Triodos Bank

Annual Report 2020

Risk management

The Executive Board is responsible for designing, implementing and maintaining an adequate system for internal control over financial reporting. Financial reporting is the product of a structured process carried out by various functions and banking entities under the direction and supervision of the financial management of Triodos Bank.

The Executive Board is responsible for the risk management function and compliance function. The risk management function works together with management to develop and execute risk policies and procedures involving identification, measurement, assessment, mitigation and monitoring of the financial and non-financial risks. The compliance function plays a key role in monitoring Triodos Bank's adherence to external rules and regulation and internal policies. The adequate functioning of the risk management and compliance function as part of the internal control system is frequently discussed with the Audit and Risk Committee. It is further supported by Triodos Bank's culture.

Triodos Bank's Internal Audit function provides independent and objective assurance of Triodos Bank's corporate governance, internal controls, compliance and risk management systems. The Executive Board, under the supervision of the Supervisory Board and its Audit and Risk Committee, is responsible for determining the overall internal audit work and for monitoring the integrity of these systems.

The risk management framework is an important building block in the internal control structure of the bank. Triodos Bank is working in a changing environment, which requires regular upgrades of its internal control structure and frameworks.

The risk management and control systems provide reasonable, but not absolute, assurance regarding the reliability of financial reporting and the preparation and fair presentation of its financial statements.

The Executive Board report provides insight in the functioning of the internal controls, compliance and risk management systems.

Risk governance structure

Risk statement

The risk management and control systems provide reasonable, but not absolute, assurance regarding the reliability of financial reporting and the preparation and fair presentation of its financial statements.

Objective

The risk management objective of Triodos Bank is to create an environment that supports the bank in pursuing its mission and realizing its strategic objectives, by timely identifying and managing the risks the bank is or may be exposed to. From a risk management perspective, this implies that the structural context is provided to identify and manage the risks inherent to the bank's activities. The intent is to embed risk management in a practical and effective way that is proportionate with the size and complexity of Triodos Bank.

The Three Lines of Defence

The Three Lines of Defence (LoD) model is a prominent organizational risk concept that is integrated in the internal governance and organization of Triodos Bank. The concept strengthens Triodos Bank's risk control by consistently assigning and embedding clearly defined risk management roles and responsibilities across the bank. The fundamental rationale behind the three lines concept is that risk management can only be effective when it is embedded and exercised in all constituent parts of the bank. For the same reason that risks may, in principle, surface and manifest themselves anywhere within the bank, risk awareness and consciousness is to be maintained at all levels throughout the bank. Only then can risks be timely identified and adequately responded to. As the management of risks is therefore not reserved to the ‘risk management’ role, the three lines concept offers an effective way of structuring and arming the organisation as a whole against all risks that may jeopardize the realization of the purpose and strategy of the bank. Contributing to a sound risk culture directed at embedding intended norms, attitude and behaviour related to risk awareness, risk-taking and risk management is a shared responsibility of all co-workers.

The first line takes risk and is primarily responsible for managing the risks it incurs in conducting its activities and operations within its span of control. The first line therefore has the ‘*ownership*’ of these risks. From a functional area perspective, the first line responsibilities are shared by the respective areas (i.e. Business Banking, Retail Banking, Corporate Strategy, Corporate Communications, ICT, Operations, Human Resource Management, Legal, Finance, Group Treasury and Marketing).

The second line contains the Risk Management and Compliance functions. Both functions are present at local business unit level and at group level. Whereas the first line exercises *‘risk ownership*’, the second LoD exercises ‘*risk control’*. In order to control and manage risks accordingly, the second line supports and facilitates a sound risk management and control framework throughout the bank, oversees the control processes and controls in place at the 1st LoD to ensure proper design and effectiveness and actively engages with the 1st LoD to jointly enhance the functioning of the risk management and control framework of the bank.

The third line is the Internal Audit function, which provides ‘*risk assurance*’ by providing risk-based independent and objective assurance, advice, and insight to the Executive Board, Audit and Risk Committee, senior management and managers at group and business unit level. This is done by a systematic, disciplined and balanced approach of evaluation, reporting and advising with regard to the corporate governance structure, internal control, compliance and risk management functions of the bank.

Risk organisation

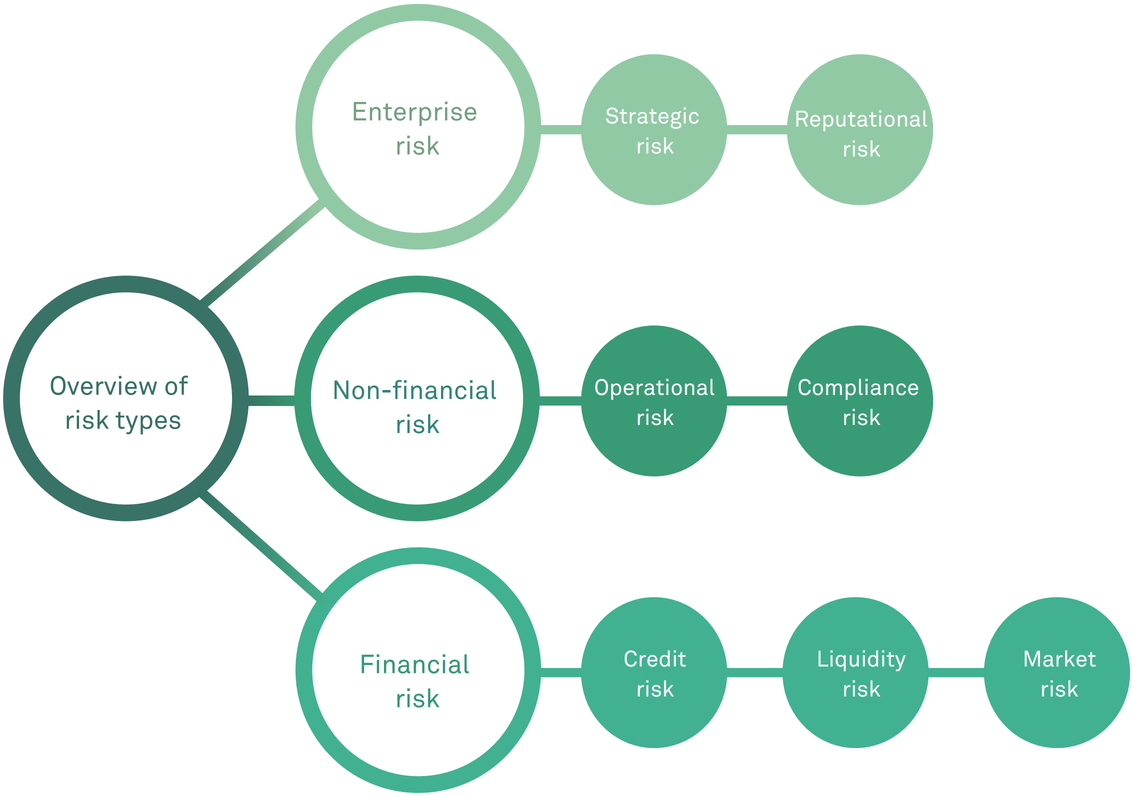
In view of Triodos Bank’s size, the impact of all new regulations, and the increased attention of supervisory authorities, Triodos Bank has made an important step up in its risk control organisation during the past years. In line with the increased importance of compliance, the Director Compliance reports directly to the Chief Risk Officer. All second line activities and responsibilities are supervised by the Audit and Risk Committee of the Supervisory Board.

The Risk and Compliance functions provide relevant independent information, analyses and expert judgement on risk exposures, and advise on proposals and risk decisions to be made by the Executive Board and business or support units as to whether they are consistent with the institution’s risk appetite. The Risk and Compliance functions recommend improvements to the risk management framework and options to remedy breaches of risk policies, procedures and limits.

The structure of the risk organisation meets banking industry standards and covers all identified relevant risks for Triodos Bank within three main risk categories: Enterprise Risks, Financial Risks and Non-Financial Risks. Each risk category consists of a limited number of risk types (see diagram below).

Risk culture

The essence of Triodos Bank's mission and business model supports the mitigation of its risks. In addition, the risk management framework promotes that co-workers at all levels share the same risk perspective and appreciate the formal structures and policies in a unified and congruent manner across the bank. Triodos Bank strives for a risk culture that is both robust and embedded. An environment of open communication and effective challenge, in which decision- making processes encourage a broad range of views and a constructive critical attitude, such that sound and informed decisions can be made, are important to such a culture. Risk conscious leadership is key in establishing and enhancing the risk attitude and behaviour. Leading by example and setting the tone at the top are preconditional requisites for the aspired risk culture.



The Executive Board (partly) delegated decision-making authority to the following risk committees at a central level:

- For Financial Risk, the Central Credit Committee has authority to take decisions on credit risks, both on an individual debtor level and on a credit portfolio level; the Asset & Liability Committee has authority to decide on market risks and liquidity risk;
- For Non-financial Risk, the Non-Financial Risk Committee has authority to decide on operational and compliance risk matters. The Group Product Governance Committee has the authority to approve new products and review existing products and the Anti-Money Laundering and Counter-terrorist financing risk Committee oversees the regulatory and associated topics regarding anti-money laundering and counter-terrorist financing risk; and
- For Enterprise Risk, the Enterprise Risk Committee has authority to decide on strategic and reputational risk issues.

Each committee is chaired by an Executive Board member or the Director Banking to ensure consistent decision making on material risks within Triodos Bank's wider strategy.

Business units have local decision-making committees such as a Local Non-Financial Risk Committee and a local Anti-Money Laundering and Counter-terrorist financing risk Committee in place. In addition, the business units that engage in local lending have a Local Credit Committee in place. The processes and mandates for the local decision-making committees are captured in their respective charters.

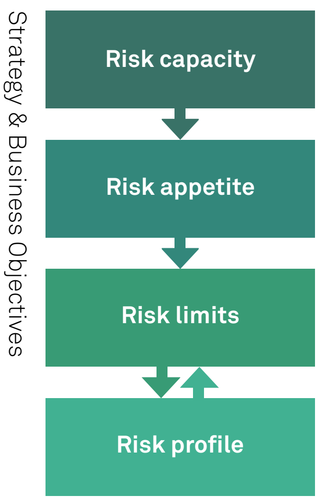
The Supervisory Board's Audit and Risk Committee supervises the activities of the Executive Board with respect to the operation and adequacy of internal risk management and control systems. The group heads of Risk and the group director Compliance report directly to the Chief Risk Officer. The head of the Risk function (the CRO) and the head of the compliance function (the group director Compliance), have direct access to the Supervisory Board to raise concerns and escalate issues whenever required.

Enterprise risk

The Enterprise Risk discipline synthesises the risks of all risk areas and performs analyses to determine at a strategic level which larger trends can potentially influence Triodos Bank's risk profile. Triodos Bank manages Enterprise Risk by means of specific tasks and related activities: performing strategic risk assessments, defining the risk appetite, assessing capital and liquidity requirements, and monitoring the risk profile through periodic enterprise risk management reporting.

Risk appetite

A risk appetite process is implemented across Triodos Bank to align its risk profile with the willingness to take risk in delivering its business objectives. The Risk Appetite Statement is reviewed yearly and is endorsed by the Supervisory Board upon advice by the Audit and Risk Committee. The general concept of risk appetite and the link to the Strategy and Business objectives is illustrated below:



- The maximum level of risk the financial institution can assume given its current level of resources before breaching constraints determined by regulatory capital and liquidity needs, the operational environment (e.g. technical infrastructure, risk management capabilities, expertise) and obligations, also from a conduct perspective, to depositors, policyholders, shareholders, fixed income investors, as well as other customers and stakeholders.

- The aggregate level and types of risk a financial institution is willing to assume within its risk capacity to achieve its strategic objectives and business plan.
- Directly related to an entity's risk capacity as well as its culture, desired level of risk/return, capability and business strategy.

- Quantitative measures based on forward looking assumptions that allocate the financial institution's aggregate risk appetite statement (e.g. measure of loss or negative events) to business lines, legal entities as relevant, specific risk categories, concentrations, and as appropriate, other levels.

- Point in time assessment of the financial institution's gross and, as appropriate, net risk exposures (after taking into account mitigants) aggregated within and across each relevant risk category based on forward looking assumptions.

The risk appetite is based on three objectives that fit with Triodos Bank's corporate goals and guarantee a sustainable banking model. These objectives are to: (1) protect identity and reputation, (2) maintain sound balance sheet relations and (3) ensure stable profits.

Triodos Bank uses a set of indicators and limits to measure and assess the level of risk appetite and risk profile of the organisation. The risk limits, determined at group level, are translated into a localised limit structure for each business unit.

Reputational risk

Triodos Bank defines Reputational Risk as the risk arising from negative perception by customers, counterparties, shareholders or regulators, which can adversely affect the bank's ability to maintain existing, or establish new, (business) relationships and continued access to sources of funding.

Being a mission-driven bank, Triodos Bank's reputation is vital to its ability to pursue its mission. As such, Triodos Bank's reputation is managed in a proactive manner, for the most part by 'doing things right' and 'doing right in line with Triodos Bank's mission'. Generally, proactively managing its reputation implies for Triodos Bank (i) to attract and retain qualified employees with a strong affinity with Triodos Bank's mission and values; (ii) to maintain a sound risk governance structure, enabling the execution and control of the bank-related processes correctly; and (iii) to actively position Triodos Bank's identity, its positive impact (for the longer term) and connection to society.

Enterprise risk reporting

The principal objective of the Enterprise Risk Management (ERM) report is to set the actual risk profile of Triodos Bank against its risk appetite, assess if key risk indicators have been breached and what actions may need to be taken. In addition, the ERM report creates a single point of reference for all risk related profiles and activities within Triodos Bank. The ERM report provides insights into specific risk themes and provides an integrated picture of risk at corporate level. This report is discussed in the Enterprise Risk Committee and shared with the Audit and Risk Committee and Supervisory Board.

Every risk discipline reports on a monthly basis or on a quarterly basis. These reports are discussed in corresponding committees and measures are taken whenever needed. On a quarterly basis, they are integrated in the ERM Report which provides insights into the Triodos Bank risk profile in relation to its risk appetite.

Strategic risk

Strategic Risks relate to inadequate initial strategy selection, execution or modification over time and may impact the realization of the organisation's purpose. Therefore, Strategic Risk Assessments (SRA) are performed at Executive Board level for Triodos Bank as a whole and at business unit level for each business unit. The SRA contains an assessment of the strategic risk exposures that can ultimately affect shareholder value or the viability of the organization.

The external landscape changes, in particular the low interest rate environment, climate change, energy transition, regulatory requirements, the European political landscape and technological developments. Next to these areas more sudden and disruptive events may occur such as the COVID-19 pandemic. The challenges that arise from these changes will continuously influence Triodos Bank.

Triodos Bank considers its banking model to have a moderate risk profile. While on the one hand the bank's mission is to support the real economy and society with basic and straightforward banking products, the risk appetite reflects the recognition that the relatively fast-changing external environment requires us to adapt.

Strategic risks need to be carefully managed to realise integrated financial and mission-driven objectives. Sensitivities both at group and local level feed into scenarios, that are used to test Triodos Bank’s capital, liquidity, profitability and operational stability during the year. Triodos Bank has identified the following strategic risks to be taken into account at group level:
• Economic risk: downturn as a result of the COVID-19 pandemic, increasing volatility as a result of political uncertainty, decreasing business confidence which leads to lower investment levels, intervention of central banks to stimulate economic growth which may continue longer than expected with lower interest rates as a result;
• Climate risk: likelihoods associated with and responses to the impacts of climate change on the bank's assets and on the bank itself as well as on how societal constraints shape adaptation options;
• Political and social risk: political uncertainty in the countries we operate in and at EU level and public discontent which leads to more volatility;
• Technological risk: FinTechs create new fields of competition and raise customer expectations which challenge our relationship approach. Increasing cybercrime will force the organisation to spend more effort and investments on safeguarding systems;
• Legal risk: regulations like BRRD and CRR/CRD are still under development and can result in requirements that influence Triodos Bank’s business model.

The Corona crisis has greatly affected the bank in many ways as well as the market environment it operates in. The bank is gradually adapting to new circumstances and establishing a workable ‘new normal’. Developments are however surrounded by many uncertainties. Mitigating strategies are discussed and tailored to fit the situation at hand. In addition, the low interest rate environment and increasing regulatory requirements continue to affect the bank. The first has led to a decreased margin and consequently lower profitability than foreseen. The second one has led to the need for additional co-workers, system adaptation and processes in order to implement new regulatory requirements.

Climate risk contains two important elements:
• the risk that is related to the transition of “old” sources of energy to sustainable sources (transition risk), which can result in so called stranded assets. As an example: power plants using coal must be closed earlier than the precalculated end date,
• the risk that is related to the changes of the climate itself causing physical damage (physical risk). E.g. extreme weather conditions and the rise of sea level.

Given that sustainability considerations are a starting point within our lending processes, transition risks are minimal in our loan portfolio. Our lending is already contributing to a low-carbon future.

Regarding physical risk, the changes in climate leading to storms, floods and droughts may have an impact on our assets. We have not identified assets we consider to be especially vulnerable to these physical risks. In the longer term, impact on weather conditions (such as wind and solar resources) may affect renewable energy generation. However, there are no reliable predictions for this happening, and it is unlikely to affect our portfolio assets within the duration of our current portfolio.

Nevertheless, Triodos Bank carries out annual stress tests which take extreme but plausible situations into account. As part of determining the scenarios, Triodos evaluates whether extreme weather situations could impact the bank's resilience with a time horizon of three years.

Currently, we find that it is very unlikely to have material impact on this time horizon.

Finally, we are of the opinion that, since these risks certainly are capable of severely affecting society as a whole, on the longer term we must as a society and sector drastically decrease and minimise the financing of unsustainable assets.

Stress testing

Stress testing is part of Triodos Bank's risk management. It is of critical importance in establishing a well-balanced forward-looking management view to incorporate adverse developments and circumstances that the bank might be exposed to. Stress testing exercises also provide valuable insights in the exposure of the portfolio towards risk events. Stress testing for capital at Triodos Bank is conducted at several levels: group-wide, at risk domain and at sector level. In addition, sensitivity tests are also carried out as part of the annual business banking sector analyses.

The process of firm-wide scenario stress test analysis may be broken down into a sequence of phases, where the defined stress scenarios are translated into risk events and indicators to measure the risk levels. After determination of the impact and the aggregation of the results, the outcome is reported and discussed. Scenarios that are assessed are of a varied nature, including macro-economic stress and idiosyncratic stress (e.g. operational and reputational stress).

Given the selected scenarios, Triodos Bank is sensitive to a long lasting, low interest environment scenario. It shows that profitability would be under pressure in the coming years. This risk will be mitigated by a focus on cost efficiency, pricing and by diversification of income. Finally, Triodos Bank is sensitive to scenarios relating to reputational risk. To prevent such an event, it is essential to communicate clearly about the mission and to act accordingly.

Recovery

The Recovery Plan specifies measures Triodos Bank can take in order to survive a severe crisis. The aim of a recovery plan is to be prepared for a crisis and therefore to lower the probability of the organisation defaulting. It also aims to identify and quantify the effectiveness of measures in different scenarios.

Non-financial risk

Non-financial risk includes all the risks faced in Triodos Bank's regular activities and processes, that are not categorised as enterprise or financial risk. Triodos Bank has sub-divided this into operational and compliance risk. Monitoring these risks is particularly important to ensure Triodos Bank can continue to offer quality financial services to its stakeholders.

Operational risk

Operational risks relate to losses Triodos Bank could incur as a result of inadequate or failing internal processes, systems, human behaviour or external events. Triodos Bank limits these risks with clear policies, procedures and controls for all business processes. Operational Risk Management consists of identifying, managing and monitoring the risks within several subcategories including Information Security, Business Continuity, Tax risk and Financial reporting risk.

Activities to manage risks related to these subjects are, from a second line perspective, executed under the responsibility of the Chief Risk Officer (CRO) in line with the operational risk framework. At Triodos Bank HO, the Group Head of Operational Risk reports to the CRO. The Group Risk Management function is mirrored locally in each of the BUs as much as possible, taking into account the level of proportionality. At BU level, the Local Head of Operational Risk reports hierarchically to the Local Head of Risk and functionally to the Group Head of Operational Risk. The Local Head of Risk reports hierarchically to the Managing Director and functionally to the Chief Risk Officer.

The Non-Financial Risk Committee, a decision-making risk committee at Group level with delegated decision-making power by the Executive board to take decisions on the non-financial risk appetite and other non-financial risks aspects (including Compliance), meets both locally and at a group level on a monthly basis. During 2020 the non-financial risk appetite KRI's were reviewed, updated and cascaded to the BU's.

The Operational Risk Framework follows the principles mentioned in the Sound Practices for the Management and Supervision of Operational Risk. These sound practices provide guidelines for the qualitative implementation of operational risk management and are advised by the Bank of International Settlements. The Operational Risk policy framework includes:

- Operational Risk Management Framework which describes guiding principles for the management of operational risk within Triodos Bank.
- Non-Financial Scenario Analysis policy which describes the methodology of the ORM instrument “Scenario Analysis” within Triodos Bank.
- Risk and Control Self-Assessment policy which formalizes and explains the definition and positioning of the Risk & Control Self-Assessment (RCSA) methodology within Triodos Bank.
- Key Control Management policy which formalizes positioning of key controls and the management of these key controls within Triodos Bank. This means the identification of key controls, and the testing, reviewing and evaluation of the operating effectiveness of these key controls.
- Risk Acceptance and Waiver policy which describes the process of waiving policy implementations as well as the process of accepting risks for which it has been decided that it is not feasible to avoid, transfer or mitigate the risk to a low residual risk
- Risk Event Management policy which describes how risk events are managed, captured and reported within Triodos Bank.
- Action Tracking policy which describes Action Tracking as an ORM instrument to monitor actions, which intends to mitigate the identified risks within Triodos Bank.

The Operational Risk Framework uses several tools and technologies to identify, measure and monitor risks and monitors the level of control on an operational, tactical and strategic level. During 2020 control testing and key control management was extended to also support the monitoring DGS related control objectives. The Operational Risk Management department performs analyses on a continuous basis due to a risk event management process and strong reporting and communication lines between the Local Operational Risk departments and Group Operational Risk Management.

Information security

Cyber threats are still high across the financial sector. Triodos Bank performs periodic cyber threat assessments to determine its strategy to limit these risks. The information security management system includes the Dutch Central Bank (DNB)'s framework for Information Security which is based on COBIT. In order to detect and respond to cybersecurity events a Security Operations Centre (SOC) is in place within Triodos Bank. Business Units follow both the central security plan but also have their own responsibility when setting up awareness training specific to local needs as strong security awareness among co-workers is also an essential part of security.

Tax risk

Triodos Bank is subject to international tax risks due to its operations in several West-European countries. The local tax risks are managed by the respective local Triodos Bank business units, in close cooperation on tax matters supported by the tax department at group level.

Financial reporting risk

Triodos Bank is subject to financial reporting risk which is mainly related to estimates and assumptions applied as further disclosed in the financial statements. Triodos Bank is continuously working on improving its reporting. Projects and improvement programs have been set up to ensure effective and efficient usage and analysis of data in order to support its decision processes.

Compliance risk

Triodos Bank defines compliance risk as the risk of legal or regulatory sanctions, material financial loss or loss to reputation that Triodos Bank may suffer as a result of its failure to comply with laws, regulations, rules, related self-regulatory standards, and codes of conducts applicable to its banking activities. Internal policies, procedures and awareness activities are in place to guarantee that co-workers in all functions comply with relevant laws and regulations.

The compliance function independently monitors and challenges the extent to which Triodos Bank complies with laws, regulations and internal policies, with an emphasis on customer due diligence, anti-money laundering, treating customers fairly, preventing and managing conflicts of interest, data protection and the integrity of co-workers.

Triodos Bank has a European compliance team which is led by the Group Director Compliance, who is also the Group Data Protection officer. Compliance officers and Data Protection officers are appointed in every banking entity with a functional line to the central compliance department. The Director of Compliance reports to the Chief Risk Officer and has an escalation line to the Chair of the Audit and Risk Committee, that supports the independence of the Compliance Function.

Triodos Bank aims to serve the interests of all stakeholders, including society, by actively fulfilling its role as a gatekeeper in the financial system and to counter money laundering and terrorism financing. The bank applies various procedures and measures in this respect.

In 2018, the DNB conducted a thematic, sector wide survey among Dutch banks, focussing on the measures that the banks have taken to prevent money laundering and terrorism financing. Following this survey, DNB concluded that Triodos Bank is required to implement enhanced measures concerning customer due diligence and monitoring of customer transactions. On 6 March 2019 the Dutch Central Bank imposed on Triodos Bank N.V.

a formal instruction (aanwijzing) to remedy shortcomings in the compliance with provisions of the anti-money laundering and counter-terrorist financing laws and the financial supervision laws. Triodos Bank accepted this instruction and is implementing mitigating measures. Following the formal instruction Triodos Bank received an administrative penalty on 14 December 2020 that was paid without delay.

Triodos Bank was not involved in any other material legal proceedings or any other further sanctions associated with non-compliance with legislation or regulations in terms of financial supervision, corruption, advertisements, competition, data protection or product liability.

Financial risk

Financial risk is an umbrella term for multiple types of risk associated with financing the balance sheet. To manage this, financial risk is subdivided in three categories: credit risk, liquidity risk and market risk.

Credit risk

Credit risk management

Credit risk is the risk that a counterparty doesn't fulfil its financial obligations. Triodos Bank manages its Credit Risk at a client and at portfolio level. It operates within a pre-defined set of criteria for accepting credits. Credits are extended within the target markets and lending strategy in accordance with Triodos Bank's mission and expertise. Before accepting a credit facility, Triodos Bank assesses the customer's risk profile, cash flows, available collateral and the requested transaction, including an assessment of the integrity and reputation of the borrowers or counterparty. Compliance analysis with Triodos Lending Criteria is an integral part of each credit proposal.

In order to manage credit risk Triodos Bank developed an internal rating-based system, resulting in a probability of default. Furthermore, Triodos Bank has developed a loss given default model, allowing us to model the expected loss and the economic capital.

Credit risk organisational structure

Each branch has a credit risk team headed by a Head of Credit Risk. The teams comprise credit risk analysts and Special Asset Managers. They have a functional reporting line to the Central Head of Credit Risk at Head Office. At central level a dedicated team is in place with credit analysts, data analysts and special asset management specialists.

At local level, individual files have a second line review and the portfolio is monitored and reviewed on a continuous basis. The larger files based on exposure and rating, are furthermore analysed at central level. The aggregated portfolio is also monitored at central level.

The resulting analysis is provided to the local and/or central credit committee for decision making on approvals for individual files, lending criteria for sectors and limits on sectors, countries or individual obligors.

Concentration risk

Loans are provided to businesses and projects that contribute to achieving Triodos Bank's mission. Given that this involves a small number of sustainable sectors, a certain level of sector concentration is inherent to the loan portfolio. Concentration in the existing sectors is acceptable as Triodos Bank has considerable expertise in these sectors and actively invests in further increasing its knowledge.

Triodos Bank focus primarily on the quality and diversification of its loan portfolio. We put extra effort into identifying loans to front-runners in their fields; the entrepreneurs developing the sustainable industries of the future.

A diversified credit risk portfolio is the result of assets spread over many debtors, sectors and geographies that are not inter- or intra-related. In order to manage concentration risks and face an economic downturn with confidence, Triodos Bank maintains a set of limits. The limits are based on the bank's capital base and reflect the risk appetite. This policy describes the different kind of credit concentrations identified and the limit setting.

Triodos Bank measures and limits the following concentration risks in its lending activities:
- Obligor exposures
- Group exposures
- Top 20 exposures excluding (sub-)Government exposures
- Government exposures
- Sector exposures
- Non-Bank Financial Intermediation (Shadow banking) exposures
- Mortgage exposures
- Country exposures

Besides lending activities, Triodos Bank has established limits related to the investment portfolio:
- Maximum exposure on government and sub-governments
- Maximum exposure on supranational institutions
- Maximum exposure on banks and financial institutions

The limit setting is derived from the risk appetite framework and aims to keep concentration risk at an acceptable level.

Sector concentrations

Triodos Bank is active in well-defined sectors where it has extensive expertise, and which are in line with its mission. It has set limits on sectors, based on Actual Own Funds, at group and banking entity level. Sector studies have shown relatively low correlations of risk drivers in sectors that Triodos Bank finances in multiple countries. A specification of the lending by sector can be found from page 202 onwards.

At group level, Triodos Bank divides the sector concentration limits in different levels. Specific limits for each sector per country are set by the Executive Board within these levels, taking into account the specific risks of each sector and country.

Larger sectors are strategic for Triodos Bank. These are well distributed across banking entities (and countries) and have an overall low risk profile that justifies a higher consolidated concentration. Sector analyses are performed on an annual basis and are presented to the Central Credit Committee to be able to respond swiftly to developments that may affect the risk profile of the portfolio. Central Credit Risk can request sector updates at shorter intervals if there is a change to a sector risk profile.

Sector limits are approved on the basis of thorough annual sector analyses demonstrating an in-depth knowledge of the sector and Triodos Bank's track record.

Country concentrations

Triodos Bank is a European bank, acting under the European Banking Directive since 1993, with banking entities in four countries (The Netherlands, Belgium, Spain and Germany), with a subsidiary in the United Kingdom and with additional exposures amongst others in France and Ireland.

Triodos Bank does not set any country limits for the countries it operates in as long as these countries have a credit rating of AA- or better. Specific limits are defined for countries with a credit rating of A+ or lower.

Credit risk loan book

Credit risk is the risk that a counterparty doesn't fulfil its financial obligations. Triodos Bank manages its Credit Risk at a client and at portfolio level. It operates within a pre-defined set of criteria for accepting credits. Credits are extended within the target markets and lending strategy in accordance with Triodos Bank's mission and expertise. Before accepting a credit facility, Triodos Bank makes an assessment of the customer's risk profile, cash flows, available collateral and the requested transaction, including an assessment of the integrity and reputation of the borrowers or counterparty. Compliance analysis with Triodos Lending Criteria is an integral part of each credit proposal.

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Obligor risk

An obligor is a single legal entity that commits to the terms and conditions of a loan agreement. The obligor is thoroughly analysed on meeting Triodos Bank's lending criteria and its capacity to repay a loan. The risk related to the obligor is that it fails to meet its contractual obligations. Obligors are rated through an internal rating methodology.

A thorough assessment of each obligor and the structure of their loan is made before any loan is provided. A review of approved credit is made once a year, as a minimum, to assess the evolution of the client's capacity to meet its obligations. The high quality of securities (collateral) against outstanding loans reduces credit risk. Examples of principal collateral: mortgage registrations for business or private properties, securities from public authorities, companies or private individuals, and rights of lien on movables, such as office equipment, inventories, receivables and/or contracts for projects.

Triodos Bank aims to finance specific projects and assets that are in line with its mission. When financing a project, the bank has a pledge on the underlying contracts. For the financing of objects, Triodos Bank will take a pledge or mortgage on the specific object. It applies haircuts, in all cases, on the market value. The level of this haircut will depend on the marketability of the asset in a negative scenario. This allows Triodos Bank to make a proper assessment of the overall risk of the loan and the value of the asset in case of a downturn. The value of the collateral is reviewed on a yearly basis. An external valuation by an expert is requested, at a minimum every three years, for large loans with a mortgage.

Triodos Bank has an early warning system that helps identify problem loans early, to allow for more available options and remedial measures. Once a loan is identified as being in default (unlikeliness to pay or overdue payments beyond 90 days), it is managed under a dedicated remedial process, with a focus on full recovery.

Group exposures

The risk related to a Group is that if one obligor fails to meet its contractual obligations, so will the remaining obligors within the Group. A group is defined as two or more obligors that are interrelated in such a way that they are considered as a single risk.

Each obligor of the Group, and the Group as a whole, are analysed on all aspects, from meeting Triodos Bank's lending criteria to their capacity to repay the loan.

Credit risk investment portfolio

Liquidity not invested in loans to customers is invested in deposits with banks (including Central Banks) or bonds. Triodos Bank's policy is to invest the liquidity in the countries where it has branches or subsidiaries. The bond portfolio of Triodos Bank comprises of (local) government bonds (from countries where Triodos Bank has a branch or subsidiary) and investment grade bonds issued by European supranational organisations (e.g.European Investment Bank), Financial Institutions and corporates.

There are no regulatory restrictions to exposures on governments. Triodos Bank sets limits based on the country risk.

There are also no regulatory restrictions to exposures on multilateral development banks as far as an institution has a credit risk weight of 0% for regulatory capital requirements. Triodos Bank has set limits to avoid concentration risk in these exposures.

Credit risk banks

Banks are selected on the basis of their creditworthiness and screened on their sustainability performance. Exceptions can occur, when the capacity of selected banks in a country is considered not sufficient to place Triodos Bank's liquidities using a certain maximum concentration per individual bank. In such cases, deposit maturity periods will not exceed three months. All counterparty limits for banks are set by either the Executive Board or the Central Credit Committee. Banking entities place excess liquidity with the country's central banks (minimum reserve requirements and deposit facility). There are no regulatory restrictions on exposures to Central Banks.

The Capital Requirements Regulation Large Exposures Regime limits the maximum exposure to a bank at 25% of its Tier 1 capital plus (if available) Tier 2 with a maximum of one third of Tier 1 capital. To avoid the interbank exposure exceeding the regulatory maximum, Triodos Bank applies a maximum exposure below the limit based on the Large Exposures Regime. The limits are furthermore adapted to the external rating of the counterparty and also deposits on banks are limited to a maximum maturity of one year.

Credit risk related to derivatives

Triodos Bank has exposure to credit risk resulting from outstanding Foreign Exchange (FX) contracts (spot, forward and swap transactions) with Financial Institutions and with funds managed by Triodos Investment Management. Triodos Bank services these funds by providing hedges for the foreign exchange risk of these funds' investments.

Triodos Bank has limited exposure to credit risk resulting from outstanding Interest Rate Swaps (IRS). The IRS are all centrally cleared with the LCH Clearnet. The daily margining minimises the (potential) credit risks.

A limit is set per counterparty based on the expected amount of outstanding FX transactions and the corresponding expected exposure. This limit is subject to the overall counterparty limit Triodos Bank has per counterparty.

Any collateral needed for FX transactions is calculated and managed daily. In the liquidity stress tests, the amount of collateral needed for FX transactions is stressed in order to calculate the potential impact on Triodos Bank's liquidity position.

Triodos Bank entered into FX deals with Triodos Investment Funds and these deals are hedged by deals with a few banks. Wrong-way risk is the risk that the exposure to a counterparty is adversely correlated with the credit quality of that counterparty. The FX deals with the Triodos Investment Funds do not cause wrong-way risk as these FX deals hedge the FX risk of the underlying assets of the Investment Funds. At the end of 2017 Triodos Bank stopped entering into new FX deals with Triodos Investment Funds because of new regulation. In addition, the wrong-way risk of transactions with banks is mitigated by only using banks with a sufficient credit rating and by having collateral agreements in place.

Additional disclosure related to the credit quality of assets

Business loans in the portfolio are periodically reviewed on an individual basis. Their frequency depends on the debtor's creditworthiness, the degree of market exposure and the market in which the debtor operates. Small business and private loans are reviewed at portfolio level, and on individual basis if appropriate.

Each branch has a credit risk team headed by a Head of Credit Risk. The teams comprise credit risk analysts and Special Asset Managers. They have a functional reporting line to the Central Head of Credit Risk at Head Office. At central level a dedicated team is in place with credit analysts, data analysts and special asset management specialists.

The credit committees discuss and, if necessary, take action with respect to overdue payments from debtors. If there is any doubt regarding the continuity of the debtor's core operations and/or a debtor fails to settle agreed interest and repayment instalments for a prolonged period, this debtor falls under the category of doubtful debtors and will be managed intensively.

Provisions for loan losses are taken for doubtful debtors at an individual level based on the difference between the total amount of the debtor's outstanding liability to Triodos Bank and the future expected cash flows, discounted at the original effective interest rate of the contract. These individual provisions include provisions for concessions or refinancing given to debtors who face financial difficulties. They are only granted to the debtor in question in order to overcome their difficulties in these exceptional circumstances. These are described as forbearance measures.

The credit risk in the loan portfolio is reported each month to the Central Credit Committee, and quarterly to the Audit and Risk Committee as part of the ERM report.

Qualitative disclosure requirements on institutions' use of external credit ratings under the standardised approach for credit risk.

In addition to our check on minimum standards, external credit ratings – if available – are used to determine the credit worthiness of the counterparties of our investment portfolio and banks, and for a few corporates. External ratings are also used for calculating the minimum capital requirement for credit risk under the standardised approach. For this purpose, we use the ratings of Fitch and Moody's.

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Credit risk quantitative disclosures

Credit quality analysis

The following tables set out information about the credit quality of financial assets, loan commitments and guarantee contracts. Unless specifically indicated, for financial assets, the amounts in the table represent gross carrying amounts. For loan commitments and financial guarantee contracts, the amounts in the table represent the amounts committed or guaranteed, respectively.

The following table shows the loans and advances to banks at amortised cost, which are all in stage 1.

	2020	2019
Loans and advances to banks at amortised cost	**Stage 1**	**Stage 1**
Gross amount	150,581	227,633
allowance for expected credit losses	-18	-42
Carrying amount	**150,563**	**227,591**

Triodos Bank applies ratings to its loans and advances to customers based on its credit risk policy. Within the policy clients with total business loans above EUR 250 thousand are rated. Clients with retail mortgage loans and or total business loans below EUR 250 thousand have no rating appointed. These are represented in the not rated category. The below table shows the loans and advances to customers within the rating categories.

	2020			
Loans and advances to customers at amortised cost	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
Rating 1-9: Normal risk	5,315,917	611,226	-	5,927,143
Rating 10-13: Increased risk	39,664	119,416	-	159,080
Rating 14: Default	-	-	214,649	214,649
Not rated	2,697,674	209,134	-	2,906,808
Gross amount	**8,053,255**	**939,776**	**214,649**	**9,207,680**
allowance for expected credit losses	-8,148	-9,384	-33,438	-50,970
Carrying amount	**8,045,107**	**930,392**	**181,211**	**9,156,710**

		2019		
Loans and advances to customers at amortised cost	Stage 1	Stage 2	Stage 3	Total
Rating 1-9: Normal risk	5,221,112	126,178	-	5,347,290
Rating 10-13: Increased risk	55,990	88,815	-	144,805
Rating 14: Default	-	-	190,836	190,836
Not rated	2,018,922	540,940	-	2,559,862
Gross amount	**7,296,024**	**755,933**	**190,836**	**8,242,793**
allowance for expected credit losses	-4,475	-1,000	-28,304	-33,779
Carrying amount	**7,291,549**	**754,933**	**162,532**	**8,209,014**

The following table sets out information about the overdue status of loans and advances to customers in Stages 1, 2 and 3.

		2020		
Loans and advances to customers at amortised cost	Stage 1	Stage 2	Stage 3	Total
Current	8,050,729	285,271	-	8,336,000
Overdue < 90 days	2,526	654,505	-	657,031
Overdue > 90 days	-	-	214,649	214,649
Total	**8,053,255**	**939,776**	**214,649**	**9,207,680**

		2019		
Loans and advances to customers at amortised cost	Stage 1	Stage 2	Stage 3	Total
Current	7,259,658	739,613	-	7,999,271
Overdue < 90 days	36,366	16,320	-	52,686
Overdue > 90 days	-	-	190,836	190,836
Total	**7,296,024**	**755,933**	**190,836**	**8,242,793**

All debt securities at amortised cost are within stage 1 The below table sets out the debt securities per rating.

Debt securities at amortised cost	2020 Stage 1	2019 Stage 1
AAA	67,941	177,102
AA	390,372	425,926
A	428,501	55,894
BBB	430,550	375,403
allowance for expected credit losses	-63	-34
Carrying amount	**1,317,301**	**1,034,291**

Loan commitments are not (yet) rated and the ECL is determined based on the business loans and mortgage loans portfolios. The outcome is presented in the table below.

		2020	
Loan commitments	Stage 1	Stage 2	Total
Gross carrying amount	1,301,301	141,622	1,442,923
allowance for expected credit losses	-1,025	-1,209	-2,234
Carrying amount (provision)	-1,025	-1,209	-2,234

		2019	
Loan commitments	Stage 1	Stage 2	Total
Gross carrying amount	943,411	177,216	1,120,627
allowance for expected credit losses	-570	-107	-677
Carrying amount (provision)	-570	-107	-677

All financial guarantee contracts are within stage 1 as shown in the table below.

	2020	2019
Financial guarantee contracts	Stage 1	Stage 1
Gross carrying amount	41,009	75,901
allowance for expected credit losses	-14	-19
Carrying amount (provision)	-14	-19

Cash and cash equivalents Triodos Bank held cash and cash equivalents of €2.956 million at 31 December 2020 (2019: €2.270 million). The cash and cash equivalents are held with central banks.

Collateral held and other credit enhancements

Triodos Bank can hold collateral and other credit enhancements against certain of its credit exposures. The following table sets out the principal types of collateral held against different types of financial assets.

	Percentage of exposure that is subject to collateral requirements		
	2020	2019	Principal type of collateral held
Non trading derivatives	100	100	Cash Collective
Loans and advances to customers			
Mortgage lending	97	96	Residential Property
Business lending	61	76	Commercial Property, Other
Current accounts	-	-	None

The following tables stratify credit exposures from mortgage loans and advances to retail customers by ranges of loan-to-value (LTV) ratio. LTV is calculated as the ratio of the gross amount of the loan – or the amount committed for loan commitments – to the value of the collateral. The valuation of the collateral excludes any adjustments for obtaining and selling the collateral. The value of the collateral for residential mortgage loans is based on the collateral value at origination updated based on changes in house price indices. For credit-impaired loans the value of collateral is based on the most recent appraisals.

LTV ratio	2020	2019
Less than 65%	1,400,205	978,172
65-75%	338,468	405,268
75-90%	458,956	218,329
More than 90%	542,301	375,406
Total residential mortgage lending	**2,739,930**	**1,977,175**

Details of financial and non-financial assets obtained during the year by taking possession of collateral held as security against loans and advances and held at the year end are shown below.

	2020	2019
Property	874	4,304

Triodos Bank sometimes repossesses assets which come from acquisition in public auctions. These assets are collaterals of an executed loan. A part of the repossessed assets however will not be sold immediately because Triodos Bank has opted to add value by letting these assets and are therefore presented as investment properties.

Allowance for expected credit losses

The following tables show reconciliations from the opening to the closing balance of the allowance for expected credit losses by class of financial instrument.

Triodos Bank uses three stages to classify the expected credit loss (hereafter "ECL") for financial instruments. Stage 1 includes the financial instruments that have (close to) similar credit risk since origination. For this category the ECL is determined by looking forward for 12 months. Stage 2 includes the financial instruments which have had a significant increase in credit risk since origination. The ECL for stage 2 is determined looking over the entire lifetime of the financial instrument. The ECL for stages 1 and 2 is determined by the PD, LGD and EAD per exposure, which are determined with the use of a model that includes several drivers. These drivers can be client specific or based on macro-economic scenarios. Stage 3 includes the financial instruments which are in default. The ECL for this stage is also determined over the entire lifetime, considering default specific scenarios.

The ECL provision represents an estimate of the expected credit loss. The future development of the underlying parameters can influence this estimate positively (or negatively) leading to a decrease (or increase) of expected credit losses in future periods. If economic growth is expected to develop positively in future periods, this will have a positive effect on the calculation of ECL and result in lower ECL provision for stage 1 and 2.

Net portfolio growth captures all additions and full loans repayments. New loans are initially included in Stage 1. Additions in Stage 2 are caused increases in loans already in Stage 2 or sector overlays for significant increases in credit risk. Changes in ratings of clients may trigger classifications into different categories. When a rating declines significantly, the loan is transferred from Stage 1 to Stage 2, if the decline persists the loan can go into default and is subsequently moved into Stage 3. Furthermore, the defaults may be cured, and credit ratings may go up, such that loans can be transferred back to Stage 2 or Stage 1. The changes in stages is represented in the transfers.

When the drivers of the PD and LGD are changed, ECL amounts per financial instrument are recalculated. This is captured in the net remeasurement of allowance for expected credit losses. The net remeasurement can be broken down into several items: (1) Remeasurement in calculated ECL of individual loans which have transferred between stage 1 and stage 2. (2) Changes in forward looking macro-economic scenarios. (3) Updates and refinements of the used ECL model. And, (4) changes in individual loan or advance behaviour such as changes in rating not triggering stage transfer or loan amount due to repayment.

Loans and advances to banks at amortised cost have no changes in rating, and therefore credit risk, from issuance of current outstanding balance and therefore everything is within stage 1.

ECL loans and advances to banks at amortised cost	2020	2019
Balance at 1 January	42	42
Transfer to Stage 1	-	-
Transfer to Stage 2	-	-
Transfer to Stage 3	-	-
Net remeasurement of allowance for expected credit losses*	-24	2
Net portfolio growth	-	-2
Balance at 31 December	**18**	**42**

* The allowance for expected credit losses in these tables includes ECL on loan commitments for certain retail products such as credit cards and overdrafts, because the Group cannot separately identify the ECL on the loan commitment component from those on the financial instrument component.

The following table shows the movements within the ECL for business loans and current accounts.

	2020			
ECL loans and advances to customers at amortised cost - Business loans and current accounts	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
Balance at 1 January	4,102	828	28,011	32,941
Transfer to Stage 1	237	-237	-	-
Transfer to Stage 2	-316	316	-	-
Transfer to Stage 3	-59	14	45	-
Net remeasurement of allowance for expected credit losses	1,796	7,000	10,002	18,798
of which:				
- Effect of transition between stages	*-1,420*	*5,264*	-	*3,844*
- Macro-economic forward looking impact	*7,356*	*1,228*	-	*8,584*
- Update ECL model	*-36*	*-40*	-	*-76*
- Individual loan or advance behaviour	*-4,104*	*548*	*10,002*	*6,446*
Net portfolio growth	1,545	1,202	-	2,747
Other transfers	-	-	-696	-696
Write-offs	-	-	-4,287	-4,287
Exchange rate differences	-18	-62	-103	-183
Balance at 31 December	**7,287**	**9,061**	**32,972**	**49,320**

The allowance for expected credit losses in this table includes ECL on off balance loan commitments for certain retail products such as credit cards and overdrafts, because Triodos Bank cannot separately identify the ECL on the loan commitment component from those on the financial instrument component.

ECL loans and advances to customers at amortised cost - Business loans and current accounts	2019			
	Stage 1	Stage 2	Stage 3	Total
Balance at 1 January	4,185	851	33,515	38,551
Transfer to Stage 1	57	1	-58	-
Transfer to Stage 2	-158	179	-21	-
Transfer to Stage 3	-34	25	9	-
Net remeasurement of allowance for expected credit losses	-767	-264	10,020	8,989
of which:				
- Effect of transition between stages	*-20*	*71*	-	*51*
- Macro-economic forward looking impact	*644*	*86*	-	*730*
- Update ECL model	-	-	-	-
- Individual loan or advance behaviour	*-1,391*	*-421*	*10,020*	*8,208*
Net portfolio growth	819	36	-6,416	-5,561
Other transfers	-	-	-	-
Write-offs	-	-	-9,137	-9,137
Exchange rate differences	-	-	99	99
Balance at 31 December	**4,102**	**828**	**28,011**	**32,941**

The following table shows the movements within the ECL for mortgage loans.

	2020			
ECL loans and advances to customers at amortised cost – Mortgages	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
Balance at 1 January	373	169	296	838
Transfer to Stage 1	47	-47	-	-
Transfer to Stage 2	-	-	-	-
Transfer to Stage 3	-2	-11	13	-
Net remeasurement of allowance for expected credit losses	111	132	157	400
of which:				
- Effect of transition between stages	*-46*	*2*	-	*-44*
- Macro-economic forward looking impact	*197*	*109*	-	*306*
- Update ECL model	*6*	*13*	-	*19*
- Individual loan or advance behaviour	*-46*	*8*	*157*	*119*
Net portfolio growth	332	80	-	412
Balance at 31 December	**861**	**323**	**466**	**1,650**

ECL loans and advances to customers at amortised cost – Mortgages	2019 Stage 1	Stage 2	Stage 3	Total
Balance at 1 January	339	167	230	736
Transfer to Stage 1	-	-	-	-
Transfer to Stage 2	-	-	-	-
Transfer to Stage 3	-2	-18	20	-
Net remeasurement of allowance for expected credit losses	-95	-20	46	-69
of which:				
- Effect of transition between stages	-	*19*	-	*19*
- Macro-economic forward looking impact	*-14*	*-8*	-	*-22*
- Update ECL model	-	-	-	-
- Individual loan or advance behaviour	*-81*	*-31*	*46*	*-66*
Net portfolio growth	131	40	-	171
Balance at 31 December	**373**	**169**	**296**	**838**

The following table shows the movements within the ECL for debt securities at amortised cost.

ECL debt securities at amortised cost	2020 Stage 1	2019 Stage 1
Balance at 1 January	34	31
Net remeasurement of allowance for expected credit losses	6	9
Net portfolio growth	23	-
Foreign exchange and other movements	-	-6
Balance at 31 December	**63**	**34**

The following table shows the movements within the ECL for financial guarantees.

ECL financial guarantees	2020 Stage 1	2019 Stage 1
Balance at 1 January	19	91
Net remeasurement of allowance for expected credit losses	-5	-
Net portfolio growth	-	-
Foreign exchange and other movements	-	-72
Balance at 31 December	**14**	**19**

The following table shows the movements within the ECL for loan commitments.

		2020	
ECL loan commitments issued	**Stage 1**	**Stage 2**	**Total**
Balance at 1 January	570	106	676
Net remeasurement of allowance for expected credit losses	271	1,067	1,338
of which:			
- Macro-economic forward looking impact	*469*	*1,825*	*2,294*
- Update ECL model	*-4*	*-2*	*-6*
- Individual commitment behaviour	*-194*	*-756*	*-950*
Net portfolio growth	184	35	219
Balance at 31 December	**1,025**	**1,208**	**2,233**

Loan commitments issued for the most significant part result in issued loan when offers are signed or when commitments are used. The table therefore shows the totals of the loan commitment ECL per stage.

	2019		
ECL loan commitments issued	Stage 1	Stage 2	Total
Balance at 1 January	678	119	797
Net remeasurement of allowance for expected credit losses	-96	-10	-106
of which:			
- Macro-economic forward looking impact	*55*	*5*	*60*
- Update ECL model	-	-	-
- Individual commitment behaviour	*-151*	*-15*	*-166*
Net portfolio growth	-12	-3	-15
Balance at 31 December	**570**	**106**	**676**

Allowance for expected credit losses reconciliation to income statement

The following table provides a reconciliation between:

- amounts shown in the above tables reconciling opening and closing balances of allowance for expected credit losses per class of financial instrument; and
- the 'impairment losses on financial instruments' line item in the consolidated statement of profit or loss and other comprehensive income.

	2020			
Impairment losses on financial instruments	Stage 1	Stage 2	Stage 3	Total
Loans and advances to banks	-24	-	-	**-24**
Loans and advances to customers	3,723	8,414	10,221	**22,358**
Debts securities at amortised cost	29	-	-	**29**
Financial guarantees	-5	-	-	**-5**
Loan commitments issued	455	1,102	-	**1,557**
Impairment losses on financial instruments for the year	**4,178**	**9,516**	**10,221**	**23,915**

Impairment losses on financial instruments	2019 Stage 1	Stage 2	Stage 3	Total
Loans and advances to banks	1	-	-	**1**
Loans and advances to customers	-49	-21	3,582	**3,512**
Debts securities at amortised cost	3	-	-	**3**
Financial guarantees	-72	-	-	**-72**
Loan commitments issued	-108	-12	-	**-120**
Impairment losses on financial instruments for the year	**-225**	**-33**	**3,582**	**3,324**

Credit-impaired financial assets

The following table sets out a reconciliation of changes in the net carrying amount of credit- impaired loans and advances to customers.

	2020	2019
Credit-impaired loans and advances to customers at 1 January	28,304	33,742
Addition	14,128	10,016
Write-off	-4,287	-9,137
Release	-3,908	-6,416
Other transfers	-696	-
Exchange rate differences	-103	99
Balance sheet value as at 31 December	**33,438**	**28,304**

Modified financial assets

The following table provides information on financial assets that were modified during the reporting period. The net modification loss comprises the modification result minus modification fees or penalty interest received.

	2020	2019
Financial assets modified during the period		
Amortised cost before modification	65,730	11,764
Net modification loss	7	34

Offsetting financial assets and financial liabilities

Triodos Bank does not make use of any netting under master agreements for its financial instruments.

The ISDA and similar master netting arrangements do not meet the criteria for offsetting in the statement of financial position. This is because they create for the parties to the agreement a right of set-off of recognised amounts that is enforceable only following an event of default, insolvency or bankruptcy of the Group or the counterparties or following other predetermined events. In addition, Triodos Bank and its counterparties do not intend to settle on a net basis or to realise the assets and settle the liabilities simultaneously.

Triodos Bank receives and gives collateral in the form of cash in respect of the derivatives held for risk management. This collateral is subject to standard industry terms including, when appropriate, an ISDA credit support annex. This means that securities received/given as collateral can be pledged or sold during the term of the transaction but have to be returned on maturity of the transaction. The terms also give each party the right to terminate the related transactions on the counterparty's failure to post collateral.

The impact of potential collateral requirements is increasing at Triodos Bank. The amount pledged with central and commercial banks, for payment system purposes, increased in 2020 and is expected to increase with the further growth of Triodos Bank.

The collateral needs stemming from FX forwards decreased in 2020 because the FX forward portfolio of Triodos Bank decreased. At the end of 2020 total net amount of EUR 7.1 million cash collateral was posted (2019: EUR 16.4 million).

Interest Rate Swaps which are centrally cleared, increased the potential collateral needs as well during the year. At the end of 2020 total net amount of EUR 6.9 million cash collateral was posted (2019: EUR 9.3 million). This cash collateral is posted as part of the ISDA agreement as mentioned above, eligible for the counterparty in case of default.

Part of the value of debt securities at amortised is used as collateral for a possible debit balance, amounting to EUR 177.5 million at the Dutch Central Bank (2019: EUR 89.4 million). This will serve as collateral when Triodos Bank obtains a line of credit from the Dutch Central Bank and cover this line in case of default. Triodos Bank did not make use of this in 2019 and 2020.

Liquidity risk

Liquidity risk management

Triodos Bank only lends to and invests in sustainable enterprises in the real economy. Triodos Bank is not dependent on funding from the wholesale market. Funds are attracted from depositors and shareholders.

Triodos Bank does not invest in complex financial instruments. It has been this approach that enabled Triodos Bank to remain solid and stable in a time of market crisis but also to continue to grow steadily. The key factor to achieve this is to maintain healthy levels of liquidity. Triodos Bank has a large, good quality liquidity buffer resulting in solid liquidity and funding ratios. Triodos Bank does not act as correspondent bank which minimises liquidity needs during the day.

As a mid-sized European bank with total Funds Entrusted of EUR 11,747 million per the end of December 2020, liquidity risk is an important risk for Triodos Bank. The Bank has intensively worked on the development of a solid liquidity framework to have always sufficient funds to meet sudden and (un)expected short-term liquidity needs. The high cash liquidity buffer in combination with a high-quality investment portfolio, reflects the low risk appetite for liquidity risk.

For its funding Triodos Bank mainly depends on funds entrusted from retail and business banking clients, consisting of current accounts, saving accounts and fixed term accounts.

The liquidity portfolio increased in 2020 due to the participation in the Targeted Longer-Term Refinancing Operation (TLTRO) of the Euro system to anticipate potential (temporary) higher credit demand from our clients. Our policy is to hold a sound liquidity buffer. Liquidity is invested within our minimum standards on sustainability, in highly liquid assets and (short-term) cash loans which count as inflow in the LCR 30 days before maturity, if the risk-return is more favourable than having the liquidity at the central banks. Around one third of the liquidity is invested, mainly in bonds and to a small extent in cash loans. The rest of the liquidity is mainly at the current account of the national central banks of our local entities and to some extent at sight with commercial banks to facilitate payments. The amount invested in (regional government) bonds (in Belgium and Germany) slightly increased due to favourable investment circumstances in Q2 2020. Most bonds qualify as high-quality liquid assets and are issued by central governments, regional governments and/or agencies in the Netherlands, Belgium, Spain, Germany and the UK without a solvency weight. There are small positions in some green bonds issued by banks and corporates for diversification.

Triodos Bank transforms client funds entrusted to lending purposes that have a positive impact on society. Triodos Bank wants to meet the obligations to all clients at all time without incurring additional costs and/or resulting in reputational issues. Triodos Bank therefore has a low risk appetite for liquidity risk with limits regarding the size and quality of the liquidity buffer accordingly. Triodos Bank ensures availability of a sufficient liquidity buffer of high credit quality and a stable funding base.

The total amount of funds entrusted is EUR 11,747 million of which 79% are deposits insured by the Deposit Guarantee Scheme.

In 2020 Triodos Bank increased its collateral position at DNB to the participate in the Targeted Long-Term Refinancing Operation of the Euro system. This collateral is mainly provided by the retained RMBS Sinopel and mobilized credit claims. The impact of potential collateral requirements from payment system purposes decreased significantly at Triodos Bank in 2020 due to the cancelation of some payment activities that required a high amount of collateral (collection of pension premiums). Other collateral needs mainly stem from market value changes in Interest Rate Swap positions (to manage the interest rate risks) and in FX forwards (because of hedging the currency risk of the UK subsidiary equity participation of Triodos Bank).

The liquidity risk appetite as determined by the Executive Board (EB) and Enterprise Risk Committee (ERC) is reviewed and approved by the Supervisory Board. With this governance structure in place, the risk appetite regarding liquidity is well anchored within the senior management team of the bank. The adequate organisational structure with three lines of defence ensures that a clear division of tasks, power and responsibility is in place together with an independent control, compliance, audit and risk management function.

The liquidity contingency plan has been tested and reviewed thoroughly to achieve a solid crisis management structure in case a liquidity crisis at Triodos Bank emerges.

A limit structure is in place to manage the inherent funding mismatch other than in exceptional circumstances. Triodos Bank follows the BSBC/EBA principles considering its sustainable profile, the very strong relationship with its customers, the granularity of the Funds Entrusted and its conservative and robust liquidity management framework that is integrated in the business processes.

Triodos Bank has a large, good quality liquidity buffer resulting in high Liquidity Coverage Ratios and Net Stable Funding Ratios. In all liquidity stress test scenarios Triodos Bank has sufficient liquidity to survive the total stress period.

The remaining low interest rate climate influences liquidity risk management at Triodos Bank. Triodos Bank needs to manage its liquidity buffer at an ever-increasing cost-of-carry. The trade-off between having sufficient liquidity versus the relative high costs of holding that liquidity is becoming more important.

Liquidity risk management organisation

The daily liquidity management is currently executed at banking entity level as it is the business strategy of Triodos Bank to have this process close to the end-customer to provide detailed cash forecasts. On aggregated level, Group Treasury monitors the liquidity buffer versus the internal limits daily.

Reporting and measurement systems.

Triodos Bank monitors and reports its liquidity position at different levels and frequencies. Firstly, the total liquidity position is monitored by Group Treasury and the individual banking entities on a daily basis. Secondly, the detailed liquidity position, both in total and at banking entity level, is reported to the Chief Financial Officer and Chief Risk Officer on a weekly basis. Finally, every month the liquidity ratios are reported to the Asset and Liability Committee. The main liquidity ratios are part of the quarterly ERM report.

Liquidity risk management policy

The liquidity buffer is the source of funds in case of liquidity needs. The Cash and Liquidity Management Policy describes the requirements related to the liquidity placements, investments and investment portfolio, whereas the goal is to optimize the trade off between risk and return in a manner consistent with the mission and vision of Triodos Bank.

The Liquidity Risk Management Policy describes the actions to manage the liquidity position of Triodos Bank.

The Internal Liquidity Adequacy Assessment Process (ILAAP) assesses Triodos Bank's liquidity adequacy and liquidity management during normal business activities and in times of stress. This process is performed at least once a year and the results are submitted to the Dutch Central Bank as part of the Supervisory Review and Evaluation Process (SREP). The ILAAP Report is an internal document. The goal of this report is to properly evaluate the liquidity and funding risks and Triodos Bank's corresponding liquidity levels and the quality of the liquidity management.

Contingency funding plans

The Liquidity Contingency Plan and the Recovery Plan describe the main items that should be considered in managing the liquidity risk position of Triodos Bank in a 'stressed situation'. This includes liquidity stress indicators and trigger levels for management actions.

To increase the possibilities of recovery in periods of liquidity stress, Triodos Bank executed a retained securitisation transaction of Dutch mortgage loans (Sinopel 2019) and mobilized credit claims (loans to regional government entities) to the Euro system as collateral to be able to participate in the monetary (liquidity providing) operations.

Stress testing

The management of the liquidity position under 'normal' conditions is described in the Liquidity Risk Management Policy. Triodos Bank manages the liquidity position to withstand a liquidity crisis without damaging the on-going viability of its business. The potential but unlikely event of an upcoming liquidity crisis requires a set of early warning indicators and triggers, a set of potential early warning and recovery measures, and a dedicated organisation including a communication strategy to handle such a crisis. A list of potential early warning and recovery measures is included in the Recovery Plan. The other aspects mentioned are described in the Liquidity Contingency Plan.

Triodos Bank conducts liquidity stress tests on a monthly basis.

Declaration

A robust framework is in place at Triodos Bank to identify, measure and manage liquidity risk in line with BCBS/EBA principles. An integrated overview of the group cash position and liquidity metrics is available on a daily and weekly basis.

Securitisation

In 2019, Triodos executed its first retained residential mortgage backed securitisation (RMBS) transaction called Sinopel 2019 B.V. ("Sinopel"). A securitisation is a transaction where a pool of assets is sold to a special purpose vehicle. The special purpose vehicle issues notes with different tranches to finance the purchase price of the assets. Sinopel 2019 adheres to the Simple Transparent and Standardised (STS) securitisation framework.

With Sinopel Triodos Bank structured a retained RMBS whereby Triodos is the sole buyer of the issued notes and as such has not transferred any credit risk. Through the retained RMBS, Triodos strengthens its financial resilience and gains additional access to (central bank) liquidity by pledging the notes as collateral with the Dutch Central Bank. The Sinopel RMBS is collateralised by Dutch residential mortgages loans. The structure is fully compliant with the new Simple Transparent Standardised EU regulation. For notes issued by Sinopel 2019 B.V., the following ECAIs were involved: DBRS Ratings Limited and S&P Global Ratings Europe.

As there is no risk transfer with the Sinopel transaction, the securitisation exposures (notes) are not risk-weighted separately. The securitised assets (mortgage loans) are taken into account as if they were not securitised. Triodos consolidates Sinopel in its annual accounts.

Apart from the Sinopel transaction Triodos is not active as originator, investor or sponsor of securitisation exposures. As a result, Triodos does not hold any re-securitisation positions and does not provide securitisation related services to any other Special Purpose Vehicle.

Quantitative liquidity risk disclosures

Maturity analysis for financial liabilities and financial assets

The following tables set out the earliest possible contractual maturities of Triodos Bank's financial liabilities and financial assets.

2020
Financial asset by type
Cash and cash equivalents
Loans and advances to banks
Loans and advances to customers
Debt securities at amortised cost
Investment securities
Non-trading derivatives
Other assets [2]
Total assets
Financial liability by type
Deposits from banks
Deposits from customers
Non-trading derivatives
Debt issued and other borrowed funds
Other liabilities [3]
Total liabilities
Contingent liabilities
Irrevocable facilities
Total off balance sheet liabilities

[1] Includes assets and liabilities on demand.
[2] Includes intangible assets, property and equipment, investment property, right-of-use assets, deferred tax assets, other assets and non-
[3] Includes lease liabilities, deferred tax liabilities, current tax liability and other liabilities as presented in the consolidated balance sheet.

	Less than 1 month[1]	1–3 months	3 months –1 year	1–5 years	More than 5 years	No maturity	Total
	2,955,787	-	-	-	-	-	2,955,787
	126,615	8,948	15,000	-	-	-	150,563
	132,435	615,256	832,317	3,202,127	4,374,575	-	9,156,710
	9,015	36,149	206,436	857,992	207,709	-	1,317,301
	-	-	-	-	-	31,214	31,214
	-	-	877	894	24	-	1,795
	26,310	12,258	3,840	2,113	19,376	211,130	275,027
	3,250,162	**672,611**	**1,058,470**	**4,063,126**	**4,601,684**	**242,344**	**13,888,397**
	87	-	753,067	13,378	48,608	-	815,140
	10,735,658	494,777	278,034	204,101	34,637	-	11,747,207
	476	714	4,912	869	3,481	-	10,452
	-	-	9	-	6,359	-	6,368
	61,842	4,034	11,775	12,002	9,936	1,429	101,018
	10,798,063	**499,525**	**1,047,797**	**230,350**	**103,021**	**1,429**	**12,680,185**
	3,336	794	4,834	22,957	41,183	-	73,104
	94,364	53,844	208,909	1,111,268	467,948	-	1,936,333
	97,700	**54,638**	**213,743**	**1,134,225**	**509,131**	**-**	**2,009,437**

-current assets held for sale as presented in the consolidated balance sheet.

2019
Financial asset by type
Cash and cash equivalents
Loans and advances to banks
Loans and advances to customers
Debt securities at amortised cost
Investment securities
Non-trading derivatives
Other assets [2]
Total assets
Financial liability by type
Deposits from banks
Deposits from customers
Non-trading derivatives
Other liabilities [3]
Total liabilities
Contingent liabilities
Irrevocable facilities
Total off balance sheet liabilities

[1] Includes assets and liabilities on demand.
[2] Includes intangible assets, property and equipment, investment property, right-of-use assets, deferred tax assets, other assets and non-
[3] Includes lease liabilities, deferred tax liabilities, current tax liability and other liabilities as presented in the consolidated balance sheet.

	Less than 1 month[1]	1–3 months	3 months –1 year	1–5 years	More than 5 years	No maturity	Total
	2,269,983	-	-	-	-	-	2,269,983
	205,078	7,513	15,000	-	-	-	227,591
	218,894	470,833	554,765	2,311,366	4,653,156	-	8,209,014
	20,312	15,051	162,407	663,024	173,497	-	1,034,291
	-	-	-	-	-	24,299	24,299
	552	-	5,035	2,227	908	-	8,722
	50,249	508	18,925	19,408	13,269	205,329	307,688
	2,765,068	**493,905**	**756,132**	**2,996,025**	**4,840,830**	**229,628**	**12,081,588**
	697	1,425	5,267	27,484	35,847	-	70,720
	9,356,771	730,225	306,174	265,725	34,804	-	10,693,699
	578	-	7,429	4,629	2,427	-	15,063
	39,455	8,518	24,493	12,637	14,558	1,518	101,179
	9,397,501	**740,168**	**343,363**	**310,475**	**87,636**	**1,518**	**10,880,661**
	2,468	882	1,071	61,413	41,661	-	107,495
	68,713	68,414	138,097	617,951	509,275	-	1,402,450
	71,181	**69,296**	**139,168**	**679,364**	**550,936**	**-**	**1,509,945**

-current assets held for sale as presented in the consolidated balance sheet.

The amounts in the table above have been compiled as follows:

Type of financial instrument	Basis on which amounts are compiled
Non-derivative financial liabilities and financial assets	Undiscounted cash flows, which include estimated interest payments.
Contingent and irrevocable facilities	Contractual maturity date of the off balance facility. Contingent facilities relate to credit and non-credit substitute guarantees. Credit substitute guarantees are guarantees to customers for loans provided to these customers by other banks. Non-credit substitute guarantees are guarantees to customers for all other obligations of these customers to third parties. Many of these guarantees are expected to expire without being drawn on and therefore do not necessarily represent future cash outflows. Irrevocable facilities mainly constitute accepted loans not yet paid out. Many of these facilities are for a fixed duration and bear interest at a floating rate.
Derivative financial liabilities and financial assets held for risk management purposes	Contractual undiscounted cash flows. The amounts shown are the gross nominal inflows and outflows for derivatives that have simultaneous gross settlement (e.g. forward exchange contracts and currency swaps) and the net amounts for derivatives that are net settled.

Triodos Bank's expected cash flows on some financial assets and financial liabilities can vary significantly from the contractual cash flows. The principal differences are as follows:

- demand deposits from customers are expected to remain stable or increase;
- unrecognised loan commitments are not all expected to be drawn down immediately; and
- retail mortgage loans have an original contractual maturity of up to 35 years, end of 2019 this resulted in an average contractual maturity of 15.5 years and an average expected maturity of 10.1 years because customers take advantage of early repayment options.

Liquidity reserves

	2020 Carrying amount	2019 Carrying amount
Balances with central banks	2,955,787	2,269,983
Cash and balances with other banks	150,563	227,591
Unencumbered debt securities issued by sovereigns	877,246	613,518
Undrawn credit lines granted by central banks*	139,143	787,627
Other assets eligible for use as collateral with central banks	245,977	313,773
Total liquidity reserves	**4,368,716**	**4,212,492**

* The amount is the actual credit line available.

Financial assets available to support future funding

2020	Pledged as collateral Encumbered	Unencumbered	Total
Cash and cash equivalents	-	2,955,787	2,955,787
Loans and advances to banks	22,110	128,453	150,563
Debt securities at amortised cost	178,526	1,138,775	1,317,301
Loans and advances to customers	793,749	8,362,961	9,156,710
Investment securities	-	31,214	31,214
Non-financial assets	-	276,822	276,822
Total assets	**994,385**	**12,894,012**	**13,888,397**

2019	Pledged as collateral Encumbered	Unencumbered	Total
Cash and cash equivalents	-	2,269,983	2,269,983
Loans and advances to banks	21,706	205,885	227,591
Debt securities at amortised cost	92,826	941,465	1,034,291
Loans and advances to customers	889,580	7,319,434	8,209,014
Investment securities	-	24,299	24,299
Non-financial assets	-	316,410	316,410
Total assets	**1,004,112**	**11,077,476**	**12,081,588**

In addition, in some Triodos Bank N.V. has an obligation to maintain a reserve with central banks. As at 31 December 2020, the minimum mandatory reserve deposits with various central banks amount to EUR 102,245 (2019: EUR 91,752).

Market risk

Market risk management

Market risk is the risk of losses in on and off-balance positions arising from movements in market prices. For Triodos Bank this means changes in interest rates and foreign exchange rates in particular. Triodos Bank doesn't have a trading book, but interest rate risk is present in the banking book.

Foreign exchange risk is the current or prospective risk to earnings and capital that arises from adverse movements in foreign exchange rates. Triodos Bank's base currency is the euro. The base currency of the UK subsidiary of Triodos Bank is GBP.

Triodos Bank aims to avoid net currency positions with the exception of those arising from strategic investments. The forward positions in foreign currencies are used for hedging the currency risk of the UK subsidiary equity participation. The position also contains the currency derivatives of Triodos Investment Funds which are nearly fully hedged.

The foreign exchange position is monitored daily and discussed in the Asset and Liability Committee on a monthly basis. Limits are agreed by the ALCo.

Market risk structure and organisation

Triodos Bank has exposure to credit risk resulting from outstanding Foreign Exchange (FX) contracts (spot, forward and swap transactions) with Financial Institutions and with funds managed by Triodos Investment Management. Triodos Bank services these funds by providing hedges for the foreign exchange risk of these funds' investments.

Triodos Bank has limited exposure to credit risk resulting from outstanding Interest Rate Swaps (IRS). The IRS are all centrally cleared with the LCH Clearnet. The daily margining minimises the (potential) credit risks.

A limit is set per counterparty based on the expected amount of outstanding FX transactions and the corresponding expected exposure. This limit is subject to the overall counterparty limit Triodos Bank has per counterparty.

Market risk measurement systems

Any collateral needed for FX transactions is calculated and managed daily. In the liquidity stress tests, the amount of collateral needed for FX transactions is stressed in order to calculate the potential impact on Triodos Bank's liquidity position.

Triodos Bank entered into FX deals with Triodos Investment Funds and these deals are hedged by deals with a few banks. Wrong-way risk is the risk that the exposure to a counterparty is adversely correlated with the credit quality of that counterparty. The FX deals with the Triodos Investment Funds do not cause wrong-way risk as these FX deals hedge the FX risk of the underlying assets of the Investment Funds. At the end of 2017 Triodos Bank stopped entering into new FX deals with Triodos Investment Funds because of new regulation. In addition, the wrong-way risk of transactions with banks is mitigated by only using banks with a sufficient credit rating and by having collateral agreements in place.

Interest rate risk in the Banking Book

Interest rate risk is generated by normal customer related banking activities. Triodos Bank uses retail funding to finance clients and projects which aim to improve society and the environment. In addition, the bank maintains solid capital and liquidity buffers to support its resilience.

The level of interest rate risk is managed in a four-stage risk control cycle. In this cycle, first the relevant definitions, indicators, measurement methods, and analysis for IRRBB are set. Next, the limits for the main IRRBB indicators are specified in the risk appetite statement. The third stage defines the roles and responsibilities for IRRBB management, model governance, and escalation procedures and exceptions. Lastly, the risks are monitored, reported and mitigated if necessary.

The development at the individual banking entities determines an important part of the risk development. Each banking entity sets up a budget for the next three years and updates it quarterly with a forecast. The budgets are consolidated and compliance with the risk appetite is checked. Adherence to the budget means that asset and liability management is predictable and therefore the fulfilment of the budget is closely monitored.

Triodos Banks manages its interest rate risk position in three ways. - Firstly, Triodos Bank is to a limited extent able to steer the volume and interest rate terms of new assets and the interest rate of its liabilities in order to maintain the interest rate risk exposure within limits. However, changes in client rates and terms will not be made to the extent that they would materially impair Triodos Bank's customer service, market position, profitability, capital adequacy and reasonable customer expectations. - Secondly, the amount and duration of the marketable investments in the liquidity buffer can be adjusted. - Finally, Triodos Bank uses Interest Rate Swap (IRS) contracts to maintain the bank's IRRBB exposure within the limits, if the first two methods are not effective enough. The consequent positions are taken into account in all the IRRBB calculations and subject to hedge accounting to avoid volatility in the P&L.

The ALCo is delegated by the Executive Board to monitor and take decisions related to the management of the IRRBB. Additionally, the ALCo approves material changes to IRRBB models and changes to important model assumptions. Finally, the ALCo decides on approval of and monitors adherence to the group-wide pricing framework for retail and business banking products.

One of our main strategic risks is the low interest rate environment. With the economy hit hard by the global pandemic and a long recovery ahead of us, low interest rates are likely to continue for some time, with a negative impact on Triodos Bank's return. As rates on the assets are decreasing, and the rates on the liabilities have hit the psychological floor of zero percent, the margin is being compressed. Negative rates on savings and current accounts of clients with a balance over EUR 100.000, as well as fees on savings accounts were introduced to be able to deal with the margin compression.

Interest Rate Risk management and mitigation strategies

Triodos Bank defines interest rate risk in the banking book (IRRBB) as the risk that changes in prevailing interest rates will adversely affect the market value of assets versus that of liabilities and/or income versus expenses. Triodos Bank identifies the following three main sources of IRRBB:

- Gap risk, the risk of adverse consequences due to differences in timing of the impact of interest rate changes on the value and interest of assets and liabilities, covering changes to the term structure of interest rates occurring consistently across the yield curve (parallel risk) or differentially by tenor (non-parallel risk).

- Basis risk, the risk of adverse consequences which result from changes in the difference between two or more rates for different instruments with the same interest maturity but different benchmark rates on which the pricing is based.
- Option risk, the risk that changes in market interest rates prompt changes in the value or maturity of instruments, due to explicit or implicit optionality embedded in the bank's products.

Main measures

Triodos Bank uses various indicators to measure interest rate risk. The interest rate risk position is monitored by the ALCo monthly and reported quarterly to the Executive Board. The main IRRBB indicators used are Earnings at Risk, Economic Value of Equity at Risk, Modified Duration of Equity, and Gap analysis. Below follows a brief description:
- Earnings at Risk: a short-term indicator which shows the effect of an interest rate shock on Triodos Bank's net interest income over a one year and two-year horizon.
- Economic Value of Equity at Risk: a long-term indicator which represents the change of the Economic Value of Equity (which is the net present value of the future cash flows of all assets netted with the net present value of the future cash flows of the liabilities) in the event of an interest rate shock.
- Modified Duration of Equity: an indicator that expresses the sensitivity of the Economic Value of Equity in the event of parallel interest rate changes.
- Gap analysis: allows to get a quick and intuitive sense of how Triodos is positioned by comparing the values of the assets and liabilities that roll over – or reprice – at various time periods in the future. While a Gap analysis is a good measure of repricing risk, it is not able to measure interest rate risk stemming from option risk and basis risk. Therefore, Triodos Bank monitors the sensitivity of economic value of the banking book items to interest rate changes for different parts of the yield curve, by calculation of key rate durations.

Option risk is typically present in the form of caps and/or floors on floating interest rates and as a result of client and bank behaviour, i.e. due to prepayments on loans and mortgages, withdrawal of funds entrusted, and the discretion to change the interest rate on savings and current accounts. Both embedded options and behavioural characteristics are considered in the IRRBB measures.

Due to the growth of the mortgage portfolio, Triodos has also worked (and continues working) on improving the data on off-balance commitments. Especially fixed rate commitments (which are often present in new mortgages to be paid out) add to the interest rate position of the Bank.

Triodos Bank runs a variety of interest rate scenarios to assess its level of interest rate risk. The scenarios are expressed as shocks to the market rate. These shocks can vary from parallel shocks to non-parallel shocks, downward to upward shocks, and instant to gradual shocks. Part of the shocks are prescribed by regulatory guidelines whereas other shocks are developed internally. The interest rate scenarios are regularly reviewed and approved in the ALCo.

Modelling and parametric assumptions

The model used for calculating IRRBB meaasures complies with the EBA guidelines. The balance sheet develops according to the budget/forecasts for earings calculations and uses run off profile for the EVE calculations. In modelling of IRRBB, client behaviour is complex as it depends on many factors and, as a result, IRRBB models in general build on many assumptions. A brief description of relevant assumptions used in Triodos Bank's IRRBB modelling follows below.

First of all, behavioural models are used to assess the interest rate risk in savings and current accounts. The interest rate risk stemming from these products is difficult to quantify since these accounts typically have variable interest rates and no fixed maturity. The objective of the models used is to forecast the future outflow of the non-maturing deposits and their sensitivities to market conditions based on historical data, taking into consideration the statistical significance of that data. The model combines the relationship between client interest rates and market interest rates and outflow predictions.

Secondly, prepayments on loans and mortgages affect interest rate risk on the asset side of the balance sheet and depend on customer behaviour as well. Due to the low interest rate environment and the maturity of the portfolio, prepayments increased during the last years. Therefore, behavioural assumptions are present in the risk model and the level of prepayments is included in the measurement of IRRBB. Currently, a constant prepayment rate is used, consistent with the forecast made by the banking entities. Triodos Bank takes into account the correlation between interest rate levels and prepayment behaviour by using sensitivity analyses.

Thirdly, some of Triodos Bank's loans and mortgages contain caps and floors to prevent interest rates increasing or decreasing below a certain level. This affects the level of IRRBB in these products and both are taken into account in the economic value and earnings analysis. The economic value of the pipeline, which contains loans with a set interest rate which are committed but not yet remitted, is considered as well.

The EVE measures, Duration of Equity and Outlier Criterion measures are determined using risk free discounting and commercial margin and other spread components are excluded from the cash flow calculations.

Explanation of the risk measures significant variations of those risk measures

The one-year Net Interest Income at Risk increased from 2.5% at the end of 2019 to 2.8% at the end of 2020. This is the impact of a ramped parallel 2% downward scenario, a floor based on expert judgement is applied to the market rates.

Duration of equity increased from 0.3 years to 3.3 years in 2020. This increase was mainly caused by the growing mortgage portfolio and the inclusion of interest rate sensitivity of embedded options in the duration of equity measure. These two effects were partly offset with a higher savings duration caused by the continuing low interest rate environment.

The Economic Value of Equity (EVE) at Risk increased from 4.1% at the end of 2019 to 15.0% at the end of 2020. The sharp increase is partly due to the introduction of risk-free discounting, and partly due to the growing mortgage portfolio. When using the same methodology as last year, the current value would be 9.4%. The worst-case scenario from the perspective of EVE at Risk occurs under a parallel upward shock of the yield curve. The supervisory outlier test (SOT) increased from 12.9% at the end of 2019 to 17.2% at the end of 2020. All EVE measures including the SOT are now calculated using risk-free discounting, only the duration of equity is still calculated using product specific spread components. The new methodologies impact the numbers significantly, together with the introduction of the new methodologies the process was started to gradually reduce the interest rate risk, this process will be finalized in the first quarter of 2021.

Regarding the EUR portfolio, the duration of equity increased from 0.4 years at the end of 2019 to 2.81 years at the end of 2020. The one-year Euro Net interest Income at Risk, at 2020 year-end, increased slighlty from 2.6% to 3.1%, compared to the end of 2019. The EUR EVE at Risk increased from 4.7% at the end of 2019 to 16.3% at the end of 2020.

Duration of equity of the Pound Sterling (GBP) portfolio increased from 0.4 years at the end of 2019 to 5.2 years at the end of 2020. The one-year GBP Net Interest Income at Risk decreased from 3.2% at the end of 2019 to 0.9% at the end of 2020. The GBP EVE at Risk increased from 5.5% at the end of 2019 to 9.7% at the end of 2019.

Quantitative market risk disclosures

Interest Rate Risk in the Banking Book

The following table shows the interest rate risk within Triodos Bank:

2020	Floating-rate	<= 3 months	<= 1 year	<= 5 years	> 5 years	Total
Interest-bearing assets						
Cash	2,956,179	-	-	-	-	2,956,179
Banks	134,112	1,453	-	14,000	1,000	150,565
Loans	1,174,082	998,082	1,510,417	2,759,799	2,757,857	9,200,237
Hedged loans	12,500	159,000	165,900	-195,500	-141,900	-
Interest-bearing securities	-	53,923	214,299	840,055	199,652	1,307,929
Total	**4,276,873**	**1,212,458**	**1,890,616**	**3,418,354**	**2,816,609**	**13,614,910**
Interest-bearing liabilities						
Banks	750,220	1,312	9,264	24,258	31,910	816,964
Subordinated loan	-	-	-	-	6,369	6,369
Funds entrusted	12,472	1,385,853	1,943,651	5,877,833	2,521,691	11,741,500
Total	**762,692**	**1,387,165**	**1,952,915**	**5,902,091**	**2,559,970**	**12,564,833**

2019	Floating-rate	<= 3 months	<= 1 year	<= 5 years	> 5 years	Total
Interest-bearing assets						
Cash	2,270,224	-	-	-	-	2,270,224
Banks	212,087	474	15,000	-	-	227,561
Loans	1,106,829	887,460	1,451,037	2,469,173	2,326,996	8,241,495
Hedged loans	-	82,800	67,400	-114,700	-35,500	-
Interest-bearing securities	-	55,226	161,072	640,717	166,407	1,023,422
Hedged interest-bearing securities	-	89,500	55,475	-104,975	-40,000	-
Total	**3,589,140**	**1,115,460**	**1,749,984**	**2,890,215**	**2,417,903**	**11,762,702**
Interest-bearing liabilities						
Banks	212	1,359	5,819	28,634	33,999	70,023
Funds entrusted	26,333	1,217,498	1,776,985	5,329,176	2,333,269	10,683,261
Total	**26,545**	**1,218,857**	**1,782,804**	**5,357,810**	**2,367,268**	**10,753,284**

Only interest-bearing assets and liabilities are reported in this table, which results in differences with the balance sheet figures. No allowance for expected credit losses, net modification of amortised cost or interest amounts are showed in this table above. Interest bearing securities are valued at redemption value including bond premium and after deduction of discounts. For funds entrusted without a fixed interest rate term, the outcome of the quantitative savings and current account model, as mentioned before, is used. All other interest-bearing assets and liabilities are reported as floating rates or are broken down in the maturity calendar by their remaining contractual interest rate term.

Foreign exchange risk

Foreign exchange risk is the current or prospective risk to earnings and capital that arises from adverse movements in foreign exchange rates. Triodos Bank’s base currency is the euro. The base currency of the UK subsidiary of Triodos is GBP.

The following table shows Triodos Bank's foreign currency position in thousands of EUR as at 31 December.

2020	Cash position Debit	Cash position Credit	Term position Debit	Term position Credit	Net position Debit	Net position Credit
GBP	1,792,659	1,585,255	-	192,519	14,885	-
USD	13,995	434	4,908	4,908	13,561	-
NOK	95	-	-	-	95	-
AUD	1	-	-	-	1	-
SEK	51	-	-	-	51	-
INR	-	-	9,191	9,191	-	-
IDR	-	-	-	-	-	-
CNY	-	-	-	-	-	-
Total	**1,806,801**	**1,585,689**	**14,099**	**206,618**	**28,593**	**-**

Net open foreign currency position (total of net positions debit and credit): 28,593

2019	Cash position Debit	Cash position Credit	Term position Debit	Term position Credit	Net position Debit	Net position Credit
GBP	1,577,785	1,372,842	-	192,519	12,424	-
USD	20,083	1,676	9,708	9,708	18,407	-
NOK	101	-	-	-	101	-
AUD	1	-	-	-	1	-
SEK	49	-	-	-	49	-
INR	-	-	38,786	38,786	-	-
IDR	-	-	6,172	6,172	-	-
CNY	-	-	3,309	3,309	-	-
Total	**1,598,019**	**1,374,518**	**57,975**	**250,494**	**30,982**	**-**

Net open foreign currency position (total of net positions debit and credit): 30,982

Capital management

Triodos Bank wants to be strongly capitalised to support our growth strategy and to be a strong counterparty for our clients. Therefore, we maintain a relatively high equity base, which as a consequence puts downward pressure on the Return on Equity.

The objective of Triodos Bank's capital strategy is to ensure its viability by:
- Maintaining sufficient capital to absorb current and future business losses, also in extreme situations ('stress');
- Adequately allocate capital to its business units; and
- Ensuring compliance to all applicable capital legislation and regulation at all times.

All of Triodos Bank's solvency comes from common equity.

Regulation

Banking industry is highly regulated. Regulations play an important role in society to ensure banks operate safely. Triodos Bank pays constant attention to comply with all regulation.

Basel III is a worldwide standard for regulation, supervision and risk management of the banking sector, developed by the Basel Committee on Banking Supervision. Basel III has been transposed by the European Union into the Capital Requirements Regulation and the Capital Requirements Directive IV. The Capital Requirements Regulation is directly applicable and the Capital Requirements Directive IV was transposed into local law by each of the members of the European Union so is the Dutch implementation of the Capital Requirements Directive IV as Triodos Bank is formally domiciled in The Netherlands.

There is no difference in the scope of consolidation for accounting and for prudential reporting purposes. Except for transfer of own funds of Triodos Bank UK Ltd, there is not any current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities among Triodos Bank and its consolidated companies.

Internal capital

The capital strategy of Triodos Bank is captured in its Internal Capital Adequacy Assessment Process ('ICAAP'). The ICAAP covers, for example, the measurement of risks requiring an adequate capital buffer, stress testing, capital contingency and the allocation of available capital to the different Triodos Bank banking entities and business units. The ICAAP is subjected to the Supervisory Review and Evaluation Process (SREP) of the Dutch Central Bank on a yearly basis.

The actual capital position is stressed regularly based on a number of stress scenarios. A capital contingency process is set up for Triodos Bank in case of a (potential) shortfall in available capital, which can be a threat to its solvency. For this purpose, the Recovery Plan contains measures for restoring its solvency by reducing risks and/or increasing capital and provides a specific governance structure for these stressed conditions.

Capital allocation and monitoring

Equity is allocated to banking entities, in proportion to the outcome of the internal capital calculation. Triodos Bank works with a rolling three-year capital forecast. The Asset and Liability Committee monitors Triodos Bank's capital position and advises the Executive Board on the capital adequacy. The Asset and Liability Committee also assesses whether available capital is sufficient to support current and future activities on a monthly basis. During 2020 available capital has been at sufficient levels at all times in line withexternal regulatory minimum requirements. A retained portion of the 2020 profit will be added to its reserves.

Capital requirements

Triodos Bank calculates its internal capital adequacy requirements based on minimum requirements (‘pillar I’) and supplemented with additional capital charges (‘pillar II’), as described in the Capital Requirement Regulation.

The total capital ratio increased by 0.9% from 17.9% at the year end 2019 to 18.8% at the year end 2020. This ratio is still well above the regulatory requirement. In December 2020 Triodos Bank issued Tier 2 capital in the amount of EUR 6.4 million. Further quantative information is disclosed in the Pillar 3 report which can be found on the website of Triodos Bank.

Minimum capital requirements (pillar I)

The total minimum regulatory requirement consists of capital charges for credit risk, operational risk and market risk:

- Credit risk – Triodos Bank applies the standardised approach (SA) for calculating its minimum capital requirements for credit risk and the simple approach for credit risk mitigation. The risk weighted asset calculations are done for all on-balance sheet exposures (including the loan book and the investment book), and off-balance sheet items (such as loan offers, not yet accepted) and derivatives exposures;
- Operational risk – Based on the size and limited complexity of the Triodos Bank organisation, the basic indicator approach (BIA) is used for calculating the capital requirement for operational risk, which equals 15% of the average over three years of Triodos Bank’s gross income;
- Market risk – The capital charge for Triodos Bank’s market risk is related to its exposure to foreign exchange risk. The requirement is calculated as the sum of the bank’s overall net foreign exchange position, multiplied by 8%. Triodos Bank only accepts limited net foreign exchange positions in strategic investments and in its UK activities in GBP. However, when the regulatory threshold of 2% of the actual own funds is not exceeded, the capital charge for market risk is zero;
- Credit valuation adjustment risk – The capital charge for the counterparty risk of derivative transactions that are not cleared through a qualified central counterparty.

Additional capital requirements

In order to determine its economic capital, Triodos Bank also calculates additional capital requirements. These consist of charges for risks or parts of risks that are not covered by Pillar 1. This consists of items in the areas of credit risk, strategic risk, interest rate risk in the banking book, model risk and operational risk. The total capital requiment consists, next to the pillar I and II requirements, also of the combined buffer requirements.

Management of excessive leverage

The risk of excessive leverage is managed inclusively in our capital management policy and procedures. We aim for a strong capital base, avoiding high leverage risks. Triodos’ risk appetite level related to the leverage ratio is set at 7%, which is significantly above all regulatory requirements.

At year end the relevant capital used to calculate the leverage ratio consists only of CET1 capital. Our capital base is therefore not subject to refinancing risks. The leverage ratio is part of our three-year budget. Compliance with our risk appetite level is part of the budget requirements.

Triodos has participated in the TLTRO III.5 which usually decreases the leverage ratio. However, in 2020 the ECB formulated new regulation so that amounts placed with central banks can be left out of the leverage ratio calculation.

Fair value of financial instruments

Valuation models

Triodos Bank measures fair values using the following fair value hierarchy, which reflects the significance of the inputs used in making the measurements.

- Level 1: Inputs that are quoted market prices (unadjusted) in active markets for identical instruments.
- Level 2: Inputs other than quoted prices included within Level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). This category includes instruments valued using: quoted market prices in active markets for similar instruments; quoted prices for identical or similar instruments in markets that are considered less than active; or other valuation techniques in which all significant inputs are directly or indirectly observable from market data.
- Level 3: Inputs that are unobservable. This category includes all instruments for which the valuation technique includes inputs that are not observable and the unobservable inputs have a significant effect on the instrument's valuation. This category includes instruments that are valued based on quoted prices for similar instruments for which significant unobservable adjustments or assumptions are required to reflect differences between the instruments.

Triodos bank determines the fair value of its financial instruments using the following bases. The fair value of listed debt securities at amortised cost is the market value. The fair value of unlisted debt securities at amortised cost is public quoted information if available or nominal value. The fair value of loans and advances to banks, lease liabilities, deposits from banks, deposits from customers and debt issued and other borrowed funds has been determined by calculating the net present value of expected interest and redemption cashflows, taken into account market interest rates as at the end of the year. The fair value of loans and advances to customers (including mortgages) has been determined by calculating the net present value of the interest and redemption cashflows, taken into account expected prepayment behavior. The net present value is calculated by using market data, i.e. zero coupon rates, as at the end of the year, which are adjusted with a Triodos Bank-specific spread. The spread is based on the expected margin the business units expect to make over the market base rates in the coming years on their production of business loans and mortgages. Part of the corporate loans and mortgages include caps and/or floors on the interest rates. The fair value of the other asset and liabilities are assumed to be equal to the balance sheet value.

Investments securities comprise participating interests and debt where no significant influence can be exercised and are carried at fair value through either comprehensive income or profit and loss. In the case of an investment security that is listed on an active stock exchange, the fair value will be deemed to be equal to the most recently published stock exchange price. In the case of an investment security not listed on an active stock exchange or where there is no regular price quotation, the fair value will be determined to the best of one's ability using all available data, including an annual report audited by an external independent auditor, interim financial information from the institution and any other relevant data provided to Triodos Bank.

Derivatives held for risk management are carried at fair value through profit and loss. These instruments are split between interest rate swaps and foreign exchange rate forward contracts. The interest rate swaps are valued using the appropriate discount curve to calculate the net present value of expected cashflows under the contracts. This curve is openly observable from market data. See Financial instruments for further information on the valuation. The foreign exchange rate forward contracts are valued using the forward exchange rate for the corresponding currency, as observable from market data.

Financial instruments measured at fair value – Fair value hierarchy

The following table analyses financial instruments measured at fair value at the reporting date, by the level in the fair value hierarchy into which the fair value measurement is categorised.

2020	Level 1	Level 2	Level 3	Total
Derivative assets held for risk management				
Interest rate	-	24	-	24
Foreign exchange	-	1,771	-	1,771
Total	**-**	**1,795**	**-**	**1,795**
Investment securities				
Equities	8,601	13,694	4,458	26,753
Debt	-	4,461	-	4,461
Total	**8,601**	**18,155**	**4,458**	**31,214**
Derivative liabilities held for risk management				
Interest rate	-	6,344	-	6,344
Foreign exchange	-	4,108	-	4,108
Total	**-**	**10,452**	**-**	**10,452**

2019	Level 1	Level 2	Level 3	Total
Derivative assets held for risk management				
Interest rate	-	908	-	908
Foreign exchange	-	7,814	-	7,814
Total	**-**	**8,722**	**-**	**8,722**
Investment securities				
Equities	13,160	1,442	4,960	19,562
Debt	-	4,737	-	4,737
Total	**13,160**	**6,179**	**4,960**	**24,299**
Derivative liabilities held for risk management				
Interest rate	-	5,012	-	5,012
Foreign exchange	-	10,051	-	10,051
Total	**-**	**15,063**	**-**	**15,063**

Level 3 valuations relate to participating interest which are valued at fair value through other comprehensive income. Total fair value changes amount to EUR -420 (2019: EUR -272).

Financial instruments not measured at fair value

The following table sets out the fair values of financial instruments not measured at fair value and analyses them by the level in the fair value hierarchy into which each fair value measurement is categorised.

2020	Level 1	Level 2	Level 3	Total Fair Values	Total Carrying
Assets					
Debt securities at amortised cost	1,221,053	119,160	-	1,340,213	1,317,301
Loans and advances to banks	-	-	150,601	150,601	150,563
Loans and advances to customers	-	-	9,395,422	9,395,422	9,156,710
Liabilities					
Deposits from banks	-	-	813,457	813,457	815,140
Deposits from customers	-	-	11,935,701	11,935,701	11,747,207
Debt issued and other borrowed funds	-	-	7,194	7,194	6,368
Lease liabilities	-	-	24,182	24,182	19,963

2019	Level 1	Level 2	Level 3	Total Fair Values	Total Carrying
Assets					
Debt securities at amortised cost	948,403	109,798	-	1,058,201	1,034,291
Loans and advances to banks	-	-	227,611	227,611	227,591
Loans and advances to customers	-	-	8,315,161	8,315,161	8,209,014
Liabilities					
Deposits from banks	-	-	68,714	68,714	70,720
Deposits from customers	-	-	10,695,702	10,695,702	10,693,699
Debt issued and other borrowed funds	-	-	-	-	-
Lease liabilities	-	-	23,822	23,822	22,078

Fair value of the cash and cash equivalents approximates the total carrying amount as these are on demand balances and therefore not included in the above table.

Classification of financial assets and financial liabilities

The following table provides a reconciliation between line items in the statement of financial position and categories of financial instruments.

2020	Mandatorily at FVTPL	Designated as at FVTPL	FVOCI – equity instruments	Amortised cost	Total carrying amount
Cash and cash equivalents	-	-	-	2,955,787	2,955,787
Debt securities at amortised cost	-	-	-	1,317,301	1,317,301
Loans and advances to customers	-	-	-	9,156,710	9,156,710
Loans and advances to banks	-	-	-	150,563	150,563
Investment securities	4,461	-	26,753	-	31,214
Other assets	-	-	-	275,027	275,027
Derivative assets held for risk management	1,795	-	-	-	1,795
Total financial assets	**6,256**	**-**	**26,753**	**13,855,388**	**13,888,397**
Derivative liabilities held for risk management	10,452	-	-	-	10,452
Deposits from banks	-	-	-	815,140	815,140
Deposits from customers	-	-	-	11,747,207	11,747,207
Lease Liabilities	-	-	-	19,963	19,963
Other liabilities	-	-	-	87,423	87,423
Total financial liabilities	**10,452**	**-**	**-**	**12,669,733**	**12,680,185**

2019	Mandatorily at FVTPL	Designated as at FVTPL	FVOCI – equity instruments	Amortised cost	Total carrying amount
Cash and cash equivalents	-	-	-	2,269,983	2,269,983
Debt securities at amortised cost	-	-	-	1,034,291	1,034,291
Loans and advances to customers	-	-	-	8,209,014	8,209,014
Loans and advances to banks	-	-	-	227,591	227,591
Investment securities	4,737	-	19,562	-	24,299
Other assets	-	-	-	307,688	307,688
Derivative assets held for risk management	8,722	-	-	-	8,722
Total financial assets	**13,459**	**-**	**19,562**	**12,048,567**	**12,081,588**
Derivative liabilities held for risk management	15,063	-	-	-	15,063
Deposits from banks	-	-	-	70,720	70,720
Deposits from customers	-	-	-	10,693,699	10,693,699
Lease Liabilities	-	-	-	22,078	22,078
Other liabilities	-	-	-	79,101	79,101
Total financial liabilities	**15,063**	**-**	**-**	**10,865,598**	**10,880,661**

Non-trading derivatives and hedge accounting

Non-trading derivatives

The following table describes the fair values of derivatives held for risk management purposes by type of instrument.

	2020		2019	
	Assets	Liabilities	Assets	Liabilities
Instrument type				
Interest rate				
Designated in fair value hedges	-	6,344	908	5,012
Other derivatives	24	-	-	-
Foreign exchange				
Designated in a net investment hedge	-	2,407	-	2,565
Other derivatives	1,771	1,701	7,814	7,486
Total foreign exchange	**1,771**	**4,108**	**7,814**	**10,051**
Total non-trading derivatives	**1,795**	**10,452**	**8,722**	**15,063**

Fair value hedges of interest rate risk

Triodos Bank uses interest rate swaps to hedge its exposure to changes in the fair values of fixed- rate euro loans and advances in respect of a benchmark interest rate (mainly Euribor). At the beginning of the year 2020 Triodos Bank made changes in its risk management strategy towards interest rate risk and has updated our hedge strategy accordingly. As of 1 January 2020 Triodos Bank applies the EU carve-out under IAS 39.

This means that Triodos Bank changed from designating individual hedged items and hedging instruments into fair value hedge relationships to portfolio designation, or, macro fair value hedge accounting. The types of hedging instruments and hedged items remain unchanged. The existing hedge relationships have been terminated and as of 2020 these have been designated in a hedge relationship on a portfolio basis.

Triodos Bank determines hedged items by identifying portfolios of homogenous loans based on their contractual interest rates, maturity and other risk characteristics. Loans within the Identified portfolios are allocated to repricing time buckets based on expected, rather than contractual, repricing dates. The hedging instruments (pay fix/receive floating rate interest rate swaps) are designated appropriately to those repricing time buckets. Hedge effectiveness is measured on a monthly basis, by comparing fair value movements of the designated proportion of the bucketed loans due to the hedged risk, against the fair value movements of the derivatives, to ensure that they are within an 80% to 125% range.

At the time of designation of the hedge relationship for macro hedge accounting, a prospective test of the hedge relationship is performed to evidence the existence of an economic relationship. Fair value of hedged items and hedging instruments is calculated as at the designation date. In addition, the fair values are recalculated by applying at +/-50bps shift on the EURIBOR zero-curve and the OIS zero-curve. If the change in fair value of hedged item and hedging instrument is within 80-125% of each other, the hedge relationship can be expected to be highly effective.

The retrospective test is periodically performed by calculating the fair value of the hedged items and hedging instruments with the curves applicable as at that date (month end). The hedge relationship is considered to be highly effective if the delta in fair value between hedging instrument and hedged item as per designation date and as per period end date is in the 80% – 125% bandwidth, which is the so-called dollar offset method.

When the outcome of the effectiveness test is outside of the bandwidth, the hedge relationship for the tested month is discontinued. This means that the fair value changes of the hedging instruments continue to be recorded through profit and loss, but no offsetting fair value adjustment is recognised on the hedged items. At dedesignation, the fair value hedge accounting adjustments are amortised on a straight-line basis over the original hedged life. The Bank has elected to commence amortisation at the date of de-designation.

Triodos Bank discloses its risk management relates to interest rate risk in Market risk management.

Hedge relationships designated under this policy are expected to be highly effective. However, some degree of ineffectiveness is expected due to:

- Discounting of assets with the curve of the payment frequency where the swaps are discounted using the OIS curve
- Fair value changes in the floating leg of the swaps

2020		Carrying amount			
Hedging instruments	Nominal amount	Assets	Liabilities	Change in fair value	Ineffectiveness
Interest rate swaps – portfolio hedge accounting	295,175	-	6,344	-2,216	111

	Carrying amount	Fair value hedge adjustments		
Hedged item	Assets	Assets	Liabilities	Change in fair value
Loans and advances to customers	295,975	5,286	-	2,327

Net investment hedge

Triodos Bank entered into GBP foreign currency forward contracts as of april 2019 hedging the currency risk of the UK subsidiary equity participation of Triodos Bank. In order to maintain an effective hedging relationship, not the full value of the UK subsidiary equity participation is hedged. Triodos Bank hedges up to a maximum of 95% of the UK subsidiary.

Triodos Bank discloses its risk management relates to foreign exchange risk in Market risk management.

Triodos Bank ensures that the foreign currency in which the hedging instrument is denominated is the same as the functional currency of the net investment. This qualitative assessment is supplemented quantitatively using the hypothetical derivative method for the purposes of assessing hedge effectiveness. Triodos Bank assesses effectiveness by comparing past changes in the fair value of the derivative with changes in the fair value of a hypothetical derivative. The hypothetical derivative is constructed to have the same critical terms as the net investment designated as the hedged item and a fair value of zero at inception. The net investment is held for a period longer than the maturity of the forward foreign exchange contracts, Triodos Bank hedges the net investment only to the extent of the nominal amount of the foreign exchange leg of the derivative.

2020		Carrying amount			
Hedging instruments	Nominal amount	Assets	Liabilities	Change in fair value	Ineffectiveness
Foreign currency forward contracts (EUR:GBP)	180,100	-	2,407	-10,200	-
		Carrying amount			
Hedged item	Nominal amount	Assets	Liabilities	Change in fair value	Foreign currency translation reserve
GBP net investment in UK subsidiary	181,351	202,497	-	11,408	-4,440

2019		Carrying amount			
Hedging instruments	Nominal amount	Assets	Liabilities	Change in fair value	Ineffectiveness
Foreign currency forward contracts (EUR:GBP)	163,000	-	2,565	3,004	-
		Carrying amount			
Hedged item	Nominal amount	Assets	Liabilities	Change in fair value	Foreign currency translation reserve
GBP net investment in UK subsidiary	175,894	207,748	-	3,247	3,247