



CAPITAL ADEQUACY AND RISK
MANAGEMENT REPORT 2021

PILLAR 3

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INTRODUCTION

GOAL AND OVERVIEW

NIBC's Capital Adequacy and Risk Management (Pillar 3) Report contains information that enables an assessment of the risk profile and capital adequacy of NIBC Holding N.V. This publication fulfils the requirements of the Basel III framework, as stipulated in the *Capital Requirements Regulation and Directive IV (CRR/CRD IV)*, as amended. The CRR/CRD IV is legally enforced by Dutch law by the *Financial Supervision Act (Wet Financieel Toezicht, Wft)*.

The Basel Framework contains three pillars:

- Pillar 1 defines the regulatory minimum capital requirements by providing rules and regulations for the measurement of credit risk, market risk and operational risk. These capital requirements need to be covered by regulatory own funds. NIBC received approval from the *Dutch central bank (DNB)* to use the *Advanced Internal Ratings-Based (AIRB)* approach for calculating solvency requirements regarding credit risk for its most important exposure classes, namely corporate loans and residential mortgage loans, and the *Internal Model Approach (IMA)* regarding market risk in the Trading book. Furthermore, NIBC uses the ratings-based approach for the securitisation exposure class and the simplified risk-weight approach for the equity exposure class. Solvency requirements for the remaining portfolios and for operational risk are calculated using the *Standardised Approach (SA)*;
- Pillar 2 covers the Supervisory Review Process. This consists of the *Internal Capital Adequacy Assessment Process (ICAAP)*, the bank's own assessment of its capital adequacy in relation to all its risks, and the *Supervisory Review and Evaluation Process (SREP)*, the response of the Supervisor to the institution's ICAAP. Since 2011, DNB also analyses the *Internal Liquidity Adequacy Assessment Process (ILAAP)*; and
- Pillar 3 focuses on disclosure requirements, covering all relevant pieces of information for a market participant to assess the risk profile and capital adequacy of a credit institution. The risk disclosures are connected to Pillar 1 of the CRR/CRD IV framework, as information is provided regarding the underlying exposures, risk weighted assets and regulatory capital.

NIBC's Capital Adequacy and Risk Management Report is prepared to meet the requirements of Pillar 3, as well as the increased need for transparency in the financial market. The Capital Adequacy and Risk Management Report follows the structure below:

- Internal Capital Adequacy Assessment Process
- Risk Management Strategy & Process
- Own Funds
- Countercyclical Capital Buffers
- Leverage Ratio
- Liquidity Risk
- Credit Risk
- Securitisation Exposures
- Market Risk including Interest Rate Risk in the Banking book
- Operational Risk
- Remuneration Policy

The scope of application in this report refers to NIBC Holding, henceforth referred to as NIBC. The main subsidiary of NIBC Holding is NIBC Bank. Where necessary, an explicit distinction between NIBC Holding and NIBC Bank is made. The starting point of the CRR/CRD IV prudential scope of application is the consolidation scope of NIBC, according to the *International Financial Reporting Standards (IFRS)*. In line with the requirements of the CRR/CRD IV, a prudential filter is applied for

non-financial subsidiaries. These entities are excluded from the consolidation scope and are, instead, treated as investments in associates.

The credit exposures in this report may not always be directly comparable to the numbers in NIBC's 2021 Annual Report. The numbers in the Annual Report refer to book values and classifications in line with IFRS requirements. The numbers in this report refer to *exposure at default (EAD)* which is either mentioned as EAD or Exposure in this Pillar 3 Report, which is a risk measure of the potential amount outstanding in the event of default. EAD is a different measure than drawn and undrawn amounts, and the method employed for its calculation differs per exposure class and among credit institutions. A more detailed explanation on EAD can be found in the *Credit Risk* chapter. In the Annual Report, balance sheet figures are based on drawn amounts and risk "exposure" is the sum of drawn plus undrawn amounts and not EAD as reported in this Pillar 3 Report.

NIBC's CET1 Ratio and liquidity buffers remain solid where the exposure to cyclical corporate sectors (Energy, Leveraged Finance) has been reduced further in 2021. Liquidity and unused credit lines are closely monitored where portfolio management and client monitoring has increased and remains at elevated levels amidst the current economic backdrop.

NIBC continues to work on the implementation of *Capital Requirements Regulation 2 and Directive V (CRR II/CRD V)* including in the preparation of the Pillar 3 Report.

With respect to the CRR "quick fix" adjustments in response to the COVID-19 pandemic, NIBC has decided not to make use of transition periods related to CRR Article 473a (transitional arrangements for prudential impact of IFRS 9) and Article 468 (temporary treatment of unrealized gains and losses measured at fair value through other comprehensive income).

NIBC's Risk Management and Capital Adequacy (Pillar 3) report is published annually on [NIBC's website](#). The report may also be published more frequently if special market circumstances require so. Information regarding risk management and key data on capital adequacy is presented in NIBC's Annual Report as well. This Pillar 3 Report should be read in conjunction with NIBC's Annual Report. All figures presented in this Pillar 3 Report are as per the year end (31 December) of the indicated year.

MANAGEMENT STATEMENT

NIBC operates a risk framework to support the appropriateness of the Pillar 3 disclosures. In line with the ITS and the mapping tool as provided by EBA, the templates in this report have been aligned to other supervisory reporting and reconciliations were executed against regulatory reporting to DNB such as Corep and Finrep. The Managing Board has discussed the Pillar 3 Report, to satisfy itself, that the process to prepare the Pillar 3 report include sufficient internal verification and review procedures. The Pillar 3 report adequately conveys the risk profile of NIBC and the risk management systems are adequate with regards to the profile and strategy of the bank.

SCOPE OF APPLICATION

The basis of NIBC's financial consolidation scope is described in the accounting policies section of NIBC Holding financial statement 2021. The scope is based on IFRS, which is determined in accordance with IAS 10 Consolidated Financial Statements, IAS 28 Investments in Associates, IAS 31 Interest in Joint Ventures and SIC 12 Consolidation Special Purpose Entities.

The regulatory consolidation scope differs from the financial consolidation scope. The regulatory consolidation does not include Special Purpose Entities where significant risk has been transferred to investors. Subsidiaries engaged in non-financial activities are excluded from the regulatory consolidation. Exposures to the Special Purpose Entities and non-financial subsidiaries are risk weighted as securitisation exposures and investments in associates (equity method).

The following table presents the entities that form part of the capital base of NIBC Holding N.V.

	Principal place of business	Country	Nature of activity	Percentage of voting rights held
SUBSIDIARIES OF NIBC HOLDING N.V.				
NIBC Bank N.V.	The Hague	Netherlands	Banking	100%
NIBC Investment Management N.V.	The Hague	Netherlands	Financing	100%
NIBC Investments N.V.	The Hague	Netherlands	Financing	100%
Subsidiaries of NIBC Investments N.V.				
Beequip B.V.	Rotterdam	Netherlands	Financing	100%
Lendex Holding B.V.	Almere	Netherlands	Financing	100%
Fin Quest B.V.	Eindhoven	Netherlands	Financing	100%
SUBSIDIARIES OF NIBC BANK N.V.				
Parnib Holding N.V.	The Hague	Netherlands	Financing	100%
Counting House B.V.	The Hague	Netherlands	Financing	100%
B.V. NIBC Mortgage Backed Assets	The Hague	Netherlands	Financing	100%
NIBC Principal Investments B.V.	The Hague	Netherlands	Financing	100%
NIBC Financing N.V.	The Hague	Netherlands	Financing	100%

TABLES THAT ARE OUT OF SCOPE FOR NIBC

The following tables have been identified as not applicable to NIBC and therefore not included in this report:

Template	Description	Reason of exclusion
EU INSI	Insurance participations	NIBC does not hold any own funds in insurance or re-insurance undertakings or insurance holding company not deducted from own funds
EU INS2	Financial conglomerates information on own funds and capital adequacy ratio	NIBC is not (part of) a financial conglomerate
EU PV1	Prudent valuation adjustments (PVA)	NIBC has not made any prudent valuation adjustments
EU CCR4	IRB approach – CCR exposures by exposure class and PD scale	NIBC does not use the Internal Ratings Based approach for counterparty credit risk exposures
EU CCR6	Credit derivatives exposures	NIBC does not use credit derivatives as a form of security or as an instrument to hedge credit risk
EU CCR7	RWEA flow statements of CCR exposures under the IMM	NIBC is not a Globally Systemically Important Institution (G-SII), listed institution or other large institution
EU CR6	IRB approach – Credit risk exposures by exposure class and PD range	Based on NIBC's size and complexity, the underlying data is not required in the regulatory reporting templates
EU CR6A	Scope of the use of IRB and SA approaches	Based on NIBC's size and complexity, the underlying data is not required in the regulatory reporting templates
EU CR7	IRB approach - Effect on the RWEAs of credit derivatives used as CRM techniques	NIBC does not use credit derivatives as CRM technique
EU CR8	RWEA flow statements of credit risk exposures under the IRB approach	Based on NIBC's size and complexity, the underlying data is not required in the regulatory reporting templates
EU CR9	IRB approach – Back-testing of PD per exposure class (fixed PD scale)	Based on NIBC's size and complexity, the underlying data is not required in the regulatory reporting templates
EU CR9.1	IRB approach – Back-testing of PD per exposure class (only for PD estimates according to point (f) of Article 180(1) CRR)	NIBC does not map its internal grades to the scale used by an ECAI or similar organization
EU SEC2	Securitisation exposures in the trading book	NIBC does not have any exposure to securitisation positions in its trading book

NIBC does not have a NPE ratio equal to or higher than 5%. The reporting threshold of Article 8(3) of Regulation (EU) 2021/637 is thus not met and therefore the following tables are not included in this report.

Template	Description
EU CR2a	Changes in the stock of non-performing loans and advances and related net accumulated recoveries
EU CQ2	Quality of forbearance
EU CQ6	Collateral valuation - loans and advances
EU CQ8	Collateral obtained by taking possession and execution processes – vintage breakdown

KEY METRICS & OVERVIEW OF RISK-WEIGHTED EXPOSURE AMOUNTS

KEY METRICS

EU KMI - Key Metrics

in		2021	2020
EUR millions			
Available own funds (amounts)			
1	Common Equity Tier I (CET1) capital	1,638	1,586
2	Tier I capital	1,757	1,700
3	Total capital	1,890	1,837
Risk-weighted exposure amounts			
4	Total risk-weighted exposure amount	8,918	7,981
Capital ratios (as a percentage of risk-weighted exposure amount)			
5	Common Equity Tier I ratio (%)	18.4%	19.9%
6	Tier I ratio (%)	19.7%	21.3%
7	Total capital ratio (%)	21.2%	23.0%
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)			
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	3.7%	3.3%
EU 7b	of which: to be made up of CET1 capital (percentage points)	2.1%	1.9%
EU 7c	of which: to be made up of Tier I capital (percentage points)	2.8%	2.5%
EU 7d	Total SREP own funds requirements (%)	11.7%	11.3%
Combined buffer requirement (as a percentage of risk-weighted exposure amount)			
8	Capital conservation buffer (%)	2.5%	2.5%
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	0.0%	0.0%
9	Institution specific countercyclical capital buffer (%)	0.0%	0.0%
EU 9a	Systemic risk buffer (%)	0.0%	0.0%
10	Global Systemically Important Institution buffer (%)	0.0%	0.0%
EU 10a	Other Systemically Important Institution buffer	0.0%	0.0%
11	Combined buffer requirement (%)	2.5%	2.5%
EU 11a	Overall capital requirements (%)	14.2%	13.8%
12	CET1 available after meeting the total SREP own funds requirements	847	-
Leverage ratio			
13	Total exposure measure	21,760	19,847
14	Leverage ratio (%)	8.1%	8.6%
Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)			
EU 14a	Additional own funds requirements to address the risk of excessive leverage (%)	5.8%	5.6%
EU 14b	of which: to be made up of CET1 capital (percentage points)	3.7%	3.6%
EU 14c	Total SREP leverage ratio requirements (%)	9.2%	8.9%
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)			
EU 14d	Leverage ratio buffer requirement (%)	0.0%	0.0%
EU 14e	Overall leverage ratio requirements (%)	9.2%	8.9%
Liquidity Coverage Ratio			
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	2,280	2,380
EU 16a	Cash outflows - Total weighted value	1,317	1,231
EU 16b	Cash inflows - Total weighted value	77	155
16	Total net cash outflows (adjusted value)	1,240	1,075
17	Liquidity coverage ratio (%)	183.9%	221.3%
Net Stable Funding Ratio			
18	Total available stable funding	19,689	18,458
19	Total required stable funding	15,591	14,634
20	NSFR ratio (%)	126.3%	126.1%

OVERVIEW OF RISK WEIGHTED EXPOSURE AMOUNT

EU OVI - Overview of total risk exposure amounts

in EUR millions		Risk weighted exposure amounts (RWEAs)		Total own funds requirements	
		2021	2020	2021	2020
1	Credit risk (excluding CCR)	7,337	6,505	587	520
2	Of which the standardised approach	2,395	1,306	192	104
3	Of which the Foundation IRB (F-IRB) approach	-	96	-	8
4	Of which slotting approach	-	-	-	-
EU 4a	Of which equities under the simple riskweighted approach	959	931	77	74
5	Of which the Advanced IRB (A-IRB) approach	3,841	4,171	307	334
5a	Of which other non credit-obligation assets	142	96	11	8
6	Counterparty credit risk - CCR	281	220	23	18
7	Of which the standardised approach	189	-	15	-
8	Of which internal model method (IMM)	-	-	-	-
EU 8a	Of which exposures to a CCP	1	17	0	1
EU 8b	Of which credit valuation adjustment - CVA	44	33	4	3
9	Of which other CCR	47	169	4	14
15	Settlement risk	-	-	-	-
16	Securitisation exposures in the non-trading book (after the cap)	272	277	22	22
17	Of which SEC-IRBA approach	36	45	3	4
18	Of which SEC-ERBA (including IAA)	174	130	14	10
19	Of which SEC-SA approach	62	89	5	7
EU 19a	Of which 1250%/ deduction	-	-	-	-
20	Position, foreign exchange and commodities risks (Market risk)	130	54	10	4
21	Of which the standardised approach	4	10	0	1
22	Of which IMA	126	44	10	3
EU 22a	Large exposures	-	-	-	-
23	Operational risk	898	926	72	74
EU 23a	Of which basic indicator approach	-	-	-	-
EU 23b	Of which standardised approach	898	926	72	74
EU 23c	Of which advanced measurement approach	-	-	-	-
24	Amounts below the thresholds for deduction (subject to 250% risk weight)	-	-	-	-
29	Total	8,918	7,981	713	638

The amount of *Risk Weighted Exposure Amount (RWEA)* increased in 2021 and is primarily due to the increase in credit risk RWEA, largely as a result of the acquisition of the Finqus mortgage loan portfolio.

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

The *Internal Capital Adequacy Assessment Process (ICAAP)* of each institution refers to the process in which risks and related capital are internally measured, allocated and managed, and by which the adequacy of available capital is assessed.

The internal capital requirements of NIBC under the ICAAP are based upon an internal Economic Capital framework. In addition to this, NIBC has set up an extensive framework of historical and theoretical stress scenarios that analyse the impact of severe shocks in the credit risk and market risk environment. The outcomes of these stress scenarios are compared to the available capital on a semi-annual basis.

Economic capital

Economic Capital (EC) is the amount of capital that NIBC allocates as a buffer against potential losses from business activities, based upon its internal assessment of risks. EC is based on the CRR/CRD IV

regulatory capital, with the addition of EC for risks not captured by the regulatory method. Business profitability is measured relative to the risk taken using the *Risk-Adjusted Return on Capital (RAROC)*, a risk-weighted measure of return. EC and RAROC are key tools used in supporting the capital allocation process according to which shareholders' equity is allocated as efficiently as possible based on expectations of both risk and return. The usage of EC is steered in the ALCO. The ALCO can adjust the maximum EC level allocated to and within each business, taking into account business expectations and the desired risk profile.

EC methodology

The EC calculation is based on a one-year risk horizon, using a 99.9% confidence level. This confidence level means that there is a probability of 0.1% that losses in a period of one year will be larger than the allocated EC, based on a constant portfolio and no management intervention.

NIBC uses a bank-wide EC framework and fully attributes all EC charges to portfolios.

NIBC uses regulatory capital for all Pillar I risks, whereas internal models are used for Pillar II risks.

Pillar I risks

Pillar I risks include credit risk, market risk (including CVA) and operational risk. As stated above the EC for Pillar I risks follows the regulatory capital treatment:

- The Credit Risk EC is mostly based upon the AIRB formula, using internal estimates of PD, LGD, EAD and maturity (**M**), whereas for a number of exposures the Standardised Approach is used;
- The Market risk EC includes regulatory capital for the Trading Book, FX risk and CVA;
- The EC for Operational risk is based upon the Standardised Approach for Regulatory Capital.

Pillar II risks

As part of the risk identification process, NIBC has assessed all risks to which it is exposed in addition to the Pillar I risks. These include both financial and non-financial risks. For the financial risks, NIBC uses internally developed models. Examples of Pillar 2 financial risks are *Interest Rate Risk in the Banking Book (IRRBB)*, concentration risk both single name and sector concentration and market risk for fair value positions. The largest part of the EC for non-financial risks is based on stylized scenarios and business projections. Non-financial risks are business and reputational risk, legal and compliance risk, model risk and country risk.

Diversification

NIBC does not recognise any diversification between risk types. Within certain risk types diversification is inherently included, like market risk, IRRBB and concentration risk.

Stress scenarios

NIBC performs internal Stress Testing as part of the overall Pillar 2 framework for CRR/CRD IV. On a semi-annual basis, stress scenario outcomes estimated by NIBC's Stress Testing Framework are presented to the RMC and RPCC, providing senior management and the Supervisory Board members with information that can be taken into account for strategic decision making. Moreover, outcomes are directly linked to NIBC's Risk Appetite Framework, based on which management steers the bank's aggregated risks. The Stress Testing Framework accounts for the impact of a set of historical and hypothetical stress scenarios on the profit and loss and capital adequacy of NIBC.

RISK MANAGEMENT STRATEGY & PROCESS

Risk management is at the core of our business and sustainable growth strategy. NIBC's approach to risk management results in fast decision-making through experienced, client-focused origination teams with detailed knowledge of its client portfolio, allowing for risk exposure to be managed through carefully structured facilities and client-centered restructuring on the corporate side. In the retail offering, risk is managed through simple and transparent products and an experienced arrears management team aimed at preventing foreclosures. We mainly pursue credit and investment risk while reducing our interest rate, currency, liquidity and operational risks to a level that is acceptable and ensuring solid capital and liquidity positions. The risks we take are measured and monitored against our risk appetite, ensuring that NIBC is capable of executing its business activities in line with its strategy.

NIBC actively supports mid-sized corporates, retail customers and new ventures at their most decisive moments. The origination philosophy is centred around the client relationship, understanding the client's cash flow and the availability of collateral. In our corporate client offering we apply an integrated approach to managing credit risk by focusing on risk-adjusted returns. We assess whether a new opportunity fits our risk appetite and evaluate commercial and compliance matters prior to engaging with any particular client. In this process we consider credit risk and financial market risk as part of the decision process and conduct risk assessments prior to making the final lending or investment decision. The ultimate decision is dependent on our comfort with the specific client. The *Restructuring & Distressed Assets (RDA)* department that covers the corporate client offering is highly experienced, and typically engaged at an early stage of client financial distress to maximise the probability of a successful work-out and to limit potential losses. In our retail client offering we apply a conservative approach to new products and use programme lending for regular residential mortgage loans. In addition, tools are used to model credit risk, such as internally developed methodologies under the AIRB approach.

NIBC has the advantage of its medium scale and the close proximity and collaboration there is between colleagues and with its client base. This provides a setting in which a quick and efficient multidisciplinary approach can be taken in areas of risk management. We therefore have the capacity to keep moving forward as a business while we continue to comply with evolving regulatory requirements.

RISK APPETITE

NIBC's risk appetite framework is based on six pillars, which are rolled out throughout the organisation and incorporated in our policies, procedures, limits and action plans. These pillars are:

1. **Franchise:** be a reliable and client-focused bank.
2. **Solvency:** be a creditworthy partner for our clients and other stakeholders.
3. **Profitability:** aligned with business model and risk profile.
4. **Liquidity & Funding:** to have sufficient and appropriate liquidity and stable and diverse funding base at all times.
5. **Asset quality:** it seeks to align its asset quality with its business objectives
6. **Non-Financial:** to maintain a solid licence to operate.

NIBC measures its performance across these pillars by means of the quantitative and qualitative elements of its risk appetite framework. This framework helps NIBC to implement and execute its strategy for sustainable growth.

NIBC's risk appetite framework has been established and rolled out across the organisation. NIBC has adopted certain key risk and performance indicators and other early warning signals that are used by NIBC's business units to monitor and control developments in key risk areas.

NIBC continuously monitors and evaluates the effectiveness of this framework and periodically update this based on market developments and our environment. Going forward, the Risk Appetite framework will also include climate risk as a driver of traditional financial risks.

RISK STRATEGY

NIBC has a clearly defined business model around corporate client offering and retail client offering. Next to the retail customers of retail client offering, corporate client offering focuses on mid-sized corporate clients mainly in the Netherlands and Germany, and is a meaningful player in a select number of asset classes. Indispensable to corporate and retail client offerings and the entire business of NIBC are the Treasury, Risk Management and Corporate Center departments. Due to its focus and in-depth understanding of the business and its clients, NIBC has good understanding of the risks in this select number of markets.

The risk strategy of NIBC is aligned with this business model, resulting in the following markets and portfolios, where the risks are concentrated:

- Credit risk in the corporate loan portfolio is segmented across NIBC's chosen asset classes in the corporate client offering and in the residential mortgage loan portfolio (consisting of mainly Dutch, the Buy-to-Let portfolio as well as a small portfolio of German residential mortgage loans). Furthermore, credit risk exists also in the investment loan portfolio. Investment loans may reflect subordination or contain equity characteristics such as attached warrants or conversion features. Examples of these exposures include mezzanine loans, convertible loans and shareholder loans. Finally, credit risk exists in our derivative, lease receivables, cash management and debt investments portfolios;
- Investment risk in equity investments;
- Interest rate risk in residential mortgage loan portfolio; and
- Market risk in the Treasury portfolios mainly consisting of interest rate risk in the Money Markets & Trading book, Mismatch book and Banking book and the debt investments portfolio. The latter consists of the securitisations investment portfolio and the portfolio of debt investments in institutions and corporate entities.

In line with NIBC's business strategy, it is predominantly exposed to credit risk and investment risk, while aims to reduce interest rate, currency, liquidity and operational risks to acceptable levels. Risk appetite helps to achieve NIBC's targets in a sustainable and controlled manner. One additional element being a key for enabling the business activities is to ensure the bank's capital adequacy.

The business model described above is also reflected in the Economic Capital framework, which is further described in the section *Internal Capital Adequacy Assessment Process (ICAAP)*. NIBC uses Economic Capital as a risk measure throughout the organisation. For each business activity, Economic Capital is allocated and reported quarterly to the *Asset & Liability Committee (ALCO)*.

RISK GOVERNANCE AND RISK CULTURE

NIBC relies on a "three lines of defence" risk management governance model, which provides a structure to assign risk management activities and responsibilities at various levels throughout its organisation. Day-to-day responsibility for risk management lies firstly with the front office and/or

operational departments and constitutes the first line of defence. The risk control functions (consisting of Risk Management, Legal, Compliance & Regulatory Affairs and CSR) form the second line of defence and are responsible for initiating risk policy and supervision of risk control within NIBC. NIBC internal audit forms the third line and is responsible for, among other things, performing independent audits on the risk appetite framework.



To support effective decision-making, the Managing Board has delegated decision-making authority regarding key risk management focus areas to a number of committees, of which includes at least two Executive Committee members, amongst others:

- **Engagement committee (EC):** Responsible for decision-making with regard to client engagement and conflicts of interest including an assessment of the potential integrity risks when engaging with a client.
- **Transaction committee (TC):** The transaction committee has decision-making power with regards to credit transactions, assessment of credit proposals and the monitoring of credit related risks. The TC approves and monitors transaction proposals which cause NIBC to assume credit risk. Further, the TC decides on impairments and write-offs and reviews all larger exposures at least annually.
- **Investment committee (IC):** The IC is the delegated authority to decide on equity, mezzanine, subordinated, and other equity related financial products. The IC assesses new investment proposals and periodically determines the valuation of our equity portfolio.
- **Strategic investment committee (SIC):** The SIC has decision-making power on equity, mezzanine debt, subordinated debt and senior debt granted to new strategic participations and/or strategic investments.
- **Risk management committee (RMC):** The RMC decides on policies, measurement methods, monitoring, and controlling of all risk types. The role of the RMC is to safeguard our risk appetite by monitoring all risks NIBC is exposed to, thereby looking backwards as well as forwards.
- **Asset & liability committee (ALCO):** The ALCO monitors and controls capital ratios, liquidity, earnings, interest rate risk and market risk. As ALCO is responsible for liquidity, as they also decide on funding plans and large funding transactions.
- **Regulatory Change Committee (RCC):** The RCC keeps central oversight of the implementation of new regulatory laws and regulations.

The Supervisory Board supervises, monitors and advises the Managing Board on the risks inherent in NIBC's business activities, including the structure and operation of the internal risk management and control systems and compliance with legislation, regulations and NIBC's code of conduct. The Supervisory Board has set up two committees for this purpose: the Risk Policy and Compliance Committee (the "Risk Policy & Compliance Committee") and the Audit Committee ("Audit Committee"). The Risk Policy & Compliance Committee advises the Supervisory Board on its responsibilities relating to NIBC's risk appetite, risk profile, risk management policies and broader compliance topics. It presents proposals and recommendations, at the request of the Managing Board or Supervisory Board, or otherwise in accordance with the mandates, on credit, market, investment, liquidity, operational and compliance/regulatory risks, and any other material risks NIBC is exposed to. The Audit Committee advises the Supervisory Board on financial reporting, and internal and external audits.

One of the elements of NIBC's risk framework is the application of thorough anti-money laundering, client due diligence and know-your-client procedures and policies. NIBC places particular emphasis on active client monitoring on an ongoing basis. Individual client officers are primarily responsible for the execution of client due diligence onboarding in accordance with NIBC's procedures; however, the day-to-day activities relating to onboarding have been assigned to the Client Onboarding department, which is a separate department within the corporate client offering segment. The Compliance Department (as defined below), is responsible for policies, monitoring of regulations and treatment of high risk cases.

RISK MANAGEMENT ORGANISATION

NIBC's risk management committees are supported by a robust risk management organisation, which focuses on the daily monitoring and management of the risks NIBC is exposed to and includes the following departments and teams:

- Credit Risk Management (**CRM**) is responsible for assessing, managing and advising on credit risk related to corporate counterparties (for the corporate client offering) and high net worth individuals and this includes the investment loan portfolio as well as investment risk management for private equity positions. CRM develops and implements policies and procedures regarding credit risk, advises on credit proposals, reviews, waivers and amendments. Furthermore, CRM assigns NIBC's internal *counterparty credit ratings* (**CCR**) and *loss given default* (**LGD**) ratings.
- Retail Risk Management (**RRM**) is responsible for maintaining an overview of the total risk of the retail client offering and its portfolios, to review strategic projects, and monitor the development and impact from changes in NIBC's risk appetite.
- Restructuring and Distressed Assets Management (**RDA**) actively manages and restructures loans of financially distressed clients transferred from the various NIBC business units.
- Group Risk Management (**GRM**) is responsible for assessing and advising on country risk as well as being responsible for a number of regulatory as well as credit and investment policies. The development of the risk appetite framework is also the responsibility of GRM.
- The Market Risk Management department (**MRM**) is responsible for monitoring the market risk of NIBC's Treasury activities, both inside and outside the trading book. MRM also monitors NIBC's currency positions.

- The Risk Analytics and Model Validation department (**RA&MV**) is mainly responsible for economic capital modelling and reporting, model validation and quantitative research projects.
- Modelling & Data Analytics (**MDA**) is central to NIBC's Basel III process with respect to the development of policies and methods for measuring risk, notably the credit rating system used to evaluate probability of default and loss given default in NIBC's corporate credit portfolio as well as similar models for the residential mortgage loan portfolio. MDA also conducts certain quantitative risk modelling including that needed for IFRS 9 and bank-wide stress testing.
- Risk Portfolio Management (**RPM**) monitors risk at a portfolio level and is also responsible for the reporting of credit portfolio information to various users and stakeholders within and outside NIBC, including the reporting of NIBC's risk appetite framework. The team develops and maintains the (sub-) portfolio, sector & product limits as well as being responsible for monitoring, assessing and advising on the credit and counterparty risk of NIBC's Treasury activities, including monitoring and advice on counterparty credit limits and issuer limits.
- Operational Risk Management (**ORM**) is responsible for monitoring and managing operational risk stemming from NIBC's business and operational practices including IT risk. ORM co-ordinates the new product approval and review process and the group-wide significant change approval process of new activities ensuring pre-implementation of risk assessments by relevant functions throughout NIBC. NIBC corporate social responsibility activities are also managed by ORM. NIBC's code of conduct, business principles, compliance framework and sustainability framework guide NIBC's business activities and client transactions. Sustainability is integrated in NIBC's business strategy where we aim to create environmental and social value at decisive moments for our clients and stakeholders. The Sustainability Officer is responsible for catalysing sustainability and corporate social responsibility within the organisation.
- The Compliance Department is responsible for assisting and challenging the business in updating the overall compliance risk analysis for NIBC and all international offices on an annual basis. The Compliance team's role is to translate and implement relevant external regulations into sound and clear internal policies and procedures, document as well as update relevant compliance policies, inform and train staff members in order to broaden their compliance awareness, maintain proper information barriers and restricted lists and act as the co-ordinator for correspondence with the AFM and, via its local compliance officers, for the relevant international supervisory bodies. Compliance also advises on specific cases, when asked but also pro-actively. Client due diligence is an important topic as banks fulfil an important role in the prevention of intentional and unintentional wrongdoing. *Know-your-customer* and *Anti-Money Laundering* regulations are updated to meet today's challenges, and banks have to keep pace by adjusting their processes and procedures in order to effectively address the risks and remain compliant with these regulations. NIBC actively reviews and adjusts the client onboarding processes to keep these in line with continuously evolving requirements.
- The Regulatory Affairs team assists NIBC in minimizing regulatory risk by proactively assisting various parts of the bank by acting as regulatory advisor as well as carrying out a signaling and monitoring function in relation to new and existing laws and regulations. Regulatory Affairs coordinates the Regulatory Expert Networks for conduct and prudential regulation aimed at keeping track of new regulatory laws and regulations and the implementation thereof within NIBC. The team furthermore manages the Policy Framework of NIBC.

- Legal Department (**LD**) ensures that the legal risks which NIBC accepts remains within the parameters of NIBC's risk appetite framework. LD proactively assists various parts of the bank and advises on both external and internal transactions, as well as carrying out a control function. In addition, LD assists with various other matters, ranging from administrative matters to corporate affairs, strategic projects and fulfilling the Data Protection Officer role.

OWN FUNDS

CAPITAL MANAGEMENT AND CONTROL

Capital Base Components

The capital base, also referred to as regulatory capital, is calculated in accordance with the CRR/CRD IV. The available regulatory capital is based on capital contributed by subsidiaries covered by prudential consolidation accounts, which should be available, without restrictions or time constraints, to cover risks and absorb potential losses. All amounts are included net of tax charges.

The available regulatory own funds at NIBC are classified under three main categories, being Common Equity Tier 1 capital, Tier 1 capital and Tier 2 capital. The two main components in the regulatory own funds are core equity and subordinated debt. The key terms and conditions of each of these categories are summarised below

The capital ratio is calculated by dividing the regulatory capital by the *risk weighted assets (RWA)* also known as Risk Weighted Exposure Amount (**RWEA**).

Common Equity Tier 1 capital

Common Equity Tier 1 capital consists of common share capital including share premium accounts, retained earnings, accumulated other comprehensive income, adjusted by deduction of repurchased own shares and other eligible items.

Tier 1 capital

Tier 1 capital is composed of Common Equity Tier 1 capital and additional Tier 1 capital instruments after deduction of eligible items.

Tier 2 capital

The Tier 2 capital is composed of Tier 2 instruments. The amount possible to include in the Tier 2 capital related to dated Tier 2 capital instruments is reduced if the remaining maturity is less than five years. The outstanding nominal amount is calculated based on the number of the remaining calendar days of the contractual maturity of the instrument divided by the five years period in front of contractual maturity

Capital Adequacy

The capital adequacy of NIBC is principally managed at NIBC Holding level.

The principal ratios for reviewing the capital adequacy of NIBC are the Common Equity Tier 1 ratio and the Tier 1 ratio. These ratios, which were implemented by the *Bank for International Settlements (BIS)*, are intended to promote comparability between financial institutions. They are based on the CRR/CRD IV legislation.

NIBC monitors balance sheet developments on a continuous basis and evaluates the effects on capital ratios, including comparison between the expected ratios and the actual ratios. These ratios indicate capital adequacy to mitigate on-balance credit risks, including off-balance sheet commitments, market risks, operational risks and other risk positions expressed as risk-weighted items in order to reflect their relative risk.

Capital ratios of NIBC Holding

The Common Equity Tier 1 ratio is defined as Common Equity Tier-1 capital divided by the total RWA.

The Tier 1 ratio is defined as Tier 1 capital divided by the total RWA.

The Total Capital ratio is defined as Total Capital (which is the sum of Tier 1 capital and Tier 2 capital) divided by RWA.

NIBC Holding's fully loaded Common Equity Tier 1 capital ratio was 18.4% at end-2021. This is a solid position that also implies that NIBC Holding can fulfil the CRR/CRD IV requirements when fully implemented as of December 31, 2021.

Basel IV

An agreement was reached on the finalisation of the Basel III reforms (Basel IV) in December 2017. In March 2020 the Basel Committee on Banking Supervision announced that it will delay the implementation of Basel IV and its accompanying transitional arrangement by one year to allow banks to focus on the COVID-19 pandemic. The standards will have to be fully implemented by January 2028.

While certain elements still require more clarification, based on our current assessment and interpretation of the Basel IV Standards, NIBC estimates the impact to be well below 10% of RWA by 2028, compared to the RWA as determined at year-end 2021. This increase is in addition to the impact of the 30% RWA add-on following the IMI in 2019 and the floor for the risk weighting of Dutch mortgage loans, as it will be implemented as of January 2022. This analysis is based on the assumption that NIBC will successfully implement the required improvements in its model landscape. This does not take into account possible management actions, nor potential changes to Pillar 2 requirements. This also assumes a portfolio composition in 2028 that is equal to the current portfolio, as well as risk weights that reflect the current economic environment.

An uncertainty for banks is that the Basel IV Standards will have to be incorporated into legislation within the European Union. The EU legislative process may take up to several years. During this process of transposition in EU and national law, adjustments may be implemented. NIBC aims to meet the final requirements early in the phase-in period while NIBC continues to execute our client-focused strategy.

This analysis is based on the assumption that NIBC will successfully implement the required improvements in its model landscape. This does not take into account possible management actions, nor potential changes to Pillar 2 requirements. This also assumes a portfolio composition in 2028 that is equal to the current portfolio, as well as risk weights that reflect the current economic environment. This implies the impact of the sharpened strategic focus has not been taken into consideration.

OWN FUNDS

The recognition in consolidated own funds refers to the treatment of capital issued of subsidiaries to third parties. Capital instruments issued by consolidated subsidiaries and held by third parties may no longer be fully recognised towards capital at group level under the CRR/CRD IV but only to the extent used by the subsidiary to cover the minimum capital requirements including capital buffers. The partial de-recognition of capital issued to third parties by subsidiaries applies to all fully consolidated subsidiaries, including wholly-owned and partly owned. The partial de-recognition will affect the Additional Tier-1 and Tier-2 provided to third parties by all subsidiaries.

The tables in this chapter contain information on:

- Capital instruments main features (EU CCA)
- Composition of regulatory own funds (EU CCI)
- Reconciliation from IFRS to regulatory balance sheet (EU CC2)

EU CCA - Main features of regulatory own funds instruments and eligible liabilities instruments

General

	Tier 1 Instrument	Tier 1 instrument	Tier 1 instrument	Tier 2 instrument
Issuer	NIBC Bank N.V.	NIBC Bank N.V.	NIBC Bank N.V.	NIBC Bank N.V.
Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	XS1691468026	XS0215294512	XS0249580357	NIB 6.95 09APR27
Governing law(s) of the instrument	The securities are governed by, and construed in accordance with the laws of the Netherlands	The securities are governed by, and construed in accordance with the English law save for the subordination clause which is governed by, and construed in accordance with, the laws of the Netherlands	The securities are governed by, and construed in accordance with the English law save for the subordination clause which is governed by, and construed in accordance with, the laws of the Netherlands	The loan is governed by the laws of the Netherlands
	Tier 2 Instrument	Tier 2 Instrument	Tier 2 Instrument	Tier 2 Instrument
Issuer	NIBC Bank N.V.	NIBC Bank N.V.	NIBC Bank N.V.	NIBC Bank N.V.
Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	XS0161702914	NIB VAR 01JUL99	XS0210781828	XS1183596151
Governing law(s) of the instrument	The securities are governed by, and construed in accordance with the English law save for the subordination clause which is governed by, and construed in accordance with, the laws of the Netherlands	The loan is governed by the laws of the Netherlands	The securities are governed by, and construed in accordance with the English law save for the subordination clause which is governed by, and construed in accordance with, the laws of the Netherlands	The securities are governed by, and construed in accordance with the laws of the Netherlands

Regulatory treatment

	Tier 1 Instrument	Tier 1 Instrument	Tier 1 Instrument	Tier 2 instrument
Transitional CRR rules	Additional Tier 1	Additional Tier 1	Additional Tier 1	Tier 2
Post-transitional CRR rules	Additional Tier 1	-	-	Tier 2
Eligible at solo/ (sub-)consolidated/ solo & (sub-)consolidated	Solo & consolidated	Solo & consolidated	Solo & consolidated	Solo & consolidated
Instrument type (types to be specified by each jurisdiction)	Additional Tier 1 as published in Regulation (EU) No 575/2013 article 52	(grandfathered through 31 December 2021) as published in Regulation (EU) No 575/2013 article 484.3;	(grandfathered through 31 December 2021) as published in Regulation (EU) No 575/2013 article 484.3;	Tier 2 as published in Regulation (EU) No 575/2013 article 63
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	EUR 200 mln	EUR 17 mln	EUR 11 mln	EUR 11 mln
Nominal amount of instrument	EUR 200 mln	USD 90 mln	EUR 50 mln	EUR 11 mln
Issue price	100%	100%	100%	100%
Redemption price	Redemption at par	Redemption at par	Redemption at par	Redemption at par
Accounting classification	Equity	Liability - fair value	Liability - fair value	Liability - amortised cost
Original date of issuance	29-9-2017	24-3-2005	30-3-2006	9-4-1997
Perpetual or dated	Perpetual	Perpetual	Perpetual	Dated
Original maturity date	Perpetual	Perpetual	Perpetual	9-4-2027
Issuer call subject to prior supervisory approval	Yes	Yes	Yes	N/A
Optional call date, contingent call dates, and redemption amount	First call date 15/10/2024; tax, reg call; all calls at the outstanding amounts	First call date 24/03/2015; tax call, reg call; all calls at par	First cal date 30/03/2011; tax call, reg call; all calls at par	N/A
Subsequent call dates, if applicable	semi-annual calls on 15/10 and 15/04	annual call on 24/03	annual call on 30/03	N/A

Regulatory treatment

	Tier 2 Instrument	Tier 2 Instrument	Tier 2 Instrument	Tier 2 Instrument
Transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2
Post-transitional CRR rules	-	Tier 2	-	Tier 2
Eligible at solo/ (sub-)consolidated/ solo & (sub-)consolidated	Solo & consolidated	Solo & consolidated	Solo & consolidated	Solo & consolidated
Instrument type (types to be specified by each jurisdiction)	Tier 2 (grandfathered through 28 June 2025) as published in Regulation (EU) No 575/2013 article 494b	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 (grandfathered through 28 June 2025) as published in Regulation (EU) No 575/2013 article 494b	Tier 2 as published in Regulation (EU) No 575/2013 article 63
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	EUR 32 mln	EUR 41 mln	EUR 55 mln	EUR 32 mln
Nominal amount of instrument	EUR 32 mln	USD 47 mln	EUR 55 mln	EUR 50 mln
Issue price	100%	100%	100%	100%
Redemption price	Redemption at par	Redemption at par	Redemption at par	Redemption at par
Accounting classification	Liability - fair value	Liability - amortised cost	Liability - fair value	Liability - amortised cost
Original date of issuance	10-2-2003	30-6-1999	21-2-2005	24-3-2015
Perpetual or dated	Dated	Perpetual	Dated	Dated
Original maturity date	10-2-2043	Perpetual	21-2-2040	24-3-2025
Issuer call subject to prior supervisory approval	Yes	Yes	Yes	N/A
Optional call date, contingent call dates, and redemption amount	First call date 10/02/2013; tax call; all calls at par	First call date 01/07/2009; tax call, reg call; all calls at par	First call date 21/02/2035; tax call; all calls at par	N/A
Subsequent call dates, if applicable	call every 5 years starting in Feb 2013	call every 10 years starting in July 2009	one time call	N/A

Coupons / dividends

	Tier 1 Instrument	Tier 1 Instrument	Tier 1 Instrument	Tier 2 Instrument
Fixed or floating dividend/coupon	Fixed to floating	Fixed to floating	Fixed to floating	Fixed
Coupon rate and any related index	6% till October 2024; 5 year EUR swap rate + 5.5564% afterwards	7.5% p.a. till March 2007; min(10 year USD swap rate + 0.1%, 8.25%) afterwards	8% p.a. till March 2011; min(10 year EUR swap rate + 0.1%, 8%) afterwards	6.95% p.a.
Existence of a dividend stopper	No	No	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Partially discretionary - Existence of the mandatory payment event	Partially discretionary - Existence of the mandatory payment event	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Partially discretionary - Existence of the mandatory payment event	Partially discretionary - Existence of the mandatory payment event	Mandatory
Existence of step up or other incentive to redeem	No	No	No	No
Noncumulative or cumulative	Noncumulative	Noncumulative	Noncumulative	N/A
Convertible or non-convertible	Non-convertible	Convertible	Convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	Total capital ratio below overall total capital requirement	Total capital ratio below overall total capital requirement	N/A
If convertible, fully or partially	N/A	Always Fully	Always Fully	N/A
If convertible, conversion rate	N/A	1 to 1	1 to 1	N/A
If convertible, mandatory or optional conversion	N/A	Mandatory	Mandatory	N/A
If convertible, specify instrument type convertible into	N/A	Preference shares	Preference shares	N/A
If convertible, specify issuer of instrument it converts into	N/A	NIBC Bank N.V.	NIBC Bank N.V.	N/A
Write-down features	Yes	No	No	No
If write-down, write-down trigger (s)	CET I ratio of the Bank or Holding below 5.125%	N/A	N/A	N/A
If write-down, full or partial	Partial	N/A	N/A	N/A
If write-down, permanent or temporary	Temporary	N/A	N/A	N/A
If temporary write-down, description of write-up mechanism	Discretionary write-up provided the CET I ratio is in excess of the regulatory minimum	N/A	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior only to common equity tier 1 instruments	Subordinated to all claims subordinated only to the claims of unsubordinated creditors	Subordinated to all claims subordinated only to the claims of unsubordinated creditors	Subordinated to claims of unsubordinated creditors
Non-compliant transitioned features	No	Yes	Yes	No
If yes, specify non-compliant features	N/A	Mandatory payment event, Conversion to preference shares	Mandatory payment event, Conversion to preference shares	N/A

Coupons / dividends

	Tier 2 Instrument	Tier 2 Instrument	Tier 2 Instrument	Tier 2 Instrument
Fixed or floating dividend/coupon	Fixed 0% (6.35% yield)	Floating to Floating 6m USD Libor + 0.55% till 1 July 2009; 6m USD Libor + 1.55% afterwards	Fixed to Floating 7% p.a till Feb 2007; afterwards min(8.5; max(10 year EUR swap rate-2 year EUR swap rate)*4, 2.85)	Fixed 4.00% p.a.
Coupon rate and any related index				
Existence of a dividend stopper	No	No	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	N/A	Mandatory	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	N/A	Mandatory	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	Yes	No	No
Noncumulative or cumulative	N/A	N/A	N/A	N/A
Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A	N/A	N/A
If convertible, fully or partially	N/A	N/A	N/A	N/A
If convertible, conversion rate	N/A	N/A	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A
Write-down features	No	No	No	No
If write-down, write-down trigger (s)	N/A	N/A	N/A	N/A
If write-down, full or partial	N/A	N/A	N/A	N/A
If write-down, permanent or temporary	N/A	N/A	N/A	N/A
If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Subordinated to claims of unsubordinated creditors	Subordinated to claims of unsubordinated creditors	Subordinated to claims of unsubordinated creditors	Subordinated to claims of unsubordinated creditors
Non-compliant transitioned features	Yes No contractual provisions for loss-absorption	No N/A	Yes No contractual provisions for loss-absorption	No N/A
If yes, specify non-compliant features				

EU CCI - Composition of regulatory own funds as of 31 December 2021

in EUR millions

Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation

	Amounts	
Common Equity Tier I (CET I) capital: instruments and reserves		
1	1,290	CC2 - 26, 27
	1,290	
	-	
	-	
2	379	CC2 - 29
3	79	CC2 - 28
EU-3a	-	
4	-	
5	-	
EU-5a	-	
6	1,749	
Common Equity Tier I (CET I) capital: regulatory adjustments		
7	-2	
8	-2	CC2 - 9
9	-	
10	-27	CC2 - 11, 19
11	-9	
12	-	
13	-	
14	-55	
15	-	
16	-	
17	-	
18	-	
19	-	
20	-	
EU-20a	-17	
EU-20b	-	
EU-20c	-17	
EU-20d	-	
21	-	
22	-	
23	-	
24	-	
25	-	
EU-25a	-	
EU-25b	-	
26	-	
27	-	
27a	(0,00)	
28	-111	
29	1,638	

in EUR millions		(a)	(b)
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Additional Tier I (AT1) capital: instruments			
30	Capital instruments and the related share premium accounts	-	
31	of which: classified as equity under applicable accounting standards	-	
32	of which: classified as liabilities under applicable accounting standards	-	
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	-	
EU-33a	Amount of qualifying items referred to in Article 494a(1) subject to phase out from AT1	-	
EU-33b	Amount of qualifying items referred to in Article 494b(1) subject to phase out from AT1	-	
34	Qualifying Tier I capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	119	
35	of which: instruments issued by subsidiaries subject to phase out	-	
36	Additional Tier I (AT1) capital before regulatory adjustments	119	
Additional Tier I (AT1) capital: regulatory adjustments			
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	-	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	
41	Not applicable	-	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	-	
42a	Other regulatory adjustments to AT1 capital	-	
43	Total regulatory adjustments to Additional Tier I (AT1) capital	-	
44	Additional Tier I (AT1) capital	119	
45	Tier I capital (T1 = CET1 + AT1)	1,757	
Tier 2 (T2) capital: instruments			
46	Capital instruments and the related share premium accounts	-	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2 as described in Article 486 (4) CRR	-	
EU-47a	Amount of qualifying items referred to in Article 494a (2) subject to phase out from T2	-	
EU-47b	Amount of qualifying items referred to in Article 494b (2) subject to phase out from T2	-	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	120	
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Credit risk adjustments	13	
51	Tier 2 (T2) capital before regulatory adjustments	133	
Tier 2 (T2) capital: regulatory adjustments			
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	-	
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
54a	Not applicable	-	
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	
56	Not applicable	-	
EU-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	-	
56b	Other regulatory adjustments to T2 capital	-	
57	Total regulatory adjustments to Tier 2 (T2) capital	-	
58	Tier 2 (T2) capital	133	
59	Total capital (TC = T1 + T2)	1,890	
60	Total risk exposure amount	8,918	

in EUR millions		(a)	(b)
		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
Capital ratios and requirements including buffers			
61	Common Equity Tier I	18.4%	
62	Tier I	19.7%	
63	Total capital	21.2%	
64	Institution CET I overall capital requirements	9.1%	
65	of which: capital conservation buffer requirement	2.5%	
66	of which: countercyclical capital buffer requirement	0.0%	
67	of which: systemic risk buffer requirement	0.0%	
EU-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer requirement	0.0%	
EU-67b	of which: additional own funds requirements to address the risks other than the risk of excessive leverage	2.1%	
68	Common Equity Tier I capital (as a percentage of risk exposure amount) available after meeting the minimum capital requirements	9.5%	
69	Not applicable		
70	Not applicable		
71	Not applicable		
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	-	
73	Direct and indirect holdings by the institution of the CET I instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	-	
74	Not applicable		
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	-	
Applicable caps on the inclusion of provisions in Tier 2			
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	30	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	13	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	31	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)			
80	Current cap on CET I instruments subject to phase out arrangements	-	
81	Amount excluded from CET I due to cap (excess over cap after redemptions and maturities)	-	
82	Current cap on AT I instruments subject to phase out arrangements	-	
83	Amount excluded from AT I due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on T2 instruments subject to phase out arrangements	-	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	

EU CC2 - Reconciliation of regulatory own funds to balance sheet in the audited financial statements as of 31 December 2021

in EUR millions

	Balance sheet as in published financial statements	Reference
	As at period end	
Assets - Breakdown by asset classes according to the balance sheet in the published financial statements		
1 Cash and balances with central banks	1,793	
2 Due from other banks	821	
3 Financial assets at fair value through profit or loss	750	
4 Financial assets at fair value through other comprehensive income	852	
5 Financial assets at amortised cost	18,271	
6 Investment property	23	
7 Investments in associates and joint ventures	16	
8 Property and equipment	118	
9 Intangible assets	2	CCI - 8
10 Current tax assets	2	
11 Deferred tax assets	33	CCI - 10
12 Other assets	30	
13 Assets held for sale	10	
14 Total assets	22,722	
Liabilities - Breakdown by liability classes according to the balance sheet in the published financial statements		
15 Due to other banks	702	
16 Deposits from customers	11,295	
17 Financial liabilities at fair value through profit or loss	287	
18 Current tax liabilities	8	
19 Deferred tax liabilities	4	CCI - 10
20 Provisions	6	
21 Accruals, deferred income and other liabilities	135	
22 Liabilities held for sale	1	
23 Debt securities in issue	7,934	
24 Subordinated liabilities	263	
25 Total liabilities	20,636	
Shareholders' Equity		
26 Share capital	3	CCI - 1
27 Share premium	1,287	CCI - 1
28 Revaluation reserves	79	CCI - 3
29 Retained profit	516	CCI - 2
30 Capital securities	200	
31 Total shareholders' equity	2,086	

COUNTERCYCLICAL BUFFER

EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer as of 31 December 2021

in EUR millions		General credit exposures		Relevant credit exposures – Market risk			Own fund requirements							
	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit exposures - Credit risk	Relevant credit exposures - Market risk	Relevant credit exposures - Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)	
Breakdown by country:														
010	Netherlands	3,967	12,553	-	126	418	17,064	375	10	6	391	4,891	63.8%	0.0%
	Germany	19	1,203	-	-	33	1,255	86	-	0	86	1,073	14.0%	0.0%
	United Kingdom	18	1,610	-	-	20	1,649	61	-	3	64	801	10.5%	0.0%
	Rest of Europe	31	812	-	-	372	1,216	41	-	12	53	663	8.6%	1.5%
	Asia / Pacific	-	75	-	-	0	75	4	-	0	4	46	0.6%	0.0%
	North America	37	172	-	-	-	209	14	-	-	14	171	2.2%	0.0%
	Other countries	0	72	-	-	-	72	1	-	-	1	15	0.2%	0.0%
020	Total	4,072	16,499	-	126	843	21,540	581	10	22	613	7,660	100%	

EU CCyB2 - Amount of institution-specific countercyclical capital buffer

in EUR millions

1	Total risk exposure amount	8,918
2	Institution specific countercyclical capital buffer rate	0.05%
3	Institution specific countercyclical capital buffer requirement	4

LEVERAGE RATIO

EU LRI - LRSum: Summary reconciliation of accounting assets and leverage ratio exposures 2021

in EUR millions

		Applicable amount
1	Total assets as per published financial statements	22,721
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	1
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	-
4	(Adjustment for temporary exemption of exposures to central banks (if applicable))	-1,793
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) CRR)	-
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	-
7	Adjustment for eligible cash pooling transactions	-
8	Adjustments for derivative financial instruments	23
9	Adjustment for securities financing transactions (SFTs)	-
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	1,060
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier I capital)	-
EU-11a	(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-
EU-11b	(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) CRR)	-
12	Other adjustments	-251
13	Total exposure measure	21,760

EU LR2 - LRCom: Leverage ratio common disclosure 2021

in EUR millions

		CRR leverage ratio exposures	
		2021	2020
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	22,178	20,511
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-	-
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	-	-
5	(General credit risk adjustments to on-balance sheet items)	-	-
6	(Asset amounts deducted in determining Tier 1 capital)	-41	-81
7	Total on-balance sheet exposures (excluding derivatives and SFTs)	22,137	20,430
Derivative exposures			
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	262	349
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	-	-
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	95	147
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach	-	-
EU-9b	Exposure determined under Original Exposure Method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	-	-
EU-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-
EU-10b	(Exempted CCP leg of client-cleared trade exposures) (original Exposure Method)	-	-
11	Adjusted effective notional amount of written credit derivatives	-	-
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-
13	Total derivatives exposures	356	496
Securities financing transaction (SFT) exposures			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	-	-
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-
16	Counterparty credit risk exposure for SFT assets	-	-
EU-16a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e(5) and 222 CRR	-	-
17	Agent transaction exposures	-	-
EU-17a	(Exempted CCP leg of client-cleared SFT exposure)	-	-
18	Total securities financing transaction exposures	-	-
Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	2,248	1,739
20	(Adjustments for conversion to credit equivalent amounts)	-1,188	-910
21	(General provisions deducted in determining Tier 1 capital and specific provisions)	-	-
22	Off-balance sheet exposures	1,060	829

in EUR millions		CRR leverage ratio exposures	
		2021	2020
Excluded exposures			
EU-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	-	-
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a (1) CRR (on and off balance sheet))	-	-
EU-22c	(Excluded exposures of public development banks (or units) - Public sector investments)	-	-
EU-22d	(Excluded exposures of public development banks (or units) - Promotional loans): - Promotional loans granted by a public development credit institution - Promotional loans granted by an entity directly set up by the central government, regional governments or local authorities of a Member State - Promotional loans granted by an entity set up by the central government, regional governments or local authorities of a Member State through an intermediate credit institution (Excluded passing-through promotional loan exposures by non-public development banks (or units): - Promotional loans granted by a public development credit institution - Promotional loans granted by an entity directly set up by the central government, regional governments or local authorities of a Member State	-	-
EU-22e	- Promotional loans granted by an entity set up by the central government, regional governments or local authorities of a Member State through an intermediate credit institution)	-	-
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	-	-
EU-22g	(Excluded excess collateral deposited at triparty agents) (Exposures to the central bank exempted in accordance with point (n) of Article 429a(1) CRR)	-1,793	-1,909
EU-22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a(1) CRR)	-	-
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a(1) CRR)	-	-
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	-	-
EU-22k	(Total exempted exposures)	-1,793	-1,909
Capital and total exposure measure			
23	Tier 1 capital	1,757	1,700
24	Total exposure measure	21,760	19,847
Leverage ratio			
25	Leverage ratio	8.1%	8.6%
EU-25	Leverage ratio excluding the impact of the exemption of public sector investments and promotional loans (%)	8.1%	8.6%
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	7.5%	7.8%
26	Regulatory minimum leverage ratio requirement (%)	3.3%	3.3%
EU-26a	Additional own funds requirements to address the risk of excessive leverage (%)	5.8%	5.6%
EU-26b	of which: to be made up of CET1 capital (percentage points)	3.7%	3.6%
27	Leverage ratio buffer requirement (%)	0.0%	0.0%
EU-27a	Overall leverage ratio requirement (%)	9.2%	8.9%
Choice on transitional arrangements and relevant exposures			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	NA	NA

in EUR millions		CRR leverage ratio exposures	
		2021	2020
Disclosure of mean values			
28	Mean value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	-	-
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	-	-
30	Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	21,760	19,847
30a	Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	23,554	21,755
31	Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	8.1%	8.6%
31a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	7.5%	7.8%

EU LR3 - LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) 2021

in EUR millions		CRR leverage ratio exposures	
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	20,385	
EU-2	Trading book exposures		-
EU-3	Banking book exposures, of which:	20,385	
EU-4	Covered bonds	139	
EU-5	Exposures treated as sovereigns	34	
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns		-
EU-7	Institutions	627	
EU-8	Secured by mortgages of immovable properties	2,663	
EU-9	Retail exposures	9,215	
EU-10	Corporates	5,266	
EU-11	Exposures in default	405	
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	2,034	

LIQUIDITY RISK

NIBC defines liquidity risk as the inability of the company to fund its assets and meet its obligations as they become due at an acceptable cost.

Maintaining a sound liquidity and funding profile is one of NIBC's most important risk management objectives. NIBC analyses its funding profile by mapping all assets and liabilities into time buckets that correspond to their maturities.

The composition of NIBC's funding mix is actively managed and benefits from a relatively long average tenor of the wholesale funding portfolio.

LIQUIDITY FRAMEWORK

Key Liquidity Indicators, 31 December 2021

In %	
LCR	184%
NSFR	126%
Loan-to-Deposit	163%
Asset Encumbrance	28%

Based on the maturity profiles of existing assets and liabilities as well as on projections prepared by our business units and reviewed by the Asset and Liability Management department, several liquidity forecasts and stress tests are prepared and presented to the ALCO every two weeks. These reports form the basis of NIBC's Liquidity Risk Management. The Base Case Liquidity forecast has a 5 year horizon and takes into consideration the expected cash flows (such as maturing loans and funding, production of new assets, liquidity actions, and cash flows due to the mark-to-market of derivatives) of NIBC's assets and liabilities.

Furthermore, NIBC monitors the development of its ECB eligible assets, which consist of treasury assets and internal securitisations. Additionally, the Basel III Liquidity Ratios, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), are both monitored within NIBC's Liquidity Management Framework and are subject to regulatory minimum levels.

Also part of the Liquidity Management Framework are periodical analyses of liquidity gaps, the funding mix, the asset encumbrance ratio, and the loan-to-deposit ratio.

STRESS SCENARIOS

Our liquidity needs are carefully considered in the following stress scenarios:

- A 12-month market-wide liquidity crisis, characterised by an economic downturn with impact on both financial institutions (their willingness to lend and to purchase assets from each other) and non-financial institutions (leading to lower loan prepayments and larger/faster drawdowns of committed credit facilities). Such a market situation is assumed to result in no access to wholesale funding and worsening market variables (rating migration, additional haircuts on market value of collateral, MtM of derivatives cash outflow, slowing prepayments, etc.);
- A 12-month institution-specific stress test, caused by a material event that calls into question the reputation and/or credit quality of the institution, leading to a subsequent run on the bank. Furthermore, a significant credit rating downgrade applies. This is assumed to result in a significant outflow of retail savings and no access to ECB-financing in the first three months in addition to having no access to wholesale funding;

- A 12-month combined stress test that combines elements from the aforementioned market-wide and institution-specific liquidity stress tests. Essentially it captures a prolonged market stress with a relatively short period of a severe NIBC specific stress. Due to the severe character of the stress, the minimum survival period of this combined stress test equals eight months, assuming earlier management intervention. Under this scenario ECB lending is assumed to be available whereas asset market liquidity is worsened due to fire sales of assets and increased credit spreads.

The liquidity stress tests assume that all of the NIBC's contractual obligations are met and take into consideration varying levels of access to funding markets. The outcomes of the liquidity stress tests are met at a comfortable positive level and remain positive for a prolonged period, under the assumptions that normal measures are carried out. The survival period and the sufficiency of the liquidity buffers are monitored on a bi-weekly basis.

In addition to the 12-month liquidity stress analysis described above, NIBC also conducts liquidity analyses over longer periods once every two weeks according to a base scenario. These analyses assume the expected development of our loan portfolio in combination with new funding initiatives. The outcome of our five year liquidity analysis shows again a positive buffer throughout the period.

FUNDING

NIBC continues to optimise its funding mix and its funding diversification. An overview of NIBC's total liabilities can be seen in NIBC's Annual Report in the section Financial Review. NIBC's main sources of funding consist of retail funding (savings), secured (wholesale) funding, unsecured (wholesale) funding in addition to institutional deposits and shareholder's equity.

ENCUMBERED AND UNENCUMBERED ASSETS

EU AEI - Encumbered and unencumbered assets as of 31 December 2021

in EUR millions		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA	
010	Assets of the reporting institution	6,319	-			16,402	2,417		
030	Equity instruments	-	-	-	-	124	-	124	-
040	Debt securities	-	-	-	-	924	628	924	628
050	of which: covered bonds	-	-	-	-	124	124	124	124
060	of which: securitisations	-	-	-	-	732	465	732	465
070	of which: issued by general governments	-	-	-	-	40	40	40	40
080	of which: issued by financial corporations	-	-	-	-	873	588	873	588
090	of which: issued by non-financial corporations	-	-	-	-	12	-	12	-
120	Other assets	6,319	-			15,354	1,789		

EU AE2 - Collateral received and own debt securities issued 2021

in EUR millions

		Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA	
130	Collateral received by the reporting institution	-	-	-	-
140	Loans on demand	-	-	-	-
150	Equity instruments	-	-	-	-
160	Debt securities	-	-	-	-
170	of which: covered bonds	-	-	-	-
180	of which: securitisations	-	-	-	-
190	of which: issued by general governments	-	-	-	-
200	of which: issued by financial corporations	-	-	-	-
210	of which: issued by non-financial corporations	-	-	-	-
220	Loans and advances other than loans on demand	-	-	-	-
230	Other collateral received	-	-	-	-
240	Own debt securities issued other than own covered bonds or securitisations	-	-	-	-
241	Own covered bonds and asset-backed securities issued and not yet pledged	-	-	-	-
250	TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	6,319	-	-	-

EU AE3 - Sources of encumbrance as of 31 December 2021

in EUR millions

		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
010	Carrying amount of selected financial liabilities	5,211	6,303

LIQUIDITY COVERAGE RATIO

EU LIQI - Quantitative information of LCR as of 31 December 2021

in EUR millions		Total unweighted value (average)		Total weighted value (average)	
		2021	2020	2021	2020
EU 1a	Year ending				
EU 1b	Number of data points used in the calculation of averages	12	12	12	12
HIGH-QUALITY LIQUID ASSETS					
1	Total high-quality liquid assets (HQLA), after application of haircuts in line with Article 9 of regulation (EU) 2015/61			2,280	2,380
CASH - OUTFLOWS					
2	retail deposits and deposits from small business customers, of which:	10,210	9,815	455	426
3	Stable deposits	6,288	5,640	314	282
4	Less stable deposits	1,227	1,237	141	144
5	Unsecured wholesale funding	129	204	129	203
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	-	-	-	-
7	Non-operational deposits (all counterparties)	129	171	129	169
8	Unsecured debt	0	33	0	33
9	Secured wholesale funding			-	-
10	Additional requirements	1,626	1,387	298	277
11	Outflows related to derivative exposures and other collateral requirements	150	154	150	154
12	Outflows related to loss of funding on debt products	-	-	-	-
13	Credit and liquidity facilities	1,476	1,233	148	123
14	Other contractual funding obligations	393	300	380	292
15	Other contingent funding obligations	114	97	55	33
16	TOTAL CASH OUTFLOWS			1,317	1,231
CASH - INFLOWS					
17	Secured lending (e.g. reverse repos)	-	-	-	-
18	Inflows from fully performing exposures	90	157	77	126
19	Other cash inflows	-	29	-	29
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)			-	-
EU-19b	(Excess inflows from a related specialised credit institution)			-	-
20	TOTAL CASH INFLOWS	90	187	77	155
EU-20a	Fully exempt inflows	-	-	-	-
EU-20b	Inflows subject to 90% cap	-	-	-	-
EU-20c	Inflows subject to 75% cap	90	187	77	155
TOTAL ADJUSTED VALUE					
21	LIQUIDITY BUFFER			2,280	2,380
22	TOTAL NET CASH OUTFLOWS			1,240	1,075
23	LIQUIDITY COVERAGE RATIO			183.9%	221.3%

NET STABLE FUNDING RATIO

EU LIQ2: Net Stable Funding Ratio as of 31 December 2021

in EUR millions

	Unweighted value by residual maturity				Weighted value	
	No maturity	< 6 months	6 months to < 1yr	≥ 1yr		
Available stable funding (ASF) Items						
1	Capital items and instruments	1,758	-	-	134	1,892
2	Own funds	1,758	-	-	134	1,892
3	Other capital instruments	-	-	-	-	-
4	Retail deposits	-	8,358	871	982	9,581
5	Stable deposits	-	5,858	-	-	5,565
6	Less stable deposits	-	2,500	871	982	4,015
7	Wholesale funding:	-	1,205	214	8,090	8,217
8	Operational deposits	-	-	-	-	-
9	Other wholesale funding	-	1,205	214	8,090	8,217
10	Interdependent liabilities	-	-	-	-	-
11	Other liabilities:	-	532	-	-	-
12	NSFR derivative liabilities	-	-	-	-	-
13	All other liabilities and capital instruments not included in the above categories	-	532	-	-	-
14	Total available stable funding (ASF)					19,689
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					137
EU-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		4	7	4,789	4,080
16	Deposits held at other financial institutions for operational purposes		-	-	-	-
17	Performing loans and securities:		1,085	701	12,595	10,491
18	Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		-	-	-	-
19	Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions		807	90	335	460
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:		264	601	4,733	8,956
21	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		-	-	-	-
22	Performing residential mortgages, of which:		5	10	7,002	5,047
23	With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk		5	9	6,311	4,458
24	Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products		9	1	524	486
25	Interdependent assets		-	-	-	-
26	Other assets:		642	-	549	816
27	Physical traded commodities		-	-	-	-
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		92	-	-	79
29	NSFR derivative assets		170	-	-	170
30	NSFR derivative liabilities before deduction of variation margin posted		380	-	-	19
31	All other assets not included in the above categories		-	-	549	549
32	Off-balance sheet items		-	-	1,328	67
33	Total RSF					15,591
34	Net Stable Funding Ratio (%)					126.3%

CREDIT RISK

NIBC defines credit risk as the current or potential threat to the company's earnings and capital as a result of counterparties' failure to make financial payments on time or to otherwise comply with its financial obligations to NIBC.

Many activities at NIBC are related to credit risk: credit risk is present in the corporate loan portfolio, the investment loan portfolio, the residential mortgage loan portfolio (including Buy-to-Let), the lease receivables portfolio, the debt investments portfolio (in corporate entities, institutions and securitisations), cash management and derivatives. It is the largest source of risk to which NIBC is exposed, representing approximately 87% of total *Risk Weighted Assets (RWA)* and of the company's capital requirements. Specifically for the debt investments portfolio, NIBC defines the credit risk as issuer risk, which is the credit risk of losing the principal amount on products such as bonds. We also highlight the corporate exposures classified under AIRB. As disclosed in a press release on 26 June 2019, NIBC has been notified by DNB on the final outcome of an *internal model investigation (IMI)* as part of ongoing supervision by DNB. The IMI, which was performed on the basis of the ECB *Targeted Review of Internal Models (TRIM)* framework, resulted in 30% additional RWAs for our corporate loan portfolios for which internal models are used. The Pillar 3 disclosure requirements prescribe that a credit institution classifies its assets into a number of standard exposure classes. For a credit institution using the AIRB approach, these exposures are defined in the CRR/CRD IV. The following table presents the relationship between the classification in this report and the portfolios in NIBC Annual Report:

Comparison between Pillar 3 exposure classes and portfolios in NIBC's Annual report

Pillar 3 exposure classes	Portfolios in Annual report
Sovereign	Debt investments in sovereign entities and cash at central banks
Institutions	Debt investments in institutions, deposits and derivative transactions with institutions
Corporate	Corporate loan portfolio, including guarantees, derivatives and debt investments in corporate entities, lease receivables (BEEQUIP) and Investment Loan portfolio
Retail	Dutch and German residential mortgage loan portfolios, Buy-to-Let portfolio, German lease receivables, securitised RMBS portfolio
Equities	Equity investments and uncalled capital commitments
Securitisations	Securitisation portfolio, derivatives and retained notes of own securitisations
Other	Non-credit related exposures

Apart from the above mentioned differences in classification, differences can also be found between the numbers presented in this report and the numbers in the risk management paragraph and risk notes in NIBC's Annual Report. The main reasons that these numbers are not directly comparable are the following:

- For exposures treated under the AIRB approach, Pillar 3 numbers refer to EAD, a risk measure of the potential outstanding amount in the event of default. Counterparties typically tend to utilise their credit lines more intensively when approaching default, which implies that the amount outstanding at default is expected to be higher than the current outstanding amount. For undrawn parts of credit facilities, a credit conversion factor is applied to the numbers in the Pillar 3 report, which cannot be recognised on the balance sheet. This credit conversion factor is incorporated in the calculation of EAD; and
- The treatment of some securitised exposures differs due to differences in de-recognition requirements in IFRS and CRR/CRD IV.

With respect to COVID-19 disclosures, please see [EU Template - Information](#) on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis 2020.

CREDIT RISK QUALITY

Credit risk exposures

This section presents NIBC's credit risk exposures based on the definitions and approaches that are used in the calculation of capital requirements. NIBC received approval by the DNB to use the AIRB approach for calculating the capital requirements of the corporate and retail mortgage loan exposure classes. Furthermore, NIBC uses the ratings-based approach for the securitisation exposure class and the simplified risk-weight approach for the equity exposure class.

The AIRB approach is the most sophisticated approach within CRR/CRD IV for the calculation of capital requirements and it is based on NIBC's internal estimation of various risk parameters. The section [Calculation of Risk Weighted Assets](#) in this report provides more information on the methods NIBC uses for the estimation of these parameters.

The Standardised Approach applies to all other NIBC exposure classes containing credit risk.

The table below shows a breakdown of exposure, EAD, RWA and capital requirement per exposure class and calculation approach at 31 December 2021 and 31 December 2020.

Breakdown of EAD, RWA and capital requirement for credit risk (excluding CVA)

in EUR millions	2021			2020		
	EAD	RWA	Capital requirement	EAD	RWA	Capital requirement
AIRB APPROACH						
- of which corporate	6,847	3,465	277	6,949	3,740	299
- of which retail	9,393	584	47	9,043	599	48
- of which securitisations	770	210	17	733	188	15
- of which equities	259	959	77	252	931	74
SUBTOTAL	17,269	5,218	417	16,976	5,458	437
STANDARDISED APPROACH						
- of which sovereign	1,869	-	-	2,041	-	-
- of which corporate	1,124	1,076	86	726	686	55
- of which retail	2,809	1,160	93	1,165	456	36
- of which institutions	879	187	15	911	183	15
- of which securitisations	73	62	5	116	89	7
- of which other	142	142	11	96	96	8
SUBTOTAL	6,896	2,627	210	5,056	1,511	121
TOTAL	24,165	7,846	628	22,032	6,968	557

Small differences are possible in the table due to rounding.

The total credit risk RWA of NIBC increased in 2021 largely as a result the acquisition of the Finqus portfolio as well as growth in the BEEQUIP leasing portfolio.

Defaulted, non-performing, impaired and forborne exposure

EU CRI - Performing and non-performing exposures and related provisions as of 31 December 2021

in EUR millions

	Gross carrying amount/nominal amount								Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				Accumulated partial write-off	Collaterals and financial guarantees received		
	Performing exposures		Non-performing exposures				Performing exposures - Accumulated impairment and provisions		Non-performing exposures - Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			On performing exposures	On non-performing exposures			
	of which: stage 1	of which: stage 2	of which: stage 2	of which: stage 3	of which: stage 2	of which: stage 3	of which: stage 1	of which: stage 2	of which: stage 2	of which: stage 3						
005	Cash balances at central banks and other demand deposits	2,409	2,409	-	-	-	-	-	-	-	-	-	-	-	-	-
010	Loans and advances	18,213	17,342	714	493	-	348	-54	-18	-35	-153	-	-103	-	16,301	179
020	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
030	General governments	87	87	-	-	-	-	0	0	-	-	-	-	-	81	-
040	Credit institutions	205	205	-	-	-	-	-	-	-	-	-	-	-	-	-
050	Other financial corporations	447	394	52	62	-	62	-3	-1	-1	-29	-	-29	-	350	17
060	Non-financial corporations	5,727	5,058	530	309	-	216	-43	-15	-27	-122	-	-74	-	4,149	41
070	Of which: SMEs	365	353	12	-	-	-	-2	-1	-1	-	-	-	-	333	-
080	Households	11,747	11,598	132	122	-	69	-8	-2	-7	-1	-	-1	-	11,722	121
090	Debt Securities	925	875	3	-	-	-	-1	0	0	-	-	-	-	-	-
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	40	40	-	-	-	-	0	0	-	-	-	-	-	-	-
120	Credit institutions	223	223	-	-	-	-	0	0	-	-	-	-	-	-	-
130	Other financial corporations	650	601	3	-	-	-	-1	0	0	-	-	-	-	-	-
140	Non-financial corporations	12	12	-	-	-	-	-	-	-	-	-	-	-	-	-
150	Off-balance sheet exposures	2,158	2,052	69	1	-	1	4	3	1	-	-	-	-	-	-
160	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
170	General governments	2	2	-	-	-	-	0	0	-	-	-	-	-	-	-
180	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
190	Other financial corporations	228	212	17	-	-	-	1	1	0	-	-	-	-	-	-
200	Non-financial corporations	1,330	1,240	52	1	-	1	3	2	1	-	-	-	-	-	-
210	Households	598	598	-	-	-	-	-	-	-	-	-	-	-	-	-
220	Total	23,706	22,678	786	494	-	349	-50	-16	-34	-153	-	-103	-	16,301	179

EU CR2 - Changes in the stock of non-performing loans and advances as of 31 December 2021

in EUR millions

Gross carrying amount

010	Initial stock of non-performing loans and advances	363
020	Inflows to non-performing portfolios	274
030	Outflows from non-performing portfolios	-145
040	Outflows due to write-offs	-33
050	Outflow due to other situations	-112
060	Final stock of non-performing loans and advances	493

EU CQI: Credit quality of forborne exposures as of 31 December 2021

in EUR millions

	Gross carrying amount/ Nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collaterals received and financial guarantees received on forborne exposures	
	Performing forborne	Non-performing forborne		On performing forborne exposures	On non-performing forborne exposures	Of which: Collateral and financial guarantees received on non-performing exposures with forbearance measures		
		Of which defaulted	Of which impaired					
005 Cash balances at central banks and other demand deposits	-	-	-	-	-	-	-	-
010 Loans and advances	474	324	324	323	-14	-121	426	70
020 Central banks	-	-	-	-	-	-	-	-
030 General governments	-	-	-	-	-	-	-	-
040 Credit institutions	-	-	-	-	-	-	-	-
050 Other financial corporations	2	41	41	41	0	-24	2	-
060 Non-financial corporations	306	242	242	242	-14	-96	218	29
070 Households	166	41	41	41	0	0	206	41
080 Debt Securities	-	-	-	-	-	-	-	-
090 Loan commitments given	9	1	1	1	0	-	-	-
100 Total	483	325	325	324	-14	-121	426	70

EU CQ3: Credit quality of performing and non-performing exposures by past due days as of 31 December 2021

in EUR millions

		Gross carrying amount / Nominal amount											
		Performing exposures				Non-performing exposures							
		Not past due or Past due < 30 days	Past due > 30 days < 90 days	Unlikely to pay that are not past-due or past-due < = 90 days	Past due > 90 days < = 180 days	Past due > 180 days < = 1 year	Past due > 1 year < = 2 years	Past due > 2 year < = 5 years	Past due > 5 year < = 7 years	Past due > 7 years	Of which defaulted		
005	Cash balances at central banks and other demand deposits	2,409	2,409	-	-	-	-	-	-	-	-	-	-
010	Loans and advances	18,213	18,198	15	493	394	9	8	1	50	31	0	493
020	Central banks	-	-	-	-	-	-	-	-	-	-	-	-
030	General governments	87	87	-	-	-	-	-	-	-	-	-	-
040	Credit institutions	205	205	-	-	-	-	-	-	-	-	-	-
050	Other financial corporations	447	447	-	62	29	-	-	-	33	0	-	62
060	Non-financial corporations	5,727	5,727	-	309	259	-	3	-	16	31	-	309
070	Of which SMEs	365	365	-	-	-	-	-	-	-	-	-	-
080	Households	11,747	11,732	15	122	106	9	6	1	0	-	0	122
090	Debt Securities	925	925	-	-	-	-	-	-	-	-	-	-
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	40	40	-	-	-	-	-	-	-	-	-	-
120	Credit institutions	223	223	-	-	-	-	-	-	-	-	-	-
130	Other financial corporations	650	650	-	-	-	-	-	-	-	-	-	-
140	Non-financial corporations	12	12	-	-	-	-	-	-	-	-	-	-
150	Off-balance sheet exposures	2,158	-	-	1	-	-	-	-	-	-	-	1
160	Central banks	-	-	-	-	-	-	-	-	-	-	-	-
170	General governments	2	-	-	-	-	-	-	-	-	-	-	-
180	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-
190	Other financial corporations	228	-	-	-	-	-	-	-	-	-	-	-
200	Non-financial corporations	1,330	-	-	1	-	-	-	-	-	-	-	1
210	Households	598	-	-	-	-	-	-	-	-	-	-	-
220	Total	23,706	21,532	15	494	394	9	8	1	50	31	0	494

EU CQ4: Quality of non-performing exposures by geography as of 31 December 2021

in EUR millions

	Gross carrying/Nominal amount	of which: non-performing	of which: subject to impairment	Accumulated impairment	Provisions on off-balance sheet commitments and financial guarantee given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
		of which: defaulted				
010 On balance sheet exposures	19,631	493		-207		-
020 Netherlands	16,100	324		-108		-
030 Germany	776	42		-30		-
040 United Kingdom	1,071	7		-12		-
050 Rest of Europe	1,142	53		-32		-
Asia / Pacific	317	12		-6		-
060 North America	64	0		0		-
070 Other countries	161	55		-19		-
080 Off balance sheet exposures	2,159	1			4	
090 Netherlands	1,389	0			2	
100 Germany	368	0			1	
110 United Kingdom	210	-			0	
120 Rest of Europe	179	1			0	
Asia / Pacific	5	-			-	
130 North America	2	-			-	
140 Other countries	7	-			0	
150 Total	21,790	494		-207	4	-

Columns "of which non-performing" and "of which subject to impairment" are kept empty in line with the requirements for institutions with an NPE ratio lower than 5%.

EU CQ5 - Credit quality of loans and advances to non-financial corporations by industry as of 31 December 2021

in EUR millions		Gross carrying amount of which: non-performing	of which: loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non- performing exposures
		of which: defaulted			
010	Agriculture, forestry and fishing	20	-	0	-
020	Mining and quarrying	273	77	-29	-
030	Manufacturing	512	33	-30	-
040	Electricity, gas, steam and air conditioning supply	110	31	-23	-
050	Water supply	62	10	-5	-
060	Construction	290	-	-1	-
070	Wholesale and retail trade	315	38	-21	-
080	Transport and storage	870	50	-15	-
090	Accommodation and food service activities	77	-	-1	-
100	Information and communication	612	-	-2	-
110	Real estate activities	967	65	-16	-
120	Financial and insurance activities	-	-	-	-
130	Professional, scientific and technical activities	32	-	0	-
140	Administrative and support service activities	1,150	0	-6	-
150	Public administration and defense, compulsory social security	16	-	0	-
160	Education	244	-	0	-
170	Human health services and social work activities	321	-	-7	-
180	Arts, entertainment and recreation	24	-	-2	-
190	Other services	140	4	-7	-
200	Total	6,036	309	-166	-

Columns "of which non-performing" and "of which loans and advances subject to impairment" are kept empty in line with the requirements for institutions with an NPE ratio lower than 5%.

Retail

Both the Dutch and German residential mortgage loan portfolios are classified as amortised cost. Under IFRS9 impairment amounts or *Expected Credit Losses (ECL)* are calculated on each individual mortgage loan. Last year showed a further decrease in losses, due to improving market circumstances. The performance of NIBC's securitised mortgage loan portfolio is also good compared to other Dutch RMBS issuers as evidenced by arrears levels and realised loss levels.

NIBC has an in-house arrears management department, actively managing arrears, foreclosures, client retention and residual debts of the Dutch residential mortgage loan portfolio.

Retail Portfolio Management and RRM monitor the quality of the residential mortgage loan portfolio on a regular basis. On a quarterly basis, the Dutch residential mortgage loan portfolio is assessed for impairments and existing impairments are reviewed.

Corporate

Portfolio managers within the commercial teams and risk managers at the CRM, GRM and RPM departments monitor the quality of (corporate) counterparties on a regular basis. On a quarterly basis, all corporate exposures are assessed for impairment and all existing impairments are reviewed.

NIBC calculates an impairment amount by taking certain factors into account, particularly the available collateral securing the loan. The amount of loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows. If collateral is present, then the present value of the future cash flows includes the foreclosure value of collateral.

When a default occurs (in line with the CRR/CRD IV definition¹), the entire EAD of the borrower is classified as defaulted. However, if an impairment amount is taken against a facility, only the EAD of that particular facility is classified as impaired.

Sovereign and Institutions

In 2021, NIBC did not take any IFRS 9 Stage 3 impairments on these exposure classes.

COVID-19

EU Template - Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis as of 31 December 2021

in EUR millions	Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
		of which: forborne	Public guarantees received	Inflows to non-performing exposures
1 Newly originated loans and advances subject to public guarantee schemes	6	3	6	-
2 of which: Households	-			-
3 of which: Collateralised by residential immovable property	-			-
4 of which: Non-financial corporations	6	3	6	-
5 of which: Small and Medium-sized Enterprises	-			-
6 of which: Collateralised by commercial immovable property	3			-

CREDIT RISK MITIGATION

EU CR3 – CRM techniques overview: Disclosure of the use of credit risk mitigation techniques

in EUR millions	Unsecured carrying amount	Secured carrying amount			Of which secured by credit derivatives
			Of which secured by collateral	Of which secured by financial guarantees	
1 Loans and advances	4,635	16,480	16,430	50	-
2 Debt securities	925	-	-	-	-
3 Total	5,560	16,480	16,430	50	-
4 Of which non-performing exposures	315	179	179	-	-
EU-5 Of which defaulted	315	179	179	-	-

¹ According to the CRR/CRD IV definition, a default is determined on borrower level. A default is indicated by using a 9 or 10 rating in NIBC's internal rating scale. A default is considered to have occurred with respect to a particular obligor if either of the two following events have taken place: i) the bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security (if held). ii) the obligor is past due more than 90 days on any material credit obligation to the banking group.

EU CQ7: Collateral obtained by taking possession and execution processes

in EUR millions

	Collateral obtained by taking possession accumulated	
	Value at initial recognition	Accumulated negative changes
010 Property Plant and Equipment (PP&E)	6	-
020 Other than Property Plant and Equipment	-	-
030 Residential immovable property	-	-
040 Commercial Immovable property	-	-
050 Movable property (auto, shipping, etc.)	-	-
060 Equity and debt instruments	-	-
070 Other	-	-
080 Total	6	-

Retail

Dutch residential mortgage loan portfolio

Credit losses are mitigated in a number of different ways:

- The underlying property is pledged as collateral;
- Under Dutch law, NIBC has full recourse to the borrower; and
- 13% of the Dutch Own Book portfolio (and 30% of the Dutch Securitised portfolio) is covered by the NHG programme.

For the portfolio not covered by the NHG programme, the underlying property is the primary collateral for any mortgage loan granted, though savings and investment deposits may also serve as additional collateral. A measurement for potential losses, taking into account indexation of house prices and seasoning, is achieved by calculating the *loan-to-indexed-market-value (LtiMV)*. The indexation is made by using the index of the *Dutch Land Registry Office (Kadaster)*, which is based on market observables. For the total portfolio 0.5% has an LtiMV above 100%. For the remainder of the portfolio, there is either coverage by the NHG programme or the indexed collateral value is sufficient to cover the entire loan balance outstanding.

German residential mortgage loan portfolio

As is the case in the Netherlands, the underlying property is the primary collateral for any mortgage loan granted. Most of the mortgage loans contain an annuity repayment, leading to a lower outstanding loan balance during the lifetime of the loan.

Corporate

An important element in NIBC's credit approval process is the assessment of collateral. Almost all exposures in the corporate exposure class have some form of collateralisation, where we note that many of the investment loans also benefit from collateral as well as having a government guarantee covering a portion of the exposure. Investment loans may contain equity characteristics such as attached warrants or conversion features; examples of this exposure include mezzanine loans, convertible loans and shareholder loans, which are in many instances unsecured instruments.

In general, NIBC requests collateral to protect its interests. NIBC ascribes value to the collateral it accepts provided that the collateral is sufficiently liquid, that documentation is effective and that enforcing NIBC's legal rights to the collateral will be successful. The type and quantity of the collateral depends on the type of transaction, the counterparty and the risks involved. The most significant

types of collateral securing the corporate exposure class are assets, such as real estate, vessels, equipment and pools of (lease) receivables.

NIBC initially values collateral based on fair market value when structuring a transaction and typically also seeks confirmation from independent third-party experts that its interests are legally enforceable. Furthermore, NIBC evaluates internally the collateral and its value (semi-) annually during the lifetime of the exposure. Exposures in the Shipping and Energy sectors are secured by vessels and equipment. The commercial real estate portfolio is primarily collateralised by mortgages on financed properties. Collateral value is estimated using third-party appraisers, whenever possible, or valuation techniques based on common market practice. Other corporate exposures are, to a large extent, collateralised by assets such as inventory, debtors, and third-party credit protection (e.g. guarantees). The value of these types of collateral can be more difficult to determine, therefore such collateral is assessed on individual basis.

Institutions

The exposures to financial institutions are either related to *over-the-counter (OTC)* derivative transactions, debt investments (in tradable securities) or cash management activities (money-market and repo transactions). Details about credit risk management for OTC derivative transactions can be found in the [Counterparty Credit Risk](#) section. NIBC only enters into repo transactions if they are secured by highly-rated bonds. Some debt investments issued by financial institutions are secured by collateral (covered bonds).

CALCULATION OF RISK WEIGHTED ASSETS

AIRB approach

EU CR7-A - IRB approach – Disclosure of the extent of the use of CRM techniques as of 31 December 2021

in EUR millions

A-IRB	Total exposures	Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs		
		Funded credit Protection (FCP)						Unfunded credit Protection (UFCP)					RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and substitution effects)	
		Part of exposures covered by Financial Collaterals (%)	Part of exposures covered by Other eligible collaterals (%)	Part of exposures covered by Immovable property Collaterals (%)	Part of exposures covered by Receivables (%)	Part of exposures covered by Other physical collateral (%)	Part of exposures covered by Other funded credit protection (%)	Part of exposures covered by Cash on deposit (%)	Part of exposures covered by Life insurance policies (%)	Part of exposures covered by Instruments held by a third party (%)	Part of exposures covered by Guarantees (%)	Part of exposures covered by Credit Derivatives (%)			
1	Central governments and central banks	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
2	Institutions	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
3	Corporates	6,427	4.4%	63.9%	16.9%	8.9%	38.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	3,257	3,257
3.1	Of which Corporates – SMEs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
3.2	Of which Corporates – Specialised lending	3,902	5.0%	80.6%	26.0%	4.8%	49.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	1,520	1,520
3.3	Of which Corporates – Other	2,524	3.4%	38.1%	2.9%	15.3%	19.8%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	1,737	1,737
4	Retail	9,393	0.0%	83.5%	83.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.3%	0.0%	584	584
4.1	Of which Retail – Immovable property SMEs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
4.2	Of which Retail – Immovable property non-SMEs	9,393	0.0%	83.5%	83.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.3%	0.0%	584	584
4.3	Of which Retail – Qualifying revolving	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
4.4	Of which Retail – Other SMEs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
4.5	Of which Retail – Other non-SMEs	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-
5	Total	15,819	1.8%	75.6%	56.5%	3.6%	15.4%	0.0%	0.0%	0.0%	0.0%	9.8%	0.0%	3,841	3,841

Ratings and rating process in the AIRB approach

The AIRB approach for the corporate and retail exposure classes has been implemented by NIBC after the approval by DNB. The ratings framework consists of the calculation of three main parameters: *probability of default (PD)*, *loss given default (LGD)* and *exposure at default (EAD)*.

The PD, LGD and EAD that are calculated through NIBC's internal models are used for the calculation of *expected loss (EL)* and Pillar-1 *regulatory capital (RC)*. Internal ratings enable an objective comparison of the credit risk of different types of assets, making them an essential tool for the commercial and risk management departments to determine whether a transaction fits NIBC's strategy and portfolio, as well as to determine the appropriate pricing. *Economic capital (EC)* and *risk-adjusted return on capital (RAROC)* are areas within Pillar 2, which make use of the above-mentioned parameters, although the methodologies for EC differ from those employed in Pillar 1.

In addition to the determination of our EC, NIBC performs on a semi-annual basis a bankwide stress test to assess the impact of the scenarios on its RWA levels and (Core)Tier-I ratio. Next to the bankwide approach NIBC performs stress test scenarios at (sub)portfolio level. For more information on the differences between NIBC's calculations under Pillar 1 and Pillar 2, we refer to the *ICAAP* chapter.

NIBC enforces strict separation of responsibilities with respect to its internal rating methodologies and rating process, model development, model validation and internal audit. The roles and responsibilities of each involved unit are explicitly set out in internal policies and standards, also in conformity with the stipulations of CRR/CRD IV with respect to model governance.

In addition to these three internally calculated parameters, a fourth parameter which influences the calculation of the Pillar-I RC is the *maturity (M)*.

Model governance within NIBC is addressed via, amongst others, the Model Risk Management Framework as included in the relevant internal policies.

This section explains how the PD, LGD and EAD are applied within the AIRB corporate and retail framework of NIBC.

Retail

The AIRB approach applies to NIBC's Dutch residential mortgage loan portfolio excluding Buy-To-Let for which the Standardised Approach applies. The calculation of PD, LGD and EAD is performed by an internally developed AIRB model, which has been in use since 2007. The PD estimates are dependent on a variety of factors, of which the key factors are the delinquency status, debt-to-income and loan-to-value ratios. Minor factors that play a role in the PD estimates are several other mortgage loan characteristics and borrower characteristics. The PD scale is based on a continuous scale ranging from 0 - 100%.

The LGD estimates are based on a downturn scenario comparable to the downturn in the Dutch mortgage loan market in the 1980s. In this case, the indexed collateral value is stressed in order to simulate the proceeds of a (forced) sale of the collateral. The stress is dependent on the location of the collateral and its value. Together with assumptions about costs and time to foreclosure, an LGD is derived. The LGD estimate also takes into account whether a mortgage loan has a *Dutch government guarantee (NHG guarantee)* for which the LGD estimate is lower in comparison to a mortgage loan without the NHG guarantee. The LGD estimate is also based on a continuous scale.

The EAD is set equal to the net exposure (outstanding balance minus built-up savings value) for all mortgage loans, except for non-amortising (in this case, interest-only loans). For the non-amortising loans, 3 months of accrued interest is added to the EAD.

The validation of these estimates is performed on historical data and is carried out on a yearly basis. For the PD and LGD, the estimates are back tested against realised defaults and realised losses. In this way, it is ensured that the model still functions correctly in a changing economic environment.

Corporate

The AIRB approach applies to NIBC's corporate loan portfolio. The calculation of CCR/PD, LGD and EAD is performed by an internally developed AIRB models, which have been in use since 2007. In addition to the EAD, the main components of the methodology consists of two elements: (i) a counterparty credit rating that reflects the probability of default of the borrower and (ii) an

anticipated loss element that expresses the potential loss on the facility in the event of default of the borrower. All counterparties are reviewed at least once a year.

Counterparty credit ratings (CCR) and probability of default (PD)

The *counterparty credit rating (CCR)* reflects the counterparty's capacity to meet its financial obligations in full and in time. CCRs do not incorporate any recovery prospects, as these are captured by the internal LGD estimates.

NIBC's uses a through-the-cycle CCR rating scale, which consists of 10 grades (1-10). Most of these grades are further divided in notches, by the addition of a plus or minus sign to show the relative standing within the rating grade. NIBC uses a total of 22 notches, each of which is mapped to the rating scale of the main international rating agencies. Each notch carries a PD percentage, which quantifies the likelihood that the counterparty will go into default in the next one year. The CCRs 9 and 10 are assigned to counterparties that have already defaulted and therefore carry a PD of 100%. Furthermore, CCRs are assigned a rating outlook. This assesses the potential direction of the CCR over the medium term. In determining a rating outlook, consideration is given to any changes in the economic and/or fundamental business conditions.

The general methodology for determining a CCR is based on several qualitative and quantitative rating indicators, such as the analysis of the business and financial profile of the counterparty, a cash flow analysis, a sovereign risk analysis and a peer-group analysis.

The performance of the CCR methodology is back-tested annually in order to ensure that consistency is kept throughout the portfolio and to measure the discriminatory power and the ranking ability of the CCRs. Furthermore, NIBC periodically benchmarks its CCRs with external parties.

Loss given default (LGD)

Whereas CCRs are assigned on a counterparty level, LGD ratings are facility-specific. The LGD ratings reflect the loss that can be expected on a facility in a downturn scenario, given a counterparty defaults. NIBC's internal LGD scale consists of 7 grades (A-F) and 10 notches, each of which represents a different degree of recovery prospects and loss expectations.

NIBC's LGD philosophy is similar to the approach for CCRs. The LGD methodology is also based on a combination of qualitative and quantitative rating indicators that include, among others, the assessment of the available collateral and/or guarantees, the seniority of the loan, the applicable jurisdiction, and the quality of the counterparty's assets. Once the various LGD drivers have been assessed, the final LGD rating is produced.

As is the case for CCRs, the maintenance of NIBC's LGD models involves benchmarking and back-testing.

Exposure at default (EAD) and credit conversion factor

A third element of the AIRB approach is the calculation of the EAD. It is defined as the amount that is expected to be outstanding at the moment a counterparty defaults. Counterparties typically tend to utilise their credit lines more intensively when approaching default, which implies that the amount outstanding at default is expected to be higher than the current outstanding amount.

In order to quantify the additional expected utilisation, NIBC applies a *credit conversion factor (CCF)* on the undrawn portion of every credit facility. The main driver for the value of the CCF is the type

of the credit facility (e.g. term loan, working capital facility, guarantee). NIBC produces its own internal estimates of CCF, based on the utilisation of defaulted credit facilities at the time of default and one year prior to default, which are a combination of internal defaulted facilities and defaulted facilities from the *Global Credit Data (GCD)* data pool.

Overview of AIRB corporate exposures

Since 2010, NIBC has been using an internally developed methodology for calculating RWAs for the defaulted counterparties. Whereas RWA and Regulatory Capital (RC) for the non-defaulted corporate exposures are calculated based on the CRR/CRD IV AIRB formula, the RWA and RC for the defaulted corporate exposures are a function of the impairment amount, if present, and the proportion of the impairment amount to the defaulted EAD. This methodology results in additional RWA and RC for the corporate exposure class, in line with NIBC's wish for more prudent capital calculations on its defaulted exposures in times of an economic downturn.

Equities

NIBC uses the simple risk weight approach for equity investments. Under this approach, the RWA is calculated by multiplying the exposure amount by 370%. The total EAD for equity investments amounts to EUR 252 million.

Securitisations

NIBC uses the IRB approach for securitisation exposures, both for purchased securitisations as well as for retained notes of own securitisations. Under the IRB approach, the RWA is calculated by multiplying the exposure amount by the appropriate risk weight. The risk weight depends upon the external rating, the granularity and seniority of the pool and on whether the transaction is a resecuritisation. Alternatively, for retained notes of own securitisations, NIBC uses the IRB capital charge had the underlying exposures not been securitised (KIRB approach).

This approach is applicable when the capital requirement under the KIRB approach is lower than the capital requirement under the IRB approach for the securitisation exposure class. More detailed risk information about NIBC's securitisation exposures can be found in the [Securitisations](#) section.

Standardised Approach

For the calculation of RWA under the Standardised approach, drawn exposure is multiplied by a prescribed risk weight, depending on the exposure type and the external rating (if applicable). The undrawn exposures are multiplied by both a risk weight and a credit conversion factor. The risk weights are prescribed in the CRR/CRD IV:

- NIBC's sovereign exposures are exposures with a zero risk weight and vast majority is related to cash placed with DNB and the Dutch State Treasury Agency. NIBC has no sovereign debt exposure to Greece, Italy, Spain and Portugal;
- The risk weight for institutions is either 20% (with a rating equal to or higher than AA-) or 50% (with a rating between A+ and BBB-) for senior unsecured and dependent on the tenor of the maturity;
- The risk weight for covered bonds (institutions) is either 10% (with a rating equal to or higher than AA-) or 20% (with a rating between A+ and BBB-);
- The risk weight for institutions regarding centrally-cleared derivatives exposures is 2%;
- The corporate exposure class carries a risk weight of 100%. It mainly contains BEEQUIP portfolio, and non-rateable/unrated exposures to corporate counterparties;
- The retail exposure consists of the German residential mortgage loan portfolio, German lease receivables portfolio, small portion of the BEEQUIP portfolio and the buy-to-let portfolio. For German residential mortgage loans, part of the exposure which is up to 80% secured by

residential property receives a 35% risk weight and the other part receives a 75% risk weight. For defaulted retail exposures 100% and 150% risk weights are applicable;

- The securitisation exposure represents a few receivables financing transactions for corporate clients that are technically classified as securitisations under the evolving regulatory framework.

EU CR4 - Standardised approach – Credit risk exposure and CRM effects as of 31 December 2021

Exposure classes	Exposures before CCF and before CRM		Exposures post CCF and post CRM		RWAs and RWAs density	
	On-balance-sheet exposures	Off-balance-sheet exposures	On-balance-sheet exposures	Off-balance-sheet exposures	RWEA	RWEA density (%)
1 Central governments or central banks	1,869	-	1,869	-	-	0.0%
2 Regional government or local authorities	-	-	-	-	-	0.0%
3 Public sector entities	-	-	-	-	-	0.0%
4 Multilateral development banks	-	-	-	-	-	0.0%
5 International organisations	-	-	-	-	-	0.0%
6 Institutions	657	-	657	-	143	21.7%
7 Corporates	1,091	52	1,091	26	1,069	95.7%
8 Retail	146	-	146	-	101	68.9%
9 Secured by mortgages on immovable property	2,449	628	2,449	214	1,059	39.8%
10 Exposures in default	5	-	5	-	6	128.2%
11 Exposures associated with particularly high risk	-	-	-	-	-	0.0%
12 Covered bonds	139	-	139	-	17	12.4%
13 Institutions and corporates with a short-term credit assessment	-	-	-	-	-	0.0%
14 Collective investment undertakings	-	-	-	-	-	0.0%
15 Equity	-	-	-	-	-	0.0%
16 Other items	-	-	-	-	-	0.0%
17 TOTAL	6,355	680	6,355	240	2,395	36.3%

EU CR5 - Standardised approach as of 31 December 2021

in EUR millions

Exposure classes	Risk weight															Total	Of which unrated		
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others				
Central																			
1 governments or central banks	1,869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,869	-
Regional																			
2 government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	-	-	-	619	-	38	-	-	-	-	-	-	-	-	-	-	657	-
7 Corporates	-	-	-	-	-	-	-	-	-	1,117	-	-	-	-	-	-	-	1,117	1,117
8 Retail	-	-	-	-	-	-	-	-	146	-	-	-	-	-	-	-	-	146	146
Secured by mortgages on immovable property	-	-	-	-	-	2,379	-	-	228	56	-	-	-	-	-	-	-	2,663	2,663
10 Exposures in default Exposures	-	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	5	5
11 associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Covered bonds	-	-	-	106	33	-	-	-	-	-	-	-	-	-	-	-	-	139	-
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 Other items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 TOTAL	1,869	-	-	106	652	2,379	38	-	374	1,175	3	-	-	-	-	-	6,595	3,930	

COUNTERPARTY CREDIT RISK

NIBC defines counterparty credit risk as the credit risk resulting from OTC derivative transactions, where there is none or limited initial investment, such as *interest rate swaps (IRS)*, *credit default swaps (CDS)* and *foreign exchange (FX)* transactions.

NIBC is exposed to counterparty credit risk from derivative transactions both with corporate clients as well as with institutions. For both types of counterparties, counterparty credit risk is measured similarly, being the sum of the positive replacement value and the add-on. The add-on reflects the potential future change in the marked-to-market value during the remaining lifetime of the derivative contract. All derivative transactions are legally covered by *International Swaps and Derivatives Association (ISDA)* agreements. Derivative transactions with corporate clients are concluded as part of the relationship with the client. Capital and credit limits for corporate clients are allocated on a one-obligor basis. The credit risk resulting from counterparty credit risk is monitored in combination with other exposures (e.g. loans) to these clients, and in the majority of cases, the security of the loan is also applicable to the derivative exposure.

For nearly all of its financial counterparties, NIBC has mitigated the counterparty credit risk by using a *Credit Support Annex (CSA)*. Under this annex, the credit exposures after netting are mitigated by the posting of (cash) collateral. Limits for financial counterparties cover money-market, repo and derivative exposures and are based upon a combination of external ratings, market developments like CDS spreads, and expert judgement. NIBC is active in clearing eligible OTC derivatives in order to mitigate counterparty credit risk and to comply with EMIR-regulation.

In line with market practice, IFRS *credit value adjustments (CVA)* and *debt value adjustments (DVA)* are incorporated into the derivative valuations to reflect the risk of default of the counterparty as well as the own default risk of NIBC. The adjustments are applied to all OTC derivative contracts, except for those that benefit from a strong collateral agreement where cash collateral is regularly exchanged, mitigating the credit risk.

As of 2014, the European-wide CRR/CRD IV introduces a capital charge for CVA risk for all derivatives excluding those with sovereigns, pension funds and non-financial counterparties. The exemption of derivatives with non-financial counterparties implies limited impact of the introduction of the CVA capital charge on the NIBC's Tier 1 capital ratio.

EU CCRI – Analysis of CCR exposure by approach as of 31 December 2021

in EUR millions

	Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post-CRM	Exposure value	RWEA
EU1 EU - Original Exposure Method (for derivatives)	-	-		1.4	-	-	-	-
EU2 EU - Simplified SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
1 SA-CCR (for derivatives)	268	73		1.4	477	477	477	189
2 IMM (for derivatives and SFTs)			-	-	-	-	-	-
2a <i>Of which securities financing transactions netting sets</i>			-		-	-	-	-
2b <i>Of which derivatives and long settlement transactions netting sets</i>			-		-	-	-	-
2c <i>Of which from contractual cross-product netting sets</i>			-		-	-	-	-
3 Financial collateral simple method (for SFTs)					-	-	-	-
4 Financial collateral comprehensive method (for SFTs)					-	-	-	-
5 VaR for SFTs					-	-	-	-
6 Total					477	477	477	189

EU CCR2 – Transactions subject to own funds requirements for CVA risk as of 31 December 2021

in EUR millions

	Exposure value	RWEA
1 Total transactions subject to the Advanced method	-	-
2 (i) VaR component (including the 3× multiplier)	-	-
3 (ii) stressed VaR component (including the 3× multiplier)	-	-
4 Transactions subject to the Standardised method	49	44
EU4 Transactions subject to the Alternative approach (Based on the Original Exposure Method)	-	-
5 Total transactions subject to own funds requirements for CVA risk	49	44

EU CCR3 – Standardised approach – CCR exposures by regulatory exposure class and risk weights as of 21 December 2021

in EUR millions	Exposure classes	Risk weight											Total exposure value	
		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others		
1	Central governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-
5	International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Institutions	-	29	-	-	2	52	-	-	-	-	-	-	83
7	Corporates	-	-	-	-	-	2	-	-	1	-	-	-	3
8	Retail	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Other items	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Total exposure value	-	29	-	-	2	55	-	-	1	-	-	-	86

EU CCR5 – Composition of collateral for CCR exposure as of 31 December 2021

in EUR millions	Collateral type	Collateral used in derivative transactions				Collateral used in SFTs			
		Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
		Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
1	Cash – domestic currency	-	15	-	64	-	-	-	-
2	Cash – other currencies	-	25	-	58	-	-	-	-
3	Domestic sovereign debt	-	-	-	-	-	-	-	-
4	Other sovereign debt	-	-	-	-	-	-	-	-
5	Government agency debt	-	-	-	-	-	-	-	-
6	Corporate bonds	-	-	-	-	-	-	-	-
7	Equity securities	-	-	-	-	-	-	-	-
8	Other collateral	-	-	-	-	-	-	-	-
9	Total	-	40	-	122	-	-	-	-

EU CCR8 – Exposures to CCPs as of 31 December 2021

in EUR millions

	Exposure value	RWEA
I Exposures to QCCPs (total)		1
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	29	1
3 (i) OTC derivatives	-	-
4 (ii) Exchange-traded derivatives	29	1
5 (iii) SFTs	-	-
6 (iv) Netting sets where cross-product netting has been approved	-	-
7 Segregated initial margin	92	
8 Non-segregated initial margin	-	-
9 Prefunded default fund contributions	-	-
10 Unfunded default fund contributions	-	-
II Exposures to non-QCCPs (total)		-
12 Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-
13 (i) OTC derivatives	-	-
14 (ii) Exchange-traded derivatives	-	-
15 (iii) SFTs	-	-
16 (iv) Netting sets where cross-product netting has been approved	-	-
17 Segregated initial margin	-	
18 Non-segregated initial margin	-	-
19 Prefunded default fund contributions	-	-
20 Unfunded default fund contributions	-	-

SECURITISATION EXPOSURES

OVERVIEW AND STRATEGY

NIBC classified all its securitisation exposures at amortised cost, with the exception of synthetics and equity tranches. Synthetics are classified at fair value through profit or loss, while equity tranches are classified as available for sale (fair value through equity).

NIBC as originator

NIBC has been active in the securitisation and structuring market for over twenty years. The types of collateral for these securitisations include residential mortgage loans, commercial mortgage loans and leveraged loans. NIBC's *Dutch Residential Mortgage Backed Securities (RMBS)* programme was established in 1997. NIBC's residential mortgage loan programme was later extended with the Sound and Essence issues. In 2003, NIBC started its North Westerly *Collateralised Loan Obligations (CLO)* programme. In addition, NIBC has acted as arranger and lead manager on a number of third-party transactions.

At 31 December 2021, there were no synthetic originated securitisations in NIBC's Securitisations portfolio.

EU-SECI - Securitisation exposures in the non-trading book as of 31 December 2021

in EUR millions

	Institution acts as originator						Institution acts as sponsor			Institution acts as investor				
	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total		
	STS	Non-STS			STS	Non-STS			STS	Non-STS				
		of which SRT			of which SRT									
1 Total exposures	-	-	28	-	-	28	-	73	-	73	533	208	-	741
2 Retail (total)	-	-	28	-	-	28	-	-	-	-	487	148	-	634
3 residential mortgage	-	-	28	-	-	28	-	-	-	-	375	125	-	500
4 credit card	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 other retail exposures	-	-	-	-	-	-	-	-	-	-	112	23	-	135
6 re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Wholesale (total)	-	-	-	-	-	-	-	73	-	73	46	60	-	107
8 loans to corporates	-	-	-	-	-	-	-	54	-	54	-	54	-	54
9 commercial mortgage	-	-	-	-	-	-	-	-	-	-	-	3	-	3
10 lease and receivables	-	-	-	-	-	-	-	-	-	-	46	2	-	49
11 other wholesale	-	-	-	-	-	-	-	20	-	20	-	-	-	-
12 re-securitisation	-	-	-	-	-	-	-	-	-	-	-	1	-	1

EU-SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor as of 31 December 2021

in EUR millions

	Exposure values (by RW bands/ deductions)					Exposure values (by regulatory approach)				RWVA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW / deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW / deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW / deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW / deductions
1 Total exposures	42	-	20	41	17	29	73	-	17	4	68	-	17	0	5	-	-
Traditional	42	-	20	41	17	29	73	-	17	4	68	-	17	0	5	-	-
2 transactions	42	-	20	41	17	29	73	-	17	4	68	-	17	0	5	-	-
3 Securitisation	42	-	20	41	17	29	73	-	17	4	68	-	17	0	5	-	-
4 Retail	29	-	-	-	-	29	-	-	-	4	-	-	-	0	-	-	-
5 Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Wholesale	13	-	20	41	17	-	73	-	17	-	68	-	17	-	5	-	-
7 Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Re-securitisation	0	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-
Synthetic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 transactions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Objectives

NIBC's objectives in relation to securitisation activities are:

- Transfer of credit risk;
- Obtain funding, reduce funding cost and diversify funding sources;
- Earn management fees on the assets under management;
- Support selected clients in their funding needs;
- Offering attractive yields and quality investments for investors;
- Earn fees on ancillary roles in securitisations.

Roles and involvement

NIBC has fulfilled the following roles in the securitisation process:

- Arranger (structuring) of both third-party and proprietary securitisation transactions;
- Underwriter in securitisation transactions involving both third-party and proprietary transactions;
- Collateral manager for a number of managed CLO transactions;
- Liquidity facility provider for a number of residential and commercial mortgage loan securitisations;
- Calculation agent and paying agent for number of residential mortgage loan securitisations;
- Company administrator for a number of securitisations; and Investor in securitisations.

Securitisation activity in 2021

New transaction in 2021 is North Westerly VII.

Names of the External Credit Assessment Institutions used for securitisations

NIBC uses Moody's and Standard & Poor's to rate its securitisations.

Accounting policy

NIBC consolidates securitisation *Special Purpose Entities (SPE)* in its financial statements when:

- It will obtain the majority of the benefits of the activities of an SPE;
- It retains the majority of the residual ownership risks related to the assets in order to obtain the benefits from its activities;
- It has decision-making powers to obtain the majority of the benefits;
- The activities of the SPE are being conducted on NIBC's behalf according to NIBC's specific business needs so that it obtains the benefits from the SPE operations. Such an evaluation is necessarily subjective.

NIBC does not consolidate SPEs that it does not control.

The Annual Report contains more detailed information on the accounting policies used by NIBC.

NIBC as investor

Next to its role as originator of securitised products, NIBC has also been active as an investor in securitised products. Since the end of 2009, NIBC has a Liquidity Investments portfolio. This portfolio was set up to invest part of NIBC's excess liquidity in the securitisation market. Investments are limited to predominantly AAA-rated RMBS/ABS transactions backed by Dutch residential mortgage loan collateral or ABS transactions, and are eligible to be pledged as collateral with the *European Central Bank (ECB)*.

In addition to this restrictive mandate, each investment is pre-approved by GRM.

EU-SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor as of 31 December 2021

in EUR millions	Exposure values (by RW bands/ deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC- IRBA	SEC- ERBA (including IAA)	SEC- SA	1250% RW / deductions	SEC- IRBA	SEC- ERBA (including IAA)	SEC- SA	1250% RW / deductions	SEC- IRBA	SEC- ERBA (including IAA)	SEC- SA	1250% RW / deductions
1 Total exposures	620	30	74	18	0	288	380	73	0	32	106	62	-	3	8	5	-
2 Traditional) securitisation	620	30	74	18	0	288	380	73	0	32	106	62	-	3	8	5	-
3 securitisation	620	30	74	17	-	288	379	73	-	32	97	62	-	3	8	5	-
4 Retail underlying	571	30	23	11	-	288	330	17	-	32	81	14	-	3	6	1	-
5 Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Wholesale	49	-	51	6	-	-	49	57	-	-	17	48	-	-	1	4	-
7 Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Re-securitisation	0	-	-	1	0	-	1	-	0	-	8	-	-	-	1	-	-
9 Synthetic securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note that the IFRS rules for consolidating securitisation exposures differ from Pillar 3 classifications under the securitisation framework which makes figures not directly comparable to NIBC's Annual Report.

Credit quality of Securitisations portfolio

The credit quality is based on an internal composite, following CRR/CRD IV guidelines, including external ratings from Standard & Poor's and Moody's. The non-rated portion of the portfolio relates to first-loss positions in both NIBC's own securitisations and third-party securitisations, which have been marked down to between 1% and 10% of their nominal value at 31 December 2021 or are not rated by Standard & Poor's or Moody's.

EU-SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments as of 31 December 2021

in EUR millions	Exposures securitised by the institution - Institution acts as originator or as sponsor		
	Total outstanding nominal amount	Total amount of specific credit risk adjustments made during the period	
		Of which exposures in default	
1 Total exposures	3,174	-	-
2 Retail (total)	1,780	-	-
3 residential mortgage	290	-	-
4 credit card	-	-	-
5 other retail exposures	-	-	-
6 re-securitisation	1,490	-	-
7 Wholesale (total)	1,394	-	-
8 loans to corporates	1,344	-	-
9 commercial mortgage	-	-	-
10 lease and receivables	-	-	-
11 other wholesale	50	-	-
12 re-securitisation	-	-	-

MARKET RISK

NIBC defines market risk as:

- the risk of losses in the Trading book arising from adverse movements in market rates and;
- the risk of losses in the Banking Book from NIBC's credit spread risk position;
- the risk of losses in both the banking and trading book from adverse movements in currencies with respect to the Euro.

The predominant market risk drivers for NIBC are interest rate risk and credit spread risk.

MARKET RISK QUALITATIVE DISCLOSURE

Risk appetite

The risk appetite for market risk is moderate. For all market risk types limits are set. Interest rate risk limits are monitored on a daily basis, while credit spread risk is monitored on a weekly basis.

Risk monitoring and measurement

From an economic value perspective the impact of an instantaneous shift in interest rates on a static portfolio is considered. Interest BPV and interest VaR is calculated and monitored on a daily basis by Market Risk Management, while credit spread BPV and credit spread VaR are calculated and monitored on a weekly basis. VaR is calculated using daily historical data and a confidence level of 99%. The model was updated in October 2021 to include all historical data starting 2008 (the previous VaR calculation was based on the most recent four years of historical data). The market risk analysis is complemented by a set of scenarios, including scenarios intended as stress testing and vulnerability identification, both based on historical events and on possible future events. Limits are set on the above measures. The limits and utilisation are reported to the ALCO once every month. Any major breach of market risk limits is reported to the CRO immediately.

Currency risk

NIBC manages its overall currency position based on the currency positions in the monthly balance sheets. The main exposures in foreign currencies for NIBC are USD and GBP. NIBC uses matched funding and other measures to apply its policy of not taking any currency positions. Any currency position which does show at month end is caused by movements in the fair value of assets or liabilities or interest income in foreign currencies and is hedged by entering into FX spot transactions. The total open foreign currency position, by nominal amount, was EUR 8.6 million at year-end 2021. This currency position is the position prior to hedging, which is always done shortly after month-end. Regulatory capital for currency risk is equal to 0.3 million EUR per year-end 2021.

Governance

The objectives of the market risk function are to measure, report and control the market risk of NIBC subject to the Market Risk Manual. The risk management and control function is independent of the trading activities. The market risk position is monitored daily and reported to the ALCO once every month. Any requests for new limits have to be approved by the ALCO. Any major breach of market risk limits is forthwith reported to the CRO and acted upon immediately. Market Risk analyses all overshootings (i.e. occasions, where either the hypothetical or actual P&L exceeds the VaR) in the Trading book and reports them both to the CRO and regulator (DNB) within 5 working days, in accordance with Article 366 point 5 of the CRR.

The risk appetite is set, among others, by the Value-at-Risk (VaR, 99% confidence level, one-day holding period) limits. The Money Market & Trading book exists of plain vanilla interest rate risk positions only. For this book the interest VaR limit was kept constant at EUR 2.25 million during 2021 and equals the 2020 limit.

Measurement Methods

NIBC uses multiple risk metrics to capture all aspects of market risk. These include interest basis point value (**BPV**), credit BPV, interest VaR and credit VaR. These metrics are calculated on a daily basis and are reviewed by the Market Risk department:

- Interest and credit BPV measure the sensitivity of the market value for a change of one basis point in each time bucket of the interest rate and credit spread, respectively. In the valuation and risk management framework of fixed income products, NIBC uses multiple forward curves (o/n, 1M, 3M, 6M, 12M) and differentiates between collateralised (discounted on o/n curve) and non-collateralised (discounted on 3M curve) transactions.
- The interest VaR and credit spread VaR measure the threshold value which daily marked-to-market losses will not exceed with a confidence level of 99%. These VaR measures are based upon historical data with (daily or weekly) changes in respectively interest rates and credit spreads. For Money Markets & Trading, additional VaR scenarios based upon daily historical market data are used both for limit-setting as well as for the calculation of the capital requirement.
- As future market price developments may differ from those that are contained by historical data, the risk analysis is complemented by stress scenarios.

Stress testing

In addition to the VaR, NIBC has defined a number of stress tests. These stress tests consist both of historical events as well as potential extreme market conditions. Market risk stress tests are conducted and reported regularly, both on portfolio as well as on a consolidated level.

Below some examples of stress tests are mentioned:

- An instantaneous parallel shift of all interest rates by 200 bps (both upwards and downwards);
- Credit crisis of 2008, where credit and basis risk spreads rose significantly;
- Hypothetical scenario, where interest rates shift by -100 basis points or + 100 basis points;
- Hypothetical scenario, where credit spreads rise significantly.

MARKET RISK IN THE BANKING BOOK

Interest rate risk in the Banking book

NIBC defines *interest rate risk in the banking book (IRRBB)* as the risk of losses from interest rate sensitive positions in non-trading activities due to movements in interest rates. Interest rate risk is measured both from an economic value perspective and an earnings perspective. The first perspective considers the impact on the market value, while the latter considers the impact on net interest income.

NIBC's banking book consists of:

- Corporate treasury;
- Commercial treasury;
- Corporate banking;
- Retail banking.

EU IRRBBI - Interest rate risks of non-trading book activities

in EUR thousands	Changes of the economic value of equity		Changes of the net interest income	
	Current period	Last period	Current period	Last period
Supervisory shock scenarios				
1 Parallel up	-47,407	-14,604	12,638	9,058
2 Parallel down	12,075	-6,011	-12,638	-9,058
3 Steepener	-234	1,871		
4 Flattener	-12,617	-9,221		
5 Short rates up	-26,662	-14,310		
6 Short rates down	9,083	2,587		

The European *Benchmark Regulation (BMR)* came into effect on 1 January 2018 and has an impact on among others the interest rate benchmarks. In 2020, changes to discount curves for centrally cleared derivatives took place: EONIA was replaced by the European Short Term Rate (€STR) and USD Fed Funds was replaced by the Secured Overnight Financing Rate (SOFR). The transition towards these new rates required adjustments. NIBC's risk management models, interest rate risk hedging and hedge accounting have been adjusted to take into account the changes.

In 2021, existing derivatives agreements, loan- and funding documentation have been adjusted to reflect the transition from Interbank Offered Rates (IBOR) to Risk Free Rates (RFR). Also, new transactions are expected referencing the RFR's, such as SONIA (Sterling Overnight Index Average) and SOFR. The timing of the transition is based on the recommended timelines from the Working Group on Sterling Risk-Free Reference Rates and the Alternative Reference Rates Committee.

NIBC has set up an IBOR transition program to implement the required changes.

Risk appetite

The risk appetite for IRRBB from an economic value perspective is measured by the modified duration of equity and equal to 5 (with a tolerance of 7.5), while the risk appetite from an earnings perspective is measured by the impact on 1Y earnings and equal to EUR 18 million (assuming a shift in interest rates of 100 bps).

Risk monitoring and measurement

From an economic value perspective the impact of an instantaneous shift in interest rates on a static portfolio is considered. Interest BPV and interest VaR measures are calculated on a daily basis and reviewed by the Market Risk department:

- Interest BPV measures the sensitivity of the market value to an instantaneous change of one basis point in each time bucket of the interest rate curve;
- The interest VaR measures the threshold value, which daily marked-to-market losses with a confidence level of 99% will not exceed, based on historical data for daily changes in interest rates. These daily changes are superimposed on the current market rates. The VaR is calculated by means of full valuation to take non-linearity into account. The VaR model was updated in October 2021 to include the historical data starting from 2008 (the previous VaR calculation was based on the most recent four years of historical data).

In measuring BPV and VaR for the Banking book the (credit) spreads have been excluded from cashflows and discounting, in line with EBA guidelines.

From the earnings perspective changes in interest rates occur both instantaneously and gradually over time. *Earnings at Risk (EaR)* is calculated by means of the following measure:

- 12 months earnings impact due to a 200 bps gradual upwards or downwards interest rate shock per currency

EaR as displayed in the tables represents the 200 bps gradual upwards measure. The interest rate risk analysis is complemented by a set of scenarios, including scenarios intended as stress testing and vulnerability identification, both based on historical events and on possible future events.

Limits are set on the above measures, both those from the economic value perspective and from an earnings perspective. The limits and limit utilisation are reported to the ALCO once every month. Any major breach of IRRBB limits is reported to the CRO immediately.

Credit spread risk

NIBC's Banking book has credit spread risk mainly in the Liquidity portfolio, Collateral portfolio and the Structured Credits portfolio. Total credit spread sensitivity remained at minus 0.2 million EUR/bp at 31 December 2021.

Foreign exchange risk

As stated previously, it is the policy of NIBC to hedge its currency risk as much as possible. NIBC uses the Standardised Approach for the calculation of regulatory capital for currency risk.

MARKET RISK IN THE TRADING BOOK

EU MRI - Market risk under the standardised approach as of 31 December 2021

in EUR millions		RWEAs
Outright products		
1	Interest rate risk (general and specific)	-
2	Equity risk (general and specific)	-
3	Foreign exchange risk	4
4	Commodity risk	-
Options		
5	Simplified approach	-
6	Delta-plus approach	-
7	Scenario approach	-
8	Securitisation (specific risk)	-
9	Total	4

EU MR2-A - Market risk under the Internal Model Approach (IMA) as of 31 December 2021

in EUR millions

	RWEAs	Own funds requirements
1 VaR (higher of values a and b)	37	3
(a) Previous day's VaR (VaRt-1)		1
(b) Multiplication factor (mc) x average of previous 60 working days (VaRavg)		3
2 SVaR (higher of values a and b)	89	7
(a) Latest available SVaR (SVaRt-1)		2
(b) Multiplication factor (ms) x average of previous 60 working days (sVaRavg)		7
3 IRC (higher of values a and b)	-	-
(a) Most recent IRC measure		-
(b) 12 weeks average IRC measure		-
4 Comprehensive risk measure (higher of values a, b and c)	-	-
(a) Most recent risk measure of comprehensive risk measure		-
(b) 12 weeks average of comprehensive risk measure		-
(c) Comprehensive risk measure - Floor		-
5 Other	-	-
6 Total	126	10

EU MR2-B - RWA flow statements of market risk exposures under the IMA as of 31 December 2021

in EUR millions

	VaR	SVaR	IRC	Comprehensive risk measure	Other	Total RWAs	Total own funds requirements
1 RWEAs at previous period end	7	36	-	-	-	44	3
1a Regulatory adjustment	5	24	-	-	-	29	2
1b RWEAs at the previous year-end (end of the day)	2	12	-	-	-	15	1
2 Movement in risk levels	2	18	-	-	-	20	2
3 Model updates/changes	7	-	-	-	-	7	1
4 Methodology and policy	-	-	-	-	-	-	-
5 Acquisitions and disposals	-	-	-	-	-	-	-
6 Foreign exchange movements	-	-	-	-	-	-	-
7 Other	-	-	-	-	-	-	-
8a RWEAs at the end of the reporting period (end of the day)	12	30	-	-	-	42	3
8b Regulatory adjustment	24	59	-	-	-	84	7
8 RWEAs at the end of the reporting period	37	89	-	-	-	126	10

EU MR3 - IMA values for trading portfolios 2021

in EUR millions

VaR (10 day 99%)		
1	Maximum value	2
2	Average value	1
3	Minimum value	0
4	Period end	1
SVaR (10 day 99%)		
5	Maximum value	6
6	Average value	2
7	Minimum value	1
8	Period end	2
IRC (99.9%)		
9	Maximum value	-
10	Average value	-
11	Minimum value	-
12	Period end	-
Comprehensive risk measure (99.9%)		
13	Maximum value	-
14	Average value	-
15	Minimum value	-
16	Period end	-

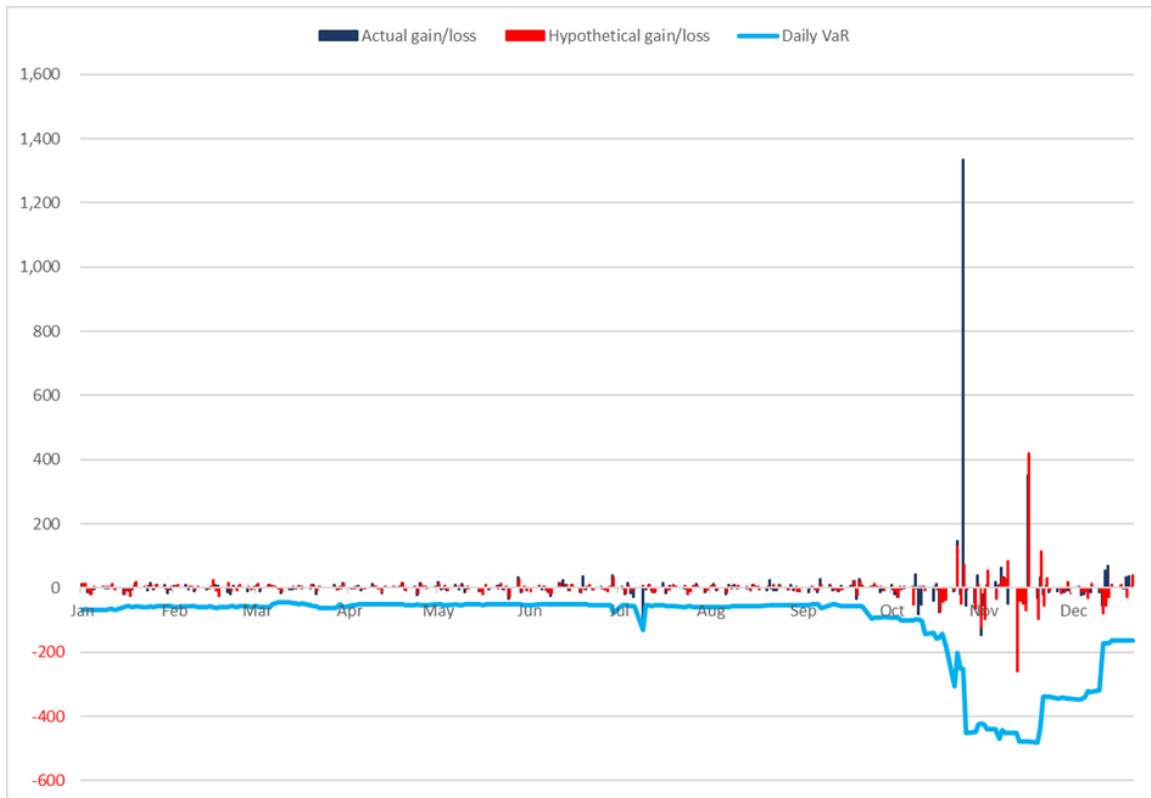
Regulatory capital for market risk in the Trading book

Since 2008 NIBC uses the *Internal Model Approach (IMA)* for general interest rate risk of the Money Market & Trading book, which is the only risk driver in this book. Articles 362 to 369 of the CRR/CRD IV set all regulatory requirements for the use of Internal Models for the Trading book. NIBC complies in all material aspects with these requirements. The capital requirement for market risk in the Trading book for banks using internal models is based on the combination of the VaR and *Stressed VaR (SVaR)*. The Stressed VaR is calculated based on the same methodology as the VaR, but based upon a different historical period with extreme stress in the markets. Currently, 2008 is used as historical period to determine the Stressed VaR.

Back testing

By nature, trading positions fluctuate during the year. The Money Market & Trading book consisted solely of interest rate-driven exposures. Activities comprise short-term (up to two years) interest position-taking, money-market and bond futures trading and swap spread position taking. Back testing for the Money Market & Trading book is conducted in accordance with the guidelines of the Basel Committee on Banking Supervision, as implemented in Europe by the CRR. The one-day 99% VaR is back tested with both the hypothetical *profit and loss (P&L)* and the actual profit and loss. The hypothetical profit and loss is calculated based upon the end-of-day trading position and the changes in market rates from the trading day to the next business day using full revaluation. The following Graph shows the hypothetical profit and loss and 99% VaR and the actual profit and loss and 99% VaR. On 31 December 2021, in the last 250 business days, there were zero outliers for hypothetical P&L and zero outliers for actual P&L.

Comparison of VaR estimates with actual and hypothetical gains/losses over last 250 trading days



OPERATIONAL RISK

Operational risk is the risk of direct or indirect loss resulting from inadequate or failed processes or systems, from human error, fraud, or external events. Operational risk includes legal risk and compliance risk. NIBC also includes reputational risk, however strategic risks are not included. Reputational risk is defined as the potential risk arising from negative perception on the part of NIBC's stakeholders.

NIBC strives for a 'no surprises' operating environment by, effectively managing operational risk across all its business lines, banking activities and countries in a transparent and consistent way. Operational risk management is embedded in day-to-day processes. Every NIBC business unit and international office has an operational risk management 'Champion'. These employees assess their department's activities for potential operational risks, monitor the control mechanisms to mitigate, avoid, transfer or accept these risks and coordinate ways of resolving loss-making events. They promote awareness for operational risks within their departments.

Regulators and society are increasingly interested in operational risk factors and what banks do to prevent any wrongdoing. Increased attention is placed on *Client Due Diligence (CDD)*, *Know Your Customer (KYC)*, *Anti-Money Laundering (AML)* and *Counter Terrorist Financing (CTF)* measures.

The central *Operational Risk Management (ORM)* function identifies, monitors, controls and reports on operational risk at group level, develops policies and processes and provides methodology and tools. The tools enable an assessment whether the operational risk profile of the bank fits within the operational risk appetite. They provide an integrated view of the operational risk and control self-assessments (**RCSA**) performed bottom-up by all BUs and countries, action planning, and event and loss registration and support the operational risk management process, including planning mitigation measures. Furthermore, the department also co-ordinates the development of periodic, forward-looking scenario analysis (hypothetical external or internal scenarios ensuring that a plan exists in case these events occur) and actively supports corporate social responsibility, business continuity management and information security professionals.

A central element in the *New Product Approval and Review Process (NPARP)* is the client's interest; i.e. determining how the product is suitable for its clients and how NIBC will ensure it can offer the product to its clients in a controlled, responsible and sustainable manner in the markets where NIBC is active. Furthermore, the NPARP assesses the operational capacity of all internal stakeholders that need to cooperate for launching an efficient and effective product. The NPARP includes a mandatory and risk-based product review at a predefined period after launch. In addition to the NPARP, NIBC has implemented a *Significant Change Approval and Review Process (SCARP)*. This process is used to assess the impact of material adjustments in internal processes. These adjustments are reviewed for impact on operational risk.

ORM's information security professionals review outsourcing initiatives, in order to ensure material outsourcings meet regulatory requirements. They also raise awareness on a continuous basis in order to ensure staff remains vigilant on the increasing cyber risks. Business Continuity Management, as well as Crisis Management is coordinated by operational risk managers in close cooperation with IT and the Managing Board. The Information Security function is closely aligned with IT in order to manage NIBC's identity and access management framework and the bank's role model.

Operational risk in all its facets - including compliance and regulation, legal risk, dealing with integrity, change management and technology risk, reputation and conduct risk - is a key part of a bank's overall risk management practice. Doing business always means properly understanding and managing risks. As such, NIBC's risk appetite framework also includes specific risk appetite statements for

operational risk, as well as other non-financial risks, such as legal, data privacy, information security/IT and compliance/conduct risks.

As part of the yearly cycle, NIBC uses the operational risk management process also as a basis for the in control and responsibility statement of the Managing Board as included in NIBC's annual report. Given its size and relatively limited complexity, NIBC applies the Standardized Approach to calculate and determine the required regulatory capital that applies to operational risk. The capital requirement under the Standardized Approach is the sum of the requirement per individual business line. Within each business line, gross income is the indicator that serves as a proxy for the scale of business operations and as such, the likely scale of operational risk exposure within each of these business lines.

The average gross income is multiplied by a CRR/CRD IV regulatory factor assigned to that business line. This factor serves as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate level of gross income for that business line.

The operational risk calculation includes data from the last three twelve-monthly observations to determine the regulatory capital charge and is restated yearly after the year-end financial closing is complete.

EU ORI - Operational risk own funds requirements and risk-weighted exposure amounts as of 31 December 2021

in EUR millions

Banking activities	Relevant indicator			Own funds requirements	Risk weighted exposure amount
	Year-3	Year-2	Last year		
1 Banking activities subject to basic indicator approach (BIA)	-	-	-	-	-
2 Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	537	431	525	72	898
3 Subject to TSA:	537	431	525		
4 Subject to ASA:	-	-	-		
5 Banking activities subject to advanced measurement approaches AMA	-	-	-	-	-

Originate-to-Manage (OTM) mortgage loans

Together with our institutional partners, we have successfully grown the OTM mortgage loan proposition to EUR 10.5 billion as per year-end 2021. For OTM mortgage loans and own book mortgage loans, the processes, services and underwriting criteria are uniform. The loans are originated under the label of NIBC Direct or Lot Hypotheken. NIBC is lender of record and therefore the consumer client has a contractual relationship with NIBC. The institutional investors bear the credit risk of these OTM mortgage loans, while other risks, such as operational risks, remain with NIBC.

REMUNERATION POLICY

The Supervisory Board reviewed and amended NIBC's remuneration policies in 2021. The review took into account all relevant laws, regulations and guidelines: the Dutch Banking Code, the DNB Principles on Sound Remuneration Policies (DNB principles), EBA Guidelines on Sound Remuneration, CRDV and the Dutch remuneration legislation for financial services companies (*Wet beloningsbeleid financiële onderneming (WbFO)*).

NIBC's remuneration policy is sustainable, balanced and in line with our chosen strategy and risk appetite. It revolves around these six key principles: remuneration is (i) aligned with business strategy and sustainability ambitions; (ii) appropriately balanced between short and long term; (iii) differentiated and linked to the achievement of performance objectives and the results of the bank; (iv) externally competitive and internally fair; (v) managed in an integrated manner that takes into account total compensation and (vi) is determined in a gender neutral way.

The *Remuneration and Nominating Committee (RNC)* and the Supervisory Board believe NIBC's remuneration policy responsibly links performance and reward and is compliant with the applicable laws, regulations and guidelines. The Supervisory Board continues to believe in prudent management of remuneration whilst recognising that NIBC operates in a competitive market place where it needs to be able to attract, motivate and retain sufficient talent. NIBC is determined to make a positive contribution towards fair compensation practices in the banking sector in consultation with its stakeholders. Furthermore, we aim to create the level playing field that regulators envisage with regard to variable compensation.

The 2021 Annual Report contains a detailed overview of NIBC's remuneration policy.

EU REMI - Remuneration awarded for the financial year as of 31 December 2021

in EUR thousands		MB Supervisory function	MB Management function	Other senior management	Other identified staff
Fixed remuneration					
1	Number of identified staff	8	3	35	7
2	Total fixed remuneration	881	4,712	10,569	1,425
3	Of which: cash-based	881	4,712	10,569	1,425
4	(Not applicable in the EU)				
	Of which: shares or equivalent ownership interests				
EU-4a		-	-	-	-
	Of which: share-linked instruments or equivalent non-cash instruments				
5		-	-	-	-
	Of which: other instruments				
EU-5x		-	-	-	-
6	(Not applicable in the EU)				
7	Of which: other forms	-	-	-	-
8	(Not applicable in the EU)				
Variable remuneration					
9	Number of identified staff	8	3	35	7
10	Total variable remuneration	-	4,435	1,564	113
11	Of which: cash-based	-	2,217	782	76
12	Of which: deferred	-	1,330	469	23
	Of which: shares or equivalent ownership interests				
EU-13a		-	-	-	-
	Of which: deferred				
EU-14a		-	-	-	-
	Of which: share-linked instruments or equivalent non-cash instruments		2,217	782	38
EU-13b		-	-	-	-
	Of which: deferred		1,330	436	15
EU-14b		-	-	-	-
	Of which: other instruments				
EU-14x		-	-	-	-
	Of which: deferred				
EU-14y		-	-	-	-
15	Of which: other forms	-	-	-	-
16	Of which: deferred	-	-	-	-
17	Total remuneration	881	9,147	12,134	1,538

EU REM2 - Special payments to staff whose professional activities have a material impact on institutions' risk profile (identified staff) as of 31 December 2021

in EUR thousands		MB Supervisory function	MB Management function	Other senior management	Other identified staff
Guaranteed variable remuneration awards					
1	Guaranteed variable remuneration awards - Number of identified staff	-	-	-	-
2	Guaranteed variable remuneration awards - Total amount	-	-	-	-
	Of which guaranteed variable remuneration awards paid during the financial year; that are not taken into account in the bonus cap				
3		-	-	-	-
Severance payments awarded in previous periods, that have been paid out during the financial year					
Severance payments awarded in previous periods, that have been paid out during the financial year - Number of identified staff					
4		-	-	1	-
Severance payments awarded in previous periods, that have been paid out during the financial year - Total amount					
5		-	-	530	-
Severance payments awarded during the financial year					
Severance payments awarded during the financial year - Number of identified staff					
6		-	-	1	-
Severance payments awarded during the financial year - Total amount					
7		-	-	47	-
Of which paid during the financial year					
8		-	-	47	-
Of which deferred					
9		-	-	-	-
Of which severance payments paid during the financial year; that are not taken into account in the bonus cap					
10		-	-	-	-
Of which highest payment that has been awarded to a single person					
11		-	-	47	-

EU REM3 - Deferred remuneration as of 31 December 2021

in EUR thousands

	Deferred and retained remuneration	Total amount of deferred remuneration awarded for previous performance periods	Of which due to vest in the financial year	Of which vesting in subsequent financial years	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in future performance years	Total amount of adjustment during the financial year due to ex post implicit adjustments (i.e. changes of value of deferred remuneration due to the changes of prices of instruments)	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year	Total amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention periods
1	MB Supervisory function	-	-	-	-	-	-	-	-
2	Cash-based	-	-	-	-	-	-	-	-
3	Shares or equivalent ownership interests	-	-	-	-	-	-	-	-
4	Share-linked instruments or equivalent non-cash instruments	-	-	-	-	-	-	-	-
5	Other instruments	-	-	-	-	-	-	-	-
6	Other forms	-	-	-	-	-	-	-	-
7	MB Management function	2,265	511	313	-	-	290	117	1,480
8	Cash-based	162	80	82	-	-	-	80	-
9	Shares or equivalent ownership interests	1,786	357	151	-	-	250	-	1,278
10	Share-linked instruments or equivalent non-cash instruments	317	73	80	-	-	40	37	203
11	Other instruments	-	-	-	-	-	-	-	-
12	Other forms	-	-	-	-	-	-	-	-
13	Other senior management	2,449	801	780	-	-	210	611	908
14	Cash-based	691	331	360	-	-	-	331	-
15	Shares or equivalent ownership interests	849	170	72	-	-	119	-	607
16	Share-linked instruments or equivalent non-cash instruments	909	300	349	-	-	91	280	300
17	Other instruments	-	-	-	-	-	-	-	-
18	Other forms	-	-	-	-	-	-	-	-
19	Other identified staff	216	82	94	-	-	12	87	39
20	Cash-based	91	43	48	-	-	-	43	-
21	Shares or equivalent ownership interests	-	-	-	-	-	-	-	-
22	Share-linked instruments or equivalent non-cash instruments	125	39	46	-	-	12	43	39
23	Other instruments	-	-	-	-	-	-	-	-
24	Other forms	-	-	-	-	-	-	-	-
25	Total amount	4,930	1,394	1,187	-	-	511	815	2,427

EU REM4 - Remuneration of 1 million EUR or more per year as of 31 December 2021

EUR		Identified staff that are high earners as set out in Article 450(i) CRR
1	1 000 000 to below 1 500 000	
2	1 500 000 to below 2 000 000	
3	2 000 000 to below 2 500 000	
4	2 500 000 to below 3 000 000	2
5	3 000 000 to below 3 500 000	
6	3 500 000 to below 4 000 000	1
7	4 000 000 to below 4 500 000	
8	4 500 000 to below 5 000 000	
9	5 000 000 to below 6 000 000	
10	6 000 000 to below 7 000 000	
11	7 000 000 to below 8 000 000	

EU REM5 - Information on remuneration of staff whose professional activities have a material impact on institutions' risk profile (identified staff) as of 31 December 2021

in EUR thousands	Management body remuneration			Business areas						Total
	MB Supervisory function	MB Management function	Total MB	Investment banking	Retail banking	Asset management	Corporate functions	Independent internal control functions	All other	
1 Total number of identified staff										53
2 Of which: members of the MB	8	3	11							
3 Of which: other senior management				11	7	-	9	5	3	
4 Of which: other identified staff				-	-	-	7	-	-	
5 Total remuneration of identified staff	881	9,147	10,028	4,384	2,268	-	4,394	1,555	1,071	
6 Of which: variable remuneration	-	4,435	4,435	715	326	-	473	163	-	
7 Of which: fixed remuneration	881	4,712	5,593	3,669	1,941	-	3,922	1,391	1,071	

APPENDIX I DISCLOSURE INDEX

Disclosure index EBA guidelines

Pillar 3 disclosure requirements	Location in Pillar 3 report	EBA Template	Template description
Disclosure of key metrics and overview of risk-weighted exposure amounts	Key Metrics & Overview of Risk-Weighted Exposure Amounts	EU OVI	Overview of total risk exposure amounts
		EU KMI	Key metrics template
Disclosure of risks management objectives and policies	Risk Management Strategy & Process		
Disclosure of the scope of application	Introduction		
Disclosure of own funds	Own Funds	EU CC1	Composition of regulatory own funds
		EU CC2	Reconciliation of regulatory own funds to balance sheet in the audited financial statements
		EU CCA	Main features of regulatory own funds instruments and eligible liabilities instruments
Disclosure of countercyclical capital buffers	Countercyclical buffer	EU CCyB1	Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer
		EU CCyB2	Amount of institution-specific countercyclical capital buffer
Disclosure of leverage ratio	Leverage Ratio	EU LRI	LRSum: Summary reconciliation of accounting assets and leverage ratio exposures
		EU LR2	LRCom: Leverage ratio common disclosure
		EU LR3	LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)
Disclosure of liquidity requirements	Liquidity Risk	EU LIQ1	Quantitative information of LCR
Disclosure of exposures to credit risk, dilution risk and credit quality	Credit Risk	EU LIQ2	Net Stable Funding Ratio
		EU CR1	Performing and non-performing exposures and related provisions
		EU CR2	Changes in the stock of non-performing loans and advances
		EU CQ1	Credit quality of forborne exposures
		EU CQ3	Credit quality of performing and non-performing exposures by past due days
		EU CQ4	Quality of non-performing exposures by geography
		EU CQ5	Credit quality of loans and advances to non-financial corporations by industry
		EU CQ7	Collateral obtained by taking possession and execution processes
Disclosure of the use of credit risk mitigation techniques	Credit Risk	EU CR3	CRM techniques overview: Disclosure of the use of credit risk mitigation techniques
Disclosure of the use of the standardised approach	Calculation of Risk Weighted Assets	EU CR4	Standardised approach – Credit risk exposure and CRM effects
Disclosure of the use of the IRB approach to credit risk	Calculation of Risk Weighted Assets	EU CR5	Standardised approach
		EU CR7-A	IRB approach – Disclosure of the extent of the use of CRM techniques
Disclosure of exposures to counterparty credit risk	Counterparty Credit Risk	EU CCR1	Analysis of CCR exposure by approach
		EU CCR2	Transactions subject to own funds requirements for CVA risk
		EU CCR3	Standardised approach – CCR exposures by regulatory exposure class and risk weights
		EU CCR5	Composition of collateral for CCR exposures
		EU CCR8	Exposures to CCPs

Pillar 3 disclosure requirements	Location in Pillar 3 report	EBA Template	Template description
Disclosure of exposures to securitisation positions	Securitisation Exposures	EU-SEC1	Securitisation exposures in the non-trading book
		EU-SEC3	Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor
		EU-SEC4	Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor
		EU-SEC5	Exposures securitised by the institution - Exposures in default and specific credit risk adjustments
		EU MR1	Market risk under the standardised approach
Disclosure of the use of the standardised approach and of the internal models for market risk	Market Risk	EU MR2-A	Market risk under the internal Model Approach (IMA)
		EU MR2-B	RWEA flow statements of market risk exposures under the IMA
		EU MR3	IMA values for trading portfolios
		EU MR4	Comparison of VaR estimates with gains/losses
Disclosure of operational risk	Operational Risk	EU ORI	Operational risk own funds requirements and risk-weighted exposure amounts
Disclosure of remuneration policy	Remuneration Policy	EU REM1	Remuneration awarded for the financial year
		EU REM2	Special payments to staff whose professional activities have a material impact on institutions' risk profile (identified staff)
		EU REM3	Deferred remuneration
		EU REM4	Remuneration of 1 million EUR or more per year
		EU REM5	Information on remuneration of staff whose professional activities have a material impact on institutions' risk profile (identified staff)
Disclosure of encumbered and unencumbered assets	Encumbered and Unencumbered Assets	EU AE1	Encumbered and unencumbered assets
		EU AE2	Collateral received and own debt securities issued
		EU AE3	Sources of encumbrance
		EU AE4	Accompanying narrative information

APPENDIX 2 LIST OF ABBREVIATIONS

AFM	Authority for Financial Markets	LGD	Loss Given Default
AIRB	Advanced Internal Ratings' Based (approach)	LtiMV	Loan-to-Indexed Market Value
ALCO	Asset & Liability Committee	M	Maturity
AML	Anti-Money Laundering	MDA	Modelling & Data Analytics (department)
ASF	Available Stable Funding	MRM	Market Risk Management (department)
BIS	Bank for International Settlements	NHG Guarantee	Dutch government guarantee
BPV	Basis-point Value	NPARP	New Product Approval Review Process
CCF	Credit Conversion Factor	NPE	Nonperforming Exposure
CCR	Counterparty Credit Rating	NSFR	Net Stable Funding Ratio
CDD	Client Due Diligence	ORM	Operational Risk Management (department)
CDS	Credit Default Swap	OTC	Over-the-Counter derivatives
CET I	Common Equity Tier I	P&L	Profit & Loss (account)
CLO	Collateralised Loan Obligations	PD	Probability of Default
CRM	Credit Risk Management (department)	RA&MV	Risk Analytics and Model Validation (department)
CRM	Credit Risk Mitigation	RAROC	Risk-Adjusted Return on Capital
CSA	Credit Support Annex	RC	Pillar-I Regulatory Capital
CTF	Counter Terrorist Financing	RCSA	Operational Risk and Control Self-assessments
CVA	Credit Valuation Adjustment	RDA	Restructuring & Distressed Assets Management (department)
DNB	Dutch Central Bank	RL	Realised Loss
DVA	Debt Value Adjustment	RMBS	Residential Mortgage-Backed Securities
EAD	Exposure at Default	RMC	Risk Management Committee
EBA	European Banking Authority	RNC	Remuneration and Nominating Committee
EC	Economic Capital	RPCC	Risk Policy & Compliance Committee
EC	Engagement Committee	RPM	Risk Portfolio Management (department)
ECB	European Central Bank	RRM	Retail Risk Management (department)
EHQLA	Extremely High Quality Liquid Assets	RSF	Required Stable Funding
EL	Expected Loss	RWA	Risk Weighted Assets
FX	Foreign Exchange	RWEA	Risk Weighted Exposure Amount
G-SII	Globally Systemically Important Institution	SA	Standardized Approach
GCD	Global Credit Data	SCARP	Significant Change Approval and Review Process
HQLA	High Quality Liquid Assets	SEC-ERBA	Securitisation External Ratings-Based Approach
IC	Investment Committee	SEC-IRBA	Securitisation Internal Ratings-Based Approach
ICAAP	Internal Capital Adequacy Assessment Process	SEC-SA	Securitisation Standardised Approach
IFRS	International Financial Reporting Standards	SIC	Strategic Investment Committee
ILAAP	Internal Liquidity Adequacy Assessment Process	SME	Small Medium Enterprise
IMA	Internal Model Approach	SPE	Special Purpose Entity
IMI	Internal Model Investigation		
IRRBB	Interest Rate Risk in the Banking Book		
IRS	Interest Rate Swaps		
ISDA	International Swaps and Derivatives Association		
KYC	Know Your Customer		
LCR	Liquidity Coverage Ratio		
LD	Legal Department		

SREP	Supervisory Review and Evaluation Process
SRT	Significant Risk Transfer
STS	Simple, Transparent and Standardised
SvaR	Stressed VaR
TC	Transaction Committee
TLTRO	Targeted Long Term Refinancing Operation
VaR	Value-at-Risk
WbFO	Wet belonging Financiële ondernemingen
Wft	Wet op het Financieel Toezicht

