed in full unless it is higher than the ECB's profit for the

15 DNB has documented its policy on the formation and use of the provision in the capital policy agreed with the shareholder. See section 4.4 of the Accountability chapter of this Annual Report for further details.
16 The APP comprises the covered bond purchase programme 3 (CBPP3), the asset-backed securities purchase programme (ABSPP), the public sector purchase programme (PSPP) and the corporate sector purchase programme (CSPP).
17 The PEPP comprises covered bonds (PEPP-COV), asset-backed securities (PEPP-ABS), government securities (PEPP-GOV), supranational securities (PEPP-SUPRA) and corporate sector securities (PEPP-CORP).
18 Decision ECB/2014/57 of 15 December 2014 on the interim distribution of the income of the European Central Bank (recast), OJ L 53, 25.2.2015, p.24, as amended.

financial year, and subject to any decisions by the Governing Council to make transfers to the provision for financial risks. The income arising from the 8% share of the income on euro banknotes in circulation can also be reduced by the amount of the costs incurred by the ECB in connection with the issue and handling of euro banknotes. The final distribution for 2020 will take place a month later and accrue to the next financial year in accordance with the prescribed accounting policy.

Recognition of income and expense

Income and expense are allocated to the financial year to which they relate. Realised gains and losses on investments are determined according to the average cost method and recognised in the profit and loss account. Unrealised gains are not recognised as income, but recorded directly in the revaluation accounts. Unrealised losses are taken to the profit and loss account if they exceed previous revaluation gains registered in the corresponding revaluation account. They are not reversed in subsequent years against new unrealised gains. Unrealised revaluation losses are taken to the profit and loss account.

Significant accounting estimates and judgements

The preparation of the financial statements requires management to make significant estimates and judgements that affect the reported amounts. These include estimates of useful lives of tangible fixed assets not depreciated in accordance with ESCB accounting policies, and assessments as to whether provisions must be established, with the exception of the provision for financial risks.
The estimate of the risk to which DNB is exposed is relevant to determining the amount added to or released from the provision for financial risks.

2. Notes to the balance sheet

Assets

1. Gold and gold receivables

In the year under review, the volume of the gold holdings did not change. The gold holdings on the last business day of the financial year consisted of 19.7 million fine troy ounces (or 612 tonnes) of gold. The market value as at 31 December 2020 stood at EUR 1,543.88 (31 December 2019: EUR 1,354.10) per fine troy ounce. The euro value of this item was higher at year-end 2020 compared with year-end 2019 due to an increase in the market price of gold.

Millions

	EUR
Balance as at 31 December 2018	22,073
Revaluation 2019	4,591
Balance as at 31 December 2019	26,664
Revaluation 2020	3,737
Balance as at 31 December 2020	**30,401**

2. Claims on non-euro area residents denominated in foreign currency

As at 31 December 2020, this item stood at EUR 13,550 million (31 December 2019: EUR 13,506 million) and can be broken down as follows:

- 2.1 Receivables from the International Monetary Fund (IMF)

Receivables from the IMF totalled EUR 8,852 million (31 December 2019: EUR 8,256 million). The SDR[19]/EUR exchange rate as at 31 December 2020 stood at EUR 1.1786 (31 December 2019: SDR/EUR 1.2339).

19 The value of the SDR is based on a basket of international currencies: the euro, the US dollar, the Chinese yuan, the Japanese yen and the pound sterling.

The receivables from the IMF are funded and held by DNB for the IMF membership of the Dutch State. The Dutch State has extended a credit guarantee up to the sum of the commitments as well as for the changes effective 1 January 2021 set out below.

Millions

	31 December 2020		31 December 2019	
	SDR	EUR	SDR	EUR
Reserve tranche position	1,836	2,163	1,309	1,615
Loans	768	905	451	556
Special drawing rights	4,907	5,784	4,931	6,085
Total	**7,511**	**8,852**	**6,691**	**8,256**

Reserve tranche position

The reserve tranche position stood at EUR 2,163 million as at 31 December 2020 (31 December 2019: EUR 1,615 million), and it is part of the national IMF quota. All IMF member states have made quotas available to the IMF. Their amounts are related to the member states' relative positions in the global economy. The Dutch quota amounts to SDR 8,737 million. The reserve tranche position (SDR 1,836 million) is the share in this quota effectively drawn by the IMF. The remaining amount – the IMF's euro holdings (SDR 6,901 million) – is kept by DNB.

Loans

Loans stood at EUR 905 million as at 31 December 2020 (31 December 2019: EUR 556 million).

Millions

	Total facility		End of	31 December 2020		31 December 2019	
	SDR	EUR	drawing period*	SDR	EUR	SDR	EUR
PRGT	1,499	1,767	31-12-2029	548	646	214	264
NAB	4,595	5,416	17-11-2022	219	259	237	292
Total				**767**	**905**	**451**	**556**

* The drawing period is the period during which loans can be taken out.

 They can be broken down as follows:

Millions

	Residual maturity* 31 December 2020				Residual maturity* 31 December 2019			
	Total	< 1 year	1 - 2 years	> 2 years	Total	< 1 year	1 - 2 years	> 2 years
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
PRGT	**646**	4	2	640	**264**	8	4	252
NAB**	**259**	-	-	259	**292**	-	-	292
Total	**905**	**4**	**2**	**899**	**556**	**8**	**4**	**544**

* The residual maturity is the period between the balance sheet date and the expiration date.
** NAB loans have 10-year terms from the time of granting. Loans were partly redeemed early in 2020.

The Poverty Reduction and Growth Trust (PRGT) is a fund set up to supply the principal amounts of subsidised low-interest loans to the poorest developing countries. Lending under this fund was increased in response to the coronavirus crisis.

The New Arrangement to Borrow (NAB) is a credit line which DNB has made available to the IMF. The IMF can use this credit line for its regular operations in addition to the quota. The NAB facility was doubled to SDR 9,190 million and its drawing period extended to 31 December 2025 effective 1 January 2021.

In addition, a new bilateral agreement with the IMF (2020 credit line) of EUR 5,863 million took effect on 1 January 2021. The drawing period ends on 31 December 2023. The credit line is an additional facility made available to the IMF, which it can draw on if resources from the quota and the NAB are insufficient. It replaces the 2016 credit line, which expired on 31 December 2020.

Special drawing rights

As at 31 December 2020, DNB's special drawing rights amounted to EUR 5,784 million (31 December 2019: EUR 6,085 million). They represent the right to exchange SDR holdings to obtain other currencies.

Special drawing rights were created against the liability item 'Counterpart of special drawing rights allocated by the IMF'. At 31 December 2020, these stood at EUR 5,700 million (31 December 2019: EUR 5,968 million).

- 2.2 Balances with banks and security investments, external loans and other external assets

As at 31 December 2020, this item stood at EUR 4,698 million (31 December 2019: EUR 5,250 million).

The breakdown of this item by currency is as follows:

Millions

	31 December 2020			31 December 2019*		
	Foreign currency	EUR	Exchange rate	Foreign currency	EUR	Exchange rate
USD	4,251	3,464	1.2271	4,254	3,787	1.1234
JPY	156,032	1,234	126.49	169,080	1,386	121.94
DKK	0	0	7.4409	571	76	7.4715
Other currencies		0			1	
Total		**4,698**			**5,250**	

* The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for more information.

The table below provides a breakdown of these foreign currency balances by investment category.

Millions

	31 December 2020	31 December 2019*
	EUR	EUR
Fixed-income securities	3,577	3,043
Equity funds	970	1,477
Reverse repos	149	727
Nostro accounts	2	3
Total	**4,698**	**5,250**

* The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for more information.

Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion of the movements in own investments at a portfolio level.

The table below provides a breakdown of investment categories by residual maturity.

Millions

	Residual maturity* 31 December 2020					Residual maturity* 31 December 2019				
	Total	No maturity	< 1 year	1 - 2 years	> 2 years	Total	No maturity	< 1 year	1 - 2 years	> 2 years
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Fixed-income securities	**3,577**	-	2,537	504	536	**3,043**	-	2,156	436	451
Equity funds	**970**	970	-	-	-	**1,477**	1,477	-	-	-
Reverse repos	**149**	-	149	-	-	**727**	-	727	-	-
Nostro accounts	**2**	2	-	-	-	**3**	3	-	-	-
Total	**4,698**	**972**	**2,686**	**504**	**536**	**5,250**	**1,480**	**2,883**	**436**	**451**

* The residual maturity is the period between the balance sheet date and the expiration date.

** The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for more information.

3. Claims on euro area residents denominated in foreign currency

As at 31 December 2020, this item stood at EUR 583 million (31 December 2019: EUR 731 million).

The table below provides a breakdown of this item by currency.

Millions

	31 December 2020			31 December 2019		
	Foreign currency	EUR	Exchange rate	Foreign currency	EUR	Exchange rate
USD	716	583	1.2271	821	731	1.1234
Other currencies		0			0	
Total		**583**			**731**	

The table below specifies these foreign currency balances by investment category.

Millions

	31 December 2020	31 December 2019
	EUR	EUR
Fixed-income securities	420	706
USD tender	162	22
Nostro accounts	1	3
Total	**583**	**731**

Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion of the movements in own investments at a portfolio level.

The table below provides a breakdown of investment categories by residual maturity.

Millions

	Residual maturity* 31 December 2020					Residual maturity* 31 December 2019				
	Total	No maturity	< 1 year	1 - 2 years	> 2 years	Total	No maturity	< 1 year	1 - 2 years	> 2 years
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Fixed-income securities	**420**	-	237	59	124	**706**	-	613	93	-
USD tender	**162**	-	162	-	-	**22**	-	22	-	-
Nostro accounts	**1**	1	-	-	-	**3**	3	-	-	-
Total	**583**	**1**	**399**	**59**	**124**	**731**	**3**	**635**	**93**	**-**

* The residual maturity is the period between the balance sheet date and the expiration date.

The USD tender comprises claims arising from reverse operations on Eurosystem counterparties of EUR 162 million (2019: EUR 22 million). They are related to the short-term liquidity-providing operation in US dollars, under which the Federal Reserve makes US dollars available to the ECB, aiming to provide short-term liquidity in US dollars to Eurosystem counterparties. At the same time, the ECB enters into swap operations with euro area NCBs, including DNB, which use the available funds to enter into liquidity-providing swap operations with Eurosystem counterparties. The swap operations between the ECB and NCBs give rise to claims and liabilities within the Eurosystem, which are recognised under asset item 8.5 'Other intra-Eurosystem claims (net)'.

4. Claims on non-euro area residents denominated in euro

As at 31 December 2020, this item stood at EUR 27 million (31 December 2019: EUR 970 million). These claims can be broken down as follows:

Millions

	31 December 2020	31 December 2019
	EUR	EUR
Fixed-income securities	-	895
Nostro accounts	27	75
Total	**27**	**970**

DNB reduced its portfolio of euro-denominated fixed-income securities to nil in 2020. This is also apparent from asset item 7.2 'Other securities'.

Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion of the movements in own investments at a portfolio level.

The table below provides a breakdown of investment categories by residual maturity.

Millions

	Residual maturity* 31 December 2020					Residual maturity* 31 December 2019				
	Total	No maturity	< 1 year	1 - 2 years	> 2 years	Total	No maturity	< 1 year	1 - 2 years	> 2 years
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Fixed-income securities	**-**	-	-	-	-	**895**	-	586	38	271
Nostro accounts	**27**	27	-	-	-	**75**	75	-	-	-
Total	**27**	**27**	**-**	**-**	**-**	**970**	**75**	**586**	**38**	**271**

* The residual maturity is the period between the balance sheet date and the expiration date.

5. Lending to euro area credit institutions related to monetary policy operations denominated in euro

As at 31 December 2020, the Eurosystem's claim arising from the item 'Lending to euro area credit institutions related to monetary policy operations denominated in euro' totalled EUR 1,793,194 million (31 December 2019: EUR 624,232 million). Of this total, lending by DNB to Dutch-based credit institutions amounted to EUR 141,538 million (31 December 2019: EUR 26,791 million). In accordance with Article 32.4 of the ESCB and ECB Statute, all risks relating to such lending will, if materialised, following a decision by the ECB's Governing Council, be borne in full by the Eurosystem NCBs in proportion to the Eurosystem capital key in force at the time when the loss is suffered. To have access to this facility, a financial institution must meet the requirements laid down by the ECB, including the collateral eligibility criteria. Losses occur only if the counterparty defaults on the repayment and, in addition, the sale of the collateral fails to cover the debt.

The main refinancing rate stood at 0.00% throughout 2020 (unchanged from 2019). The deposit rate stood at -0.50% throughout 2020 (-0.40% from 1 January to 17 September 2019, -0.50% from 18 September to 31 December 2019).

This item can be broken down as follows:

Millions

	31 December 2020	31 December 2019
	EUR	EUR
Main refinancing operations	-	-
Longer-term refinancing operations	141,538	26,651
Fine-tuning reverse operations	-	-
Structural reverse operations	-	-
Marginal lending facility	-	140
Credits related to margin calls	-	-
Total	**141,538**	**26,791**

- 5.1 Main refinancing operations

No credit is outstanding under main refinancing operations as at 31 December 2020 (31 December 2019: nil). They are conducted as standard tenders on a weekly basis, usually with a maturity of one week. The main refinancing operations are conducted as fixed-rate tenders with full allotment of all bids.

- 5.2 Longer-term refinancing operations

Longer-term refinancing operations, amounting to EUR 141,538 million as at 31 December 2020 (31 December 2019: EUR 26,651 million), provide longer-term liquidity. These operations have maturities equal to the minimum reserve maintenance period[20] or maturities between 3 and 48 months. TLTRO II loans stood at EUR 448 million as at 31 December 2020 (31 December 2019: EUR 26,624 million), while TLTRO III loans stood at EUR 140,535 million (31 December 2019: EUR 27 million). Also, PELTRO loans stood at EUR 450 million (31 December 2019: nil), and LTRO loans stood at EUR 105 million (31 December 2019: nil).

Four targeted longer-term refinancing operations (TLTRO II) started from 2016 onwards. These operations have a four-year maturity, with a possibility of early repayment after two years. In 2020, repayments of TLTRO II loans totalled EUR 26,176 million (2019: EUR 1,117 million).

Additionally, in 2019 the ECB's Governing Council introduced the first of an initial series of seven[21] quarterly targeted longer-term refinancing operations (TLTRO III). These operations have a three-year maturity, with a possibility of early repayment after two years. Early repayment after one year will be possible from September 2021 onwards. The Governing Council of the ECB had initially decided that the final interest rate applicable to each TLTRO III operation would be as low as the average interest rate on the deposit facility prevailing over the life of the operation. In response to the COVID-19 shock, the ECB's Governing Council decided in 2020[22] that the interest rate applied from 24 June 2020 to 23 June 2021 (the special interest rate period) could be up to 50 basis points below the average interest rate on the deposit facility prevailing over the same period, but in any case may not become less negative than -1%. Given that the actual interest rate will only be known on each loan's maturity date and that a reliable estimate is not possible until that time, a rate of -1% is used for calculating the interest expenses for the special interest period, as this was deemed a prudent approach. Following the special interest period, interest expenses will be based on the deposit facility rate for the residual maturity.

On 30 April 2020, the Governing Council of the ECB also decided to conduct a new series of seven additional longer-term refinancing operations, called pandemic emergency longer-term refinancing operations (PELTROs) maturing in the third quarter of 2021. The PELTRO loans will provide liquidity support to the euro area financial system and contribute to preserving the smooth functioning of

20 An indicative calendar of reserve maintenance periods can be found on the ECB website.
21 On 10 December 2020 the Governing Council of the ECB announced that three additional operations would be conducted under the TLTRO III series between June and December 2021.
22 On 30 April 2020, the Governing Council of the ECB decided that the special interest rate period would be from 24 June 2020 to 23 June 2021. It subsequently decided, on 10 December 2020, that this period would be extended by twelve months to 23 June 2022.

money markets. The PELTROs are conducted as fixed rate tender procedures with full allotment. The interest rate will be 25 basis points below the average rate applied in the Eurosystem's main refinancing operations over the life of the respective PELTRO[23].

- 5.3 Fine-tuning reverse operations

Fine-tuning reverse operations aim to regulate the market liquidity situation and steer interest rates, particularly to smooth the effects on interest rates caused by unexpected market fluctuations. Owing to their nature, they are conducted on an ad-hoc basis. As in 2019, they were not conducted in 2020.

- 5.4 Structural reverse operations

These are reverse open-market transactions through standard tenders to enable the Eurosystem to adjust its structural liquidity position vis-à-vis the financial sector. As in 2019, they were not conducted in 2020.

- 5.5 Marginal lending facility

Marginal lending facilities may be used by counterparties to obtain deposits from NCBs at a pre-specified deposit interest rate against eligible assets until the morning of the next business day. As at 31 December 2020, this item stood at nil (31 December 2019: EUR 140 million).

- 5.6 Credits related to margin calls

These are credits to counterparties in case the collateral provided exceeds a predetermined limit, resulting in excess collateral relative to the outstanding monetary policy operations. In 2020, as in 2019, no credits related to margin calls were extended.

6. Other claims on euro area credit institutions denominated in euro

As at 31 December 2020, this item stood at nil (31 December 2019: EUR 2 million).

7. Securities of euro area residents denominated in euro

As at 31 December 2020, this item stood at EUR 156,272 million (31 December 2019: EUR 121,414 million), consisting of 'Securities held for monetary policy purposes' and 'Other securities'.

23 On 10 December 2020 the Governing Council of the ECB decided to offer four additional PELTROs during 2021. In 2020, it has initially decided to conduct a series of seven.

- 7.1 Securities held for monetary policy purposes

As at 31 December 2020, this item consists of securities acquired by DNB within the scope of the second and third covered bond purchase programmes (CBPP), the securities markets programme (SMP), the public sector purchase programme (PSPP) and the pandemic emergency purchase programme (PEPP).

	Start date	Active/inactive	Decision	Eligible securities*
Terminated programmes				
Covered bond purchase programme	July 2009	inactive since June 2010	ECB/2009/16	Covered bonds issued by euro area residents
Covered bond purchase programme 2	November 2011	inactive since October 2012	ECB/2011/17	Covered bonds issued by euro area residents
Securities markets programme	May 2010	inactive since September 2012	ECB/2010/5	Private-sector and public-sector securities issued in the euro area
Asset purchase programme (APP)				
Covered bond purchase programme 3	October 2014	active	ECB/2020/8 (recast)	Covered bonds issued by euro area residents
Asset-backed securities purchase programme**	November 2014	active	ECB/2014/45 (amended)	Senior and guaranteed mezzanine tranches of asset-backed securities issued by euro area residents
Public sector purchase programme	March 2015	active	ECB/2020/9 (recast)	Bonds issued by euro area central, regional or local governments and recognised agencies, international organisations and multilateral development banks
Corporate sector purchase programme**	June 2016	active	ECB/2020/9 (amended)	Bonds issued by non-bank institutions located in the euro area
Pandemic emergency purchase programme (PEPP)				
Pandemic emergency purchase programme	March 2020	active	ECB/2020/17	All asset categories eligible under the APP***

* Further eligibility criteria for specific programmes are set out in the Governing Council's decisions.
** DNB makes no purchases under the ABSPP or the CSPP.
*** Including securities issued by the Greek government.

In 2020 the Eurosystem continued its net purchases of securities under the asset purchase programme (APP)[24] at a monthly pace of EUR 20 billion on average. The Governing Council of the ECB decided in March 2020 to effect additional net APP purchases to the amount of EUR 120 billion until 31 December 2020. The Governing Council expects net purchases to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it begins to raise the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

In addition, in March 2020 the Eurosystem introduced the temporary pandemic emergency purchase programme (PEPP) with an initial envelope of EUR 750 billion. The programme's aims are to loosen monetary policy and counter the serious risks to the monetary policy transmission mechanism and the outlook for the euro area posed by the coronavirus (COVID-19) outbreak. All asset categories eligible under the APP are also eligible under the PEPP, and purchases were initially foreseen until 31 December 2020. In June 2020, the Governing Council of the ECB increased the envelope for the PEPP by 600 billion. The Governing Council subsequently decided in December 2020 to increase the envelope to a total of EUR 1,850 billion. It also extended the horizon for net purchases under the PEPP to at least the end of March 2022. In any case, the Governing Council will conduct net purchases until it judges that the coronavirus crisis phase is over. The Governing Council also decided to extend the reinvestment of principal payments from maturing securities purchased under the PEPP until at least the end of 2023. The future roll-off of the PEPP portfolio will be managed to avoid interference with the appropriate monetary policy stance.

As at 31 December 2020, the amounts held by the Eurosystem NCBs under these programmes totalled EUR 3,694,642 million (31 December 2019: EUR 2,632,056 million). Of this amount, DNB held EUR 154,109 million (31 December 2019: EUR 116,125 million).

24 The APP consists of the third covered bond purchase programme (CBPP3), the ABSPP, the PSPP and the corporate sector purchase programme (CSPP). See the ECB's website for further details.

 The amortised cost and market value[25] of the fixed-income securities held by DNB are as follows:

Millions

	31 December 2020		31 December 2019	
	Amortised cost	Market value	Amortised cost	Market value
	EUR	EUR	EUR	EUR
Terminated programmes				
Covered bond purchase programme	-	-	55	56
Covered bond purchase programme 2	40	42	46	49
Securities markets programme	1,436	1,534	2,417	2,617
Asset purchase programme (APP)				
Covered bond purchase programme 3	20,451	21,873	16,781	17,627
Public sector purchase programme	97,640	105,034	96,826	101,294
Pandemic emergency purchase programme (PEPP)				
Pandemic emergency purchase programme - covered bonds	114	117	-	-
Pandemic emergency purchase programme - government securities	34,428	34,599	-	-
Total	**154,109**	**163,199**	**116,125**	**121,643**

25 Market values are indicative and are derived on the basis of market quotes. When market quotes are not available, market prices are estimated using internal Eurosystem models. Market values are not presented in the balance sheet or in the profit and loss account, but are provided here for comparative purposes only.

The table below provides a breakdown of the maturities of the fixed-income securities.

Millions

	Residual maturity* 31 December 2020						Residual maturity* 31 December 2019					
	Total	< 1 year	1 - 2 years	2 - 5 years	5 - 10 years	> 10 years	Total	< 1 year	1 - 2 years	2 - 5 years	5 - 10 years	> 10 years
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Terminated programmes												
Covered bond purchase programme	**-**	-	-	-	-	-	**55**	55	-	-	-	-
Covered bond purchase programme 2	**40**	-	40	-	-	-	**46**	6	-	40	-	-
Securities markets programme	**1,436**	988	246	198	4	-	**2,417**	993	982	324	118	-
Asset purchase programme (APP)												
Covered bond purchase programme 3	**20,451**	1,184	1,911	3,453	6,064	7,839	**16,781**	1,824	1,200	4,369	4,286	5,102
Public sector purchase programme	**97,640**	5,670	10,645	26,147	27,635	27,543	**96,826**	9,989	5,843	32,001	25,785	23,208
Pandemic emergency purchase programme (PEPP)												
Pandemic emergency purchase programme - covered bonds	**114**	-	31	-	41	42	**-**	-	-	-	-	-
Pandemic emergency purchase programme - government securities	**34,428**	14,939	1,247	4,920	10,789	2,533	**-**	-	-	-	-	-
Total	**154,109**	**22,781**	**14,120**	**34,718**	**44,533**	**37,957**	**116,125**	**12,867**	**8,025**	**36,734**	**30,189**	**28,310**

* The residual maturity is the period between the balance sheet date and the expiration date.

The Governing Council of the ECB and the Governing Board of DNB assess on a regular basis the financial risks associated with the securities held under these programmes.

Impairment tests are conducted by the Eurosystem on an annual basis, using data as at the year-end. In these tests, impairment indicators are assessed separately for each programme. DNB's policy is in accordance with the decision by the ECB Governing Council. The annual impairment test conducted as at 31 December 2020 has led the ECB Governing Council to expect that all future cash flows from the securities held under these programmes will be received.

 In accordance with the decision of the Governing Council taken under Article 32.4 of the ESCB and ECB Statute, losses from these programmes[26], if they were to materialise, are shared in full by the Eurosystem NCBs, in proportion to the prevailing ECB capital key shares.

Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion of the various risks to which the monetary programmes are exposed.

- 7.2 Other securities

As at 31 December 2020, this item stood at EUR 2,163 million (31 December 2019: EUR 5,289 million). It consists of equity and bond funds valued at market value. DNB reduced its portfolio of euro-denominated fixed-income securities to nil in 2020. This is also apparent from asset item 4 'Claims on non-euro area residents denominated in euro'.

The table below specifies other securities by investment category.

	31 December 2020	31 December 2019*
	EUR	EUR
Fixed-income securities	-	4,040
Equity funds	957	-
High-yield bond funds	619	703
Investment-grade bond funds	587	546
Total	**2,163**	**5,289**

* The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for more information.

26 Excluding financial losses from PSPP-GOV and PEPP-GOV, which are not shared by all Eurosystem NCBs. The ABSPP is on the ECB's balance sheet and is primarily at the ECB's risk. Any losses are charged to the NCBs through the ECB's interim profit distribution.

The table below provides a breakdown of investment categories by residual maturity.

Millions

	Residual maturity* 31 December 2020					Residual maturity* 31 December 2019**				
	Total	No maturity	< 1 year	1 - 2 years	> 2 years	Total	No maturity	< 1 year	1 - 2 years	> 2 years
	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Fixed-income securities	**-**	-	-	-	-	**4,040**	-	3,007	829	204
Equity funds	**957**	957	-	-	-	**-**	-	-	-	-
High-yield bond funds	**619**	619	-	-	-	**703**	703	-	-	-
Investment-grade bond funds	**587**	587	-	-	-	**546**	546	-	-	-
Total	**2,163**	**2,163**	**-**	**-**	**-**	**5,289**	**1,249**	**3,007**	**829**	**204**

* The residual maturity is the period between the balance sheet date and the expiration date.
** The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for more information.

8. Intra-Eurosystem claims

As at 31 December 2020, this item stood at EUR 107,495 million (31 December 2019: EUR 109,038 million).

- 8.1 Participating interest in the ECB

Pursuant to Article 28 of the ESCB and ECB Statute, the NCBs of the ESCB are the sole subscribers to the capital of the ECB. Subscriptions depend on shares which are fixed in accordance with Article 29 of the ESCB and ECB Statute and are subject to adjustment every five years or whenever there is a change in composition of the ESCB national central banks.

As at 31 December 2020, this item stood at EUR 551 million (31 December 2019: EUR 540 million). This is comprised of EUR 444 million in capital contribution (31 December 2019: EUR 440 million) and EUR 107 million in contributions resulting from the changes in DNB's share in the ECB's accumulated net equity (31 December 2019: EUR 100 million).

As a result of the departure of the United Kingdom from the European Union and consequent withdrawal of the Bank of England from the ESCB, the capital keys were changed as presented in the table below on 1 February 2020. As a result, DNB's share in the ECB's subscribed capital increased from 4.0677% to 4.7662%.

The NCBs' capital keys were changed as follows:

Percentages

	Capital key from 1 February 2020	Capital key until 31 January 2020
	%	%
National Bank of Belgium	2.9630	2.5280
Deutsche Bundesbank	21.4394	18.3670
Eesti Pank	0.2291	0.1968
Central Bank of Ireland	1,.3772	1.1754
Bank of Greece	2.0117	1.7292
Banco de España	9.6981	8.3391
Banque de France	16.6108	14.2061
Banca d'Italia	13.8165	11.8023
Central Bank of Cyprus	0.1750	0.1503
Latvijas Banka	0.3169	0.2731
Lietuvos bankas	0.4707	0.4059
Banque centrale du Luxembourg	0.2679	0.2270
Central Bank of Malta	0.0853	0.0732
De Nederlandsche Bank	**4.7662**	**4.0677**
Oesterreichische Nationalbank	2.3804	2.0325
Banco de Portugal	1.9035	1.6367
Banka Slovenije	0.3916	0.3361
Národná banka Slovenska	0.9314	0.8004
Suomen Pankki-Finlands Bank	1.4939	1.2708
Subtotal for euro area NCBs*	*81.3286*	*69.6176*
Bulgarian National Bank	0.9832	0.8511
Česká národní banka	1.8794	1.6172
Danmarks Nationalbank	1.7591	1.4986
Hrvatska narodna banka	0.6595	0.5673
Magyar Nemzeti Bank	1.5488	1.3348
Narodowy Bank Polski	6.0335	5.2068
Banca Națională a României	2.8289	2.4470
Sveriges Riksbank	2.9790	2.5222
Bank of England	0,0000	14.3374
Subtotal for non-euro area NCBs*	*18.6714*	*30.3824*
Total for euro area and non-euro area NCBs	**100.0000**	**100.0000**

* Totals may not add up owing to rounding.

The table below sets out the NCBs' shares in the authorised, subscribed and paid-up capital of the ECB.

Percentages and millions

	31 December 2020			
	Eurosystem capital key	Capital key	Authorised and subscribed capital	Paid-up capital
	%	%	EUR	EUR
National Bank of Belgium	3.6432	2.9630	321	276
Deutsche Bundesbank	26.3615	21.4394	2,321	1,999
Eesti Pank	0.2817	0.2291	25	21
Central Bank of Ireland	1.6934	1.3772	149	128
Bank of Greece	2.4735	2.0117	218	188
Banco de España	11.9246	9.6981	1,050	904
Banque de France	20.4243	16.6108	1,798	1,549
Banca d'Italia	16.9885	13.8165	1,496	1,288
Central Bank of Cyprus	0.2152	0.1750	19	16
Latvijas Banka	0.3897	0.3169	34	30
Lietuvos bankas	0.5788	0.4707	51	44
Banque centrale du Luxembourg	0.3294	0.2679	29	25
Central Bank of Malta	0.1049	0.0853	9	8
De Nederlandsche Bank	**5.8604**	**4.7662**	**516**	**444**
Oesterreichische Nationalbank	2,9269	2.3804	258	222
Banco de Portugal	2.3405	1.9035	206	178
Banka Slovenije	0.4815	0.3916	42	37
Národná banka Slovenska	1.1452	0.9314	101	87
Suomen Pankki-Finlands Bank	1.8369	1.4939	162	139
Subtotal for euro area NCBs*	*100.0000*	*81.3286*	*8,805*	*7,583*
Bulgarian National Bank	-	0.9832	106	4
Česká národní banka	-	1.8794	203	8
Danmarks Nationalbank	-	1.7591	190	7
Hrvatska narodna banka	-	0.6595	71	3
Magyar Nemzeti Bank	-	1.5488	168	6
Narodowy Bank Polski	-	6.0335	653	25
Banca Natională a României	-	2.8289	306	11
Sveriges Riksbank	-	2.9790	323	12
Subtotal for non-euro area NCBs*	-	*18.6714*	*2,020*	*76*
Total for euro area and non-euro area NCBs	**-**	**100.0000**	**10,825**	**7,659**

* Totals may not add up owing to rounding.

The ECB's subscribed capital remained unchanged at EUR 10,825 million after the Bank of England's withdrawal from the European System of Central Banks (ESCB). The share of the Bank of England in the ECB's subscribed capital, which stood at 14.3%, was reallocated among both the euro area and the non-euro area NCBs.

The ECB's paid-up capital also remained unchanged at EUR 7,659. The remaining NCBs must assume the Bank of England's paid-up share of EUR 58 million. DNB accordingly transferred EUR 4 million to the ECB on 1 February 2020.

The euro area NCBs must subsequently pay up their increased share in the ECB's subscribed capital in full in two annual instalments[27]. DNB must contribute EUR 36 million in 2021 and 2022.

- 8.2 Claims equivalent to the transfer of foreign reserves to the ECB

As at 31 December 2020, these claims – arising from the transfer of foreign reserve assets to the ECB – totalled EUR 2,364 million (31 December 2019: EUR 2,357 million). Pursuant to Article 30.2 of the ESCB and ECB Statute, the transfer is in proportion to DNB's share in the ECB's subscribed capital. The interest paid on these claims is calculated daily at the latest established rate used in the main refinancing operations of the Eurosystem, with a zero return on the gold component.

Only the euro area NCBs transfer foreign reserve assets to the ECB. As a result of the Bank of England's withdrawal from the ESCB on 1 February 2020 and the associated redistribution of each NCB's share in the ECB's subscribed capital, their shares increased. The Governing Council of the ECB has decided, however, that the total amount of foreign reserve assets already transferred would remain at the current level. DNB's transfer increased by EUR 7 million.

27 This will increase the ECB's paid-up capital from EUR 7,659 million in 2020 to EUR 8,271 million in 2021 and EUR 8,881 million in 2022.

Millions

	Transfer of foreign reserves from 1 February 2020	Transfer of foreign reserves until 31 January 2020
	EUR	EUR
National Bank of Belgium	1,470	1,465
Deutsche Bundesbank	10,635	10,644
Eesti Pank	114	114
Central Bank of Ireland	683	681
Bank of Greece	998	1,002
Banco de España	4,811	4,833
Banque de France	8,240	8,233
Banca d'Italia	6,854	6,840
Central Bank of Cyprus	87	87
Latvijas Banka	157	158
Lietuvos bankas	234	235
Banque centrale du Luxembourg	133	132
Central Bank of Malta	42	42
De Nederlandsche Bank	**2,364**	**2,357**
Oesterreichische Nationalbank	1,181	1,178
Banco de Portugal	944	948
Banka Slovenije	194	195
Národná banka Slovenska	462	464
Suomen Pankki-Finlands Bank	741	736
Total for euro area NCBs*	**40,344**	**40,344**

* Totals may not add up owing to rounding.

- 8.4 Net claims related to the allocation of euro banknotes within the Eurosystem

This item, amounting to EUR 66,097 million (31 December 2019: EUR 59,872 million), consists of a net claim of DNB on the Eurosystem relating to the reallocation of euro banknotes. See 'Intra-ESCB and intra-Eurosystem claims and liabilities' and 'Banknotes in circulation' in the 'Accounting policies' section for further details. The interest paid on these claims is calculated daily at the latest established rate used in the main refinancing operations of the Eurosystem.

- 8.5 Other intra-Eurosystem claims (net)

As at 31 December 2020, this net claim amounts to EUR 38,483 million (31 December 2019: EUR 46,269 million), comprising three components.

Millions

	31 December 2020	31 December 2019
	EUR	EUR
Claims on the ECB in respect of TARGET2	38,397	46,430
Claims on the ECB in respect of monetary income	12	(245)
Claims on the ECB in respect of the ECB's interim profit distribution	74	84
Total	**38,483**	**46,269**

The first component is the TARGET2 claim on the ECB of EUR 38,397 million (31 December 2019: EUR 46,430 million). This claim is related to receipts and payments of credit institutions and NCBs via TARGET2 which result in balances held in Eurosystem NCB correspondent accounts. The interest paid on this claim is calculated daily at the latest established rate used in the main refinancing operations of the Eurosystem.

The second component is DNB's position vis-à-vis the ECB due to the annual pooling and distribution of monetary income by the Eurosystem NCBs. This shows a net balance of EUR 12 million at the end of the year (31 December 2019: EUR (245) million). DNB held a claim in respect of monetary income on the ECB in 2020, whereas there was a liability to the ECB in previous years. The main drivers behind this turnaround were increased interest expenses on TLTRO III loans[28] and lower interest income due to the introduction of tiering for current account balances[29].

The third component is DNB's claim on the ECB in connection with the interim profit distribution by the ECB. For 2020, the Governing Council of the ECB decided to distribute interim profits of EUR 1,260 million (31 December 2019: EUR 1,431 million) to the Eurosystem NCBs. As at 31 December 2020, the amount allocated to DNB totalled EUR 74 million (31 December 2019: EUR 84 million).

28 See the note to asset item 5.2 on page 134 for further details.
29 See the note to liability item 2.1 on page 151 for further details.

9. Other assets

As at 31 December 2020, this item totalled EUR 2,189 million (31 December 2019: EUR 1,971 million).

- 9.2 Tangible and intangible fixed assets

The table below sets out the components of and movements in 'Tangible and intangible fixed assets'.

Millions

	Total tangible and intangible fixed assets	Total tangible fixed assets	Land and buildings*	Fittings	Fixed assets under construction	Total intangible fixed assets	Development costs (software)
	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Book value as at 31 December 2018	**177**	**157**	118	27	12	**20**	20
Movements:							
Reclassification	**-**	**-**	3	0	(3)	**-**	-
Additions	**34**	**33**	-	2	31	**1**	1
Disposals	**0**	**0**	0	-	-	**-**	-
Depreciation and amortisation	**(60)**	**(53)**	(38)	(15)	-	**(7)**	(7)
Impairment losses	**-**	**-**	-	-	-	**-**	-
Book value as at 31 December 2019	**151**	**137**	83	14	40	**14**	14
Movements:							
Reclassification	**-**	**-**	41	5	(46)	**-**	-
Additions	**86**	**82**	-	6	76	**4**	4
Disposals	**(15)**	**(15)**	(14)	(1)	-	**-**	-
Depreciation and amortisation	**(70)**	**(64)**	(55)	(9)	-	**(6)**	(6)
Impairment losses	**-**	**-**	-	-	-	**-**	-
Book value as at 31 December 2020	**152**	**140**	55	15	70	**12**	12
Cost	**339**	**251**	88	93	70	**88**	88
Accumulated depreciation and amortisation	**(187)**	**(111)**	(33)	(78)	-	**(76)**	(76)
Book value as at 31 December 2020	**152**	**140**	55	15	70	**12**	12

* Land and buildings includes land in the amount of EUR 7 million. Land is not depreciated.

 In 2020 DNB started renovating its property at Frederiksplein into a sustainable building. As a consequence, the large majority of its workforce are now based in the Toorop building at Spaklerweg in Amsterdam. Accelerated depreciation was applied to the property until 1 July 2020 at Frederiksplein. The impact of this accelerated depreciation is EUR 35 million in 2020 (2019: EUR 20 million). The remaining book value of the property and the land stood at EUR 15 million as at 1 July 2020. The property will be depreciated over its remaining useful life.

The banknote operations and gold vaults were moved to Haarlem in 2020, pending their ultimate transfer to Camp New Amsterdam in Zeist.

DNB assumed future contractual financial commitments in 2020 for the renovation of the property at Frederiksplein and the construction of the new facility in Zeist. These amount to EUR 144 million and EUR 66 million, respectively. In the fourth quarter of 2020, DNB sold its visitor centre at Sarphatistraat 1-5 in Amsterdam. The sale resulted in a EUR 14 million disposal and a gain of EUR 46 million. The disposal is disclosed under 'Buildings and land', while the gain on sale is disclosed under 'Other income'.

- 9.3 Other financial assets

The table below sets out the subcategories of 'Other financial assets'.

Millions

	31 December 2020	31 December 2019*
	EUR	EUR
Participating interests	61	61
Equities and equity funds	3	3
Other receivables	117	132
Total	**181**	**196**

* The comparative figures for 2019 have been restated. See 'Restatement of comparative figures' on page 119 for more information.

Participating interests

The participating interests concern shares in the Bank for International Settlements (BIS), the Society for Worldwide Interbank Financial Telecommunication scrl (SWIFT), and N.V. Settlement Bank of the Netherlands (SBN). The shareholding percentages for the BIS and SBN are unchanged from 2019. The BIS shares are 25% paid-up. As in 2019, the contingent liability for the uncalled part of the shares stood at SDR 64.9 million as at 31 December 2020. Although DNB holds 100% of the shares in SBN, this entity is not within DNB's scope of consolidation. The reason is that DNB cannot exercise any policy-making influence over SBN, which is entirely controlled by external parties.

Percentages and millions

Participating interests	Participation share	Location	Shareholders' equity*	31 December 2020	31 December 2019
			EUR	EUR	EUR
BIS	3.10	Basel (Switzerland)	26,965	52	52
SWIFT	0.03	La Hulpe (Belgium)	443	0	0
SBN	100.00	Amsterdam	9	9	9
Total				**61**	**61**

* Shareholders' equity of SWIFT and SBN is based on the 2019 annual financial statements.
Shareholders' equity of the BIS is based on the 2019/2020 annual financial statements (financial year from 1 April 2019 to 31 March 2020).

Other receivables

Other receivables include mainly receivables arising from staff mortgage loans managed by a Dutch financial institution. The mortgage loan portfolio is periodically assigned to DNB under a concession agreement.

- 9.5 Accruals and prepaid expenses

As at 31 December 2020, this item stood at EUR 1,630 million (31 December 2019: EUR 1,614 million). consisting predominantly of accrued interest. It also comprises unamortised results, which can be broken down as follows:

Millions

	31 December 2020	31 December 2019
	EUR	EUR
Foreign exchange swaps	60	122
Foreign exchange forwards	2	3
Interest rate swaps	(3)	(2)
Total	**59**	**123**

Liabilities

1. Banknotes in circulation

This item consists of DNB's share in the total euro banknotes circulated by the Eurosystem.

The table below sets out the composition of banknotes put into circulation by DNB less banknotes returned to DNB, by denomination.

Millions

	31 December 2020		31 December 2019	
	Number	EUR	Number	EUR
EUR 5	(194)	(970)	(183)	(916)
EUR 10	(217)	(2,166)	(201)	(2,007)
EUR 20	(607)	(12,130)	(593)	(11,853)
EUR 50	710	35,519	632	31,615
EUR 100	(66)	(6,636)	(55)	(5,471)
EUR 200	29	5,799	30	6,005
EUR 500	(16)	(8,171)	(16)	(7,754)
Total euro banknotes circulated by DNB		11,245		9,619
Reallocation of euro banknotes in circulation	72,823		65,914	
Euro banknotes allocated to the ECB (8% of the sum of 11,245 + 72,823)*	(6,726)		(6,042)	
		66,097		59,872
Total		**77,342**		**69,491**

* Totals may not add up owing to rounding.

During 2020, the total value of banknotes in circulation within the Eurosystem increased by 11%. As a result of the reallocation of banknotes, DNB's share in the euro banknotes in circulation was EUR 77,342 million at year-end 2020 (31 December 2019: EUR 69,491 million). The value of the euro banknotes DNB actually issued increased by 17% from EUR 9,619 million to EUR 11,245 million. The difference of EUR 66,097 million between the reallocated amount and the total amount of euro banknotes put into circulation through DNB is shown under 'Net claims related to the allocation of euro banknotes within the Eurosystem'. The negative numbers of banknotes for certain denominations are accounted for by the fact that, on a net basis, DNB issued fewer of these banknotes than it received from circulation.

2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro

This item relates to liabilities to credit institutions arising from DNB's money market policy conducted on behalf of the Eurosystem. As at 31 December 2020, this item stood at EUR 258,291 million (31 December 2019: EUR 139,756 million).

As at 31 December 2020, the breakdown of this item was as follows:

- 2.1 Current accounts (covering the minimum reserve system)

These liabilities, amounting to EUR 252,691 million as at 31 December 2020 (31 December 2019: EUR 131,213 million), contain the credit balances on the transaction accounts of credit institutions that are required to hold minimum reserves. The main refinancing rate of interest is paid on these mandatory reserve holdings. Starting on 30 October 2019, the Governing Council of the ECB introduced a two-tier system for reserve remuneration, which exempts part of banks' reserve holdings in excess of minimum reserve requirements from negative remuneration at the rate applicable on the deposit facility. This part is remunerated at the annual rate of 0%. The volume that was exempt from the deposit facility rate was determined as six times an institution's minimum reserve requirements[30]. The non-exempt part of excess liquidity holdings continues to be remunerated at the lower of either 0% or the deposit facility rate.

30 The multiplier of six may be adjusted by the Governing Council over time in line with changing levels of excess liquidity holdings.

- 2.2 Deposit facility

This permanent facility, amounting to EUR 5,600 million as at 31 December 2020 (31 December 2019: EUR 8,543 million), may be used by credit institutions to place overnight deposits at DNB at the deposit facility rate.

- 2.3 Fixed-term deposits

Fixed-term deposits are fine-tuning liquidity absorbing operations that take the form of deposits. As in 2019, no bids were made in 2020.

- 2.4 Fine-tuning reverse operations

These are monetary policy operations intended to tighten liquidity. As in 2019, no such operations were conducted in 2020.

- 2.5 Deposits related to margin calls

This item refers to deposits made by counterparties in those instances where the market value of the collateral pledged falls short of an established trigger point, implying a deficit of collateral with respect to outstanding monetary policy operations. In 2020, as in 2019, no deposits related to margin calls were held.

3. Other liabilities to euro area credit institutions denominated in euro

This item, amounting to EUR 245 million (31 December 2019: nil), consists entirely of liabilities arising from repo transactions.

4. Liabilities to other euro area residents denominated in euro

As at 31 December 2020, this item totalled EUR 16,981 million (31 December 2019: EUR 5,317 million).

- 4.1 General government

This item, amounting to EUR 14,232 million as at 31 December 2020 (31 December 2019: EUR 3,290 million) comprises non-monetary deposits as part of DNB's services to governments and supranational institutions. It consists mainly of EUR 11,243 million to the general government (31 December 2019: EUR 3,290 million) and EUR 2,986 million in liabilities to the European Stability Mechanism (ESM) (31 December 2019: nil).

- 4.2 Other liabilities

This item, amounting to EUR 2,749 million (31 December 2019: EUR 2,027 million) consists predominantly of non-monetary deposits as part of DNB's services to other euro area residents.

5. Liabilities to non-euro area residents denominated in euro

This item, amounting to EUR 51,154 million (31 December 2019: EUR 41,922 million) consists of EUR 49,382 million in non-monetary deposits as part of DNB's services to non-euro area central banks and governments (31 December 2019: EUR 40,271 million), EUR 1,751 million in liabilities to the European Single Resolution Fund (31 December 2019: EUR 1,620 million) and EUR 21 million in liabilities related to margin calls (31 December 2019: EUR 31 million).

7. Liabilities to non-euro area residents denominated in foreign currency

At 31 December 2020, this item stood at nil (31 December 2019: EUR 161 million).

8. Counterpart of special drawing rights allocated by the IMF

This item is disclosed under the asset item 'Receivables from the International Monetary Fund (IMF)'.

10. Other liabilities

As at 31 December 2020, this item stood at EUR 964 million (31 December 2019: EUR 882 million), consisting predominantly of currency revaluation differences on the off-balance sheet instruments of EUR 195 million (31 December 2019: EUR 304 million), accrued interest related to TLTRO II and TLTRO III operations of EUR 670 million (31 December 2019: EUR 295 million) and cash collateral of EUR 184 million (31 December 2019: EUR 198 million).

The breakdown of the revaluation differences can be found in the table of off-balance sheet positions related to currency swaps, currency forwards and interest rate swaps on page 160.

11. Provisions

Provisions can be broken down as follows:

Millions

	Total	Provision for financial risks	Provision for monetary policy operations	Provision for employee benefits	Other provisions
	EUR	EUR	EUR	EUR	EUR
Balance as at 31 December 2018	**2,017**	1,987	9	12	9
Withdrawal	**(3)**	-	-	0	(3)
Release	**(181)**	(177)	(4)	-	-
Addition	**1**	-	-	1	-
Balance as at 31 December 2019	**1,834**	1,810	5	13	6
Withdrawal	**(7)**	-	(4)	(1)	(2)
Release	**(2)**	-	(1)	(1)	-
Addition	**882**	868	-	11	3
Balance as at 31 December 2020	**2,707**	2,678	0	22	7

Provision for financial risks

In 2020, EUR 868 million was added to the provision for financial risks (2019: EUR 177 million released). As at 31 December 2020, the provision totalled EUR 2,678 million (31 December 2019: EUR 1,810 million).

Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion on the risks to which DNB is exposed.

Provision for monetary policy operations

In accordance with Article 32.4 of the ESCB and ECB Statute, the provision for monetary policy operations was formed by all participating Eurosystem NCBs in 2018 in proportion to their ECB capital keys. In 2020 the impaired securities in the CSPP portfolio held by a euro area central bank were sold. To cover the loss on the sale, EUR 64 million was released from the provision formed by all participating Eurosystem NCBs. Accordingly, EUR 4 million was released from this provision for DNB. As a result, the remaining provision for all participating euro area NCBs is EUR 26 million. Pro rata to DNB's share in the ECB in 2018[31] EUR 1 million was released to 'Net result of monetary income redistribution'.

Provision for employee benefits

The provision for employee benefits increased by EUR 9 million to EUR 22 million (31 December 2019: EUR 13 million). The increase reflects a supplementary addition in connection with health care insurance. See the table on page 171.

DNB operates the following arrangements:

- a defined benefit pension scheme;
- a contribution to the health care insurance premiums of a group of pensioners and former employees;
- a service anniversary and retirement bonus arrangement;
- a social plan arrangement.

DNB operates an average-pay staff pension scheme, which features provisional indexation based on the consumer price index in line with that for pensioners and former DNB staff. Annual indexation takes place only if DNB Pension Fund's financial position allows this. DNB Pension Fund's policy funding ratio stood at 113.9% at 31 December 2020 which means it was not underfunded throughout 2020. Partial indexation was applied in the year under review. The pension contribution paid is charged to the profit and loss account, rather than set against a provision.

The contribution towards the health insurance premiums payable by pensioners is an allowance towards the costs concerned which, effective 2020, also covers over 1,100 former employees due to reinterpretation of the underlying agreement. The impact of the supplementary addition to the provision is EUR 11.5 million.

31 The first impairment in this portfolio was effected in 2018.

 The service anniversary and retirement bonus arrangements provide for bonuses payable to staff upon 20, 30, 40 and 50 years' service and retirement, and payments made in the event of incapacity for work and to surviving dependants.

The liabilities and annual costs are actuarially determined. The assumptions used were:

	31 December 2020	31 December 2019
Discount rate for other employee benefits	Scheme-dependent (anniversaries: 0.40% other: 0.75%)	Scheme-dependent (anniversaries: 0.70% other: 0.65%)
Price inflation	2.0%	2.0%
General salary increase	2.0%	2.0%
Individual salary increase (average)	2.0%	2.0%
Expected average retirement age	Assumption for all participants: 67	Assumption for all participants: 67
Mortality outlook	Mortality table AG 2020 + mortality experience	Mortality table AG 2018 + mortality experience

Other provisions

Other provisions primarily consist of a provision formed for staff-related expenses with respect to restructuring (31 December 2020: EUR 7 million, 31 December 2019: EUR 6 million).

12. Revaluation accounts

As at 31 December 2020, this item totalled EUR 30,173 million (31 December 2019: EUR 26,636 million). The table below sets out the components of and net movements in the revaluation accounts.

Millions

	Total	Gold	Foreign currency	Fixed-income securities	Equity funds	High-yield bond funds	Investment-grade bond funds
	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Balance as at 31 December 2018	**21,726**	20,947	95	23	659	0	2
Net revaluation movements	**4,910**	4,591	(7)	2	208	73	43
Balance as at 31 December 2019	**26,636**	25,538	88	25	867	73	45
Net revaluation movements	**3,537**	3,737	(67)	5	(182)	4	40
Balance as at 31 December 2020	**30,173**	**29,275**	**21**	**30**	**685**	**77**	**85**

The increase in the aggregate amount for the revaluation accounts of EUR 3,537 million can be largely ascribed to the higher market value of gold. The decrease in the revaluation of equity funds can be explained by a change in exposure between equity funds. As a result, the balance in the revaluation account was realised.

13. Capital and reserves

DNB's authorised capital, which is fully issued and paid up, amounts to EUR 500 million and is divided into 500 shares of EUR 1 million each. All shares are held by the Dutch State. The statutory reserve has been formed for the book value of the intangible fixed assets.

The table below sets out the movements in capital and reserves before appropriation of profit:

Millions

	Total**	Issued capital	General reserve	Statutory reserve
	EUR	EUR	EUR	EUR
Balance as at 31 December 2018	**7,935**	500	7,415	20
Profit for the year 2018	**188**			
Dividend	**(179)**			
Addition of 2018 net profit*	**9**		9	
Movement in statutory reserve	**-**		6	(6)
Balance as at 31 December 2019	**7,944**	**500**	**7,430**	**14**
Profit for the year 2019	**1,176**			
Dividend	**(637)**			
Addition of 2019 net profit*	**539**		539	
Movement in statutory reserve	**-**		2	(2)
Balance as at 31 December 2020	**8,483**	**500**	**7,971**	**12**

* Addition of net profit concerns profit after dividend payment.
** Totals may not add up owing to rounding.

14. Profit for the year and appropriation of profit

The profit for the 2020 financial year was EUR 15 million (31 December 2019: EUR 1,176 million).

With due observance of the relevant provision of the Articles of Association, the proposed appropriation of profit is set out below. See section 4.4 of the Accountability chapter of this Annual Report for further details of DNB's capital policy.

Millions

	2020	2019
	EUR	EUR
Addition to the general reserve	-	539
Distribution to the State	15	637
Profit for the year	**15**	**1,176**

Other notes to the balance sheet

Off-balance sheet positions revaluation differences

The off-balance sheet positions are shown below. Their conversion to euro results in net revaluation differences.

Millions

	31 December 2020								31 December 2019							
	Total	EUR	USD	JPY	GBP	CNH	DKK	SDR	Total	EUR	USD	JPY	GBP	CNH	DKK	SDR
Foreign exchange swaps																
Receivables	**7,599**	6,388	1,211	-	-	-	-	-	**7,243**	5,838	1,405	-	-	-	-	-
Payables	**(7,415)**	-	(4,775)	(1,327)	(96)	(127)	-	(1,090)	**(7,547)**	-	(4,417)	(1,396)	(10)	(13)	(76)	(1,635)
	184	6,388	(3,564)	(1,327)	(96)	(127)	-	(1,090)	**(304)**	5,838	(3,012)	(1,396)	(10)	(13)	(76)	(1,635)
Foreign exchange forwards																
Receivables	**5,661**	3,165	2,496	-	-	-	-	-	**6,856**	3,465	3,391	-	-	-	-	-
Payables	**(5,650)**	(2,454)	(2,721)	(45)	(45)	(61)	-	(324)	**(6,856)**	(3,104)	(3,613)	(41)	(43)	(55)	-	-
	11	711	-225	(45)	(45)	(61)	-	(324)	**(0)**	361	(222)	(41)	(43)	(55)	-	-
Interest rate swaps	**0**	-	0	-	-	-	-	-	**0**	-	0	-	-	-	-	-
Total*	**195**	**7,099**	**(3,789)**	**(1,372)**	**(141)**	**(188)**	**-**	**(1,414)**	**(304)**	**6,199**	**(3,234)**	**(1,437)**	**(53)**	**(68)**	**(76)**	**(1,635)**

* DNB has fully hedged the exchange rate risk of the exposures listed, except for working stocks.

The foreign exchange swaps and forwards are used to hedge currency risks. The purpose of interest rate swaps is to hedge interest rate risk. Futures are used to control the maturity profile of the investment portfolio.

A foreign exchange swap is a transaction in which parties agree to directly buy or sell one currency in exchange for another currency at the spot rate and later to sell or buy back the currency at the forward rate. A currency forward contract is a transaction in which parties agree to buy or sell a currency in return for another currency at a specific rate and for delivery at a date in the future. Upon initial recognition, positions are valued at the spot rate, split into off-balance sheet presentation at the forward rate and a forward profit or loss recognised under 'Accruals and prepaid expenses', which is amortised. The amortised profit or loss represents the difference between the forward rate and the spot rate. This allows the value to evolve towards the forward rate over time.

An interest rate swap is a contract under which two parties exchange flows of interest payments in a single currency over a set period of time without exchanging the principal amount. As at 31 December 2020, the underlying value of the interest rate swaps totalled EUR 41 million (31 December 2019: EUR 45 million).

A future is a negotiable contract under which a predetermined volume of specific underlying assets is purchased or sold on a specific date and time. As at 31 December 2020, DNB's futures position was EUR 0 million in euros (31 December 2019: EUR (1,003) million) and EUR 545 million in US dollars (31 December 2019: EUR 1,058 million). Gains and losses on futures are settled on a day-to-day basis.

USD tender

The off-balance sheet positions include forwards related to the ECB in connection with the short-term US dollar liquidity providing programme. Related claims resulting from swap transactions with Eurosystem counterparties for providing US dollar liquidity in exchange for euro liquidity are also included under off-balance sheet positions.

Securities lending programme

In accordance with the ECB's Governing Council's decisions, DNB has made available for lending its holdings of securities purchased under the PSPP. Unless these securities lending operations are conducted against cash collateral, they are recorded in off-balance-sheet accounts. Such securities lending operations with a nominal value of EUR 198 million (31 December 2019: EUR 107 million) were outstanding as at 31 December 2020.

Foreign currency position

As at 31 December 2020, the euro equivalent of the total sum of assets denominated in foreign currency (included in asset items 2 and 3) amounted to EUR 14,133 million (31 December 2019: EUR 14,237 million). As at 31 December 2020, the euro equivalent of the total sum of liabilities denominated in foreign currency (included in liability items 6, 7 and 8) amounted to EUR 5,700 million (31 December 2019: EUR 6,129 million). These positions are included in the revaluation accounts and revalued as set out under 'Revaluation'. DNB has fully hedged its currency exposures, except for those on working stocks and investment funds.

Management and custody

DNB manages and holds securities and other documents of value in custody as part of its Eurosystem Reserve Management Services (ERMS) to central banks outside the euro area and governments. Such management and custody are for the account and risk of the depositors. Income is recognised in the profit and loss account under commission income.

Buffers for balance sheet-wide risks

In 2020 the financial risks for DNB increased sharply as a result of the measures taken by the Eurosystem to stabilise the operation of the euro area and mitigate the impact of the COVID-19 pandemic. The financial risk as at 31 December 2020 was determined at EUR 15,890 million (31 December 2019: EUR 3,640 million). Of the total balance sheet-wide risk, EUR 13,001 million (31 December 2019: EUR 1,810 million) relates to specific risks under the APP and the PEPP[32].
As at 31 December 2020, the provision for financial risks stood at EUR 2,678 million (31 December 2019: EUR 1,810 million).

The table below provides a breakdown of the buffers for balance sheet-wide risks:

Millions

	31 December 2020	31 December 2019
	EUR	EUR
Capital and reserves (excluding statutory reserve)*	8,471	7,930
Provision for financial risks	2,678	1,810
Total	**11,149**	**9,740**

* Capital and reserves does not include profit for the financial year. The reported EUR 541 million increase reflects the EUR 539 million profit appropriation for the 2019 financial year and the EUR 2 million release from the statutory reserve.

32 The APP and PEPP risks consist of credit risk relating to the asset purchases (excluding exposures to the Dutch government) and interest rate risk. Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion on the risks to which DNB is exposed. The Accountability chapter forms part of the risks paragraph in the financial statements, which means that it is included in the scope of the audit report of the independent auditor.

Events after the balance sheet date

IMF

New loan arrangements between DNB and the IMF entered into effect on 1 January 2021. They affect the volume of the loans and their drawing periods. Further details can be found on pages 126 to 128.

Off-balance sheet rights and liabilities

Liability claims and proceedings

By reason of its supervisory task or otherwise, DNB may receive liability notices or pre-announcements of such notices. In some cases, liability proceedings have been brought against DNB. Where the liability amounts cannot reasonably be estimated or where a liability is unlikely to be settled, such cases are only disclosed in this section. No liability proceedings against DNB are currently pending.

IMF

Within the context of the Netherlands' IMF membership, DNB has made various credit lines available to the IMF. More details are provided on pages 126 to 128.

Outsourcing

DNB has outsourced part of its ICT function to an external party – the end user services, the data centre and the services related to this. The initial term of the outsourcing contract is four years, ending in March 2023. Under the contract, DNB's financial liability largely depends on its future scalable service purchase volume. The annual expense is currently expected to amount to EUR 15 million.

Rental and lease agreements

DNB has rented part of the Toorop building and the neighbouring premises at Omval in Amsterdam since 1 July 2018. The term of the rental agreements is until 31 August 2025. DNB relocated in 2020 as its office building at Frederiksplein is due to undergo major renovation. Annual rental charges are taken to the profit and loss account. The rental liability is presented in the table below.

In 2019 DNB entered into a ground lease agreement with the Dutch State for the benefit of a newly built location that will house DNB's banknote operations and its gold vaults. The term of the agreement is 60 years. Annual ground rent payments are taken to the profit and loss account. The liability assumed is presented in the table below.

DNB has rented part of the building formerly in use by the Joh. Enschedé printing company in Haarlem since 1 October 2019 to house its banknote operations and gold vaults on a temporary basis. The term of the agreement is until 1 April 2023. Annual rental charges are taken to the profit and loss account. The liability assumed is presented in the table below.

Several DNB staff members are entitled to a lease car on the basis of their positions. By default, the duration of car lease contracts is 4 or 5 years, with the option of renewal. The liability under the present car lease contracts is presented in the table below. Renewal at the current prices is assumed for staff members whose contracts expired in 2020.

Millions

	Total	2021	2022 to 2025	2026 and beyond
	EUR	EUR	EUR	EUR
Rental agreements	**54**	12	42	-
Ground lease agreements	**8**	0	1	7
Lease contracts	**3**	1	2	-
Total	**65**	**13**	**45**	**7**

Accommodation Programme

DNB assumed financial liabilities amounting to EUR 6 million concerning the demolition and other expenses related to the property at Frederiksplein.

Tangible fixed assets

The contractual investment liabilities for tangible fixed assets are disclosed under asset item 9.2 'Tangible and intangible fixed assets' on page 147.

3. Notes to the profit and loss account

Operating income

1 and 2 Net interest income

This item includes interest income and interest expense in respect of the assets and liabilities denominated in euro.

The table below provides a breakdown of interest income.

Millions

	2020	2019
	EUR	EUR
Investments	68	176
Liabilities to euro area credit institutions	730	711
Non-monetary deposits	254	150
Monetary portfolios	442	456
Total	**1,494**	**1,493**

Interest income is generated primarily from the balances which credit institutions hold on average on the deposit facility and current accounts with DNB. They pay interest at the negative deposit facility rate on any balances held in excess of the exempt amount. See the note to liability item 2.1 for further details.

The table below sets out the components of interest expense.

Millions

	2020	2019
	EUR	EUR
Monetary lending	(715)	(95)
Other	(206)	(236)
Total	**(921)**	**(331)**

The increase in interest expense related to monetary lending primarily concerns the charges incurred on the TLTRO III loans. See the note to asset item 5.2 for further details. 'Other' predominantly relates to the costs of hedging foreign exchange risks.

3. Realised gains/(losses) from financial operations

Net realised gains from financial operations of EUR 422 million (2019: EUR 211 million) primarily arose from the change in exposure between equity funds. As a result, the balance in the relevant revaluation account was realised. Section 4.4 of the Accountability chapter of this Annual Report provides a more detailed discussion of the developments in own investments at a portfolio level.

Millions

	2020	2019
	EUR	EUR
Net realised result on currency exchange rates	24	21
Net realised price result on fixed-income securities	15	24
Net realised price result on equity funds	373	161
Net realised price result on high-yield bond funds	10	-
Net realised price result on investment-grade bond funds	-	5
Total	**422**	**211**

4. Write-downs on financial assets and positions

The write-downs of EUR 2 million (2019: EUR 3 million) consist predominantly of price revaluation losses on interest rate swaps due to their lower market value.

5. Transfer to/from provision for financial risks

In 2020 the risks for which the provision for financial risks had been formed sharply increased. Accordingly, EUR 868 million was added in 2020 (2019: EUR 177 million released). As a result, the amount of the provision rose to EUR 2,678 million as at 31 December 2020 (31 December 2019: EUR 1,810 million).

8. Income from equity shares and participating interests

For 2020, this item amounts to EUR 132 million (2019: EUR 112 million). It mainly includes income from DNB's participating interest in the ECB. See 'ECB profit distribution' under 'Accounting policies' on page 124 for further details.

Income from DNB's participating interest in the ECB can be broken down as follows:

Millions

	2020 EUR	2019 EUR
Interim profit distribution in the financial year	74	84
Final profit distribution for the preceding financial year	54	21
Total	**128**	**105**

9. Net result of monetary income pooling

The net result of monetary income pooling can be broken down as follows:

Millions

	2020 EUR	2019 EUR
Monetary income accruing to DNB	253	661
Monetary income earned by DNB	(238)	(905)
Result of monetary income pooling	15	(244)
Adjustment of monetary income pooling from preceding years	(3)	(1)
Provision for monetary policy operations	5	4
Net result from monetary income pooling	**17**	**(241)**

The amount of each Eurosystem NCB's monetary income is determined by measuring the actual annual income that derives from the earmarkable assets held against its liability base. The earmarkable assets consist of the following items: lending to euro area credit institutions related to monetary policy operations denominated in euro, securities held for monetary policy purposes, claims equivalent to the transfer of foreign reserve assets to the ECB, net claims related to the allocation of euro banknotes within the Eurosystem, other intra-Eurosystem claims (net), and a limited amount of gold holdings in proportion to DNB's Eurosystem capital key share.

Gold is considered to generate no income. Securities held for monetary policy purposes[33], which include securities issued by central governments and agencies[34], are considered to generate income at the refinancing rate. Where the value of DNB's earmarked asset exceeds or falls short of the value of its liability base, the difference is offset by applying the refinancing rate to the value of the difference. The income on the earmarkable assets is included under 'Interest income'. The liability base consists of the following items: banknotes in circulation, liabilities to euro area credit institutions related to monetary policy operations denominated in euro, and other intra-Eurosystem liabilities (net). Any interest paid on liabilities included within the liability base is deducted from the monetary income to be pooled.

The monetary income pooled by the Eurosystem NCBs is to be allocated among the NCBs according to the subscribed ECB capital key. The pooling and reallocation of monetary income to NCBs leads to certain net reallocation effects. One reason is that the yields earned on certain earmarkable assets and the interest expense paid on certain liability base items may differ to a varying degree among the Eurosystem NCBs. In addition, usually each Eurosystem NCB's share of earmarkable assets and in the liability base deviates from its share in the subscribed capital of the ECB. For DNB, the result from monetary income pooling of EUR 15 million (2019: EUR (244) million) arises from the difference between the monetary income pooled by DNB, amounting to EUR 238 million, and the monetary income reallocated to DNB based on the capital key, amounting to EUR 253 million. The net result of monetary income pooling includes DNB's share in the provision for monetary policy operations. See the note to liability item 11 for further details.

10. Other income

In its capacity as an independent public body (ZBO) DNB exercises prudential supervision over financial institutions and is the national resolution authority. This item includes the fees raised from the supervised institutions to cover the costs of its activities as an independent public body, as well as the government contributions to the performance of these activities. It also includes the EUR 46 million gain on the sale of the visitor centre at Sarphatistraat 1-5 in Amsterdam.

33 Decision ECB/2009/16 of 2 July 2009 on the implementation of the covered bond purchase programme and Decision ECB/2011/17 of 3 November 2011 on the implementation of the second covered bond purchase programme.
34 Decision ECB/2020/9 of 3 February 2020 on a secondary markets public sector asset purchase programme and Decision ECB/2020/17 of 24 March 2020 on a temporary pandemic emergency purchase programme.

170 Other income can be broken down as follows:

Millions

	2020	2019
	EUR	EUR
Fees from supervised institutions	198	182
Government contribution	4	4
Other	46	1
Total	**248**	**187**

In accordance with supervision and resolution legislation, a more detailed account is given in a separate report.

Operating costs

11. Staff costs

The average number of employees, expressed as full-time equivalents (FTEs), amounted to 1,882 in 2020, versus 1,813 on average in 2019.

The table below provides a breakdown of 'Staff costs'.

Millions

	2020	2019
	EUR	EUR
Wages and salaries	(163)	(154)
Social insurance contributions	(31)	(21)
Pension costs	(35)	(35)
Other staff costs	(17)	(17)
Total	**(246)**	**(227)**

The pension scheme costs of EUR 35 million for the year (2019: EUR 35 million) are included under 'Pension costs'. They equal total pension contributions paid (2020: EUR 42 million; 2019: EUR 41 million), less employee-paid contributions (2020: EUR 7 million; 2019: EUR 6 million).

The annual costs on account of the contribution to the health care insurance premiums of pensioners are included under 'Social insurance contributions'. This includes the one-off expense resulting from the reinterpretation of the agreement (see liability item 11 on page 154). The annual costs on account of other employee benefits are included under 'Wages and salaries' and 'Social insurance contributions'.

Remuneration

General

Under the Public and Semi-public Sector Executives Remuneration (Standards) Act (Wet normering bezoldiging topfunctionarissen publieke en semipublieke sector – WNT), DNB is required to disclose the remuneration of its senior executives and of officials other than senior executives exceeding the remuneration ceiling referred to in the WNT. The Minister of Finance and the Minister of the Interior and Kingdom Relations have decided that DNB is allowed to agree with Governing Board members on individual remuneration in excess of the ceiling referred to in the WNT.

The remuneration ceiling under the WNT for the financial year 2020 amounts to EUR 201,000 (2019: EUR 194,000), Unless stated otherwise, all officials mentioned worked in full-time employment throughout the year.

Governing Board

The individual maximum remuneration of the Governing Board members in 2020, as fixed by the Minister of Finance, includes holiday allowance, an extra month's pay and other terms and conditions of employment, but has no performance-related component. The pension scheme for the members of the Governing Board is in accordance with the agreements made with the Minister of Finance in 2005, and has been aligned with the statutory provisions that have applied since 1 January 2015. Like other staff, the members of the Governing Board contribute to their pension premiums.

The table below specifies the remuneration, taxable expense allowances and deferred remuneration (employer's pension contributions) for each member of the Governing Board.

		Remuneration and taxable expense allowances		Deferred remuneration		Total remuneration		Individual maximum remuneration	
		2020	2019	2020	2019	2020	2019	2020	2019
Name	Position	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Klaas Knot	President	407,444	395,023	26,555	26,189	433,999	421,212	434,000	420,000
Else Bos	Executive Director	397,594	386,015	25,605	25,157	423,199	411,172	423,200	410,000
Frank Elderson[1]	Executive Director	330,273	322,731	25,325	26,189	355,598	348,920	343,279	348,000
Job Swank	Executive Director	313,685	317,246	26,555	26,189	340,240	343,435	349,000	343,000
Nicole Stolk	Executive Director	200,394	185,180	25,605	25,157	225,999	210,337	226,000	210,000
Olaf Sleijpen[2]	Executive Director	214,869	-	24,299	-	239,168	-	239,168	-
Total		**1,864,259**	**1,606,195**	**153,944**	**128,881**	**2,018,203**	**1,735,076**		

1 Frank Elderson stepped down with effect from 15 December 2020. His individual maximum remuneration covers the period from 1 January to 14 December 2020. The holiday allowance accrued in 2020, which would normally be paid in April 2021, is included in his final settlement, representing a permitted excess over his individual maximum remuneration, given that previous holiday allowances were also allocated to the years to which they relate. This does not therefore represent an undue payment.

2 Olaf Sleijpen was appointed Executive Director with effect from 1 February 2020. He was previously a Division Director. The figures for 2020 relate to his remuneration as Executive Director only. His individual maximum remuneration covers the period from 1 February to 31 December 2020.

Remuneration paid to the members of the Supervisory Board

Members of the Supervisory Board are paid fees in line with the WNT, which stipulates maximum fees of 10% and 15% of the generally applicable remuneration ceiling for members and the Chair, respectively.

In 2020 and 2019, the members of the Supervisory Board were paid the following fees:

	2020	2019
	EUR	EUR
Wim Kuijken (Chair)	30,150	29,100
Margot Scheltema (Vice-Chair)	20,100	19,400
Feike Sijbesma	20,100	19,400
Kees Goudswaard[1, 2]	15,048	19,400
Annemieke Nijhof[1]	20,100	19,400
Marry de Gaay Fortman	20,100	19,400
Roger Dassen	20,100	19,400
Mirjam van Praag[1, 3]	5,052	-
Total	**150,750**	**145,500**

1 Kees Goudswaard, Annemieke Nijhof and Mirjam van Praag were also members of the Bank Council, for which they were each paid EUR 3,299 on an annual basis (2019: EUR 3,299), which is not included here.

2 Kees Goudswaard stepped down from the Supervisory Board and the Bank Council with effect from 1 October 2020. His remuneration was calculated proportionally.

3 Mirjam van Praag was appointed to the Supervisory Board and the Bank Council with effect from 1 October 2020. Her remuneration was calculated proportionally.

Officials with remuneration that exceeds the WNT ceiling

In compliance with the WNT, DNB also reports remuneration of officials other than executives that exceeds the ceiling, which in 2020 was EUR 201,000 (2019: EUR 194,000). In respect of these officials the WNT does not impose a ceiling, but prescribes disclosure. The remuneration of these officials exceeds the threshold as a result of DNB's package of employment conditions. The number of officials whose remuneration details we publish fell from 28 to 23 compared with the previous year.

Remuneration overview

The table below shows the non-senior executives, listed by position, whose remuneration exceeds the threshold.

	Average number of hours a week		Remuneration and taxable expense allowances		Deferred remuneration		Total remuneration	
	2020	2019	2020	2019	2020	2019	2020	2019
Position			EUR	EUR	EUR	EUR	EUR	EUR
Division Director	36.0	36.0	277,081	295,517	26,555	26,189	303,636	321,706
Division Director	36.0	37.2	241,365	258,351	26,555	26,213	267,920	284,564
Division Director	36.0	37.2	235,117	235,463	26,555	26,213	261,672	261,676
Division Director	36.0	36.0	232,806	249,188	26,555	26,189	259,361	275,377
Division Director	36.0	37.2	231,960	232,581	26,555	26,213	258,515	258,794
Division Director	36.0	37.2	230,894	231,247	26,555	26,213	257,449	257,460
Division Director	36.0	36.0	215,615	235,887	26,555	26,189	242,170	262,076
Division Director	36.0	36.0	207,797	215,752	25,605	25,157	233,402	240,909
Division Director	36.0	36.0	202,785	194,929	26,555	26,189	229,340	221,118
Division Director	36.0	36.0	202,997	221,330	25,605	25,157	228,602	246,487
Division Director	36.0	36.0	199,032	166,909	26,555	26,189	225,587	193,098
Division Director	36.0	36.0	199,273	140,659	25,605	20,162	224,878	160,821
Division Director	36.0	36.0	192,870	188,662	25,605	25,157	218,475	213,819
Division Director	36.0	37.2	187,705	219,738	26,555	26,213	214,260	245,951
Division Director	36.0	36.0	186,089	189,228	26,555	26,189	212,644	215,417
Division Director	36.0	36.0	185,826	179,914	25,605	25,157	211,431	205,071
Head of Department	36.0	36.0	183,136	168,503	26,555	26,189	209,691	194,692
Head of Department	36.0	36.0	181,959	187,293	26,555	26,189	208,514	213,482
Head of Department	36.0	40.0	179,076	180,134	26,555	26,265	205,631	206,399
Head of Department	36.0	38.5	178,211	178,532	26,555	26,237	204,766	204,769
Head of Department	36.0	36.0	176,065	181,368	26,555	26,189	202,620	207,557
Head of Department	36.0	38.5	175,687	183,876	26,555	26,237	202,242	210,113
Expert	38.5	38.5	182,558	182,849	26,607	26,237	209,165	209,086

12. Other administrative costs

The table below specifies 'Other administrative costs'.

Millions

	2020	2019
	EUR	EUR
Temporary staff and outsourcing	(110)	(74)
Travel and accommodation expenses	(1)	(5)
Accommodation	(20)	(16)
Office equipment, software and office expenses	(34)	(26)
General expenses	(9)	(13)
Total	**(174)**	**(134)**

General expenses include the fees paid to the external auditor. The table below provides a breakdown of the fees into categories.

Whole amounts

	2020			2019		
	KPMG Accountants N.V.	KPMG Network	Total KPMG	KPMG Accountants N.V.	KPMG Network	Total KPMG
	EUR	EUR	EUR	EUR	EUR	EUR
Audit of the financial statements	(633,530)	-	(633,530)	(849,418)	-	(849,418)
Other audit services	(151,855)	-	(151,855)	(209,330)	-	(209,330)
Tax advisory services	-	-	-	-	-	-
Other non-audit services	(88,810)	-	(88,810)	-	(24,200)	(24,200)
Total	**(874,195)**	**-**	**(874,195)**	**(1,058,748)**	**(24,200)**	**(1,082,948)**

The total fees for the audit of the financial statements include VAT and are based on the fees paid during the financial year to which the audit relates. In 2019, its first year as DNB's external auditor, KPMG was paid an additional fee of EUR 175,000 to cover the costs of transitioning from Deloitte to KPMG.

17. Corporate income tax

DNB's corporate income tax liability is limited to duties not assigned to it by law. The corporate income tax payable for 2020 amounted to EUR 0 million (2019: EUR 0 million). No significant results were posted that are related to duties not assigned to it by law.

Amsterdam, 18 March 2021
Governing Board of De Nederlandsche Bank N.V.

Klaas Knot, *President*
Else Bos
Job Swank[35]
Nicole Stolk
Olaf Sleijpen

Amsterdam, 18 March 2021
Adopted by the Supervisory Board of De Nederlandsche Bank N.V.

Wim Kuijken, *Chair*
Margot Scheltema, *Vice-Chair*
Feike Sijbesma
Annemieke Nijhof
Marry de Gaay Fortman
Roger Dassen
Mirjam van Praag

35 Executive Director Job Swank did not sign the financial statements due to long-term illness.

4. Other information

Independent auditor's report

To: the General Meeting and the Supervisory Board of De Nederlandsche Bank N.V.

Report on the audit of the accompanying financial statements

Our opinion

We have audited the 2020 financial statements of De Nederlandsche Bank N.V., based in Amsterdam.

In our opinion the financial statements of De Nederlandsche Bank N.V. have been compiled, in all material respects, in accordance with the models and accounting policies applying to the European Central Bank (ECB) and the European System of Central Banks (ESCB) and the harmonised disclosures to the balance sheet and the profit and loss account. This is possible under the exemption provisions of Section 17 of the Bank Act 1998. Where Section 17 does not provide any exemption or where the ESCB accounting policies or harmonised disclosures do not cover the subject, the financial statements are compiled in accordance with the provisions of Part 9 of Book 2 of the Dutch Civil Code. In addition, remuneration is disclosed in accordance with the provisions of the Public and Semi-public Sector Executives Remuneration (Standards) Act (Wet bezoldiging topfunctionarissen publieke en semipublieke sector – WNT.

The financial statements comprise:

1 the balance sheet as at 31 December 2020;

2 the profit and loss account for the year 2020; and

3 the notes comprising a summary of the accounting policies and other explanatory information.

Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing and the Audit Protocol 2020 under the Public and Semi-public Sector Executives Remuneration (Standards) Act. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of De Nederlandsche Bank N.V. in accordance with the Audit firms supervision act (Wet toezicht accountantsorganisaties), the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Audit approach

Summary

Materiality
— Materiality of EUR 80 million — 1% of Capital and reserves — Lower materiality for costs and WNT

Key audit matters
— Compliance with the ‘Wet Normering topinkomens’ (WNT) — VFR and balance sheet-wide risks

Opinion
Unqualified opinion: in all material respects in accordance with the accounting policies.

Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at EUR 80 million (2019: EUR 80 million). The materiality is determined with reference to the relevant benchmark Capital and Reserves in the amount of EUR 8,483 million as at 31 December 2020. The materiality as a percentage amounts to 1% (2019: 1%). We consider Capital and Reserves as the most appropriate benchmark due to the fact that it is a stable benchmark and because its size provides insight into the ability of DNB to ensure on an ongoing basis the stability of the financial sector in the Netherlands. We have also considered alternative benchmarks, such as total profit for the financial year and the balance sheet total. The profit for the financial year and the balance sheet total are, however, more subject to fluctuation depending on the economic circumstances in the Netherlands and the euro area. Due to these yearly fluctuations, we consider the profit for the financial year and the balance sheet total to be less appropriate as a benchmark for materiality.

We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

Since we also audit the ZBO-report of DNB, we apply a lower materiality for the audit of the Staff costs, Other administrative costs and Depreciation and amortisation of tangible and intangible fixed assets of EUR 3.6 million, as prescribed in the 'Controleprotocol financiële verantwoording Autoriteit Financiële Markten en de Nederlandsche Bank'.

With respect to the audit of the remuneration disclosure, we apply a lower materiality as prescribed in the 'Controleprotocol WNT 2020' as defined by the Ministry of Interior and Kingdom Relations. The materiality used to audit the accuracy of the disclosure is set at a range between EUR 5,000 and EUR 10,000 and for the audit of the completeness of the top executives remuneration disclosure at zero.

In addition, we take deviations and/or possible deviations into account that in our opinion can be considered material to the users of the financial statements due to qualitative reasons.

We agreed with the Supervisory Board that misstatements in excess of EUR 3.2 million, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Governing Board and the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have not previously reported key audit matters in our auditor's opinion for DNB.

Compliance with the Wet normering topinkomens (WNT)

Description

As a public entity, DNB has to be compliant with the WNT. In this Act a distinction is made between the remuneration of top executives and the remuneration of executives with an employment contract if these employment contracts exceed the individual applicable threshold. The individual applicable remuneration ceiling for the Governing Board members of DNB are established by the Ministry of Finance and the Minister of the Interior and Kingdom Relations. For other executives of DNB, the general WNT maximum of EUR 201,000 applies in 2020 on the basis of a full-time employment contract. Instances exceeding the remuneration ceiling, must be explained in the financial statements.

The WNT disclosure is included on pages 172-175. Given the public attention surrounding this topic, the high level of detail in the laws and regulations and the changes in 2020 in the top executives, compliance with the WNT is a key audit matter.

Our approach

We have performed our audit in line with the Audit Protocol WNT 2020. During our risk assessment procedures and during the execution of our audit, we have consulted WNT specialists.
We have taken notice of the internal control measures for compliance with the WNT. We determined the accuracy and completeness of the top executives disclosure by making a reconciliation to underlying contracts, publications in the Government Gazette regarding individual remuneration ceiling exceptions and by making a reconciliation to underlying payroll data.

We have determined that the other executive officers with salaries above the remuneration ceiling are accurately and completely disclosed on the basis of the payroll administration and other payroll components. Where applicable, we have submitted to the Ministry of the Interior and Kingdom Relations an anonymised copy of DNB's interpretation of the WNT to determine that this interpretation is in accordance with the WNT.

Our observation

Based on our procedures performed, in accordance with the Audit Protocol WNT 2020, we determined that the WNT disclosure is prepared in accordance with the requirements of the WNT.

VFR and balance-wide risks

Description

DNB has the possibility to recognise a provision for financial risks (known in Dutch as the “VFR”), based on ESCB principles and guidelines. The provision for financial risks is established on a discretionary basis by the Governing Board based on the results of internal models for interest and credit risk. The respective results are largely determined by the design of the model, the parameters and the extent to which DNB is exposed to certain risks regarding monetary operations. Amongs other things, DNB uses data on portfolios that are acquired by other central banks as part of monetary operations that entail risks for the entire euro area. As concluded in the capital agreement with the Ministry of Finance, the addition to the provision for financial risks is at most the profit for the financial year (before the addition to the provision is deducted) and depends on the quantifiable balance sheet-wide risks, including interest and credit risks. Additions to the provision for financial risks have an impact on the financial year profit of DNB and therefore impact the dividend distribution and capital development. Due to the inherently present subjective judgement and estimation uncertainty underlying the provision for financial risks, this is a key audit matter.

Our approach

We have taken notice of the relevant controls that are implemented to ensure the operating effectiveness of the models and the comp–leteness and accuracy of the input of parameters and data.

We have reviewed the validation of the models performed by DNB with the assistance of our own specialists based on the validation process and the validation reports.

We determined that the DNB expert judgment process to establish the interest rate scenario used was conducted in accordance with internal guidelines.

To ensure the accuracy and completeness of the data used in the models, we reconciled these with data received from the ECB or other external data suppliers.

We performed procedures and took notice of monetary developments and decisions as taken by the Governing Council of the ECB. Based on the aforementioned and the analysis performed by DNB's Risk Management Department, we verified whether the developments in the provision for financial risks in relation to the risks are sufficiently substantiated.

We verified whether the results of the models are presented accurately in the disclosure of the financial statements and whether the addition to the provision for financial risks is determined by the Governing Board in agreement with the internal procedures.

We verified –the disclosure of the provision for financial risks in the financial statements (including the buffers for balance sheet-wide risks and the risk section in Chapter 4 of the Annual Report).

Our observation

As described in paragraph 4.4 in the Annual Report, almost the entire result of 2020 is added to the provision for financial risk. This is due to the fact that the balance-sheet wide risks as of December 31, 2020 exceeded the available buffers.

We determined that the provision for financial risks is recognised in accordance with the ESCB guidelines and that the provision for financial risks and the balance sheet-wide risks are adequately disclosed in the financial statements 2020.

Paragraph to emphasize the applied accounting principles for valuation and determination of results

We draw attention to paragraph 1 ‘Accounting Policies’ as included in the notes to the financial statements. The financial statements of DNB are, in accordance with the Bank Act 1998, prepared in accordance with the accounting guidelines of the European Central Bank (ECB/2016/34) and the amendments contained in ECB/2019/34, on accounting and financial reporting in the ESCB and its harmonised disclosures to the balance sheet and profit and loss account.

In addition, the Governing Board of DNB has decided on a number of specific deviations from these principles in order to improve reporting, as well as to comply with the additional specific requirements as included in Part 9 of Book 2 of the Dutch Civil Code and the WNT and of the Guidelines of the Dutch Council for Annual Reporting (RJ), where the ESCB accounting policies or harmonised disclosures do not cover the subject. This is consistent with the unique character of a central bank. For a proper understanding of the financial statements, users should become familiar with the accounting policies as these differ from the more widely known accounting standards, such as IFRS and Part 9 of Book 2 of the Dutch Civil Code.

Our opinion is not modified in respect of this matter.

Unaudited compliance with the anti-cumulation clause in the WNT

In accordance with the 'Controleprotocol WNT 2020' we did not audit the anti-cumulation clause referred to in Section 1.6a of the WNT and Section 5 subsection 1j of the 'Uitvoeringsregeling WNT'. Consequently, we did not verify whether or not the salary maximum has been exceeded by a 'leidinggevende topfunctionaris' (managing senior official) due to possible employment at other institutions subject to the WNT, and whether the WNT disclosure as required in relation to this clause is accurate and complete.

Report on the other information included in the Annual Report

In addition to the financial statements and our auditor's report thereon, the Annual Report contains other information.

Based on the following procedures performed, we conclude that the other information:

— is consistent with the financial statements and does not contain material misstatements;

— contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information and based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is less than the scope of those performed in our audit of the financial statements.

The Governing Board is responsible for the preparation of the other information, including the Annual Report, in accordance with Part 9 of Book 2 of the Dutch Civil Code, and other information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

Description of the responsibilities for the financial statements

Responsibilities of the Governing Board and the Supervisory Board for the financial statements

The Governing Board is responsible for the preparation and fair presentation of the financial statements in accordance with the accounting principles of guidance ECB/2016/34 and the amendments as included in ECB/2019/34, supplemented with the applicable standards of Part 9 of Book 2 of the Dutch Civil Code pursuant to Section 17 of the Banking Act (Bankwet) 1998 and also the Standard Remuneration Act (Wet normering topinkomens). In this respect, the Governing Board is responsible for such internal control as the Governing Board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to errors or fraud.

As part of the preparation of the financial statements, the Governing Board is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting framework mentioned, the Governing Board must prepare the financial statements using the going concern basis of accounting.

The Supervisory Board is responsible for overseeing the company's financial reporting process.

Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud during our audit.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with Dutch Standards on Auditing, the 'Controleprotocol WNT 2020', the ‘Controleprotocol financiële verantwoording Autoriteit Financiële Markten en de Nederlandsche Bank’ and the ethical requirements and independence requirements.

Our audit included amongst others:

— identifying and assessing the risks of material misstatement of the financial statements, whether due to errors or fraud, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from errors, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

— obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;

— evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Governing Board;

— concluding on the appropriateness of the Governing Board's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company ceasing to continue as a going concern;

— evaluating the overall presentation, structure and content of the financial statements, including the disclosures; and

— evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit.

From the matters communicated with the Supervisory Board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor’s report unless laws and regulations preclude public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Amstelveen, 18 March 2020

KPMG Accountants N.V.

M.A. Huiskers RA

Provisions governing the appropriation of profit

These provisions are set out in Article 22(2) of the Articles of Association of De Nederlandsche Bank N.V. and read as follows:
The profit, as shown in the adopted financial statements, is at the disposal of the general meeting.